The Financial Times ran a very interesting article last week called "China: Turning away from the dollar". It got a lot of attention, at least among China analysts, and I was asked several times by friends and clients for my response. The authors, James Kynge and Josh Noble, begin their article by noting that we are going through significant changes in the institutional structure of global finance:

An "age of Chinese capital", as Deutsche Bank calls it, is dawning, raising the prospect of fundamental changes in the way the world of finance is wired. Not only is capital flowing more freely out of China, the channels and the destinations of that flow are shifting significantly in response to market forces and a master plan in Beijing, several analysts and a senior Chinese official say.

While this may be true, I am much more skeptical than the authors, in part because I am much more concerned than they seem to be about the speed with which different countries are adjusting, or not adjusting, to the deep structural imbalances that set the stage for the global crisis. My reading of financial history suggests that we tend to undervalue institutional flexibility, especially in the first few years after a major financial crisis, perhaps because in the beginning countries that adjust very quickly tend to underperform countries that adjust more slowly. As I have written many times before China's high growth and very large capital outflows suggest to me how difficult it has been for China to shift from its current growth model.

Beijing has been trying since at least 2007 to bring down China's high savings rate, for example, and yet today it remain much higher than it did seven years ago. Chinese capital outflows, in other words, which are driven by its excessively high savings rates, may have less to do with master planning than we think, and certainly when I think of the most dramatic periods of major capital outflows in the past 100 years, I think of the US in the 1920s, the OPEC countries in the 1970s, and Japan in the 1980s. In each case I think we misinterpreted the institutional strengths and the quality of policymaking.

Any discussion about China's future role in global finance or about the reserve status of the dollar or the RMB is so highly politicized that you cannot approach the topic in the same way you might approach an article about the Mexican peso, or even the Russian ruble, but I figured that there are a lot of interesting points about which a discussion might anyway be illuminating. To begin with, there is much in the article with which I agree, but also some things with which I disagree. About the latter I have basically three different "sets" of disagreements:

1. In some cases my interpretation of both the information and the implications provided by the authors is a lot more skeptical than theirs.

2. The authors provide the views of several analysts concerning the impact on the US bond markets and US economy more generally of reduced PBoC purchases of US government bonds, and these views range from neutral to very negative. I would argue however that in fact these views fail to understand the systemic nature of the balance of payments, in which any country's internal imbalances must necessarily be consistent with its external imbalances. They assume implicitly assume that PBoC purchases only affect the demand for US government bonds, whereas in fact the flow of capital from one country to another must automatically affect both demand and supply. In fact the impact of reduced PBoC purchases of US government bonds is likely to be net positive, and while this view is probably counterintuitive, and certainly controversial, in another part of the article the authors cite a Chinese official whose statement, had they explored the implications fully, would have explained why.

3. There is one point that they make which I think is fundamentally wrong, although a lot of people, including surprisingly enough economists and central bankers, have made the same mistake. It is not fundamental to their argument overall, but I think this mistake does indicate the level of confusion that exists about the way reserve currencies work and it is worth drawing out.

The first set of disagreements concern issues on which reasonable people can disagree, and while I have always been on
the skeptical side, I also recognize that only time can resolve the disagreements. For example in discussing some of
Beijing's recent activity in driving the internationalization of the RMB the authors say:

> What is clear is that Beijing's intention to diversify the deployment of its foreign exchange reserves is
> strengthening. Over the past six months, it has driven the creation of three international institutions dedicated
to development finance: the Shanghai-based New Development Bank along with Brazil, Russia, India and
South Africa; the Asian Infrastructure Investment Bank and the Silk Road Fund.

There certainly have been many announcements in the past few years, not just about new global institutions that are being
planned, but also about currency swap agreements and other actions taken by foreign central banks related to RMB
reserves, and each of these has created a great sense of excitement and momentum. I have often thought the amount of
attention they received significantly exceeded their importance, and while I won't mention specific cases because that may
come across as a little rude, some of the countries whose central banks negotiated currency swap lines with the PBoC are
either credit-impaired enough that any implicit extension of credit would be welcome, or are primarily making a political
statement. In at least one case the currency swap is denominated in both RMB and the counterpart's national currency, but
is actually settled in US dollars, and so is little more than a dollar loan indexed to RMB.

**How certain are today's predictions?**

I am also very skeptical about the long-term importance of the various development banks that are in the works. It is not
clear to me that the incentives of the various proposed members are sufficiently aligned for there to be much agreement on
their loan policies, nor is it clear to me that all the members agree about their relative status and how policy-making will
occur. It is easy enough to agree in principle that there is a lot of room to improve the existing infrastructure of global
financial institutions - mainly the Bretton Woods institutions - but that may well be because the needs of different countries
are either impractical or so heterogeneous that no institution is likely to resolve them.

We do have some useful history on this topic. The Bretton Woods institutions were established when one country, the US,
was powerful enough to ride roughshod over competing needs, and so the misalignment of interests was resolved under
very special and hard-to-replicate conditions, but since then it is hard to think of many examples of similar institutions that
have played the kind of transformative role that is expected of the institutions referred to in the article. It is not as if proposals
to change the global financial system have not been made before - I remember that burgeoning reserves among Arab OPEC
members in the 1970s, or Japan in the 1980s, also generated waves of activity - but change is always easier to announce
than to implement. This doesn't mean that the new institutions being proposed will not have a very different fate, of course,
but I would be pretty cautious and would wait a lot longer before I began to expect much from them.

There is anyway a more fundamental reason for long-term skepticism. As the authors note the creation of these institutions
is driven largely by China and is based on current perceptions about longer-term trends in China's growth. Historical
precedents suggest however that it may be hard to maintain the current momentum. Rapid growth is always unbalanced
growth, as Albert Hirschman reminded us, and what many perceive as the greatest economic strengths of rapidly growing
economies are based on imbalances that also turn out to be their greatest vulnerabilities.

The fact that the US in the 1920s, Germany in the 1930s, Brazil in the 1960s and 1970s, Japan in the 1980s, China during
this century, and many other rapidly growing economies generated deep imbalances during their most spectacular growth
phases should not be surprising at all, but it is important to remember that all of them subsequently suffered very difficult
adjustments during which, over a decade or more, these imbalances were reversed (Germany after the 1930s of course
"adjusted" in a different way, but it was already clear by 1939-40 that the German economy was over-indebted and
substantially unbalanced).

The reversal of these imbalances involved adjustment processes that turned out very different from the predictions. While
the periods of spectacular growth always get most of the attention from economists and journalists, and always create
outsized expectations, the real test over the longer term is how well the economy adjusts during the rebalancing period. We
can learn much more about long-term growth, in other words, by studying Japan post-1990, or the US post-1930, for
example, than we can from studying Japan pre-1990 or the US pre-1930. Until we understand how adjustment takes place,
and the role of debt in the adjustment process, the only safe prediction we can make, I suspect, is that the momentum that
drives Beijing's current activity will not be easy to maintain.

A second area in which reasonable people can disagree is on the quality and meaning of recent data. "The renminbi's
progress has been more rapid than many expected," according to the authors. This may be true by some measures, but
there has been a great deal of discussion on how meaningful some of the trade and capital flow numbers are, especially
when compared to other developing countries much smaller than China. It is true that the use of the RMB has grown rapidly
in recent years according to a number of measures, but so has that of currencies of other developing countries - Mexican pesos, for example - and at least part of this growth may have been a consequence of uncertainty surrounding the euro. We have to be careful how we interpret the reasons for this growth.

What is more, when you compare the share of foreign exchange activity - whether trade flows, reserves, or capital flows - that is denominated in RMB with the share in the currencies of other countries, including other developing countries, what is striking is how remarkably small it still is relative to the Chinese share of global GDP or of global trade. There are obvious reasons for this, of course, but it will be a long time before we can even say that the RMB share is not disproportionately small, and it has a long way to go just to catch up to several developing countries in Latin America or Asia. It is too early, in other words, to decide on the informational content of the growing RMB share of currency trading.

There has also been a lot of debate and discussion about how much of this data represents fundamental shifts in activity anyway. It is clear that a lot of trade is denominated in RMB for window-dressing purposes only - a mainland exporter that used to bill its client in yen, for example, will reroute the trade through its HK subsidiary, and bill the HK sub in RMB before then selling it on to the final buyer in yen. This shows up as an increase in the RMB denominated share of exports, but in fact nothing really changed. There has also been currency activity driven by speculation, or by political signaling, or by the need to disguise transactions, and so on. So much has already been said over the past few years on these issues that I don't have much to add, but it is worth keeping in my mind as we try to assess the informational content of this data that there may be strong systemic biases in the numbers.

**How does the RMB affect US interest rates?**

I think there is a small but growing awareness of why Keynes was right and Harry Dexter White wrong in 1944 about the use of bancor versus dollars as the global reserve currency. There is a cost to reserve currency status, even though a global trading currency creates an enormous benefit to the world.

When any single currency dominates as the reserve currency, however, the cost can be overwhelming unless the reserve currency country intervenes in trade. The UK paid that cost heavily in the 1920s and less so in the 1930s after it began to raise tariffs (people forget that sterling reserves exceeded dollar reserves during this period), which is why Keynes was so adamant that the world needed something like bancor. It is in light of the debate over the value of reserve currency status that I find the discussion about the impact a shift in the status of the RMB might have on US interest rates the more interesting part of the article. According to the authors:

*Not only is China's desire to buy US debt diminishing, so is its ability to do so. The banner years of Treasury bond purchases, during which holdings rose 21-fold over a 13-year period to hit $1.27tn by the end of 2013, were driven by an imperative to recycle China's soaring US dollar current account surpluses. But these surpluses are narrowing sharply - from the equivalent of 10.3 per cent of gross domestic product at the peak in 2007 to 2.0 per cent in 2013. In fact, if financial flows are taken into account, China ceased over the most recent four quarters to be a net exporter of capital at all.*

Actually if financial flows are taken into account, China has not ceased over the most recent four quarters to be a net exporter of capital. I think the authors are confusing capital exports through the PBoC (increases in central bank reserves) and capital exports more generally. China's net capital export, by definition, is exactly equal to its current account surplus, and while it is true that China's current account surplus has narrowed from its peak in 2007 to its trough in 2013, it has risen very rapidly during 2014. In fact I think November's current account surplus may be the largest it has ever posted. It is true that PBoC reserves have not increased in 2014, and have actually declined, although this may be mainly because the non-dollar portion of the reserves dropped dramatically in value, so that in dollar terms they have declined, but this was not because net exports have declined and it is not even a policy choice. Because the PBoC intervenes in the currency, it cannot choose whether to increase or reduce its accumulation of reserves. All it can do is buy the net inflow or sell the net outflow on its current and capital account, so the fact that we have seen massive capital outflows from China in 2014 means that it is exporting more capital than ever, but not in the form of PBoC purchases of foreign government bonds.

The trend, in other words, is no longer narrowing current account surpluses and less capital export but rather the opposite. An investor they cite thinks we will see a reversal of this trend: "I absolutely think we are going to see smaller Chinese current account surpluses in the future", he says, "because of greater Chinese spending overseas on tourism and services and greater spending power at home may lead to more imports."

I think we have to be cautious here. In order to protect itself from a rapidly rising debt burden, China is trying to reduce the growth in investment as fast as it can. It is also trying to reduce the growth in savings as fast as it can, but there are only two ways to reduce savings. One is to increase the consumption share of GDP, but this is politically very hard to do because it...
depends on the speed with which China directly or indirectly transfers wealth from the state sector to the household sector. The other is to accept higher unemployment.

Because the current account surplus is by definition equal to the excess of savings over investment, an expanding current account surplus allows China to reduce investment growth at a faster rate than can be absorbed by rising consumption - without rising unemployment. But with Europe competing with China in generating world-record current account surpluses, and with weak consumption in Japan, it isn't easy get the rest of the world to absorb large current account surpluses.

Put differently, the biggest constraint on China's export of its savings is not domestic. It is the huge amount of savings that everyone wants to export to everyone else, but which neither China nor any developing country wants to import. Still, I suppose in principle we could see a huge shift in capital flows, with less going to the US and to hard commodity exporters (as commodity prices drop) and more going to India, Africa, and other developing countries. At any rate over the long term the authors are concerned about the impact China will have on capital flows to the US:

All of this leads to a burning question: how convulsive an impact on US debt financing - and therefore on global interest rates - will the changes under way in China have? Analysts hold views across a spectrum that ranges from those who see an imminent bonfire of US financial complacency to those who see little change and no cause for concern.

The great concern, the authors correctly note, is the idea that the US has come to depend on China to finance its fiscal deficit. If China stops buying US government bonds, the worry is that the US economy may be adversely affected, and even that US government bond market will collapse and US interest rates soar:

A decade ago Alan Greenspan, the then chairman of the US Federal Reserve, found his attempts to coax US interest rates upwards negated by Beijing parking its surplus savings into Treasuries. Arguably, says Mr. Power, a bond bubble has existed ever since. "If China is now set to redeploy those deposits into capital investment the world over, does this mean the [Greenspan] conundrum will be at last 'solved' but at the cost of an imploding Treasury market?" Mr. Power asks. "If so, this will raise the corporate cost of capital in the west and put yet another brake on already tepid western GDP growth."

Because PBoC purchases of US government bonds are so large, it seems intuitively obvious to most people that if the PBoC were to stop buying, the huge reduction in demand must force up interest rates. But this argument may be based on a fundamental misunderstanding of how the balance of payments works. First of all, greater use of the RMB as a reserve currency does not mean that the PBoC will buy fewer US government bonds. On the contrary, higher levels of RMB reserves in foreign central banks will by definition increase capital inflows into China. In that case either it will force the PBoC to purchase even more foreign government bonds, if the PBoC continues to intervene in the currency, or it will cause some combination of an increase in Chinese capital outflows and a reduction in China's current account surplus. This is an arithmetical necessity.

If the RMB becomes more widely used as a reserve currency, it could certainly result in lower foreign demand for US government bonds, but not lower Chinese demand. This, however, would not be bad for the US economy or the US government bond market any more than it would be if the PBoC were to reduce its demand for US government bonds. China, and this is true of any foreign country, does not fund the US fiscal deficit. It funds the US current account deficit, and it has no choice but to do so because China's current accounts surpluses are simply the obverse of China's capital account deficits. This may not seem like an important distinction in considering how lower demand will affect prices, but in fact it is extremely important because any change in a country's capital flow can only come about as part of a twin set of changes in both the capital account and the current account.

This is true for both countries involved. There is no way, in other words, to separate the net purchase of US dollar assets by foreigners with the US current account deficit. One must always exactly equal the other, and a reduction in the former can only come about with a reduction in the latter. So what would happen if the PBoC were sharply to reduce its purchase of US government bonds? There are only four possible ways this can happen:

1. The reduction in PBoC purchases of US government bonds was matched by an increase in purchases by other Chinese institutions or individuals of US dollar assets. This is mostly what seems to have happened in 2014, and because the PBoC intervenes in the currency, fewer purchases of government bonds by the PBoC was not a choice, but rather the automatic consequence of increased foreign investment by other Chinese institutions or individuals. The impact on the US economy would depend on what assets the other Chinese institutions or individuals purchased. If they purchased risk-free US assets there would be no net impact. If they purchased risky US assets there would be a small, barely noticeable increase in the riskless US interest rate, matched by an equivalent reduction in the US risk premium.
2. The reduction in PBoC purchases of US government bonds was matched by an increase in purchases by other foreigners of US dollar assets. The impact on the US economy would depend, again, on what assets the other foreigners purchased. If they purchased risk-free US assets there would be no net impact. If they purchased risky US assets there would be a small, barely noticeable increase in the riskless US interest rate, matched by an equivalent reduction in the US risk premium.

3. The reduction in PBoC purchases of US government bonds was not matched by an increase in purchases by other Chinese or foreigners, so that there was a commensurate decline in the US current account deficit. Because the US current account deficit is equal by definition to the excess of investment over savings, there are only two ways the US current account deficit can decline. If there is no change in US investment, US savings must rise, and in an economy with underutilized capacity and unemployment, this will happen as unemployed workers and underutilized capacity are put to work, either to replace imports or to increase exports. Workers with jobs save more than workers without, and companies with less underutilized capacity save more than companies with more because they are more profitable. More profitable businesses and fewer unemployed workers results in higher fiscal revenues and lower fiscal expenses, so that fewer foreign purchases of US government bonds is accompanied by a lower supply of government bonds.

4. Finally, because the US current account deficit is equal by definition to the excess of investment over savings, the only other way the US current account deficit can decline is if there is no change in US savings, in which case, US investment must decline. Businesses close down American factories and otherwise reduce business and government investment. This causes GDP growth to drop and unemployment to rise.

What determines US savings?

These four, or some combination, are the only possible ways in which the PBoC can reduce its purchases of US government bonds. It is pretty obvious that the best outcome, the third scenario, requires fewer foreign purchases of US assets, as does the worst, the fourth scenario. It is also pretty obvious that what the PBoC does in largely irrelevant. What matters is whether the US current account deficit declines. Because not only are Chinese institutions and other foreigners eager to purchase US assets, and because demand abroad is so weak, the US current account deficit is in fact likely to increase, as foreigners purchase even more US assets. The US current account deficit will only decline if growth abroad picks up or if the US takes actions to reduce its current account deficit - perhaps by making it more difficult for foreigners to invest their excess savings in the US.

If the US were to force down its current account deficit, would US savings rise or would US investment drop - put another way, is a lower current account deficit good, or bad, for the US economy? For most people the answer is obvious. A lower US current account deficit is good for growth. In fact much of the world is engaged in currency war precisely in order to lower current account deficits, or increase current account surpluses, by exporting their savings abroad.

For some analysts, however, a reduction in foreign purchases of US assets would be bad for US growth because, they argue, the US is stuck with excessively low savings rates. Because there is no way to increase US savings, a reduction in foreign purchases of US assets must cause US investment to decline.

These analysts - trained economists, for the most part - are almost completely mistaken. First of all, it does not require an increase in the savings rate for American savings to rise. Put differently, if unemployed American workers are given jobs, US savings will automatically rise even if the savings rate among employed workers and businesses is impossible to change. Secondly, these economists mistakenly argue that the reason the US runs a current account deficit is because US savings are wholly a function of US savings preferences, which are culturally determined and impossible to change. Because these are clearly lower than US investment, it is the unbridgeable gap between the two that "causes" the US current account deficit.

But while the gap between the two is equal to the current account deficit by definition, these economists have the causality backwards. As I show in the May 8 entry on my blog, excess savings in one part of the world must result either in higher productive investment or in lower savings in the part of the world into which those excess savings flow. This is an arithmetical necessity. Because China's excess savings flow into the US - mostly in the form of PBoC purchases of US government bonds - the consequence must be either more productive investment in the US or lower savings.

If productive investment in the US had been constrained by the lack of domestic savings, as it was in the 19th Century, foreign capital inflows would have indeed kept interest rates lower, and because these foreign savings were needed if productive investment were to be funded, the result in the 19th Century was higher growth. But while it is true that in the US today there are many productive projects that have not been financed - the US would clearly benefit from more infrastructure investment for example - the constraint has not been the lack of savings. No investment project in the US has been turned
down because capital is too scarce to fund it. In fact more generally it is very unlikely that any advanced economy has been forced to reject productive investment because of the savings constraint. It is usually poor planning, dysfunctional politics, legal constraints, or any of a variety of other reasons that are to blame.

This means that if China's excess savings flow into the US, there must be a decline in US savings, and the only way this can happen is either through a debt-fueled consumption boom or through higher unemployment. The analysts interviewed in the Financial Times article argue that if there were an interruption to PBoC purchases of US government bonds, the adverse consequences could range from fairly minor to the extreme - a collapse in the US government bond market - but in fact the only necessary consequence would be a contraction in the US current account deficit. While there are scenarios under which this could be disruptive to the US economy, in fact it is far more likely to be positive for US growth.

As counterintuitive as this may at first seem, several economists besides me have made the same argument, and I provide the full explanation of why fewer foreign purchases of US assets will actually increase both American savings and America growth in Chapter 8 of my book, The Great Rebalancing. What is more, the fact that the US government has put pressure on Beijing to revalue the RMB in order to reduce the US current account deficit is simply another way of saying that Washington is pressuring Beijing to reduce the amount of US government bonds the PBoC is purchasing. After all, if large foreign purchases of US government bonds were good for the US, Europe, China, or anyone else, it must follow automatically that large current account deficits are good for growth and help keep interest rates low.

And this cannot be true. Remember that by definition, the larger a country's current account deficit, the more foreign funding is "available" to purchase domestic assets, including government bonds. And yet instead of welcoming foreign funds and the associated current account deficits, countries around the world are eager to export as much of their savings as they can, which is another way of saying that they are eager to run large current account surpluses as they can.

**The arithmetic of the balance of payments**

In fact there is evidence even within the article that Chinese purchases of US government bonds, far from boosting US growth, either by keeping interest rates low or otherwise, actually causes a reduction in demand for US-produced goods and services. This becomes obvious by recognizing the inconsistency between Chinese behavior and Chinese claims that they are seeking to diversify reserve accumulation away from the dollar. The inconsistency is made explicit when the article cites a famous incident in 2009.

> "We hate you guys", was how Luo Ping, an official at the China Banking Regulatory Commission vented his frustration in 2009. He and others in China believed that, as the US Federal Reserve printed more money to resuscitate American demand, the value of China's foreign reserves would plunge. "Once you start issuing $1tn-$2tn ... we know the dollar is going to depreciate so we hate you guys - but there is nothing much we can do," Mr. Luo told a New York audience.

Mr. Luo, of course, turned out to be wrong, and the value of China's dollar-denominated foreign reserves did not plunge. On the contrary, if the PBoC had purchased more dollars instead of fewer dollars, it would have avoided some of the currency losses it has taken since 2009. But while it might have been useful to explain why Luo was wrong about the plunging dollar, what really needed explaining is why "there is nothing much we can do".

Actually China did have a choice as to whether to buy dollars or not. Luo was right about China's lack of choice only in the sense that as long as Beijing was determined to run a large current account surplus, and as long as purchasing other currencies would have been too risky, or too strongly resisted by their governments, the PBoC did not have much of a choice. In China the savings rate is extremely high for structural reasons that are very hard to reverse. This means that the investment rate must be just as high, or else the gap between the two must be exported. Put differently, if China cannot export excess savings and run a current account surplus, either it must increase domestic investment or it must reduce domestic savings. This is just simple arithmetic, and is true by definition.

With investment rates among the highest in the world, and with much of it being misallocated, China wants to reduce investment, not increase it. Rising investment is likely to cause the country's already high debt burden to rise. But as in the case of the US, the only way it can reduce its savings is with an increase in consumer debt or with an increase in unemployment.

Because none of the options are desirable, China can only resolve its imbalance between supply and demand if it exports the excess of savings over investment, or, put another way, it must run a current account surplus equal to the difference between savings and investment. But because China is such a large economy, and the gap between investment and savings is so large, this is an enormous amount of savings that must be exported, and China must run an enormous current account surplus that must be matched by the current account deficit of the country to whom these savings are exported. The US
financial market, it turns out, is the only one that is deep and flexible enough to absorb China's huge trade surpluses, and, perhaps much more importantly, it is also the only one whose government would not oppose being forced to run the countervailing deficits.

Had the PBoC tried to switch out of dollars and into Japanese yen, or Swiss francs, or Korean won, or euros, or anything else, it would have met tremendous resistance. In fact it did try to purchase some of those currencies and it did meet tremendous resistance, which is why its only option was to buy US government bonds. I explain why in my book as well as in another one of my blog posts.

Luo's statement implies very directly that the only meaningful way to protect the PBoC from being forced to buy dollars is not by increasing the use of the RMB in international trade but rather for China to run smaller surpluses. It certainly did have a choice, but because the alternative was so unpalatable, Beijing felt as if it had no choice. China bought US government bonds not because it wanted to help finance the US fiscal deficit but very specifically because if it didn't it would be forced either to increase domestic debt or to suffer higher unemployment.

This point is a logical necessity arising from the functioning of the balance of payments. Both Lenin and John Hobson explained this more than 100 years ago: countries export capital in order to keep unemployment low. If the RMB becomes a reserve currency, Beijing will have to choose whether, like the US, it will allow unrestricted access to its government bonds, or whether, like Korea, it resist large foreign purchases.

If it chooses the latter, the RMB cannot be a major reserve currency. If it chooses the former, the RMB might indeed become a major reserve currency, but this will force China to choose between higher debt and higher unemployment any time the rest of the world wants more growth. The result of a rising share of reserves denominated in RMB at the expense of a declining share denominated in dollars is really Washington's goal, in other words, and not Beijing's.

**Can China invest its current account surplus at home?**

At the beginning of this entry I said that the authors made one assertion that is fundamentally wrong, although so many economists get this wrong that it would be unfair to blame the authors for failing to do their homework. The mistake isn't necessary to their argument, but I bring it up not just because it is a mistake commonly made but also because it shows just how confused the discussion of the balance of payments can get.

Early in the article the authors cite Li Keqiang's "10-point plan for financial reform" which includes the following

_Better use should be made of China's foreign exchange reserves to support the domestic economy and the development of an overseas market for Chinese high-end equipment and goods._

They then go on to make the following argument:

_As a mechanism towards this end, China is earning a greater proportion of its trade and financial receipts in renminbi. Because these earnings do not have to be recycled into dollar-denominated assets, they can be ploughed back into the domestic economy, thus benefiting Chinese rather than US capital markets._

This is incorrect. The amount that China invests at home and the amount of foreign government bonds the PBoC must purchase are wholly unaffected by whether China's trade is denominated in dollars, RMB, or any other currency.

There are two ways of thinking about this. One way is to focus on the trade itself. If a Chinese exporter sells shoes to an Italian importer and gets paid in dollars, the exporter must sell those dollars to his bank to receive the RMB that he needs. Because the PBoC intervenes in the currency, it effectively has no choice ultimately but to buy the dollars, and the result is an increase in FX reserves. This is pretty easy to understand.

But what happens if the next time the Chinese exporter sells shoes to the Italian importer, he gets paid in RMB? In that case it is the responsibility of the Italian importer, and not the Chinese exporter, to buy RMB in exchange for dollars. This is the only difference. The Italian importer must obtain RMB, and she does so by going to her bank and buying the RMB in exchange for the dollars. Her bank must sell the dollars in China to obtain RMB, and once again because the PBoC intervenes in the currency, it effectively has no choice ultimately but to buy the dollars. The result once again is an increase in FX reserves.

The other way to think about this is to remember that the change in FX reserves is exactly equal, by definition, to the sum of the current account and the capital account. This is because the balance of payments must always balance. China's current account surplus is wholly unaffected by whether the trade is done in dollars (the Chinese exporter is responsible for...
changing dollars into RMB) or in RMB (the Italian importer is responsible for changing dollars into RMB). In either case, in other words, PBoC reserves must rise by exactly the same amount.

What about Chinese investment? It too is wholly unaffected. The current account surplus, remember, is equal to the excess of Chinese savings over Chinese investment. If the current account surplus does not change, and savings of course will not have been affected by the currency denomination of the trade, then domestic investment must be exactly the same.