

BLOG



Aperture51/Shutterstock

The Dollar May Remain Strong For Longer Than We Think

Why demand for it is higher than other fiat currencies

by Charles Hugh Smith

Tuesday, September 16, 2014, 10:50 PM

I have long been **a dollar bull**, not for any over-arching reasons based on inflation, deflation, rising geopolitical multi-polarity or any of the other issues that touch on the dollar's valuation vis-à-vis other currencies. My analysis focuses on a few basics: the dollar's status as the global reserve currency, **Triffin's Paradox** (a.k.a. Triffin's Dilemma) and global capital flows into the dollar and dollar-denominated assets such as U.S. Treasury bonds.

Reserve Currencies vs. Trading Currencies

When we say the U.S. dollar is the global reserve currency, what does that mean? There is often some confusion about the difference between a *trading currency* and a *reserve currency*. Let's use an example to explain the difference.

Country A trades \$10 billion of goods and services with Country B, which does \$10.01 billion of trade with Country A. The two nations agree to a trade pact that enables the two nations to trade currencies directly, that is, without converting the payments for trade into a third currency such as the dollar.

Once the bilateral trade is settled, a modest \$10 million remains as a surplus/trade deficit. The owner of the surplus (Country B, in this example) can trade that excess currency on the global foreign exchange (FX) market, use it to buy goods or services, or hold it. The modest \$10 million is a tiny slice of the two trading nations' money stock and gross domestic products (GDP), and it has little effect on either global or domestic finance. The \$10 million is a small claim against the currency of the nation running the trade deficit (Country A, in this case).

The main takeaway is that billions of dollars of trade transactions may yield very little surplus/deficit.

Trading currencies are examples of the *transactional* nature of money: money enables transactions.

A **reserve currency**, on the other hand, is an example of money as a *store of value*: nations hold reserve currencies as stores of value that can be sold to support their own currency if the need arises.

A reserve currency is quite different from a trading currency as it must meet these minimum requirements to function as a reserve currency:

1. **It must be liquid** - that is, it can be readily bought and sold on the global foreign exchange market *in size*, i.e. large quantities, without affecting the value of the currency;
2. **Its value must be relatively stable** - that is, it trades in a narrow range with other currencies, and
3. **Its value is set by supply and demand** - i.e. capital flows and market forces, rather than an arbitrary peg.

Many observers greet the announcement of recent bilateral or multi-lateral currency agreements as evidence the U.S. dollar is weakening. But this is mixing apples and oranges: the U.S. doesn't gain much by issuing a currency that serves transactional needs — it offers no profit to the U.S. if trade between other nations is conducted in yen, renminbi, euros or quatlloos.

The demand for transactional currency is temporary. Transact the trade, and then the cash moves on to the next transaction.

The demand for reserve currency is not transactional. A nation that wants to build reserves *must* acquire the reserve currency and hold it.

Nations that issue reserve currencies must issue enough of their currency to satisfy the global demand for reserves, and the only way to do this is run substantial **and** permanent trade deficits.

Triffin's Paradox/Dilemma

This brings us to Triffin's Paradox, which has two basic parts:

1. Any nation that issues the reserve currency **must run a trade deficit** to supply the world with surplus currency to hold in reserve and as a result,
2. The issuing nation faces the **paradox** that the needs of global trading community are generally different from the needs of domestic policy makers.

The global trading community requires that the issuer of the reserve currency run trade deficits large enough to satisfy the demand for reserves, while domestic audiences want a strong export sector, i.e. a trade surplus.

You can't have it both ways: if you want to issue a reserve currency, you have to run a trade deficit that is commensurate in size with the global demand for your currency.

Since supply and demand set price, this push-pull affects the value of the U.S. dollar: U.S. exporters want a weak dollar to spur foreign demand for their products, while foreign holders of the USD want a strong dollar that holds its value/purchasing power.

It is impossible for any nation to maintain the reserve currency and run trade surpluses. If you run trade surpluses, you cannot supply the global economy with the currency it needs for reserves, payment of debt denominated in the reserve currency and domestic credit expansion.

Why Hold Reserves?

Why do countries need reserves in the first place? The answer can get complicated, but the basic dynamic is supply and demand: if Nation A prints vast quantities of its own currency (let's call it the quatloo) and uses the cash to buy goods and services without creating an equivalent amount of goods and services to sell to other nations, it will run a large trade deficit.

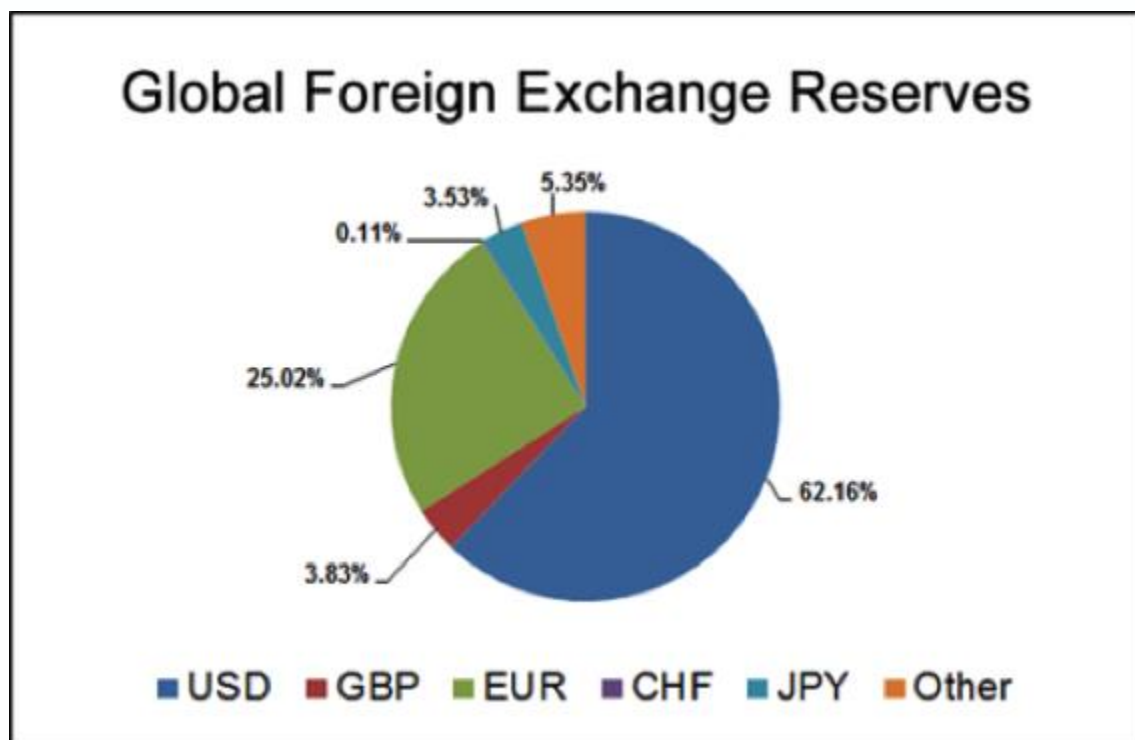
The supply of quatloos will soon exceed the demand: everybody who accepted freshly printed quatloos for their exports wants to trade them for goods or unload them as soon as possible. As a result, the value of quatloos on the global FX market falls, and Nation A is in danger of plunging into a currency crisis: as the value of the quatloo declines, the price of imports rises within Nation A, and soon people can no longer afford imports from other nations—for example, grain and oil.

One way Nation A can support the value of its quatloos is to sell its reserve currency and use the cash to buy quatloos, soaking up the excess supply that is depressing the quatloo's value. So currency reserves act as a stabilizing anchor for the nation's own currency.

There is another often-overlooked role for currency reserves: they act as *the asset base for the expansion of credit within the domestic economy*. A central bank with substantial reserves can issue credit in the domestic currency commensurate with its holdings of assets such as gold or currency reserves.

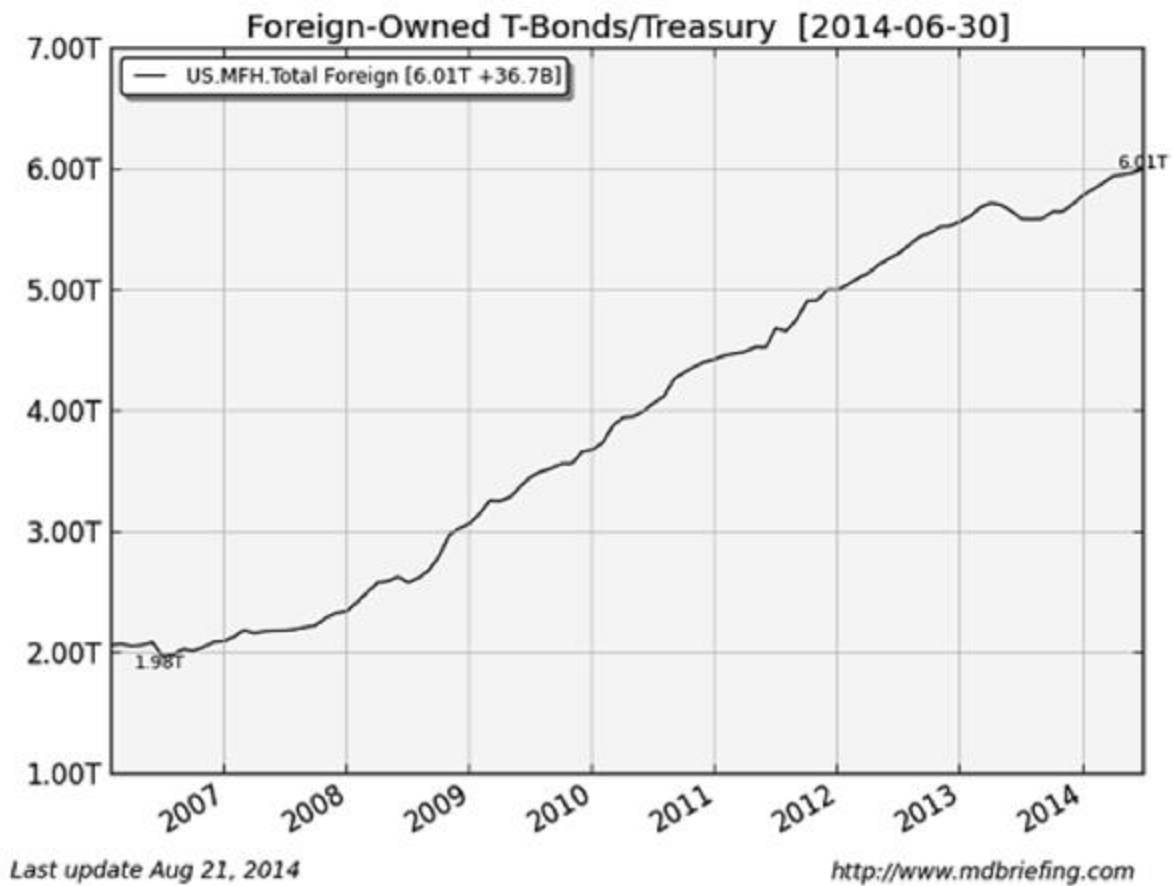
The Supply and Demand for Dollars

There are number of reasons why nations might choose to buy or sell U.S. dollars, or assets denominated in dollars such as Treasury bonds. Let's start by noting that the dollar is not the only reserve currency; the USD is roughly 62% of global currency reserves, the euro is about 25% and other currencies make up the balance.



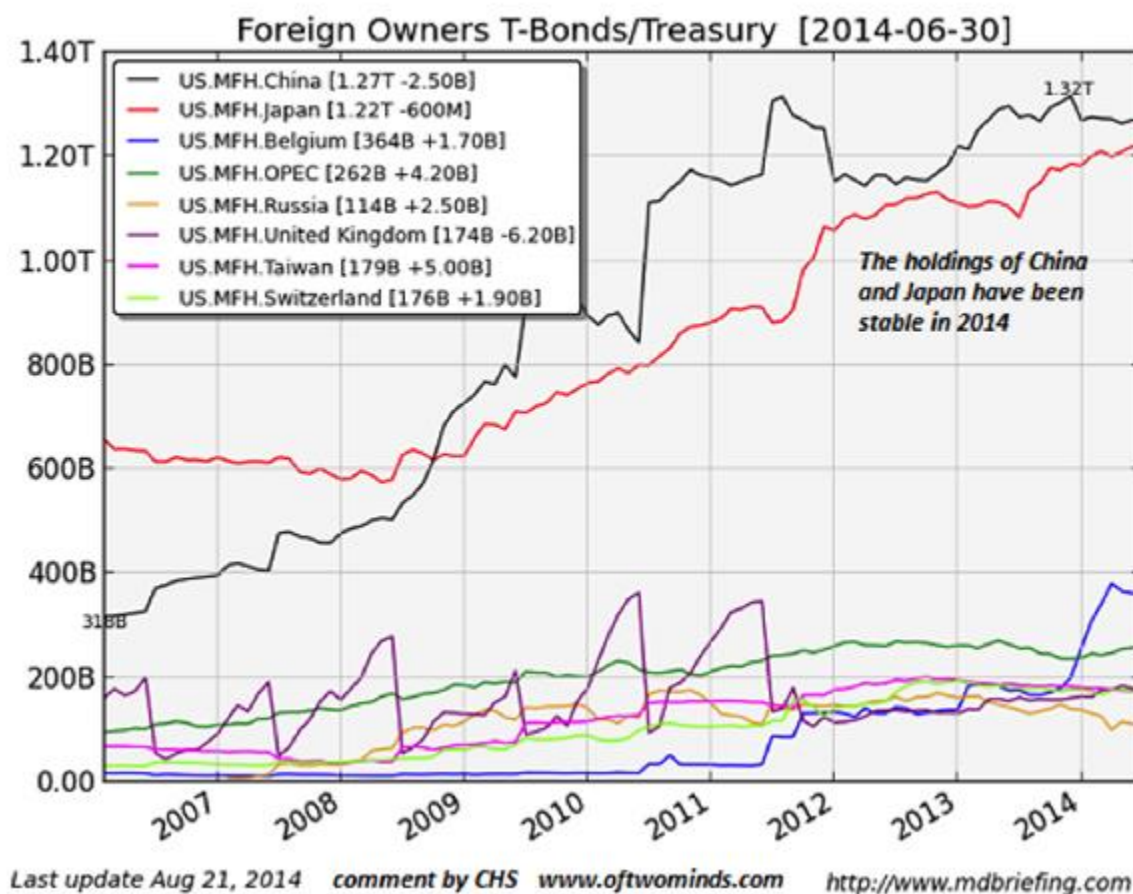
Nations might sell dollars and buy another reserve currency to diversify their holdings, hedge against a decline in the dollar relative to other reserve currencies, or perhaps as a form of geopolitical weapon or protest against American hegemony or specific policies.

Much has been made of global capital leaving U.S. Treasury bonds. Yet if we glance at a chart of foreign holdings of Treasuries, we note that foreign owners have steadily increased their holdings of Treasuries, other than a shallow dip in 2013:



For years, observers have seen the massive Treasury holdings of China as a potential *financial weapon*: if China were to dump a trillion dollars of Treasuries, that sale would disrupt the global market for U.S. bonds. (I have always held the Fed could issue a fresh \$1 trillion and buy the lot in one fell swoop.)

But interestingly, we find instead that China's holdings of Treasuries have been relatively stable recently, at around 20% of total foreign-owned Treasury bonds:



The discussion of major foreign holders of Treasury Securities, i.e. foreign states and central banks, often overlooks one key driver of this trade: states seeking to weaken their own currency to boost their exports sell their own currency and buy U.S. dollars (or dollar-denominated assets such as Treasuries). This increases the supply of their own currency, pushing the value lower, while the increased demand for dollars pushes the value of USD higher.

In terms of foreign trade, this weakens the currency of the buyer of Treasuries in relation to the dollar.

In other words, major holders of U.S. Treasuries such as China and Japan have an over-riding incentive to keep buying Treasuries: buying dollars stabilizes or weakens their currency vis-a-vis the U.S. dollar, making their goods and services cheaper in the U.S. and thereby boosting their exports.

There are two other reasons nations might buy dollars: the dollar is available in size, unlike smaller currencies such as the Swiss franc, and it is widely viewed as a proxy of U.S. economic, military and diplomatic stability: in other words, in periods of crisis, the dollar is widely viewed as a safe haven currency.

Conclusion

We now have a basic understanding of the forces of supply and demand for the dollar as a reserve currency: nations buy dollars as reserves, and also to weaken or stabilize the value of their own currency against the dollar, a strategy designed to boost their exports to the U.S.

On the supply side, the U.S. issues a surplus of dollars for others to use as reserves by running a trade deficit. Should that deficit shrink, the supply of dollars will also shrink.

In **Part 2: Why The US Dollar Could Strengthen - A Lot From Here** we analyze the surprisingly likely drivers that may keep the US dollar strengthening over the next few years, especially if another economic/financial crisis arrives. While there are many reasons to fear for the longer term viability of the US dollar given America's current misguided monetary policy and exponentially increasing debt & liabilities, the next few years could well see it appreciate further by 50-100% relative to the world's other major fiat currencies.

For those understandably disgusted by the reckless expansion of the US money supply over the past six years, it's vitally important to remember that the road to our monetary endgame is not a straight line, nor necessarily intuitive. To have the best chance of remaining solvent, understanding the likeliest pathways the route will take is often nearly as important as correctly predicting the final destination.

Click here to read Part 2 of this report (*free executive summary, enrollment required for full access*)

<http://www.safehaven.com/article/35786/the-consequences-of-a-strengthening-us-dollar>

Global finance faces \$9 trillion stress test as dollar soars

The world is more dollarized today than any time in history, and therefore at the mercy of the US Federal Reserve as rates rise

179 394 0 186 759 Email



The Fed's zero rates and quantitative easing flooded the emerging world with dollar liquidity in the boom years, overwhelming all defences Photo: Alamy



By Ambrose Evans-Pritchard

9:29PM GMT 11 Mar 2015

255 Comments

Sitting on the desks of central bank governors and regulators across the world is a scholarly report that spells out the vertiginous scale of global debt in US dollars, and gently hints at the horrors in store as the US Federal Reserve turns off the liquidity spigot.

This dry paper is the talk of the hedge fund village in Mayfair, and the stuff of nightmares for those in Singapore or Hong Kong already caught on the wrong side of the biggest currency margin call in financial history. "Everybody is reading it," said one ex-veteran from the New York Fed.

The report - "Global dollar credit: links to US monetary policy and leverage" - was first published by the Bank for International Settlements in January, but its biting relevance is growing by the day.

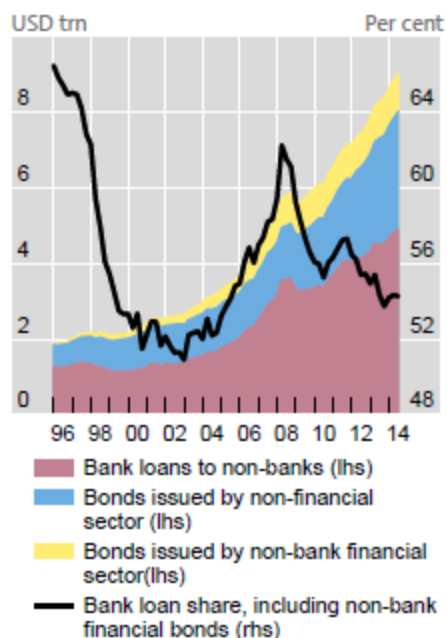
It shows how the Fed's zero rates and quantitative easing flooded the emerging world with dollar liquidity in the boom years, overwhelming all defences.

This abundance enticed Asian and Latin American companies to borrow like never before in dollars - at real rates near 1pc - storing up a reckoning for the day when the US monetary cycle should turn, as it is now doing with a vengeance.

Contrary to popular belief, the world is today more dollarized than ever before. Foreigners have borrowed \$9 trillion in US currency outside American jurisdiction, and therefore without the protection of a lender-of-last-resort able to issue unlimited dollars in extremis. This is up from \$2 trillion in 2000.

The emerging market share - mostly Asian - has doubled to \$4.5 trillion since the Lehman crisis, including camouflaged lending through banks registered in London, Zurich or the Cayman Islands.

The result is that the world credit system is acutely sensitive to any shift by the Fed. "Changes in the short-term policy rate are promptly reflected in the cost of \$5 trillion in US dollar bank loans," said the BIS.



Total US dollar debt outside US (left)

Markets are already pricing in such a change. The Fed's so-called "dot plot" - the gauge of future thinking by Fed members - hints at three rate rises this year, kicking off in June.

The BIS paper's ominous implications are already visible as the dollar rises at a parabolic rate, smashing the Brazilian real, the Turkish lira, the South African rand and the Malaysian Ringitt, and driving the euro to a 12-year low of \$1.06.

The dollar index (DXY) has soared 24pc since July, and 40pc since mid-2011. This is a bigger and steeper rise than the dollar rally in the mid-1990s - also caused by a

US recovery at a time of European weakness, and by Fed tightening - which set off the East Asian crisis and Russia's default in 1998.

\$DXY - US Dollar Index - Daily OHLC Chart



Emerging market governments learned the bitter lesson of that shock. They no longer borrow in dollars. Companies have more than made up for them.

"The world is on a dollar standard, not a euro or a yen standard, and that is why it matters so much what the Fed does," said Stephen Jen, a former IMF official now at SLJ Macro Partners.

He says the latest spasms of stress in emerging markets are more serious than the "taper tantrum" in May 2013, when the Fed first talked of phasing out quantitative easing.

"Capital flows into these countries have continued to accelerate over recent quarters. This is mostly fickle money. The result is that there is now even more dry wood in the pile to serve as fuel," he said.

WATCH: What is Quantitative Easing?

Mr Jen said Asian and Latin American companies are frantically trying to hedge their dollar debts on the derivatives markets, which drives the dollar even higher and feeds a vicious circle. "This is how avalanches start," he said.

Companies are hanging on by their fingertips across the world. Brazilian airline Gol was sitting pretty four years ago when the real was the strongest currency in the world. Three quarters of its debt is in dollars.

This has now turned into a ghastly currency mismatch as the real goes into free-fall, losing half its value. Interest payments on Gol's debts have doubled, relative to its income stream in Brazil. The loans must be repaid or rolled over in a far less benign world, if possible at all. You would not think it possible that an Asian sovereign wealth fund could run into trouble too, but Malaysia's 1MDM state fund came close to default earlier this year after borrowing too heavily to buy energy projects and speculate on land. Its bonds are currently trading at junk level.

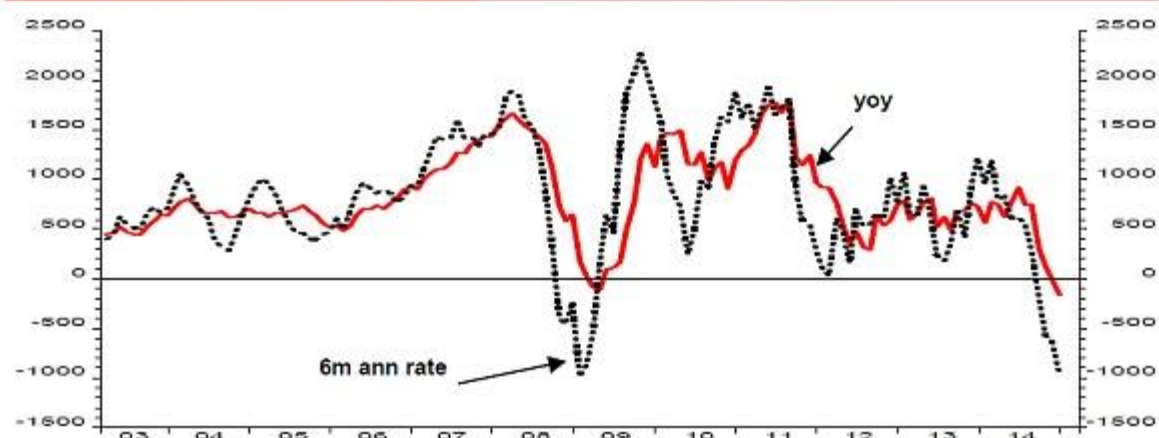
It became a piggy bank for the political elites and now faces a corruption probe, a recurring pattern in the BRICS and mini-BRICS as the liquidity tide recedes and exposes the underlying rot.

BIS data show that the dollar debts of Chinese companies have jumped fivefold to \$1.1 trillion since 2008, and are almost certainly higher if disguised sources are included. Among the flow is a \$900bn "carry trade" - mostly through Hong Kong - that amounts to a huge collective bet on a falling dollar. Woe betide them if China starts to drive down the yuan to keep growth alive.

Manoj Pradhan, from Morgan Stanley, said emerging markets were able to weather the dollar spike in 2014 because the world's deflation scare was still holding down the cost of global funding. These costs are now rising. Even Singapore's three-month Sibor used for benchmark lending is ratcheting up fast.

The added twist is that central banks in the developing world have stopped buying foreign bonds, after boosting their reserves from \$1 trillion to \$11 trillion since 2000.

Global central bank foreign exchange reserves (IMF data, actual \$bn change)



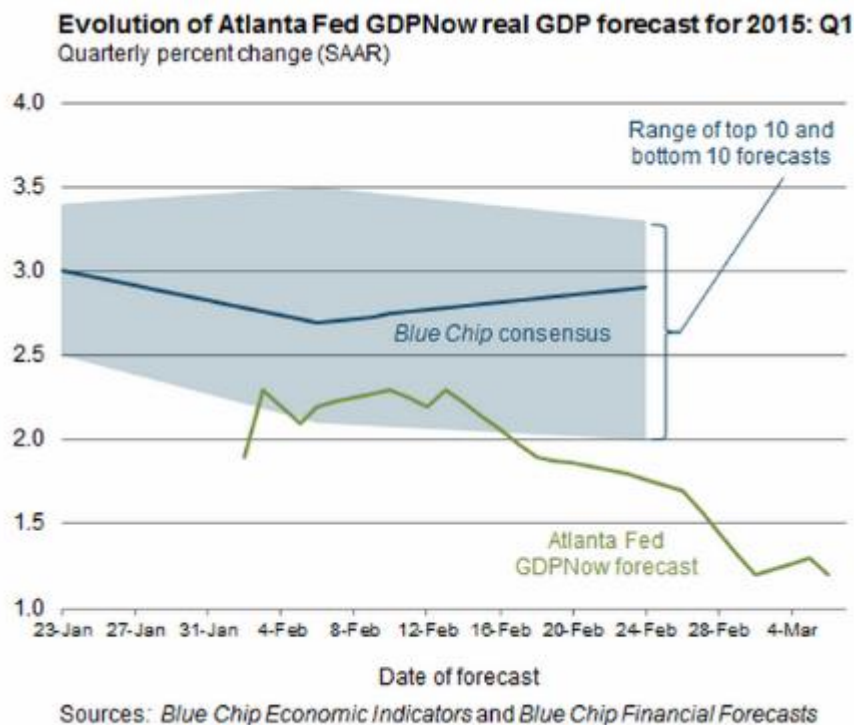
Source: Datastream
From Societe Generale

The Institute of International Finance (IIF) calculates that the oil slump has slashed petrodollar flows by \$375bn a year. Crude exporters will switch from being net buyers of \$123bn of foreign bonds and assets in 2013, to net sellers of \$90bn this year. Russia sold \$13bn in February alone.

China has also changed sides, becoming a seller late last year as capital flight quickened. Liquidation of reserves automatically entails monetary tightening within these countries, unless offsetting action is taken. China still has the latitude to do this. Russia is not so lucky, and nor is Brazil. If they cut rates, they risk a further currency slide.

Powerful undercurrents in the world's financial system are swirling beneath the surface. Some hope that the European Central Bank's €60bn blast of QE each month will keep the asset boom going as the Fed pulls back, but this is a double-edged effect for the world as a whole. It pushes the dollar yet higher. That may matter more in the end.

It is possible that the Fed will retreat once again, judging that the world economy is still too fragile to withstand any tightening. The Atlanta Fed's forecasting model for real GDP growth in the US itself has slowed sharply since mid-February.



Yet the message from a string of Fed governors over recent days is that rate rises cannot be put off much longer, the Atlanta Fed's own Dennis Lockhart among them. "All meetings from June onwards should be on the table," he said.

The most recent Fed minutes cited worries that the flood of capital coming into the US on the back of the stronger dollar is holding down long-term borrowing rates in the US and effectively loosening monetary policy. This makes Fed tightening even more urgent, in their view, implying a "higher path" for coming rate rises.

Nobody should count on a Fed reprieve this time. **The world must take its punishment.**

http://www.telegraph.co.uk/finance/comment/ambroseevans_pritchard/11465481/Global-finance-faces-9-trillion-stress-test-as-dollar-soars.html

Wednesday, March 11, 2015 12:59 AM

Is There a US\$ Shortage? Will it Sink the Global Economy? Again?

Reader Patricia is wondering about a recent ZeroHedge article, **The Global Dollar Funding Shortage Is Back With A Vengeance And "This Time It's Different"**.

The last time the world was sliding into a US dollar shortage as rapidly as it is right now, was following the collapse of Lehman Brothers in 2008. The response by the Fed: the issuance of an unprecedented amount of FX liquidity lines in the form of swaps to foreign Central Banks. The "swapped" amount went from practically zero to a peak of \$582 billion on December 10, 2008.

The USD shortage back, and the Fed's subsequent response, was the topic of one of our most read articles of mid-2009, "**How The Federal Reserve Bailed Out The World.**"

As we discussed back then, this systemic dollar shortage was primarily the result of imbalanced FX funding at the global commercial banks, arising from first Japanese, and then European banks' abuse of a USD-denominated asset-liability mismatch, in which the dollar being the funding currency of choice, resulted in a massive matched synthetic "*Dollar short*" on the books of commercial bank desks around the globe: a shortage which in the aftermath of the Lehman failure manifested itself in what was the largest global USD margin call in history. ...

Another Margin Call?

Reader Patricia writes...

I have believed for quite some time that the catalyst for the 2008 crash was the action of European Commercial banks. They got themselves into huge trouble by creating a huge mismatch in their asset and loan funding requirements. That led to a global US dollar shortage which the Fed mitigated using their special swap

facility. So the Fed bailed out the rest of the world at the expense of US citizens.

So now it appears this problem is happening again. Will the Fed attempt to bail out the world once again? Zerohedge seems to think so, but they are sometimes on the wrong side of the inflation/deflation argument.

I know you are busy and may have more important things to write about, but maybe you could keep this issue on the back burner.

Thanks,
Patricia

Result or Cause?

Here was my answer to Patricia ...

"I do not believe there is a dollar shortage or even a synthetic dollar shortage. More importantly, a dollar shortage certainly did not cause the crash in 2008. Excess debt and speculation caused the crisis in 2008. Any alleged or apparent dollar shortage was a result, not a cause of the crash."

Acting Man Chimes In

I replied to Patricia and copied Pater Tenebrarum at the *Acting Man* blog. He replied in much more detail than I did.

Hello Patricia,

I agree with Mish that the currency effects are a consequence, not a cause of crisis conditions. There are large amounts of dollars held in deposits abroad, and fractional reserve banks are of course lending them out. It is true that they routinely have sizable asset/liability maturity mismatches, but this is true of all banks everywhere, regardless of the currencies employed.

An additional difficulty is created by the fact that prior to the swap arrangements, overseas based banks could not turn to their own central banks for "lender of last resort" services with respect to funding of dollar assets when dollar deposits fled (US money market funds are a major source of these dollar deposits, and they pulled back when the US mortgage credit bubble blew up).

However, this concern is by now academic, since the swap lines now do exist, and are unlimited. Note that the US taxpayer has not suffered any harm, as all the swaps have been paid back (and even if they hadn't been: no one was actually "taxed" to pay for them. The money was created from thin air, with the push of a button).

The real problem is that the current monetary system hurts everyone, not only due to constant debasement of

currencies (falsely labeled "price stability"), but due to its ability to expand credit and create additional money substitutes with nary a limit, which distorts relative prices in the economy and leads to malinvestment of plenty of scarce capital (the housing bubble was a prime example of such malinvestment, and the same applies to the fracking boom).

Impoverishment is the result, although there are of course groups in society benefiting from these policies (otherwise there would be no reason to pursue them). There is however not only a redistribution of wealth associated with credit and money supply expansion, but a loss of real wealth for society at large.

To come back to the funding of dollar assets, currently we see euro basis swaps trading in negative territory again, which is indeed an indication that dollar funding conditions have tightened. There are approximately \$9 trillion in dollar-denominated debt outstanding abroad, a not inconsiderable amount. It is also true that this basis swap "penalty" rate is an indication that there is a measure of distrust in the system: dollar lenders are recompensed for taking credit risk.

Per experience, European banks will accept a pretty big negative basis before applying for funds from the swap window, since those funds don't come for free either.

However, it is actually not correct to speak of a "dollar shortage". The domestic dollar money supply has more than doubled since 2008, and a large additional amount of dollar creation has "escaped" into accounts held abroad. (The dollar money supply outside of the US has also increased greatly).

It is not a shortage of dollars, but a growing unwillingness of dollar holders to lend them out that creates a problem for banks in need of dollar funding.

Demand for Dollars

It's amusing to discuss currency shortages given all the central banks are or have been flooding the markets with currency in an inane attempt to cure a debt problem by forcing more debt into the system.

I discussed this on Monday in **Draghi's Goal: Higher inflation and Negative Yields; ECB's Asset Purchases to Outstrip Supply 3-1; Is There a Catch?**

That interest rates are negative in Germany for every duration from one month through six years (only two basis points from seven) speaks for itself. There is no demand for loans relative to supply of euros from the ECB.

All Draghi has done is shove more risk down the throats of various national central banks. The result is banks in Spain are stuffed with Spanish bonds; Banks in Germany are stuffed with German bonds; Banks in Portugal are stuffed with Portuguese bonds.

The ECB is taking on 20% of this risk of Draghi's 1.1 trillion bond buying spree. Countries have 80% of the risk. Bond traders front-ran the trade. They are all betting on increasingly negative yields. No one wants credit. Why is that?

Reasons for Lack of Lending

1. There is too much debt in the system
2. Creditworthy businesses do not want to expand in a deflationary world
3. Banks rightfully do not want to lend to credit-unworthy customers
4. Banks are still capital impaired in spite of what stress tests say
5. You cannot fix a debt problem with more debt

There are no other possible reasons that would explain the setup we are in. It is not a matter of confidence as Draghi believes.

QE Baton

Given that Bernanke and Yellen somehow managed to pass the QE baton to Japan and the ECB, it is entirely possible the US dollar soars to unimaginable heights. Some might think we are already there.

At some point however, this will reverse. And it may not take much to do it.

Let's step back one more time with a simple question. Why is there an overwhelming belief in dollars?

Three Reasons for Belief in Dollars

1. Most believe the Fed will hike
2. The US stock market is rising
3. US interest rates are higher than Europe and Japan

Point number one is quite suspect. Yes, the Fed may very well get in a hike or two (or not). But if the Fed does not hike as much as expected, demand for dollars will likely sink quite rapidly.

Also consider point number two. Not only is the US dollar rising, so are US stocks. This creates a huge demand for dollars and various carry trades.

Right now, US stocks are a one-way and massively one-sided trade.

Point number three is likely to stay that way. But, it is relative moves and directions of moves that matter. In effect, if point number one disappoints, so will point number three.

Same as 2008 or Opposite?

image: http://3.bp.blogspot.com/-Ao_Rz9y2xD8/VP5nPCfWvFI/AAAAAAAAAc10/bcbK8KKHQu0/s400/%24USD.png



The US dollar index is at roughly the same level as in 1998, also 1988 (not shown). The peak in 1985 was 164.72. The peak in 2001 was 121.21.

Lehman Bankruptcy

On September 15, 2008, Lehman filed for bankruptcy. The dollar bottom was in April of 2008, at 71.33.

At that time, anti-US\$ sentiment was massively in vogue.

The Schiff's of the world were screaming hyperinflation. Today, US hyperinflationists are thoroughly discredited and in hiding.

Today, nearly everyone loves dollars and hates gold. Dollar swaps that were not in place then, are in place now. All things considered, conditions are nearly the opposite of 2008.

Swaps vs. Alphabet Soup

The Fed did not save the world with swaps.

Historians will surely debate Bernanke's policy moves for the next century. Bernanke did initiate a huge number of lending programs (cleverly dubbed "*Alphabet Soup*" by Bloomberg columnist Caroline Baum).

Those lending programs eventually revived the corporate bond market in 2009. One of the programs was dollar swaps. It's debatable if that was the key program.

If one wants to ignore all Bernanke's mistakes that led to the crisis, and give him credit for "*Alphabet Soup*", so be it. In fact that will be the nature of the future historical debate, and I doubt history will be so kind.

Expect New Script

The next crisis is highly unlikely to follow the 2008 script, because the 2008 script is what central banks have prepared for.

Bernanke, followed by Yellen, then the Bank of Japan and then the ECB have all carried competitive QE madness so far that a currency crisis is now baked in the cake. No one sees it because it will not be "obvious" until long after it happens, just as with the dot-com bust and the housing bubble.

Central banks always strive to prevent the last crisis. In doing so, they plant the seeds for the next crisis. Unwarranted and counterproductive global QE is highly likely the seed for the next crisis.

Mike "Mish" Shedlock

<http://globaleconomicanalysis.blogspot.com>

Read more at <http://globaleconomicanalysis.blogspot.com/2015/03/is-there-us-shortage-will-it-sink.html#9PI6FtDG4qrUdMG.99>

March 12, 2015 | Author *Pater Tenebrarum*

A Crisis Reinforcement Channel Wakes Up

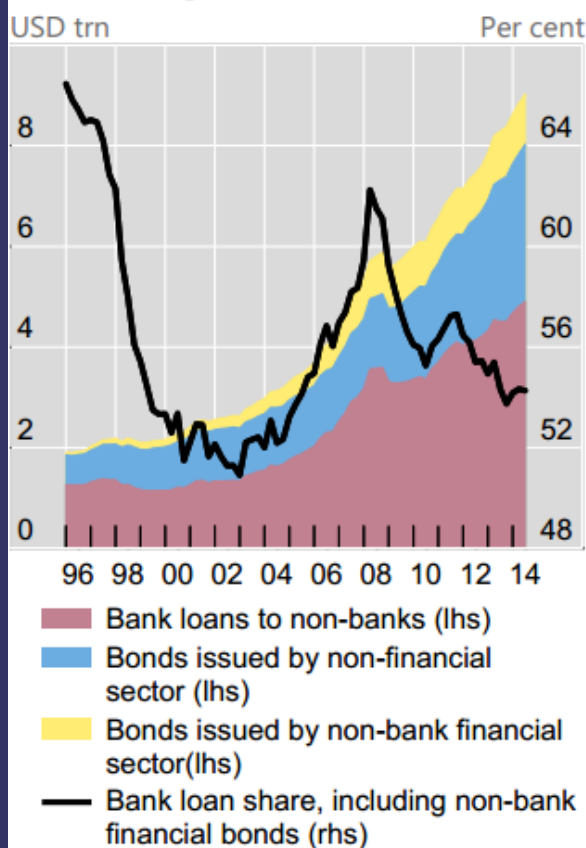
We have recently discussed the alleged “dollar shortage” with Mish and several others. The first thing that springs to mind when hearing of a “dollar shortage” is this: why should there be a shortage of a fiat currency that not only can be printed at will, but the supply of which has in fact more than doubled since early 2008?



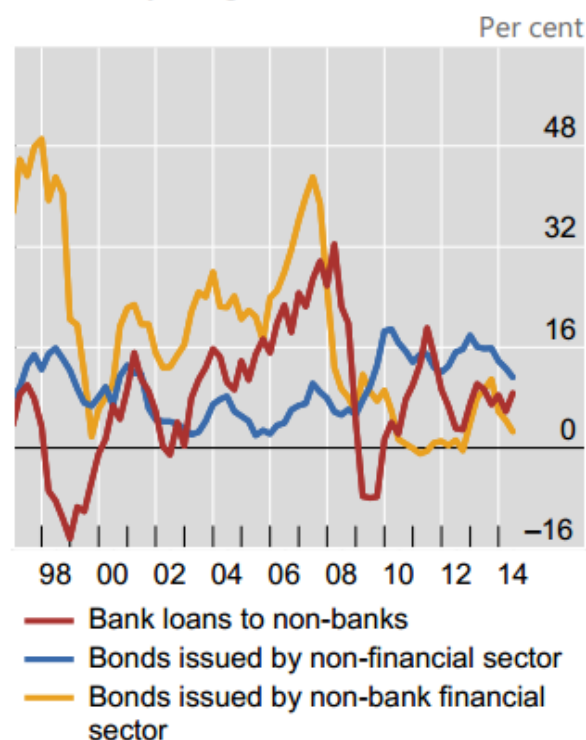
Photo credit: Christopher Furlong/Getty Images

Of course those who are in a sense short of dollars are the many dollar borrowers abroad, who need to service a \$8.6 trillion debt load. Here is a chart published by the BIS we have shown previously:

Outstanding stocks



Year-on-year growth rate



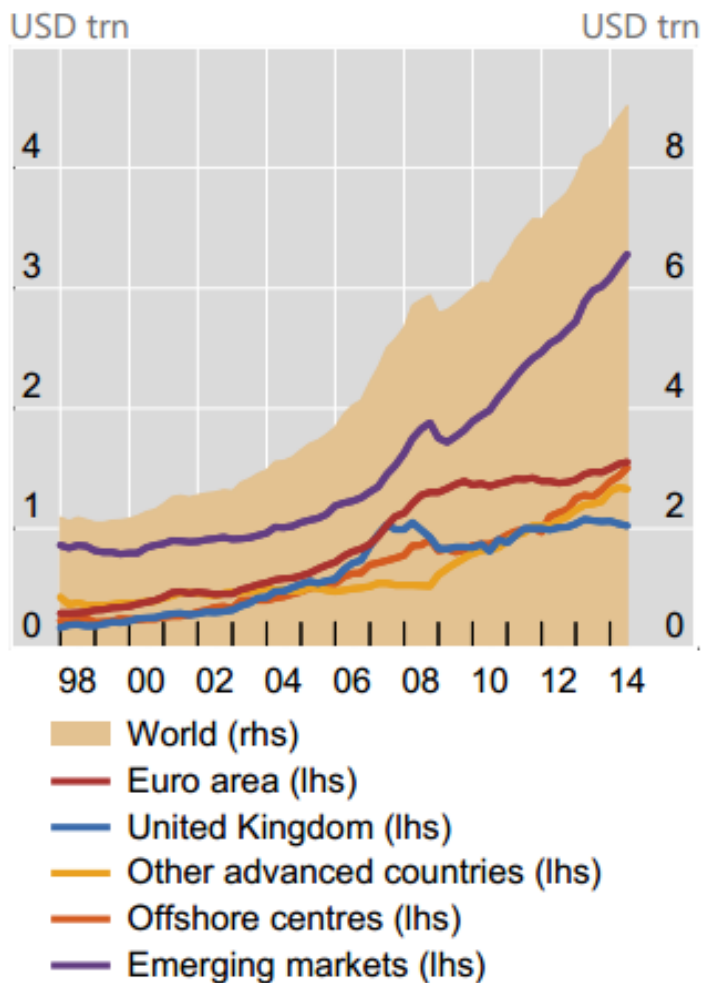
Stock of dollar loans issued to non-banks abroad (lhs), annual growth rate (rhs).

To the extent that these dollar borrowers have income that is not denominated in dollars, they may indeed be in trouble now, as the dollar's exchange rate has relentlessly soared. This incidentally slows down the accumulation of dollar reserves by central banks in countries with a mercantilistic economic policy (since they don't feel the need to weaken their currencies anymore).

Over time, this should work as a counterweight to the dollar's strength, as domestic money supply growth in these countries will tend to slow down as a result. In addition, other currencies are currently beginning to replace the US dollar for new borrowings. These days the euro and the yen have become popular funding currencies – initially, this tends to exacerbate the price trends that are already in place, but at some point, the problem currently faced by dollar borrowers will migrate to euro and /or yen borrowers.

What is quite interesting is where the majority of dollar borrowers are located. Most are actually domiciled in emerging markets, the currencies of which have been especially weak. So there undoubtedly is a problem, but as we will explain below, the problem shouldn't be termed a "shortage".

By counterparty country



Most dollar borrowers outside of the US are located in emerging markets

In the discussion alluded to above, we made the following remarks (which were in part already published by Mish), to which we add a few additional thoughts below:

The visible currency effects (such as a soaring dollar exchange rate and funding gaps, see below) are usually mainly a *consequence*, not a *cause* of crisis conditions. Of course, the recent rise in the dollar was initially triggered by perceptions of monetary policies between the US and other currency areas diverging – everybody expects the Fed to hike rates, while rates are being lowered everywhere else. It should be added to this that there are of course feedback loops at work: the stronger the dollar becomes, the more difficult it will be for dollar debtors abroad to service their debt, so any future crisis situation will tend to feed on itself. Note in this context that if a debtor has hedged his dollar exposure, the associated currency risk has not disappeared – it has merely been shifted to his counterparty.

As can be seen from the charts above, borrowing in dollars has increasingly been effected via bond issuance in recent years – however, although their share of dollar loans abroad has decreased, bank loans extended to overseas borrowers have still continued to grow. If

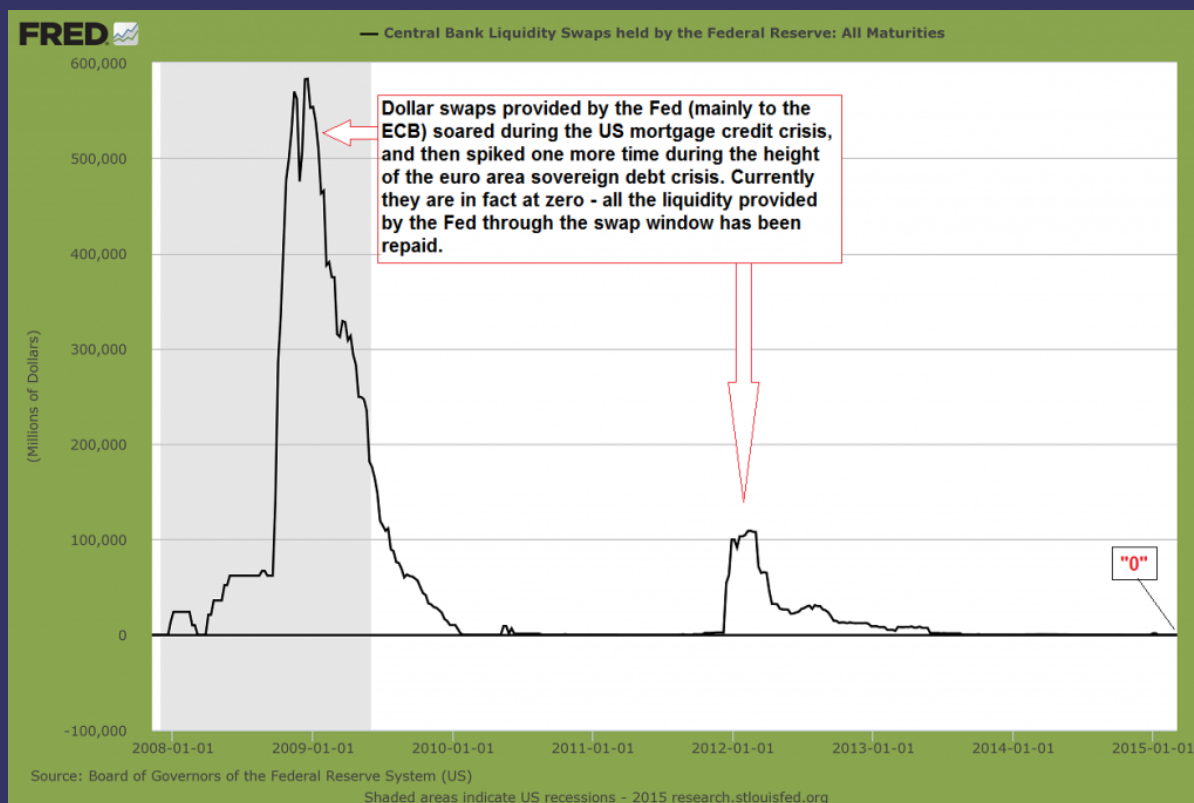
funding of dollar assets was a problem in 2008, it would be an even bigger problem today if a crisis that once again creates major distrust among financial intermediaries were to hit.

A Shortage of Dollars?

There are large amounts of dollars held in deposits abroad (mostly in Europe), and fractionally reserved banks are of course lending them out. They routinely have sizable asset/liability maturity mismatches (banks do lend out money held in demand deposits after all, which is the “ultimate” maturity mismatch), but this is true of banks everywhere, regardless of the currencies employed.

Prior to the central bank swap arrangements (this is in reference to the dollar swap windows the Fed has established with numerous central banks abroad), overseas based commercial banks could not turn to their own central banks for “lender of last resort” services with respect to funding of dollar assets when dollar deposits suddenly fled (US money market funds are e.g. a major source of these dollar deposits, and they pulled back when the US mortgage credit bubble blew up).

This concern is by now academic, since the swap lines now do exist, and are theoretically unlimited. Incidentally, US taxpayers have not suffered any harm, as all the swaps have been paid back (and even if they hadn’t been paid back yet: no-one was actually “taxed” to create them. The money was created from thin air, with the push of a button). The chart of central bank liquidity swaps below also supports our above contention: dollar funding problems in overseas banking systems are *primarily a consequence*, not a *cause* of crisis conditions.



Evolution of central bank liquidity swaps – click to enlarge.

As noted above, the largest amount of dollar deposits held abroad is located in Europe. European banks are therefore also the biggest lenders in dollar credit transactions between non-US residents. They are also the biggest lenders to emerging markets in general, so any problems there are bound to impair the situation of European banks. In fact, three quarters of all dollar-denominated lending to non-US resident borrowers is funded with dollars held abroad – only one quarter comes directly from US lenders.

We currently see euro basis swaps trading in negative territory again, which is indeed an indication that dollar funding conditions have tightened. Shorter term basis swaps have not deteriorated as much as the longer term ones – usually, when there is really a big problem, the shorter maturities will move into negative territory at almost the same pace (this is just an empirical observation). This may yet happen with a lag though.

Something is definitely stirring though – and it happens concurrently with the euro showing extraordinary weakness and in concert with on-and-off market concerns about the situation in Greece (although we would argue these concerns are more “off” than “on”, so they may only be playing a small role. It is of course a role that harbors some potential to become bigger).



Three month, one year, three year and five year euro basis swaps -diving into negative territory again – click to enlarge.

As noted above, there are approximately \$8.6 trillion in dollar-denominated debt outstanding abroad, a not inconsiderable amount. The basis swap “penalty” rate evident in euro basis swaps could be an indication that there is now a measure of distrust in the system: dollar lenders need to be recompensed for taking credit risk. The actuarial value of the fx basis should normally be at zero – if it isn’t, something is amiss. The main reason for the fx basis to drift into negative territory are usually concerns about the creditworthiness of banks.

Readers who want to learn more about short term swap markets can [download a guide by CS](#) (pdf) we have made available for such occasions. In addition to this, here is a [recent document by JPM](#) (pdf) that discusses the current signs of growing dollar funding difficulties (referred to as a “shortage” throughout, but we believe this is not the best choice of words. “Funding gap” is perhaps better). JPM argues that since no banking crisis is in evidence, the perceptions about diverging central bank policies must be the main reason for the developing supply/demand imbalance. We are not entirely sure about this though.

Per experience, euro basis swaps will decline deeply into negative territory before European banks will apply for funds from the Fed/ECB swap window, since the funds provided by central banks via these swaps don’t come for free either. In fact, they are relatively expensive if memory serves, which means that once one sees banks borrowing from this facility, the situation is probably quite dire already. Obviously, since the amount of central bank liquidity swaps currently outstanding is at zero, there is no evidence yet of an acute funding problem. What there is are however the first smoke signals that something of this sort could soon be afoot.

We think it is actually not quite correct to speak of a “dollar shortage” in this context. The domestic US dollar money supply has more than doubled since 2008 (in terms of TMS-2), and a sizable amount of dollar creation has “escaped” into accounts held abroad as well (read: the dollar money supply held outside of the US has also increased). *It is not a shortage of dollars, but a growing unwillingness of dollar holders to lend them out that could create a problem for banks in need of dollar funding.*

Bond Issuance vs. Bank Lending

Most of the new dollar lending to overseas borrowers has happened via bond issuance, and banks have shut down a lot of their proprietary bond trading due to new regulations and have cut back mightily on assets with a risk weighting higher than “zero” in order to comply with higher tier one capital requirements (this can sometimes backfire, as in the case of senior “guaranteed” Heta bonds). Given all this, should it not be assumed that any crisis in the context with dollar debts of overseas borrowers would be of – relatively speaking – little concern to banks?

The biggest losses would after all be suffered by investors in these bonds, most of whom are non-banks. However, this argument overlooks the interconnectedness of credit markets. Banks could find themselves affected indirectly. A borrower who defaults on a dollar-denominated bond and is forced into bankruptcy will also default on his other debts – and these will invariably include many bank loans. Many investors are in turn borrowing funds to leverage their investments in bonds. With interest rates at rock bottom levels everywhere, ample leverage is reportedly employed to juice returns.

Moreover, what is commonly referred to as the “shadow banking system” is also interconnected with banks. Losses in corporate bonds (which don’t necessarily have to stem from defaults – a rise in rates for whatever reason could already produce painful losses for leveraged investors and would set off a wave of forced selling) will reverberate across the

financial system. Note that the fact that banks are no longer as active in corporate bonds as they once were is likely to greatly exacerbate volatility.

How things will precisely play out when the next financial crisis arrives is not knowable in advance. There are always surprises, and all we know with certainty at this point is that the next crisis will look different from the last one. For instance, even during the mortgage credit crisis several flashpoints of the crisis were undoubtedly a surprise for most market participants (think e.g. about AIG's credit default swap portfolio blowing up – no-one expected this in advance to our knowledge).

Conclusion:

There are some indications that trouble could be on its way as a result of the soaring dollar. This is something that certainly requires close watching now, as one (of many) potential triggers for pricking the bubble. The main fount of bubble conditions, money supply growth, still seems to be in fine fettle for the moment, but we know that the current boom is to some extent fundamentally different from a "normal" boom, in that it is far more concentrated in financial markets, so one will have to be careful with the interpretation of various data. We will discuss this particular aspect in greater detail in our next installment of the "Echo Boom" series (coming soon). Stay tuned.



The dollar index continues to go parabolic ... to the chagrin of dollar borrowers not resident in the US – click to enlarge.

Charts by: BIS, St. Louis Federal Reserve Research, Bloomberg, StockCharts.