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October 17, 2014

CHINA

The Exorbitant Burden and The Scariest Graph in The World

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Last year I presented in this newsletter what I called "the scariest graph in the world". It showed how some EU policymakers were expecting Europe to rebalance demand. The graph showed Europe's current account surplus surging to 2-6% of Europe's GDP. In the newsletter I argued that this "solution" would guarantee not only continued stagnation in Europe for many years but could prevent recovery in the US or elsewhere.

Last week Deutsche Bank strategist George Saravelos alarmed the world by pointing out that Europe's $400 billion surplus represented nothing more than a $400 billion shortfall of demand imposed on the rest of the world, and because it is driven by disinvestment, and not rising savings, it would be very hard to reverse.

This huge European shortfall in demand makes more evident than ever that the current global trading and capital regime is incapable of preventing deep imbalances from destabilizing the world economy. At the heart of this regime is the use of the US dollar as the global reserve currency.

In the 1940s and 1950s the US economy was between one-third and one-half of the "globalized" world, and the benefits of reserve currency status significantly outweighed the costs. Today, the US is about one-fifth of the "globalized' world, and if the costs of the current regime have not already significantly outweighed the benefits, it is only a matter of time before they do.

The world must shift to a different trade and capital flow regime or risk ever greater imbalances.

In the June 11, 2013 issue of my newsletter I discussed a presentation by three economists from the EU, one based in Beijing and two visiting from Brussels, who had asked a few weeks earlier if they could come to my central bank seminar at Peking University and speak about the euro crisis. My central bank seminar draws some of the best students from within the university, and the format of the class is structured around the students' acting as a sort of shadow "board of governors" of the PBoC. We are lucky enough that some of the world's leading Chinese and foreign bankers, regulators and academics participate regularly in the seminar when they are in Beijing. Because Europe was a major topic of conversation for the seminar in early 2012, I was more than glad to accept their request to speak to the class.

Needless to say the presentation was fascinating. There was one point, however, that drew a great deal of shocked comment from my students. The visitors presented a graph projecting Europe's balance of payments out to 2014 as a way of illustrating how Europe would resolve domestic demand imbalances.

The graph showed Europe's trade surplus expanding from a small surplus over the 2000-10 period to a surplus equal to 2.6% of Europe's GDP by 2014. My students, I am glad to say, immediately realized the global implications, and a brisk debate followed in which we discussed the potential of this European "solution" to deficient domestic demand not only to lock Europe into many years of stagnation but, what is more, to stifle a potential recovery in the American or Japanese economies and make the Chinese adjustment far more difficult than it was already likely to be.

I reproduced the graph in my June 11, 2013 newsletter and titled it "the scariest graph in the world". More than one subscriber to my newsletter, including one of the most famous and brilliant hedge fund managers in the world, wrote back to me very quickly asking for more information and clarity, which unfortunately I was not able to provide. We all agreed, however, that this graph had serious implications if it turned out to be accurate.

Here is the relevant section from my newsletter:

> *Two weeks ago a couple of economists from the EU spoke at my central bank seminar, and among other things they presented us with what I would call the scariest graph in the world. The graph makes it pretty clear that the surge in European surpluses, which was largely matched before the crisis by the surge in deficits in peripheral Europe, is expected to be maintained even as surpluses in China and Japan, the other leading surplus nations, have dropped dramatically, but since these northern European surpluses can no longer be counterbalanced by deficits within peripheral Europe given how indebted and troubled are their European trade partners, the hope is simply to force them abroad.*
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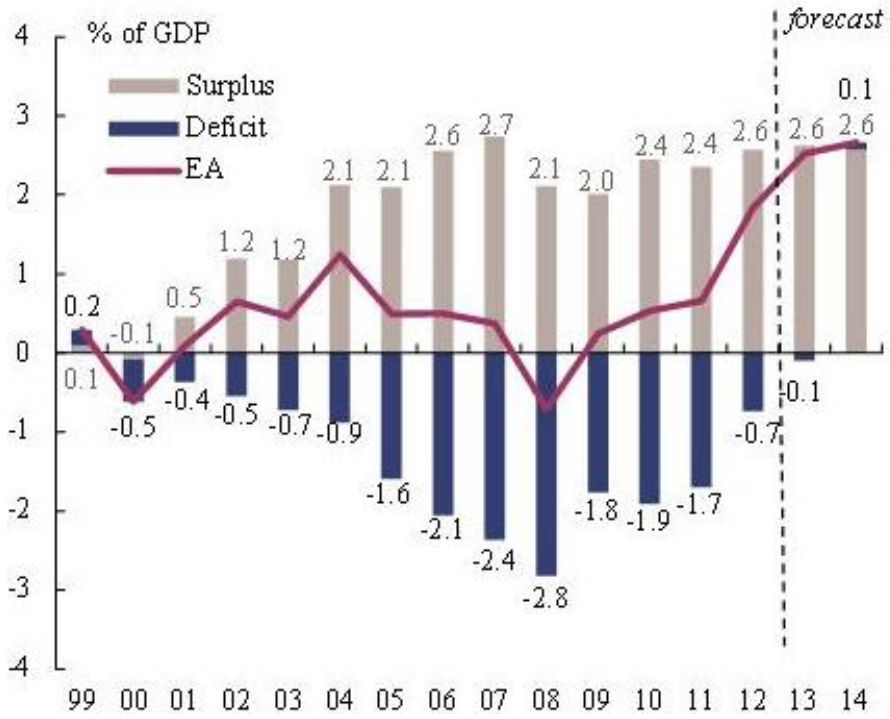
> *In a world with weak demand and deteriorating trade relationships, in other words, the northern Europeans have decided that rather than boost domestic demand they will resolve their domestic problems by absorbing far more than their share of global demand, to the tune of 2-3% of Europe's GDP. Here is the graph:*

The scariest graph in the world



This is absurd. If they succeed it will only be temporarily and at the expense of their already-suffering trade partners, and as a consequence it will just be a question of time before global trade relationships get even nastier than they have been. Of course if trade relationships deteriorate enough, and so force the imbalances back onto Europe, the result will be a surge in German unemployment with no corresponding relief in unemployment in the periphery.

Away from Europe the US continues slowly to adjust but I worry that this adjustment will be derailed by a weaker external sector. Meanwhile Japan is still struggling with its debt burden and seems to have no real way of resolving it except by forcing down the currency and interest rates, both of which mean that household sector is expected to reduce consumption to support the debt burden without, it seems, any corresponding increase in investment. In China the good news is that the rebalancing process seems to have become more determined than ever before in the past, although as of yet there has been minimal rebalancing at the expense of a significant reduction in growth rates. This I expect will continue to be the case, but European trade policies are going to put additional pressure on China's adjustment.

One very famous economics editor at a well-known newspaper wrote to tell me that the projections were unrealistic. Given Europe's floating rate currency, he said, pressures towards a surplus of this magnitude would be counterbalanced by strength in the euro, which would prevent the surplus from materializing. I wrote back and said he was probably right.

The Euroglut

It turns out that we might have both been wrong. Last week Deutsche Bank strategist George Saravelos published a note that caused a frisson of fear throughout the markets, and for exactly the same reasons that my seminar students had pounced on the "scariest graph in the world". Speaking of what he called a $400 billion "euroglut" of excess European savings over already-paltry European investment, Saravelos wrote:

> *The clearest evidence of Euroglut is Europe's high unemployment rate combined with a record current account surplus. Both are a reflection of the same problem: an excess of savings over investment opportunities. Euroglut is special for one and only reason: it is very, very big. At around $400 billion each year, Europe's current account surplus is bigger than China's in the 2000s. If sustained, it would be the largest surplus ever generated in the history of global financial markets. This matters.*

It certainly does matter, and is more evidence, if any were needed, about how global imbalances were not just the source of the 2007-08 crisis but, unless the world moves quickly to limit their impact, will continue destabilizing the world economy for many more years.

To understand why the euroglut is so worrying, we need to go back nearly a decade, to 2005, when Ben Bernanke startled the world with his "global savings glut" thesis:

> *On most dimensions the U.S. economy appears to be performing well. Output growth has returned to healthy levels, the labor market is firming, and inflation appears to be well controlled. However, one aspect of U.S. economic performance still evokes concern among economists and policymakers: the nation's large and growing current account deficit.*
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> *…Why is the United States, with the world's largest economy, borrowing heavily on international capital markets--rather than lending, as would seem more natural? What implications do the U.S. current account deficit and our consequent reliance on foreign credit have for economic performance in the United States and in our trading partners? What policies, if any, should be used to address this situation? In my remarks today I will offer some tentative answers to these questions. My answers will be somewhat unconventional in that I will take issue with the common view that the recent deterioration in the U.S. current account primarily reflects economic policies and other economic developments within the United States itself. Although domestic developments have certainly played a role, I will argue that a satisfying explanation of the recent upward climb of the U.S. current account deficit requires a global perspective that more fully takes into account events outside the United States. To be more specific, I will argue that over the past decade a combination of diverse forces has created a significant increase in the global supply of saving--a global saving glut--which helps to explain both the increase in the U.S. current account deficit and the relatively low level of long-term real interest rates in the world today.*

The global savings glut thesis was immediately controversial, but should not have been. Bernanke's thesis was simply that if institutional distortions in one part of a closed economic system (let's call it Country A) caused savings to exceed investment, it was a matter of logic – an accounting identity, in fact – that in another part of that system (let's call it Country B), investment would have to exceed savings.

If there were plausible reasons as to why Country A would find it desirable to accumulate reserves, and went to on to do so – and in the context of Bernanke's global savings glut hypothesis the 1997 Asian currency crisis was not just an obvious contender to explain reserve accumulation by East Asian countries (Country A), but was explicitly invoked by Asian policymakers in the subsequent design of central bank policies – it is literally impossible for that accumulation not to have affected the Country B. The excess of Country A's savings over investment would simultaneously cause Country B's investment to exceed it savings.

This could happen only in one or both of two ways. The flow of savings from the Country A to Country B would cause either a surge in investment, or a decline in savings, in Country B.

Most economists, surprisingly, found themselves incapable of understanding how "excess" savings in Country A could possibly cause savings in Country B to fall, but I have shown many times that not only is this very easy to explain, but in fact it has occurred many, many times. All we need for this automatically to happen are two conditions:

1. *Country B is an advanced economy whose businesses and governments have easy access to reasonably-priced capital, so that its productive investments have not been constrained by insufficient domestic savings. In that case Country A's savings must flow into non-productive investments in Country B, the most obvious being stock and real state markets, setting off a stock market or real estate market surge, and perhaps even a bubble.*[1]
2. *The citizens and businesses in Country B are very diverse and range from highly optimistic to highly pessimistic. When their stock portfolios or their homes surge in value, at least some of them believe that this increase in their wealth is more than temporary, and they respond by increasing their consumption in line with their greater wealth.*

As long as both assumptions about Country B are true – and not only are the two assumptions plausible, they are in fact highly likely – an excess in Country A's savings above its ability to invest domestically must cause Country B's savings rate to drop. The process is automatic and does not require anyone fundamentally to change his or her savings preferences.

[1] There is of course technically one possible exception to this accounting necessity, which is that the inflows into Country B somehow "cause" investors in Country B to expand, dollar for dollar, their own investments abroad, but this barely affects the assumption. While a higher Country B currency might indeed cause value investors to increase their investments abroad, it only does so by increasing the value of Country B's currency, which must automatically increase the consumption share of GDP, as I explain in Chapter 2, "How Does Trade Intervention Work", Michael Pettis, *The Great Rebalancing: Trade, Conflict, and the Perilous Road Ahead for the World Economy* (Princeton University Press, 2013). It is worth adding, by the way, that in a world in which capital flows are more likely to be driven by speculative rather than fundamental investing, the perception that Country B's currency is rising is far more likely to cause an increase in net capital inflows instead of matching capital outflows, thereby reinforcing, rather than counterbalancing, the initial flow of savings from Country A.

I have already explained that there are really only two ways savings can drop: either Country B's citizens engage in a consumption boom driven by the wealth effect of soaring stock and real estate markets or, once speculative bubbles collapse, or Country B's unemployment surges. Either process automatically causes the savings rate to drop, again, without any fundamental changes in attitudes towards savings.

When Bernanke proposed his hypothesis, Country A was actually a group of Asian countries, with China quickly becoming by far the leading source of excess savings, and Country B was mainly the United States. Not all large trade imbalances are proof that Bernanke's global savings glut hypothesis must be true, but it is easy to prove that the hypothesis is indeed very plausible and can only have bewildered economists to the extent that they were unable to understand the balance of payments.

The only question then becomes whether the imbalances are more likely to have been caused by a change after 1997 in American cultural attitudes towards thrift, or in a change after 1997 in Asian attitudes towards foreign currency reserves. As Brad Setser has pointed out elsewhere, it is relatively easy to find evidence of one or the other. Aside from explicit statements by Asian policymakers that higher foreign currency reserves were a policy target, we would have expected capital flow imbalances driven by a savings deficit in the US to have been "led" by rising US interest rates, whereas capital flow imbalances driven by a savings excess in Asia were likely to have caused declining US interest rates. That US interest rates were low and declining during this period makes it hard to believe that a collapse in American savings preferences sucked in massive amounts of foreign capital, and adds further support to Bernanke's hypothesis.

One side of the equation in Bernanke's hypothesis may be changing. It seems that if Saravelos is right, the Country A is no longer China and its Asian neighbors. The argument Saravelos is making is that Country A is or will become Europe, and its savings excess will dwarf that of China in 2007.

What about the other side? Because of the size, credibility and flexibility of American financial markets, Country B is likely once again to be the United States, but because unlike in China during most of the past 10-15 years, Europe's capital surplus will occur not in the form of central bank reserve accumulation but rather in the form of private capital outflows fleeing a stagnating economy, other countries may also take on the role of Country B in absorbing excess European savings.

This in itself becomes a very important investment consideration that may determine not just global growth but also where growth is likely to occur. In Point 5 of the Appendix to this newsletter, I discuss the limited number of conditions under which foreign capital inflows are good for growth. Surprisingly to many, foreign capital inflows are not always good for an economy, and in fact rarely are, even if they often benefit the local jurisdiction into which the capital flows.

To the extent that Europe's capital surplus flows into developing countries with large domestic investment needs constrained by insufficient domestic savings – and here perhaps India might be an obvious candidate, along with certain African countries, especially African countries whose economies are not reliant on hard commodity exports – the euroglut will increase productive investment and so add to global demand

and global growth. In nearly all other cases, and especially if excess savings flow to the US, Japan or China, the euroglut will simply shift unemployment from Europe to these countries, at least until these countries intervene in trade to prevent further inflows.

This is why European policymakers should do all they can do direct the euroglut directly or indirectly into countries like India. If they do not, and so set off anti-trade sentiment, followed by trade intervention large enough to impede the export of the euroglut, the impact on European economies is easy to predict. Europe will almost certainly be engulfed in waves of defaults, especially sovereign defaults. Because the alternative is a politically unacceptable rise in unemployment to levels much higher than they already are, sovereign defaults are the most "efficient", if brutal, way in which excess savings are "resolved".

The implications are clear. Unless it is planning to organize massive investment flows into savings-deficient developing countries like India, Europe cannot afford to have Saravelos's eurogut. European countries, and especially Germany, must make every effort to expand domestic demand, and they can do so either by increasing public infrastructure investment or by increasing workers' wages (which will boost consumption and reduce savings). Saving rates that exceed investment rates are the definition of excess savings that must be exported, and increasing the export of savings will intensify the imbalances that earlier led to the 2007-08 crisis. They could set off another consumption boom, but if the 2007-08 crisis prevents the world from enjoying another speculative bubble, unless China, Japan, the US and other major economies can stimulate a surge in productive investment, a euroglut will immediately cause a rise in foreign unemployment.

Let me stop here and make a prediction. Many economists understood the global savings glut hypothesis and even recognized that it provided at least part of the explanation for the kinds of imbalances and distortions that characterized the global financial markets over the last 10-15 years. But surprisingly many economists found the very concept absurd and hard to understand. It is impossible, they claimed, that Chinese savings can force either an American consumption boom or an increase in US unemployment. My prediction is that if Saravelos is right, and European surpluses for the next three or four years are anywhere near the magnitude he projects, these latter economists will suddenly discover that it is indeed possible for excess savings in Country A to cause either a consumption boom or a surge in unemployment in Country B.

This discovery will be especially strong among economists who have covered China for the past two decades. China's adjustment will be hard in the best of cases because it requires a sharp reduction in the kinds of investment the financial system is best able to manage, but a euroglut means that China must create even more alternative sources of demand, either in the form of much higher household consumption or of much higher productive investment (investment by small- and medium-sized businesses, most likely). This greater demand must be enough to compensate for the reduced economic activity caused both by a drop in the current form of investment and by a sharp drop in net external demand.

This can only make the adjustment more painful than expected and the required institutional changes more wrenching. A lot of economists who had once insisted that the surge in a country's deficits could only be "caused" by shifts in domestic household preferences and attitudes towards thrift, or that rising unemployment could only be caused by laziness, inefficiency or excessive "short-termism", will begin complaining about deficient European demand and will demand that policymakers either in Beijing, Brussels or Berlin do more to rebalance European domestic demand. We've seen something similar before, after all. Japanese economists who were certain in the 1980s that central bank purchases of USG bonds could not possibly cause either debt or unemployment in US to rise, suddenly discovered, just a few years ago when the PBoC began stockpiling JGBs, that Chinese central banks purchases of JGBs could indeed cause Japanese unemployment to rise.

Against The Reserve Currency

The timing of the Deutsche Bank piece was convenient for this issue of the newsletter. Last week I was speaking to one of my subscribers and he made a reference to recent blog entries on the role of the dollar as reserve currency. He found the comments useful for thinking about how trade and capital flow imbalances are likely to evolve over the next few years and asked that I summarize them for this issue of the newsletter.

As the "euroglut" concerns indicate, for many countries the best way to reduce domestic unemployment is to subsidize production by reducing wages. Many commentators, when they look at surpluses in Germany or elsewhere, wax lyrically about the hard-won discipline it took to generate these surpluses, but there is a big difference between encouraging productivity growth and subsidizing production by hidden transfers from the household sector. An undervalued currency, remember, is not a form of productivity enhancement. It is simply a consumption tax on imports the proceeds of which are used to subsidize exports. The net impact is an increase in domestic production along with a reduction in domestic demand.

As overall global demand drops, in other words, and local production rises, trade partners have to absorb the gap with an increase in their own unemployment. This strategy for increasing export competitiveness can only work if no one else is doing it. The world cannot devalue its way into higher employment.

It might be strange to think of Germany as having an undervalued currency during the past decade, when its surpluses were matched by deficits in countries that used the same currency, but remember that in Europe there are significant frictions – in labor mobility, in fiscal transfers, and even in capital mobility – that mean that Europe is not, like the US, an optimal currency zone sharing a single currency but rather a group of different countries on the equivalent of a kind of gold standard. Europe however does not have the disciplinary mechanisms of gold, or the kinds of discretionary monetary and trade policy that otherwise accommodates adjustment.

As a result, countries whose institutional structures were biased towards inflation, or who were too small easily to absorb large capital shifts, or whose workers were politically powerful, were necessarily going to fall into a pattern in which their currencies would become progressively overvalued. On the other hand countries whose institutions were biased towards low inflation, or whose workers were politically weaker, would see “their” euro become progressively undervalued.

The evidence can easily be seen in the balance of payments. Countries who entered the euro with a history of higher inflation or with lower sovereign credit ratings went from trade surpluses (in some cases quite large) or small trade deficits in the 1990s to huge trade deficits in the subsequent decade. Their counterparts went from small surpluses or deficits in the 1990s to huge surpluses in the subsequent decade. There have been attempts to explain each individual country’s shift as having been caused by domestic factors (lazy French workers, corrupt Spanish bankers, thrifty Germans, etc.) but the pattern is strong enough, I think, to suggest a stronger set of explanations based on evolving currency misalignments.

This is exactly what the current trading system permits and even encourages. If the euroglut thesis turns out to be correct, it will either have a terrible impact on the world, especially on China, or it will cause countries to retreat from global trade. It was already difficult a decade ago for the US to absorb China’s huge trade surplus when the world was leveraging up, but now, with the pressure to deleverage, if Europe tries to force an even larger surplus onto the rest of the world, it is just a question of time, I think, before the US, Japan, China, Brazil and many other countries try to restructure their role in the global trading regime.

In my blog entries I was particularly interested in the role of the US and how it would deal with its current leadership of the global trade and capital flow regime that evolved out of the 1944 Bretton Woods conference. This regime for the most part governs the process of globalization and has involved both costs and benefits for the US. To simplify enormously, the current regime is underpinned by the role of the US dollar as the primary reserve currency. The role of the dollar is widely hailed as one that brings the US an exorbitant privilege, but I have argued many times that in fact it creates for the US and exorbitant burden.

What is more, because the constraints imposed by the gold standard were not replaced once the world abandoned the gold standard, the regime we have followed after 1944, and especially after the “Nixon Shock” of 1971, allows significant imbalances to develop. When the US comprised roughly between one third and one half of the ”globalized” world, the imbalances were manageable and unlikely to destabilize either the US economy or the global economy. Now that the US comprises roughly one-fifth of the “globalized world, these imbalances create risk both for the United States and for the world.

What would make the US reconsider its role in the current trade and capital flow regime? It is, I think, fairly easy to work out an abstract calculus of the costs and benefits for the US in its role of enforcing and stabilizing global trade and capital flow regime:

1. *As the US economy becomes a smaller share not so much of the global economy but of the parts of the global economy that participate in the international trade, its share of the total benefits must decline. As trade impediments are gradually reduced, the growth in benefits overall is likely to decelerate, so the US retains a declining share of a more slowly growing number.*
2. *The costs it bears, however, are likely to grow inversely with its share of the relevant global economy. What is more, as more players with increasingly varied agenda join the system, the costs are unlikely to decelerate and may in fact accelerate. The costs include, but are probably not limited to, the risks identified as the Triffin Dilemma.*

It seems purely a matter of logic to me, then, that as the world grows, as there is convergence in income disparities between countries, and as more countries choose to join the global trading system, at some point the two lines must cross, so that the costs to the US of a global trading regime underpinned by the dollar as the dominant reserve currency exceed the benefits for the US. I would argue that we have probably already crossed that point, and evidence for this might be the seeming increase in the volatility of the US economy driven by the external sector.

The Evolution Of A New Consensus

If this calculus is reasonable, then whether or not the US has already reached the point at which its role as the stabilizer of the global trade and capital flow regime is no longer economically justified, it eventually will, and the US and the world have to consider the issue of timing. At some point the US will no longer be able or be willing to play the role it has played for the last seven decades, and Washington must decide when and what is the best way for it to restructure its role.

The transition will obviously be painful – painful for the US and even more painful for the rest of the world, especially developing countries and most especially Asian developing countries, but the extent of the pain will of course be a function of the way in which the transition takes place. If it occurs in the form of a collapse of the existing global system, as it seemed to have done during the Great War, it is a pretty safe assumption that the consequences will be chaotic and unpredictable.[2]

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[2] *I am often asked for book recommendations, and while I have read more books than I can possibly count on the economic, political and cultural history of the first three decades of the 20th Century, there are two books that, in my opinion, stand above all others on the political economy of the period. For an understanding of how the Great War undermined the global system, not just Europe and the US, the focus of most histories, but throughout the world, the best book I have read by far is The Deluge: The Great War and the Remaking of the Global Order by Adam Tooze (I also strongly recommend his book on the German economy in the 1930s, The Wages of Destruction: the Making and Breaking of the Nazi Economy). When it comes to understanding the monetary and financial forces that buffeted the US and Europe, I have long considered Barry Eichengreen's book, Golden Fetters: the Gold Standard and the Great Depression 1919-1939, as the best book on a topic about which many great books have been written.*

The damage will be much less if the US were to reduce its role at the same time that the international community were to set up a system that established a new set of rules on how the costs of adjustment were to be shared. I think the most obvious way to start would be to dust off Keynes proposals during Bretton Woods conference. Keynes understood that any global trading system was likely to be gamed, and he knew that economic volatility can never be suppressed, only transformed into another, and sometimes more destabilizing, form. Like Hyman Minsky, who always considered himself a Keynesian, it was always obvious to him that the global economy is a system of interlocked balance sheets, and that the way costs and benefits are indexed and distributed will necessarily affect both the pace of growth and the volatility of growth, not just on the individual company and country level but also system-wide.

This may be excessively optimistic on my part, but whereas the argument that US would be better off if the US dollar were not the dominant reserve currency seemed unimaginable even five years ago, there seems to have been a slow change in the way the world thinks about reserve currencies. The evolution of my own thinking is, I think, typical.

The argument against the dollar is an old one. For decades there have been economists, most famously John Maynard Keynes and Robert Triffin, who understood perfectly well the destabilizing consequences of the dollar system, but for much of my career I pretty much accepted the consensus. As I started to think more seriously about the components of the balance of payments, however, I realized that when Keynes at Bretton Woods argued for a hybrid currency (which he called “bancor”) to serve as the global reserve currency, and not the US dollar, he wasn’t only expressing his dismay about the transfer of international status from Britain to the US. Keynes recognized that once the reserve currency was no longer constrained by gold convertibility, the world needed an alternative way to prevent destabilizing imbalances from developing.

This should have become obvious to me much earlier except that, like most people, I never really worked through the fairly basic arithmetic that shows why these imbalances must develop. For most of my career I worked on Wall Street – at different times running fixed income trading, capital markets and liability management teams at various investment banks, usually focusing on Latin America – and taught classes at Columbia’s business school on debt trading and arbitrage, emerging markets finance, and financial history. Both my banking work and my academic work converged nicely on the related topics of global capital flows, financial crises and the structure of balance sheets. My 2001 book, The Volatility Machine, was my attempt to construct a balance sheet analysis of capital-flow volatility and financial crises.

When I moved to China in 2002, its huge savings and investment imbalances forced me to extend my “balance sheet” approach to consider the structure of the overall balance of payments rather than just the capital flows component. Like most balance sheet guys, I tend to think more easily in terms of “systems” than of components of a system, and by forcing me to focus on the way policies and institutional constraints affect the relationship between savings and investment within China and globally, thinking about China opened up for me a whole new way of thinking about the role of the US dollar as the dominant reserve currency.

Until then, like most people, and because of its role in Latin America, I had pretty much taken the role of the dollar as a given, and assumed vaguely that its dominance gave the US some ill-defined but important advantage – after all they did call it the "exorbitant privilege". But after a few years in China (I moved to Beijing in 2002) I became increasingly suspicious of the value of this exorbitant privilege.

Frankly it shouldn't have taken so long. After all it didn't take much to see evidence of countries that did all they could to avoid receiving any part of this privilege. Capital controls have historically been as much about preventing foreigners from buying local government bonds as it has been about preventing destabilizing bouts of flight capital, and living in China, where an aggressive demand for the privileges of reserve currency status coincide with equally aggressive policies that prevent the RMB from achieving reserve currency status (and that transfer ever more of the "benefits" to the US) made clear the huge gap in rhetoric and practice. After all, the US demand that China revalue the RMB is also a demand that the PBoC stop increasing US dollar reserves. The fact that China refused to revalue as fast as the US wanted suggests that China was determined, against American opposition, to grant the US the gift of exorbitant privilege.

In fact trade disputes are almost always couched in terms of trade, but the balance of payments identities make it clear that they can be equally expressed in terms of capital flows. If a country takes steps to expand its trade surplus, it is also taking steps to expand its net export of savings – these are more or less one and the same thing. The constant trade disputes between the US and Japan in the 1980s over the undervaluation of the yen can be recast as disputes about Japan's insistence on its right to give the US more of the exorbitant privilege and the US refusal to accept Japan's seeming generosity. Trade disputes between China and the US in the 2000s were more of the same.

Global Imbalances Emerge

The creation of the euro provided another illuminating variation on the impact of reserve currency status. When German institutions – government, businesses and labor unions – negotiated among themselves at the turn of the century a sharp reduction in wage growth for its workers, even as GDP growth picked up, they were obviously attempting to reduce Germany's high domestic unemployment by gaining trade competitiveness. Because these policies forced up the savings rate, and perhaps also explain why the investment rate dropped, they resulted in huge current account surpluses (or which is the same thing, huge excesses of savings over investment) that were counterbalanced within Europe. These policies "worked", and they worked probably far better than anyone expected. Germany, once the sick man of Europe with its high unemployment and large current account deficits, turned the corner almost immediately.

It turns out that it wasn't just good luck or brilliant economic policy-making that accounted for the speed of the German turnaround. Without anyone's realizing it, the simultaneous imposition of a single currency on a group of countries that clearly did not belong in a currency union had reduced or even eliminated the monetary adjustment mechanisms in those countries, and these mechanisms would have automatically counterbalanced the resulting increase in German capital exports. Instead of multiple currencies slowing the impact of German wage policies, the creation of the euro gave these policies far more traction than they would have otherwise had.

But for all the evidence provided by trade disputes and by the European experience, few economists, let alone the general public, had realized how ambiguous are the benefits of reserve currency status, which I called in a 2011 article in Foreign Policy and in a chapter of my 2013 book, The Great Rebalancing, the "exorbitant burden". A statement that is true by definition, that an excess of savings over investment in one part of an economic system requires an excess of investment over savings in another, was usually treated as politics, and anyone who thought that by pointing this out he was merely pointing out something as simple and obvious as 2 + 3 = 5 instead found himself being attacked from the right as a Keynesian who thinks infinite deficits are good and savings are evil, and from the left as a hard money guy who blames his problems on the poor.

The one thing both sides agreed on, however, was that the US enjoyed an advantage because of the reserve currency status of the US dollar, with some people even assuming that the US was somehow repressing the ability of Europe, China and Japan to gain the advantage for themselves. No matter how many times the US engaged in policies that tried to shift the benefits to those countries, or these countries engaged in policies that prevented them from receiving the benefits, both sides insisted that reserve currency status is a wonderful thing that everyone wants but only the US is allowed to have.

And yet it is actually quite easy to list the conditions under which reserve currency status encourages growth and the conditions under which it forces a rise either in debt or in unemployment. In advanced countries with deep and flexible financial markets, except in the case in which capital has become severely constrained by the need for money to be backed by gold, or real interest rates have been forced up to extremely high levels in order to break inflation (as was the case in the late 1970s and early 1980s), the net inflows associated automatically with reserve currency status will not result in an increase in productive investment. They only result in an increase either in the debt burden or in unemployment.

This is not an argument in favor of returning to gold, by the way. This argument is completely neutral on the issue of gold. It simply restates the Keynesian insight that eliminating the discipline imposed by the gold standard is likely to become destabilizing unless there is another way to impose discipline. Robert Triffin proved this quite clearly in the 1960s, and yet for some reason, perhaps because at the time the potentially destabilizing effect was pretty distant, his insight was never developed in ways that modified the current regime of global trade and capital flows.

Conditions have changed however, and the potentially destabilizing effect is no longer so distant. If we have not already reached the point at which the dominant reserve currency status of the US dollar is harmful to the US and potentially destabilizing to the world, logically we will inevitably reach that point, and probably soon.

Earlier in this newsletter I said that I am optimistic that we are seeing a change in the way the world thinks about the role of the US dollar, and I think this is because the 2007-08 crisis in Europe and the US, the start of Abenomics, and the extremely difficult adjustment that China faces have all focused attention on the nature and structure of savings imbalances and their effect on the global balance of payments. It is becoming increasingly obvious, I think, that Keynes was right. Several years ago, I received an email from Kenneth Austin, a Treasury Department economist who had read one of my articles. He himself was working on the same set of ideas and over the years we have had a running conversation about this topic.

The Political Spectrum

Austin recently published what I think is a very important paper in the latest issue of The Journal of Post Keynesian Economics ("Systemic equilibrium in a Bretton Woods II-type international monetary system") which explains why currency war is really a battle over where to assign excess savings, and must lead to unemployment in the country whose assets are most assiduously collected by central banks. You need to subscribe to read the full article, but the abstract tells you what Austin set out to show:

> *This article develops a model, based on balance-of-payment identities, of the new international monetary system (Bretton Woods II or BWII). It shows that if some countries engineer current account surpluses by exchange-rate manipulation and foreign-reserve accumulation, the burden of the corresponding current account deficits falls first on the reserve-issuing countries, unless those savings inflows are diverted elsewhere. The imbalances of the BWII period result from official, policy-driven reserve flows, rather than market-determined, private savings flows. The struggle to divert these unwanted financing flows is at the root of the "currency wars" within the system.*

While recognition of the exorbitant burden had been growing in recent years, Austin's article focused a lot of new attention on this topic, and it seems that finally Keynes's insight is attracting the kind of acceptance that might eventually modify future policy. In August in a much-commented-upon article in the New York Times, Jared Bernstein explained one of the corollaries of Austin's model, pointing out that

> *Americans alone do not determine their rates of savings and consumption. Think of an open, global economy as having one huge, aggregated amount of income that must all be consumed, saved or invested. That means individual countries must adjust to one another. If trade-surplus countries suppress their own consumption and use their excess savings to accumulate dollars, trade-deficit countries must absorb those excess savings to finance their excess consumption or investment.*

> *Note that as long as the dollar is the reserve currency, America's trade deficit can worsen even when we're not directly in on the trade. Suppose South Korea runs a surplus with Brazil. By storing its surplus export revenues in Treasury bonds, South Korea nudges up the relative value of the dollar against our competitors' currencies, and our trade deficit increases, even though the original transaction had nothing to do with the United States.*

This is a key point. The inexorable balance of payments accounting mechanisms make Bernstein's claim – that "Americans alone do not determine their rates of savings"– necessarily true, and yet also shocking to most economists. How many times, for example, have you heard economists insist that the US trade deficit was "caused" by the fact that Americans refuse to save, or, even more foolishly, that "no one held a gun to the American consumer's head and forced him to buy that flat-screen tv"?

The fact is that if foreign central banks buy trillions of dollars of US government bonds, except in the very unlikely case that there just happen to be trillions of dollars of productive American investments whose backers were unable to proceed only because American financial markets were unable to provide capital at reasonable prices, then either the US savings rates had to drop because a speculative investment boom unleashed a debt-funded consumption boom (i.e. household consumption rose faster than household income) or the US savings rate had to drop because of a rise in American unemployment. There is no other plausible outcome possible. Americans cannot wholly, and sometimes even partly, determine the American savings rate.

This mistaken belief that American savings are wholly a function of American household preferences arises because most economists – and, it seems, policymakers – can only imagine American households as autonomous economic units, and are seemingly incapable of imaging them as units within a system in which there are certain inflexible constraints. The same is true about households elsewhere. Because flexible exchange rates prevented Europe from running massive surpluses before the 2007-08 crisis, German capital exports to countries like Spain created the same constraints, meaning that Spanish households too faced the choice only of speculative investment booms, consumption booms, and unemployment.

The fact that both Spain and the US experienced first booms in consumption and speculative investment and then steep rises in unemployment is just a requirement of the arithmetic, and has nothing to do with local cultural vice finally succumbing to the cultural virtue of foreigners. Rather than try to understand how systems constrain choice, economists and bankers, most of them quite wealthy, preferred to lecture and wag their fingers at ineluctably stupid middle- and working-class households.

And its not just traditionally "liberal" economists who understand that trade imbalances are not caused by lazy workers. Analysts who retain sympathy for the gold standard, like self-confessed "gold bug" John Mauldin, have always understood that the main argument in favor of gold is that it imposes an unbreakable trade and capital flow discipline – indeed that is also the main argument against gold – but many of them have tended to de-emphasize reserve currency economics mainly, I think, because this particular problem is to them subsumed under their more general concerns about money. I don't know if Ralph Benko is one of them, but he has written on this subject before and very recently wrote two articles (here and here) in Forbes, which has traditionally been sympathetic to the gold cause, in which he too cites Austin's paper and adds to the chorus:

> *The mechanics of the reserve currency system preempt these funds' ready availability for "the maintenance of industry." The mechanics of the dollar as a reserve asset, therefore, finance bigger government while insidiously preempting productivity, jobs, and equitable prosperity.*
>
> *This columnist agrees wholeheartedly with Bernstein on what seem his three most important points. The reserve currency status of the dollar causes American workers, and the world, big problems. The exorbitant privilege deserves and demands far more attention than it receives. Moving the dollar away from being the world's reserve currency would be a great deal easier than many now assume.*

It is hard to construct an economics "tradition" that combines Austin, Bernstein, Mauldin and Benko, and so the fact that they are all in agreement suggests that the discussion about the role of the US dollar as a reserve currency may be emerging from the broader monetary discussion that pits two very opposing economics traditions virulently against each other. Maybe it is just a coincidence that in the last year more and more economists have been questioning conventional wisdom about the benefits of dominant reserve currency status, but once this happens, the logic against the automatic assumption of exorbitant privilege is so powerful that it may become hard ever to believe again. Perhaps we have reached that tipping point.

We need to keep this argument in mind. As US policymakers take steps to extend free trade through various bilateral and multi-lateral agreements, it is important both that the exorbitant burden is addressed before it becomes much more destabilizing but it is also important that the exorbitant burden not become an argument against free trade. To argue in favor of constraining unlimited purchases of US or other government bonds is not the same as arguing that the US or other countries should not engage in international trade, as many commentators have bizarrely clamed.

It is simply to argue that in a well-functioning world of trade, it is very difficult, even impossible, for large savings imbalances, or large trade imbalances, which are the same thing, to persist for very long. If they do, this can only be because there are institutional distortions that force these imbalances. And not only do these institutional distortions eventually lead to very difficult adjustments, often in the form of global crises, but they also prevent trade from maximizing global output.

As we design global trading agreements, we need to keep in mind that eventually the US will realize that the exorbitant privilege is actually an enormous cost for the US economy, and that it can also lead to destabilizing imbalances (this was recognized at least as early as the 1960s). At some pint, in other words, the US will either opt out, or be forced out, of its global reserve currency role. Because this must happen eventually, it is worth asking when is the best time and what is the best way for this to happen.

I would argue that the best time is now, so as to minimize the total cost to the US. I would also argue that the best way is in the form of an intentional agreement over which the US has a disproportional influence and so can stabilize the process, which perhaps also suggests that the best time is now.

Appendix

I have written about this topic many times before so I won't make the full argument, but it might be useful to remind readers why reserve currency status is an exorbitant burden:

1. Because for a variety of reasons dollars are the preferred form of foreign currency reserve, or of any "risk-off" kind of trade, in order to combat uncertainty or to increase domestic employment, foreign countries are most likely to accumulate reserves by buying US government bonds or other liquid, low-risk US dollar assets. This reserve accumulation might be formally classified as reserves, and accumulated by the central bank, or other institutions, some of which are referred to as sovereign wealth funds, might accumulate these reserves.

2. When it is the private sector that accumulates dollars, there are likely to be too many potential reasons and consequences to try to summarize them. But when governments systematically accumulate huge amounts of dollars, the reason has almost always to do with creating or expanding the trade or current account surplus, which is just the obverse of expanding the export of net domestic savings. The mechanism involves suppressing domestic consumption by taxing households (usually indirectly in the form of currency undervaluation, financial repression, anti-labor legislation, etc) and subsidizing exports. These mechanisms force up the savings rate while making exports more competitive on the international markets, the net effect of which is to reduce domestic unemployment.

3. If these savings are exported to the US, for example if the central bank buys US government bonds, the US must run the corresponding trade deficit. This has nothing to do with whether the exports go to the US or to some other country. It is astonishing how few economists understand this, but if Country A is a net exporter of savings to Country B, the former must run a surplus and the latter a deficit even if the two do not trade together at all.

4. Does the US benefit from importing foreign savings and foreign investment? The local state or country that receives the investment may benefit, but any country only benefits from importing foreign capital under one or more of three conditions:

a) *When a country has high levels of potentially productive investment but domestic savings are insufficient to satisfy domestic demand, the country*

benefits from importing foreign capital to fund these productive investments. As long as the total economic return on these investments, including all externalities, exceeds the cost of the foreign borrowing, or is funded by foreign equity investment, foreign capital inflows are wealth creating for the recipient.

b) *When during a crisis major borrowers, including the government, face severe short-term liquidity constraints and domestic capital is, for whatever reason, unwilling or unable to fund maturing debt, foreign capital inflows can help bridge the gap. In this case foreign investors fulfill the classic role of a central bank, lending to creditworthy borrowers or against acceptable assets in order to prevent a liquidity crisis from forcing the borrower into insolvency.*

c) *For countries that lack technology, that have weak business and management institutions, or that suffer from low levels of social capital, foreign investment can bring with it the technology and management skills that allow the economy*

In the days of the gold standard it was possible for an advanced economy like the US to suffer from the first condition. Today it suffers from none of the three conditions.

5. Let me explain why it does not suffer from the first. If the US is a net recipient of capital inflows, it is simply taking the other side of the accounting identity I listed earlier: an excess of savings over investment in one part of an economic system requires an excess of investment over savings in another part. If Japan, with its undervalued currency and repressed interest rates, forced its savings rate up above its already high investment rate in the 1980s, and used the excess to by US government bonds, the US had to see its investment rate exceed its savings rate. There are only three ways in which the US can increase investment relative to savings, or reduce savings relative to investment:

1. *It can increase productive investment.*
2. *It can increase nonproductive investment, especially in real estate, as foreign inflows unleash a stock and real estate market bubble, or it can increase consumption, as these bubbles unleash a wealth effect which causes ordinary Americans to increase their consumption relative to their income (i.e. reduce their savings). In either case US debt rises faster than US debt-servicing capacity.*
3. *Unemployment can rise as the expansion in imports relative to exports causes American factories to cut back on production and fire workers. Of course fired workers no longer produce but they still must consume, so the savings rate drops.*

These are the only three possible outcomes. If productive investment in the US has been constrained by the lack of American access to capital – domestic or foreign – as was the case in the 19th Century, it is possible that reserve currency status increases American employment and wealth creation. But in advanced economies productive investment is never constrained by lack of capital. It is almost always the case, in other words, that an increase in net foreign investment to the US (and to most advanced countries by the way) must result in some combination of a speculative investment boom, a consumption boom or a rise in unemployment. What typically happens is that in the beginning we get the first two, until debt levels become too high, after which we get the third.

6. Bryan Riley and William Wilson, two economists from the Heritage Foundation, in their response to Jared Bernstein's article, provided their reasons in a blog entry last month for arguing that in principle the benefits of use of the dollar as the dominant reserve currency exceed the cost to the US of this higher debt or higher unemployment. Their piece was fairly short, and so I don't want to suggest that I am representing the full scope of their disagreement, but they suggest that the benefits are:

> ***Seignorage****. The largest benefit has been "seignorage," which means that foreigners must sell real goods and services or ownership of the real capital stock to add to their dollar reserve holdings.*
>
> ***Low Interest Rates****. The U.S. has been able to run up huge debts denominated in its own currency at low interest rates. The dollar's role as the world's reserve currency reduces U.S. interest rates because foreign investors like to invest in the relatively safe U.S. economy.*
>
> ***Lower Transaction Costs****. U.S. traders, borrowers, and lenders face lower transaction costs and foreign exchange risk when they can deal in their own currency. It's easier to do business with people who take dollars.*
>
> ***Power and Prestige****. The dollar's dominant reserve status gives the United States political power and prestige. Britain's loss of reserve-currency status in the 20th century coincided with its loss of political and military preeminence.*

7. I think this is a pretty fair summary of the arguments generally used in favor of supporting "king dollar", and I think they are worth addressing specifically. To address seniorage, the benefits of seniorage are really what the whole debate is about. If the US believes that it is important for the global trading system that the US produce enough reserves for a growing global economy, and if the global trading system benefits the US, it should do so. As long as the growth in global reserves is less than the growth in the US economy, the associated rise in debt is sustainable.

But, and this is the Triffin Dilemma, if reserves and other government accumulation of US assets grow faster than US GDP, seniorage results in an unsustainable increase in US debt (or unemployment). Earlier in this newsletter, based on a previous blog entry, I argued that the former may have been the case in the 1950s, but as global GDP growth exceeds US GDP growth, as more countries and regions join in the global trading system, and as there is convergence between advanced and backward economies, the growth in US debt needed to capture these benefits either becomes unsustainable or, to restrain the growth in debt, requires a rise in US unemployment.

8. To address lower interest rates, I showed in my book why foreign purchases of US government bonds do not lower US interest rates. At best they simply distort the US yield curve and in the long term even raise them. I will not repeat the full explanation here, but to summarize, if the exorbitant burden causes unemployment to rise, as Austin and Bernstein argue, as foreigners increase their purchases of USG bonds, fiscal revenues must drop and fiscal expenses must rise, causing total government debt to rise by the same, or more (because most of us would agree that demand created by government spending is less efficient than demand created by trade) than the capital inflows available to fund government debt. So the additional supply of foreign funding is only equal to or less than the additional fiscal demand for funding.

Consider this: the larger a country's foreign current account deficit, by definition the greater the inflow of foreign money to purchase its assets, mainly government bonds in the case of the US and many other countries. The higher a country's current account surplus, by definition the greater the outflow of money to purchase foreign assets, and the less domestic money available to purchase domestic assets. Is it reasonable, then, to assume that the larger a country's current account deficit, the lower its interest rates, while the larger a country's current account surplus, the higher its interest rates? This is what the low-interest-rate argument implies.

9. To address transaction costs, while it is true that trading in US dollars reduces transaction costs for American businesses, it is hard to believe that these transaction costs are not priced into the imports and exports of their foreign counterparts. More importantly, it is not clear that reducing central bank purchases of US government bonds will cause transaction costs to rise. The vast bulk of trading volume does not consist of central bank purchases of US government bonds. It is trade and investment related. If foreign central banks were limited in their ability to stockpile US dollar reserves, foreign exchange transaction costs would barely budge.

10. To address power and prestige, while it may be true that Britain's loss of reserve-currency status in the 20th century coincided roughly with its loss of political and military preeminence, I think it is incorrect to imply that Britain lost power and prestige after the Great War mainly or even partly because sterling lost its status as the dominant reserve currency (which in fact really occurred some time in the 1930s and 1940s). It was the destruction, during the first two years of the Great War, of London's role in trade finance (which formed the vast bulk of international lending at the time, with nearly the entire trade finance market moving to neutral Amsterdam and New York), followed by its aerial pounding in WW2, that caused London to lose its financial pre-eminence.

Even today it is hard to associate London's current role as either the first or second most important financial center in the world, depending on how you measure it, with the status of sterling as a reserve currency. What is more, the US dollar only became the pre-eminent reserve currency in the 1930s and 1940s, but the US was the leading economic power – nominally, per capita, and technologically – by the 1870s.

I would argue that US power and prestige probably has more to do with the size of its economy, with the creativity of Hollywood and New York in entertainment and fashion, with technological innovation in San Francisco, Boston, New York, Austin, and elsewhere, with the size and dynamism of its economy, with its composers and artists in New York, San Francisco, and elsewhere, with its overwhelming military superiority, with its universally-valued ideal of ethnic inclusiveness and individualism, with its Ivy League and elite universities, with its think tanks, and with a host of other factors more important than the currency denomination of central bank reserves.

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