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Market Volatility and QE2

by Perry G. Mehrling on November 16, 2010

The First Thing to Say About QE2 is That it is a Very Different Operation From QE1.

After the collapse of Lehman and AIG in September 2008, the Fed more than doubled its balance sheet in a matter of weeks, inventing an alphabet soup of liquidity facilities to substitute for the collapsing wholesale money market. Then, after the immediate crisis had passed, instead of allowing repayments to shrink its balance sheet back down to pre-crisis size, the Fed reinvested those repayments in mortgage backed securities, so substituting for the collapsed shadow banking system.

QE2, by contrast, is about buying Treasury bonds, the market for which is nowhere near collapse. In war time, it is common practice for the Fed to support the price of Treasury debt by standing ready to buy at a fixed price. At the moment, however, the world seems more than willing to add to its holding of Treasury debt. The Fed is not supporting a fragile market, but rather imposing its own $600 billion demand on the existing robust market.

The second thing to say about QE2 is that it is a very different operation from standard monetary policy.

The textbooks still teach that expansionary monetary policy involves buying short-term Treasury bills to affect the short term interest rate and so, by influencing expectations about future short-term interest rates, to affect also the long term interest rate. From this standpoint, the only thing new about QE2 is the intention instead to buy longer-term Treasury bonds, and hence to affect the longer term interest rates directly.

But that is not how monetary policy actually works in practice. In pre-crisis days, the Fed set a target Fed Funds rate, and intervened as needed in the overnight repo market in order to achieve that target; Treasury bills were regularly involved as collateral for the repo loans, but were not typically purchased outright. From this standpoint, QE2 is non-standard on multiple dimensions; there is no explicit price target, and the operation is entirely about outright purchases.
What difference does it make?

The lack of an explicit price target means there is no anchor for market expectations. Exactly the opposite of war finance, the Fed has announced how much it will buy but left the price to the market. Volatility of price is the consequence, as markets are left to work out for themselves what the effect will be, even as the effect depends on what markets themselves do.

A significant unknown has to do with the outright purchase dimension. Normal expansionary monetary policy provides additional low-cost repo financing to dealers, which they are free to use to expand their security holdings—that is how monetary expansion gets into asset prices. QE2, by contrast, removes high-quality collateral from the system, and with it the low-cost financing that makes use of that collateral.

In times of uncertainty, the Fed is in effect joining everyone one else in the flight to quality, demanding $600 billion of the best securities in the system and supplying in return its own reserve liabilities that can be held only by member banks that are already stuffed full.

Perry Mehrling is author of The New Lombard Street: How the Fed Became the Dealer of the Last Resort (Princeton Press).

- The Money View

Posted by Perry G. Mehrling at 6:52 pm

Understanding Ireland

by Perry G. Mehrling on November 30, 2010

What's Really Going on With Europe's Bailout of the Irish Economy

Details of the €85bn Irish bailout have finally emerged, and no one is happy. No one now questions the scale of the losses on the balance sheets of the Irish banks; the only question is who will bear those losses. Details make clear that the answer is the Irish taxpayer, at least in the first instance.

[VIDEO LINK]

A stylized set of balance sheets make clear how it is all supposed to work. There are three main sources of funds, the European Financial Stability Fund (€35bn), the IMF (€22.5 bn), and the Irish Pension Reserve Fund (€17.5bn). There are three main uses of funds, recapitalization of the banks (€10bn), a contingent reserve for the banks (€25), and the Irish government (€50).

The important point, however, is that EFSF and IMF funds go to the government, not to the banks, so the taxpayer is on the hook for them. And of course the Pension Reserve Fund is a reserve for Irish pensions, so again the taxpayer is on the hook.

In effect, the losses of the Irish banks are being socialized, but at the level of Ireland not at the level of Europe. The senior bondholders (whether Irish, European, or other) are protected from loss, as also are the foreign firms whose corporate tax rate remains concessionary.

This is the plan for Ireland, but it is also likely the plan for Spain and Portugal. Every tub on its bottom, or rather on the bottom of the local taxpayers

[PICTURE]

The effect, predictably enough, has been to shift concern about the financial condition of the banks to concern about the financial condition of the more peripheral European states. It is all very well to assert that all these debts must be paid by the local taxpayers; it is quite another thing to actually collect, and markets are expressing doubts on that score. If the taxpayer can't or won't pay, then the bondholder won't get paid, and that prospect shows up in the price of sovereign debt today.

- The Money View

Posted by Perry G. Mehrling at 5:48 pm

(Shadow) Bank Capital

by Perry G. Mehrling on December 05, 2010 2 comments

Is Raising Required Bank Capital the Answer?

Basel I and II were attempts to connect the riskiness of bank assets on one side of the balance sheet, with the available capital cushion on the other side. Banks fail and become wards of the state, so the reasoning went, because they make bad loans. By making private equity holders take the first loss, regulatory capital requirements were supposed to limit the incentive to take risk ex ante, and so also the cost of government bailout ex post.

From this point of view, the recent financial crisis looks like a problem of insufficient capital buffer, and the solution looks like a larger buffer (Anat Admati et al 2010). One reason the Basel buffers were inadequate, from this point of view, is that there were a lot of off-balance sheet exposures which incurred no capital charges at all. The true risk exposure of banks was not, in the end, connected to the available capital cushion. The solution is to bring off-balance sheet exposures back on to the balance sheet, and to raise the capital cushion required to hold those exposures.

But this is not the only way to think about the problem; there are other analytical entry points that lead to different conclusions.

Basel I and II were supposed to eliminate regulatory arbitrage between more and less highly regulated banking systems; in fact they created a new incentive for regulatory arbitrage between the more regulated bank-based credit system and the less regulated capital market-based credit system. By 2007, the latter had become the source of the majority of credit in the United States (Adrian and Shin 2009).

Instead of starting analytically with the bank-based credit system, it may make more sense to start with the market-based credit system. It is true, ex post, that the collapse of the unregulated "shadow banking system" wound up absorbing the capital cushion of the regulated traditional banking system. But that was by no means clear ex ante. Indeed the whole idea was that the shadow banking system was supposed to be separately capitalized.

Just so, consider the equity tranche of a collateralized debt obligation. It was supposed to absorb the first loss, and so protect the higher tranches; that's capital that is not measured by the bank-centered Basel approach. Indeed, when doubts began to arise about the quality of the underlying assets, it seemed likely that holders of those equity tranches, mostly credit-focused hedge funds, would be the hardest hit (Morris 2007). But those fears proved largely misplaced.

A more important source of capital turned out to be the capital of the insurance companies that sold credit insurance of various kinds on the best assets in the shadow banking system; that is also capital that is not measured by the bank-centered Basel approach. AIG is only the most famous example, because its enormous capital cushion got wiped out by the crisis. It was not the failure of the equity tranches at the bottom of the capital structure that brought the system down but rather the failure of the AAA-rated tranches at the top of the capital structure.

From this point of view, the regulatory response to the crisis should focus not on the insufficient regulatory capital in the traditional banking system, but rather on the failings of the credit insurance contracts in the shadow banking system. That is what broke. Probably AIG was underpricing its insurance; definitely it was under-reserving for it.

But the mechanics of AIG's failure reveal also the key importance of liquidity factors, which are overlooked by Basel I and II. It was the mark-to-market collateralization feature of AIG's CDS that brought it down, and triggered the Fed's involvement. Had AIG been selling CDS on an exchange, rather than bilaterally, the exchange would have stood in between AIG and its counterparties (Goldman Sachs, Societe Generale, and others). As we move CDS onto an exchange, we need to be thinking about how to keep that exchange from suffering the fate of AIG.

The capitalization of the regulated banking system is not the central problem. The problem is the capitalization, and also the liquidity, of the shadow banking system.

- The Money View

Posted by Perry G. Mehrling at 7:13 pm

Connecting the dots in Euroland

by Perry G. Mehrling on December 25, 2010

Today's Financial Time's article: ECB: trick or Trichet (Dec 2)

After the Irish bailout, markets were starting to turn their attention to Portugal and Spain when ECB president Jean-Claude Trichet launched a program of outright purchase of sovereign bonds from these states. From one point of view, this is inappropriate use of monetary means for a fundamentally fiscal operation. If Portugal or Spain cannot make good on their debts, then the only question is who bears the loss: the holders of the debt, the taxpayers of Portugal and Spain, or the taxpayers of the European Union more broadly. Central bank purchase has the effect of shifting the loss to the EU taxpayer, but in a backdoor way that disguises what is being done.

[VIDEO LINK]

From another point of view, however, this is wholly appropriate use of monetary means to stabilize markets. In the face of uncertainty, the effect was to provide an escape hatch for nervous investors wanting out, so preventing a destabilizing run for the exits, hence nipping in the bud a speculative attack in anticipation of that run. No losses were socialized; rather temporary liquidity was provided as a way of preventing a destabilizing deviation of bond prices from their fundamental value.

Which is the correct point of view? Time will eventually tell, as the bonds will either be paid or not. Meanwhile, however, the narrow economist's debate misses the more important political economic dimension of the problem, which we can best enter by placing ourselves in Trichet's shoes.

Let it be stipulated that Trichet is a central banker, and central bankers abhor credit risk. From this point of view, the ECB can be understood as in effect betting that fiscal solutions will be found to the fiscal problems of Europe's periphery; in that event, its bond purchases entail no credit risk. Buying sovereign debt, the ECB was in effect expressing confidence that policymakers will choose among all possible futures that path along which Europe's periphery is solvent.

But it was not just passively placing a bet and hoping for the best. It also chose the same moment to recapitalize its balance sheet with contributions from its member national central banks, more that 5 billion Euros worth, which more than doubled its capital. By this mechanism, the first loss piece of any default on its bond purchases will be spread among the member states of the EU in proportion to their stake in the central bank. Now all member state central banks have a self-interest in making the ECB's bet work out.

That is the background against which to understand all the talk about expanding the European Financial Stability Facility, or introducing a joint Eurobond. Both of these proposals are the first steps toward a common treasury. The ECB is leading the way by its own loss-sharing mechanism, even as it offers up its own balance sheet to buy time.

Perry Mehrling

- The Money View

Posted by Perry G. Mehrling at 2:23 pm

Non-US banks gain from Fed crisis fund

by Perry G. Mehrling on December 28, 2010

Why is this a surprise?

Today's Financial Time's article: Non-US banks gain from Fed crisis fund (Dec 27)

We know that, after the collapse of Lehman and AIG in September 2008, the Fed's liquidity swap facility with other central banks swelled quickly to about $600 billion. The whole point of that facility was to provide dollar funding to non-US banks. The foreign central banks simply served to channel the funds.

[PICTURE]

We also know that, as early as Fall 2007, non-US banks were bidding strongly for dollar funding in the Eurodollar market, driving the spread between LIBOR and the Fed Funds rate to unprecedented levels. The non-US banks, just like the US banks, had made lending dollar funding commitments that were being called in, and they were scrambling to find the funds. At this stage, however, the source of the funds was their US correspondents, not the Fed.

In Fall 2007, the Fed was not lending much, but it was encouraging the lending by backstopping the Fed Funds market, driving the target Fed Funds rate down from 5% to 2%, using daily intervention in the Treasury repo market to keep the Fed Funds rate from being bid up along with the Eurodollar rate.

[PICTURE]

Now comes the news that the Term Auction Facility, created in December 2007 as a kind of anonymous discount window, lent on a fully collateralized basis directly to non-US banks. Personally, I did not know this until the disclosure, but I am not surprised. I had thought that TAF was lending only to the New York correspondents, who were marking it up and on-lending the money to the non-US banks. So it was new information for me, but not surprising information.

In other words, anyone who was paying attention knew quite well that the Fed was lending indirectly to non-US banks, using domestic banks and then foreign central banks as conduits. It could hardly be otherwise. The Fed is lender of last resort for the domestic dollar funding markets; inevitably it serves also as lender of last resort to the international dollar funding market.

Perry Mehrling

- The Money View

Posted by Perry G. Mehrling at 2:25 pm

The New Federal Reserve

by Perry G. Mehrling on January 09, 2011 3 comments

GFC Finance as War Finance

Today's Financial Times article: The strange death of the technocracy (Jan 5, 2011)

The editors write:

"Perhaps the most important development of the financial and economic crisis is that technocrats are losing control over policy debates to the populists….The Fed is perhaps the obvious target. The insurrectionists object to the notion of fiat (or government-made) money. On both left and right there is fundamental opposition to the coupling of private banking with the federal government that managed the entire response to the financial crisis"

From a longer historical perspective, populist targeting of the Fed, both from the right and from the left, is nothing new. Big Finance and Big Government are perennial bogeymen in American political discourse. Coupling the two in the institution of a central bank is at the heart of current debate about the role of the Fed during the crisis.

[VIDEO LINK]

In 1913, at the founding of the Fed, legislators directly confronted both bogeymen. The whole idea of the Federal Reserve System, so the language of the Act made clear, was to channel credit preferentially to productive uses. Section 13(2) makes clear who was supposed to get the credit: "Discount of Commercial, Agricultural and Industrial Paper", not speculative financial paper and not Treasury paper. The new Fed was about reversing the upper hand enjoyed by Big Finance, and without replacing it with the hand of Big Government.

Exigencies of war finance soon shifted the focus of the newborn Fed, and the Act was accordingly amended. During both World War I and World War II, the Fed pegged the price of Treasury debt, and expanded its balance sheet as necessary to absorb any excess supply that was not taken up by private buyers.

Does that kind of emergency intervention sound familiar? It should.

So-called QE1, back in early 2009, involved the Fed pegging the price of mortgage-backed securities by taking $1.25 trillion worth onto its own balance sheet. This is war finance. Actually it started even earlier, back in September 2008, with the collapse of Lehman and AIG. The initial balance sheet expansion occurred as, in addition to its domestic lending, the Fed lent $600 billion to foreign central banks, as well as other billions directly to foreign private banks, financing the loans simply by expanding its own monetary liabilities. This again is war finance, but without the war.

What troubles critics of the Fed is the use of the powerful tools of war finance to support private capital markets, and to support foreign bankers. For some, a similar unease arises from the latest QE2 twist, which has the Fed buying $600 billion of Treasury debt. There is no doubt in my mind that the Fed's actions were legal under the "unusual and exigent circumstances" provision of the Act. But what everyone wants to know is whether the Fed did the right thing, and what the transformation of the Fed over the last few years portends for the future.

The Fed has done a lot of things, but two new functions stand out. First, it has served as international lender of last resort to foreign banks and foreign central banks. Second, it has served as domestic dealer of last resort for mortgage backed securities.

These are both new functions unanticipated by the 1913 legislation, but that doesn't mean they are necessarily inappropriate. Remember, in World War I, the exigencies of war finance were also new and unanticipated, but the system evolved to make room for this new function. I submit that we are living in a similar moment today.

The exigencies of global financial crisis have shifted the focus of the Fed, and there is no going back. Our problem today is not so much devising an early exit strategy from unwelcome new emergency functions, but rather designing institutions to accommodate these new unexpected functions in the future. The technical challenges are considerable, but the political economic challenges loom even larger.

The crisis of 2007-2009 is our 1907. Back then, the bogeymen were Big Finance and Big Government, and so they are today. What we need is a financial system that supports the capital financing needs of the nation, and a central bank that supports that financial system.

Perry Mehrling

- The Money View

Posted by Perry G. Mehrling at 9:31 pm

Can CDS be exchange traded?

by Perry G. Mehrling on January 13, 2011 2 comments

Today's Financial Times article: Report to highlight alleged conflicts of interest in Goldman's dealings (Jan 12, 2011), Goldman's pieties insult our intelligence (Jan 13, 2011)

In the second article, Sebastian Mallaby reminds us: "After one vain attempt to explain market making at a belligerent Senate hearing, Goldman's boss, Lloyd Blankfein, gave up." Let's try to do better than Blankfein was able.

[VIDEO LINK]

The famous Abacus deal, in which John Paulson and the German bank IKB were on opposite sides of a bet on subprime mortgage securitization tranches, could hypothetically have been arranged in a number of different ways, and the role of Goldman Sachs in the deal could hypothetically have taken a variety of forms.

Most simply, GS could have served as a broker, simply bringing the two parties together, John Paulson as the buyer of a credit default swap and IKB as the seller, with GS taking a one-time fee. From then on, Paulson would make small periodic payments to IKB so long as the referenced mortgages were not in default; and if ever they did default then IKB would make a large one-time payment to Paulson equal to the difference between the face value of the referenced bonds and their liquidation value.

Alternatively, GS could have served as a dealer, selling CDS to Paulson and buying CDS from IKB. So long as the referenced mortgages were not in default, Paulson would make his periodic payments to Goldman, and Goldman would make similar payments to IKB. In the event of default, IKB would make a big payment to Goldman, and Goldman would make a similar payment to Paulson. I say "similar payment" because as a dealer Goldman would be selling and buying at different prices, and that difference is the profit incentive for serving as a dealer in the first place.

If Goldman had in fact been acting as a dealer, Blankfein could have sustained his argument that Goldman was simply making the market. "In the absence of a central exchange acting as counterparty for all trades," he could have argued, "Goldman was serving that function." But that is not how the deal was structured; Goldman was not a market-maker, and did not serve as central counterparty for the deal.

The way the deal was actually structured was by creation of an off-balance sheet entity called Abacus that stood between Paulson and IKB. Paulson bought CDS from Abacus, but Abacus did not buy CDS from IKB. Instead, Abacus sold risky bonds to IKB, and used the proceeds to buy Treasury bills. In the event of default, Abacus would use these Treasury bills to make its contracted payment to Paulson, so depleting its own assets and leaving its creditor, IKB, holding an empty shell.

From a standard economic point of view, the difference between these three ways of organizing the deal is all about counterparty risk. In each case, the underlying risk exposure to subprime is the same. From Paulson's point of view, the only difference is who is on the hook for the big payment: IKB, Goldman Sachs, or Abacus.

From a money view standpoint, however, an additional dimension comes clear.

To see this, suppose that Goldman had in fact been serving as a market-making dealer between Paulson and IKB. Just like an exchange, Goldman would have been concerned about the performance of its two counterparties, and so would have required some posting of collateral to ensure performance. Probably it would also have insisted on marking positions to market, so requiring IKB to post additional collateral when default came to seem more likely. But even with these provisions, there is still the problem that IKB might one day be unwilling or unable to meet a

collateral call. In that event, Goldman would of course immediately terminate the IKB contract, but it would be left with the problem of finding an alternative counterparty in a possibly disordered market. Rollover risk, or liquidity risk, remains.

From this perspective, we see Abacus in a different light. By selling bonds to IKB, Abacus was essentially buying CDS from IKB but insisting on 100% collateral to ensure performance. In this way, Abacus completely eliminated counterparty risk from IKB, and also completely eliminated liquidity risk. In effect, all potential future collateral calls were made up front, at the very inception of the contract.

There is a lesson here for those trying to implement the Dodd-Frank call to move derivative trading off the balance sheet of private dealers and onto a public exchange. Some, who resist the change, say that Dodd-Frank is asking for the impossible because the collateral requirements to ensure performance would make the market uneconomic. The Abacus deal suggests otherwise. Note first that the entire deal was already off the balance sheet of Goldman Sachs. Even more, note that the seller of CDS quite willingly posted 100% collateral.

Maybe the SEC suit against Goldman for misrepresentation to IKB was meritorious, and maybe it wasn't. Either way, Abacus shows one way forward to meeting the call of Dodd-Frank.

- The Money View

Posted by Perry G. Mehrling at 12:49 pm

China and the International Dollar

by Perry G. Mehrling on January 16, 2011 5 comments

Before the dollar there was the pound, and after the dollar there will be something else.

Today's Financial Times' articles: "Hu questions future role of US dollar", "Why 'Top Dollar' Still Runs the World" and "Renminbi rolls out" (all January 16, 2011)

The problem we face today, as so often in matters financial, is that no one knows the future, that many futures are possible, and that the actual future is quite likely to be something not currently on anyone's list of possibilities. In such a circumstance, we are well-advised to lower our sights, and to try instead to make sense of the present, to understand the current forces that are shaping the future we are unable to see.

[VIDEO LINK]

In popular accounts of the current turmoil, attention has tended to focus on the renminbi-dollar exchange rate and the Chinese policy of keeping that rate more or less fixed. This "market friction" is condemned as a source of instability. "If only the Chinese would allow their currency to rise to its proper value," the suggestion comes, market forces would be able to correct the global imbalances that beset us.

Maybe so, but maybe also not so. From a money view standpoint, one worries whenever an argument depends on treating the price of money as if it were analogous to the price of cabbages. From a money view standpoint, a fixed exchange rate is not the same kind of thing as a price support or ceiling on some basic commodity, against which Econ 101 warns us.

In the money view, the price of money has four different dimensions: par, the interest rate, the exchange rate, and the price level.

Modern economic discourse tends to abstract from par, perhaps thinking that par is a historical relic more relevant to a former era of mint parities when gold was exchangeable for currency. But par is a more general idea than that, expressing the price of one form of money in terms of another, as for example bank deposits in terms of currency. We are so used to withdrawing cash from our ATMs that it never occurs to us that we are trading one form of money for another, but so we are, and we would be rudely awakened to that fact if everyone at once tried to convert their deposits into cash.

More relevant for the present topic, foreigners got used to thinking of their accounts at Money Market Mutual Funds and their Eurodollar deposits in foreign banks as more or less the same thing as bank deposits in New York. But then the global financial crisis taught them otherwise when the Reserve Fund "broke the buck" and LIBOR traded at 100 basis points over Fed Funds.

Par is the price of one form of money in terms of another but usually, if we look closely, we find that one of the forms is better than the other; one is money and the other is a money derivative, a promise to pay money proper. In a crisis, the promise to pay is tested, which means that par is tested. How good a substitute for money proper is the money derivative?

All the talk about the future of the dollar can be understood in this light as speculation not about the domestic dollar but about the international dollar that trades (usually!) at par with the domestic dollar. This international dollar has, in the past, stood above merely domestic currencies in the hierarchy of money, but maybe not in the future.

A central fact revealed by the crisis is how much the world apparently still wants to hold dollars. Indeed, the rise of the shadow banking system can be understood in large part as the attempt by private profit-seeking bankers to meet the swelling world demand for dollar balances. And the enormous expansion of the Fed's balance sheet during the crisis can be understood as an attempt to meet the same demand, by substituting money proper for the derivative shadow money that collapsed along with the shadow banking system.

Put another way, a central fact revealed by the crisis is that the international dollar is in fact a money derivative, and that the domestic dollar is money proper. When the shadow banks faced difficulty rolling over their short term funding in international money markets, the Fed could very well have refused to step in, and maybe next time it will.

- The Money View

Posted by Perry G. Mehrling at 8:56 pm

G2 Trade Balance Explained

by Perry G. Mehrling on January 21, 2011 2 comments

It is all about promises to pay in the future.

Today's Financial Times articles: Obama toughens China line (Jan 20, 2011), A Strategy to Straddle the Planet (Jan 17, 2011)

Everyone knows that China sells more to the rest of the world than it buys, and that the US buys more from the rest of the world than it sells. All the debate is about what these facts mean, where they come from and where they are going.

[VIDEO LINK]

Perhaps the dominant view, at least in political circles, is that the above stated facts are a Problem, and that the Solution is for China to buy more of our stuff. Just so, the article quotes President Obama addressing President Hu Jintao: "We want to sell you all kinds of stuff. We want to sell you planes, we want to sell you cars, we want to sell you software."

Let's look at the same facts instead from a money view perspective.

The place to start is to think of the facts as statements about flows of cash, not flows of goods. Here is how Hyman Minsky put it, in his 1986 book Stabilizing an Unstable Economy:

> To analyze how financial commitments affect the economy it is necessary to look at economic units in terms of their cash flows. The cash-flow approach looks at all units—be they households, corporations, state and municipal governments, or even national governments—as if they were banks. (p. 198)

This way of thinking has deep roots in American economic thought, going back to the institutionalist school of Wesley Clair Mitchell and especially Morris Copeland.

Copeland's 1952 Study of Moneyflows in the United States is the origin of what we know today as the Flow of Funds Accounts which are published quarterly by the Federal Reserve Board. The original book, however, was an attempt to propose a framework for macroeconomic analysis alternative to the National Income and Product Accounts which served as the basis for Keynesian macroeconomics.

From a moneyflow perspective, every source of funds has a corresponding use, and vice versa. China's trade surplus is a source of funds that, as a matter of accounting logic, has only three possible uses: accumulation of financial assets, paydown of financial liabilities, or hoarding of money. The U.S. trade deficit is a use of funds that, as a matter of accounting logic, has only three possible sources: decumulation of financial assets, increase of financial liabilities, or dishoarding of money.

(When we talk about countries hoarding and dishoarding of money, we are of course talking about international reserves, and that is a potential cause of confusion because of the international reserve function of the U.S. dollar. Hold that thought for the moment.)

The real power of the moneyflow framework comes not so much from understanding all units as if they were banks, but rather from understanding the relations between the units and the operations of the system as a whole. From a moneyflow perspective, one unit's source of funds in another unit's use, and vice versa. If China and the US were the only countries in the world, China's accumulation of financial assets would, as a matter of accounting logic, be the counterpart of US decumulation of financial assets or borrowing.

The point is that the counterpart of a bilateral flow of funds one way on goods and services account must be a bilateral flow of funds the other way on the financial account. The US must, as a matter of accounting logic, be selling "stuff" to China equal in value to the "stuff" it is buying, but it is financial stuff the US is selling, not current goods and services. The US is selling claims of one sort or another on the future cash flows of the US.

What kind of claims are we talking about? Ownership claims to US land, buildings, companies? Or fixed income promises to pay? To ask the question is to reveal the unspoken subtext of the entire trade debate. President Obama says, "we want to sell you all kinds of stuff", but his examples are all only one kind of stuff, current goods and services, not future goods and services.

China and the US are of course not the only countries in the world, and that makes a difference. China's use of funds must be someone's source of funds, but that someone need not be the US. The US source of funds must be someone's use of funds, but that someone need not be China. In this respect, the moneyflow perspective suggests thinking of the rest of the world as a financial intermediary, at least potentially, taking in cash flow from China on the one hand and pouring out cash flow to the US on the other hand.

The point is this. The US must, as a matter of accounting logic, be selling stuff (including financial stuff) to the rest of the world (including China) equal in value to the stuff it is buying. The trade debate is not fundamentally about current goods and services at all. It is about the fabric of promises to pay in the future; it is about who is making commitments to who, and to do what, in the future.

- The Money View

Posted by Perry G. Mehrling at 6:27 am

Inside Job

by Perry G. Mehrling on January 23, 2011

And the nominees for Best Documentary are…

Today's Financial Times articles: "Popcorn and Wine at 'Inside Job'" (Jan 15, 2011) "Hollywood's Credit Crunched" (Oct 9, 2010)

If you haven't seen "Inside Job", you must. As an analysis of the crisis, it just scratches the surface, but even those scratches do immense public service by arousing us to dig deeper and find out more.

It is a beautifully made film, and that is no small part of its appeal. The soaring opening sequence on Iceland tells you immediately that you are in the hands of an artist, and by the time the camera zooms in on Manhattan, you are hooked. Suspending disbelief, you give yourself over to the magic of the theater.

[VIDEO LINK]

All the players are here, arrayed as a "securitization food chain", with cameo appearances carefully chosen to give each link in the chain a human face. The storyline that holds the movie together, however, is not so much about the forging and failure of this interlinked chain, as the economist in me would want. Rather it is at heart a morality tale; it is a movie.

The opening sequence on Iceland sets the frame. It presents a tale of a few rapacious bankers gaining control of three quite ordinary banks, using them as vehicles for their own speculative schemes and profligate appetites, borrowing vast sums from depositors outside Iceland and then, when their schemes inevitably collapse, leaving the innocent Icelandic public holding the bag. Who is accountable? The bankers, of course, but also the regulators and politicians who let them get away with it.

The rest of the movie puts this same frame on the much larger U.S. financial crisis. Here the storyline is about the expansion of (predatory) sub-prime lending that fueled a speculative housing bubble that inevitably collapsed.

Cast as the innocents are the borrowers, but also the ultimate lenders—two public sector pension funds are mentioned. Cast as the rapacious bankers are the investment bankers at Lehman and Goldman Sachs. Regulators and politicians let them get away with it, helped along by academics preaching the gospel of deregulation.

Make no mistake, the ultimate temptress in this morality tale is money itself. Rapacious bankers are with us always, the movie seems to say, but we don't have to let them loose to work their schemes, much less egg them on with outrageous and one-sided compensation schemes.

Similarly regulators, politicians, and academics can regularly be found who see only virtue in the unfettered search for profit, but there are also always more cautionary voices in each of these realms, and we don't have to give the megaphone always to ideas that have money behind them. The revolving door between financial industry and financial regulation may or may not be an example of direct corruption, but it can hardly help but distort the conversation.

From one point of view, this is a movie about how money corrupted academia; no one will soon forget the cringe-making scenes with famous Harvard and Columbia faculty. But from another point of view the movie is about how, notwithstanding the distortions of money, there were and are plenty of voices speaking on the other side, from outside as well as inside the academy: Raghuram Rajan and Nouriel Roubini, Brooksley Borne and Frank Partnoy, Charles Morris and George Soros, Christine Lagarde and Dominique Strauss-Kahn. Even the FBI comes in for praise, for early and regular warning of widespread mortgage fraud!

We are left with the implication that, were it not for the corruption of money, these alternative voices would have been heeded, and we could have avoided the crisis. I am not so sure.

The crisis had (and has) lots of moving parts, and those who raised concerns were typically focusing on one or two parts of a much larger system that was very imperfectly understood. Even today, it is not widely understood how a simple housing bubble, in a narrow segment of the market, nearly brought down the entire financial system, and the movie does not really help in that regard.

There is talk in the movie about bank leverage, and about credit-default swap side bets on sub-prime that multiplied losses, but the mechanisms for amplification of a subprime crisis into a global financial crisis are left unexplored. We hear nothing about the exposure of European banks, nothing about the role of the Fed in putting a floor under the crisis, nothing about global demand for dollar reserves, and nothing about the shadow banking system that sprang up to meet that demand.

Moral outrage is fully appropriate. What we need now is to channel that outrage into financial analysis, from top to bottom, and into financial reform, also from top to bottom.

Links:
Nakedcapitalism review of "Inside Job"
Felix Salmon review of "Inside Job"

- The Money View

Posted by Perry G. Mehrling at 3:30 pm

Inside Job II

by Perry G. Mehrling on January 28, 2011

And the nomination for best Perp Walk goes to...

Today's Financial Times' articles: "Goldman president warns on bank rules" (Jan 26), "Financial crisis report to blame Wall Street" (Jan 26), "US Crisis Inquiry Points to Widespread Failures" (Jan 27)

Now comes the Financial Crisis Inquiry Commission report, the sequel to Oscar nominee "Inside Job", the movie. Once again, all the players are here. Once again, a morality tale: "lax risk management, distortive bonuses, predatory lending, and insufficient regulation." Once again, essentially a sub-prime credit fuelled housing bubble story, with leverage and derivatives as a putative amplification mechanism.

But wait.

From what I have read (I am about half way through the 622 page report) there is a disconnect between the conclusions of the report at the front and the wealth of detail in the body of the report. Perhaps the commissioners wrote the conclusions and the staff wrote the report? Never mind, the point is not to be put off by the up-front conclusions. Read the report.

Here is what the up-front conclusions say the storyline will be:

"While the vulnerabilities that created the potential for crisis were years in the making, it was the collapse of the housing bubble—fueled by low interest rates, easy and available credit, scant regulation, and toxic mortgages—that was the spark that ignited a string of events, which led to a full-blown crisis in the fall of 2008."

Explicitly considered and dismissed are three other alternative narratives: "capital availability and excess liquidity, the role of Fannie Mae and Freddie Mac (the GSEs), and government housing policy." But supporters of these alternative narratives will find supportive evidence inside the report, and that evidence supports another narrative as well, as I will be detailing in my next post.

In the press conference to launch the report, Phil Angelides emphasized several times that "the facts speak for themselves". Of course facts never speak for themselves; what he is really saying is that everyone should read the report and connect the dots for themselves.

Of all the conclusions stated in the report, to my mind the most important is this:

"Our financial system is, in many respects, still unchanged from what existed on the eve of the crisis."

This I read as a statement of fact about the state of the financial reform process. The Commission explicitly wants to think of itself as the financial market analogue to the National Transportation Safety Board (p. xii) which means that it makes no policy recommendations. Nevertheless, it is quite clearly saying that we are not at all done with reform; in fact we have hardly begun. We should all read the report and think about what kind of reform it implies.

Let me assure you that the report is not a hard read at all. Somebody at FCIC knows how to construct a story, and also how to write compelling prose. "Money washed through the economy like water rushing through a broken dam." "Like a science fiction movie in which ordinary household objects turn hostile, familiar market mechanisms were being transformed."

In this respect the report compares favorably to my previous favorite, the UBS shareholders report, a dry document but deeply informative, amply repaying the effort required to digest it. Swiss regulators insisted that the company come clean, explaining to the world how it managed to lose so much money.

When the UBS report came out, I wondered "Where is the analogous Citibank shareholders report?" Now we have it, and it reads like a financial thriller.

The early chapters build the suspense even as they take the reader on a journey through the strange and wonderful world of structured finance. The occasional pedagogical aids—well-conceived figures and beautifully drawn diagrams, including a recurring concrete deal CMLTI 2006-NC2—enter unobtrusively and at exactly the right moment.

Chapter 8 "The CDO Machine" is a key point of inflection in the narrative, the moment when the central dramatis personae make their entrance: Bear Stearns, Citibank, AIG, Goldman Sachs, Moody's, and the SEC. After that it is "All In", "The Madness" and "The Bust". And only then, in Part IV "The Unraveling", does the narrative turn chronological, beginning with "Early 2007" and Goldman Sachs' prescient and fateful decision to get rid of its subprime exposure and go short.

Against the background of the Report, I read the remarks at Davos of Gary Cohn, president of Goldman Sachs, as warning that it can all happen again, indeed that it is already happening again. Current reform efforts are focused in the wrong place, on the traditional banking system not the parallel shadow banking system.

He warns about the future, but his warning suggests also an alternative narrative of the past. The global financial crisis is not just the collapse of a subprime bubble, but rather a stress test of the emerging new global financial (and monetary) system.

To be continued.

- The Money View

Posted by Perry G. Mehrling at 11:27 am

A Money View of the FCIC Report: Part One

by Perry G. Mehrling on January 31, 2011

When the survival constraint bites

Financial Times article being discussed: US Panel's Report Reflects Partisan Rift (Jan 30, 2011)

If you can't roll your funding as it comes due, you are dead. That is what Hyman Minsky called "the survival constraint."

From this point of view, the crisis looks like a series of ratchet steps down into the abyss, as the survival constraint shifted from one player to another—fail or bail? —until essentially the entire financial system was on life support provided by the only entity that does not face a survival constraint, the Fed.

[VIDEO LINK]

Looking a little closer, we see that each of these critical ratchet points came after an earlier fateful decision—again fail or bail?—at a less critical spot in the system. Just so, way back at the beginning of the crisis, Bear Stearns faced the choice whether to provide support for two troubled hedge funds, or just close them down. The decision to support came at the cost of weakening its own balance sheet, ultimately fatally.

Similar earlier fateful decisions can be identified for Citi, for Fannie and Freddie, for Lehman, and for AIG. Read the report and you will see what I mean. For each firm there was a business case, a profit-maximization case, for bailing, and the firm took it. Profit-driven lender of last resort came before stability-driven public lender of last resort; no one could know in advance that it would not be enough.

Pulling the camera back to see the big picture, the crisis looks less like a set of dominos falling and more like a stress test of the entire shadow banking system. The dissenters to the FCIC report warn about "the dangerous imprecision of the term shadow banking" (p. 427) and their warning is well-taken as a criticism of the main body of the report. So let's be more precise.

By "shadow banking system" I propose to mean the entire collection of interlocking balance sheets that came to link a household mortgage borrower on one end with an ultimate funder who holds shares in a money market mutual fund on the other end. In a Jimmy Stewart age, there was only a single bank in the middle, funding mortgage loans with deposits. In the last thirty years, however, we have shifted from a bank loan-based credit system to a capital market-based credit system (Figure 2.1, p. 32).

Inevitably crisis was going to test this new system, but no one knew where it would break when that test came. Now we have had the test. What broke?

So far as I can see, the critical pieces of the system that broke, and so turned a mere subprime crisis into a global financial crisis, were the tri-party repo system and the credit-derivative dealer system. Notwithstanding the suggestion that Goldman's (rumored) refusal to accept novation triggered the run on Bear, it seems clear that it was JP Morgan's insistence on collateral support for intraday credit involved in its tri-party repo operations that brought the end.

Even more, it seems clear that it was the Fed's fear about systemic effects from disruption of the tri-party repo system that impelled it to act, and subsequent events make clear that those fears were very well founded. Six months later

"These developments triggered the event that Fed policymakers had worried about over the summer: an increase in collateral calls by the two tri-party repo clearing banks, JP Morgan and BNY Mellon. As had happened during the Bear episode, the two clearing banks became concerned about their intraday exposures to Morgan Stanley, Merrill, and Goldman." (p. 361)

Lehman's failure by contrast seems to have been largely a story of OTC derivatives exposure, "900,000 derivatives contracts with a myriad of counterparties" (p. 326), as also the AIG failure. But Lehman was allowed to fail, while AIG was bailed, why? The answer seems to have been that AIG had collateral that was acceptable to the Fed while Lehman did not. Merrill Lynch survived because Bank of America bought the firm; Lehman failed because Barclay's didn't buy the firm.

Significantly, in the aftermath of Lehman and AIG, OTC derivatives markets froze:

"Derivatives had been used to manage all manner of risk—the risk that currency exchange rates would fluctuate, the risk that interest rates would change, the risk that asset prices would move. Efficiently managing these risks in derivatives markets required liquidity so that positions could be adjusted daily and at little cost. But in the fall of 2008, everyone wanted to reduce exposure to everyone else. There was a rush for the exits as participants worked to get out of existing trades. And because everyone was worried about the risk inherent in the next trade, there often was no next trade—and volume fell further. The result was a vicious circle of justifiable caution and inaction.

Meanwhile, in the absence of a liquid derivatives market and efficient price discovery, every firm's risk management became more expensive and difficult. The usual hedging mechanisms were impaired." (p. 364)

Repo markets were a key funding source for the shadow banking system. Credit derivatives markets were a key risk management tool. Both failed, and in their failure provided a key mechanism spreading the crisis systemically.

But why did the systemic crisis become a global crisis? To be continued….

- The Money View

Posted by Perry G. Mehrling at 6:43 pm

A Money View of the FCIC Report: Part Two

by Perry G. Mehrling on February 01, 2011

Saving the (International) Dollar

Financial Times articles being discussed: NY Fed to Expand Reverse Repo Requirements (Feb 1), Fed passes China in Treasury holdings (Feb 2)

The dissenters to the FCIC Report quite rightly emphasize the global character of the crisis, but they draw the wrong conclusions. What they miss is the global character of the shadow banking system, the collapse of which caused the crisis. (Chapter 7 is clear on this; "an ocean of money" was invested in commercial paper and repo, used to fund purchase of mortgage-backed securities.

[VIDEO LINK]

The Report is replete with references to actions taken in order to support money market funds, starting from the very earliest stages of the crisis. (See pp. 253-54 for example.) But it never asks why those actions were taken. The answer, from a money view perspective, is that those actions were fundamentally about defending par between the international dollar and the domestic dollar, between shares of money market mutual funds held by foreigners, and domestic dollar deposits.

The origin of the ultimate assets held by the shadow banking system was of course mortgage borrowing by US citizens, but all the other dimensions of the system could be and often were located outside the US. That global dimension needs special attention. Two pieces of the system in particular were important.

First, credit risk. While China built its massive dollar reserve, invested mainly in Treasury and GSE securities , Europe accumulated the more risky mortgage-backed securities and their derivatives. The China dimension of the crisis therefore had most to do with Fannie and Freddie (the public shadow banking system, if you will), while the European dimension had to do with the fate of the shadow banking system (the private counterpart).

Second, liquidity risk. The ultimate funders of those mortgage-backed securities preferred more money-like dollar claims, and that preference was met by the expansion of offshore money market funds, which provided short term funding for the offshore shadow banking system that held the mortgage-backed securities.

It is important to emphasize that the offshoring of both of these risks was apparently approved, even endorsed, by US regulatory authorities. Risk borne by foreigners was that much less risk faced by (FDIC-insured) depositors in the regulated domestic banking system. And quasi-money supply held by foreigners was that much less money supply backed by the discount window at the Fed.

In the early stages of the crisis, the support for this offshore shadow banking system was private and the motive was profit. Money market funds investing in asset-backed commercial paper, or lending in the repo market against mortgage-backed collateral, faced potential losses if they continued to roll over their funding. And so the sponsors of those money funds took over the funding, borrowing on their own account from the money funds and lending on to the holders of the mortgage collateral, or taking that collateral onto their own balance sheets.

After the collapse of Bear Stearns in March 2008, this private lender of last resort support was backed up by aggressive public lender of last resort support through the Primary Dealer Credit Facility (PDCF) and the Term Security Lending Facility (TSLF). But after September 2008 that wasn't enough. The Fed, in cooperation with the Treasury, took over the funding directly. The money funds got Treasury bill assets (plus an FDIC-like liability guarantee, and a discount window-like liquidity facility). The Treasury got deposits at the Fed, and the Fed lent on the proceeds to the holders of the mortgage collateral. This was the period of so-called dollar shortage.

Eventually, in 2009, the Treasury stepped out of the picture, leaving private banks to do the intermediation. Meanwhile, the Fed stepped even more into the picture by taking the collateral onto its own balance sheet, in so-called QE1 purchase of $1.25 trillion of mortgage backed securities.

This is the context, and the frame, needed to understand the most recent developments reported in the FT. Apparently the world demand for money-like dollar claims continues unabated, and if the private sector cannot meet that demand then the Fed will. That is what the QE2 program is about, at bottom; it will increase the most money-like dollar claims by $600 billion, albeit by reducing supply of the already fairly money-like Treasury securities by the same amount.

From this point of view, the reverse repo program is not so much about draining reserves lest they cause inflation. Note well that the anticipated counterparty on the other side of those repos is the money market mutual funds. The reverse repo program is therefore about letting private banks (and domestic dollar money expansion) step out of the picture in order to allow money funds (and international dollar money expansion) to take their place.

So we are apparently putting back together the international dollar system that existed before the crisis, or trying to do so anyway. The vital question of the relationship between that international dollar system and our domestic banking system going forward remains unaddressed, indeed not even asked.

- The Money View

Posted by Perry G. Mehrling at 9:36 pm

CDS Deja Vu

by Perry G. Mehrling on February 07, 2011 2 comments

Speculation, stabilizing or destabilizing?

Today's Financial Times articles: US muni smackdown (Feb 2, 2011), Wall St looks to boost market in US muni CDS (Feb 6, 2011)

"Muni veterans are from Mars, Meredith Whitney is from Venus," so says Lex, commenting on the wide divergence in current views about the future of the US municipal bond market. Whitney sees a coming wave of defaults; veterans see municipal debt/income ratios far below those that sovereign states routinely bear.

Lex frames the divergence as a matter of political judgment. Municipalities have made promises to bond investors, but they have also made promises to public sector unions in the form of wage and pension contracts. When the numbers do not add up, which promises will wind up being honored and which breached?

[VIDEO LINK]

From a money view perspective, an alternative frame presents itself, namely the possibility of refinance. Quite apart from the possibility of public refinance, already we hear isolated stories of private refinance, which involve purchase of distressed municipal debt as a way of gaining control over the underlying assets, perhaps a hotel, or a stadium, or an airport.

This is the classic value investor's game, which takes advantage of distress to buy assets below their fundamental value. All you need is a necessitous seller, such as a bond mutual fund that cannot hold downgraded securities, and an illiquid market. This is Warren Buffett's game.

The new muni CDS market offers another, newer, way to play the game. In this game all you need is divergent views about the unknowable future. Martians sell CDS, Venusians buy CDS, and Wall Street dealers make money on the buy-sell spread.

But here is the rub.

In theory, the value of a credit default swap depends on the value of the underlying referenced asset; if the underlying bond falls in value, then buyers of CDS make money and sellers of CDS lose money. But in an illiquid market, the value of the underlying bond is hard to assess; if you really have to sell, you will probably have to sell at a fire-sale price.

In practice, therefore, the value of the underlying bond comes to depend on the value of the CDS, not the other way around. Martians and Venusians do side bets with one another, and the price of those bets sets the price of the underlying Earth-bound asset.

We've seen this game before, in CDS markets on Earth-bound mortgage securities, and more recently in CDS markets on sovereign debt securities. It is the price in the more liquid market that gets used whenever assets are "marked to market", derivative markets tend to be more liquid than the underlying, and index derivatives tend to be more liquid than specific names.

So what is the problem? When Warren Buffett takes advantage of an illiquid market to buy real assets at a knockdown price, we admire him for his astute investment judgment. Why don't we equally admire the Martians who take money away from the Venusians by selling them credit insurance when they are scared? In both cases, the business opportunity arises because market price deviates from fundamental value.

What explains the difference in attitudes about these two kinds of speculation?

I think the difference goes back to an old and fundamental debate about whether speculation is stabilizing or destabilizing. It seems pretty clear that Buffet's speculation is stabilizing—he is stepping in as buyer for a necessitous seller, and without him the price would fall even farther. The case of the Martians and Venusians in the CDS market is less clear. Without them, there would be no CDS price volatility to drive activity in the cash market.

In October 1939, Nicholas Kaldor published a famous article "Speculation and Economic Stability" in the Review of Economic Studies. Riffing on a theme from Keynes, Kaldor advanced the argument that speculation could be destabilizing, in the sense that it pushes price away from fundamental value. To make matters worse, he argued, these price distortions can have real distorting effects on economic activity.

The worry, it is important to appreciate, is not just on the downside, but also on the upside. Prices can be too high (commodity prices?) as well as too low (municipal bond prices?), and they can be first too high (June 2007 MBS?) and then too low (January 2009 MBS?).

Kaldor was of course talking about a world, and a financial system, much simpler than our own. As we move to the derivative regulation phase of financial reform, we will face for ourselves the question he asked back in 1939. Speculation, stabilizing or destabilizing? For future reference, here is Kaldor's answer (p. 10):

"Hence to our question: does speculation exert a price-stabilising influence, or the opposite? the most likely answer is that it is neither, or rather that it is both simultaneously. It is probable that in every market there is a certain range of price-oscillation within which speculation works in a destabilising direction while outside that range it has a stabilising effect. Where markets differ, is in the magnitude of this critical range of price-oscillation."

- The Money View

Posted by Perry G. Mehrling at 7:41 am

Saving the (international) dollar

by Perry G. Mehrling on February 10, 2011 4 comments

A money view of the commodity bubble

Today's Financial Times articles: Currencies: Strength in Reserve (Feb 8, 2011), Long-term investors shun Treasuries sale (Feb 8, 2011), Fuelling corn's relentless rise back toward record levels (Feb 10, 2011)

Calls for a new Bretton Woods, a grand international monetary realignment away from the dollar, have come to little, so says the FT. No alternative national currency is a plausible contender, given the "Triffin dilemma", and potential supranational contenders such as the IMF's SDR or gold have their own drawbacks. Instead:

[VIDEO LINK]

"The most likely change is a gradual shift to a multipolar currency world, reflecting increased use of currencies other than the dollar in global trade and finance. China has been encouraging more international use of its currency – permitting, for example, the issuance of renminbi-denominated bonds in Hong Kong. The euro, too, has the potential to take on greater reserve status if the eurozone can sort out its internal economic difficulties and build a government bond market that approaches the US Treasury market for depth and liquidity."

Here the FT is apparently speaking from the standpoint of the nation state, viewing monetary matters as fundamentally political decisions worked out among the designated leaders of affected states. But there is another voice in these matters, namely the voice of private markets, and it has been speaking as well. What has it been saying?

Put aside the current gold price spike as the voice of nostalgia for a bygone era. Pay attention instead to what is happening with commodity prices generally, and remember some history. Commodity prices are rising; put aside for the moment the current discordant debate about why. The history I'd like to remember is the call for a commodity reserve currency that came out of the interwar period of monetary disorder.

The loudest voice in that call was Benjamin Graham (yes, that Benjamin Graham) in two books-- Storage and Stability (1937) and especially World Commodities and World Currency (1944)—although the call was taken up by both Hayek and Keynes in the run-up to the Bretton Woods conference. In brief, the Graham Plan was that international reserve money should be a portfolio of basic commodities, basic in the sense that there is no question of their ultimate sale for use.

In 1944 Graham's idea went nowhere. In the immediate postwar period, more or less everybody was going to be buying goods from the U.S., so it was dollars that everybody needed, and the system set up at Bretton Woods got organized around the dollar. This was not so much an act of high statesmanship, I would submit, as it was recognition of market reality.

(As against the dollar standard, Graham's idea was to have an international authority hold warehouse receipts for actual inventories of the basic commodities, and issue currency against those receipts. The authority would stand ready to make a two-way market, trading currency against the commodity bundle, so allowing the quantity of currency to expand or contract as needed while keeping the commodity price level stable. Individual nations would continue to issue their own currencies, convertible into this international currency, and national central banks would hold their international reserves in the form of this international currency.)

Fast forward to today. One way to understand current commodity price movements is as a kind of decentralized market search for a version of the commodity reserve currency plan that might work for today. How so?

Let us accept that the dollar is the international reserve currency, and let us suppose therefore that you are holding dollars but worried about possible instability of the value of the dollar. Suppose further that you are an international holder, so TIPS are not a good hedge.

One way to hedge is to buy futures on a broad commodity index to an amount equal to your dollar reserve holdings. If the dollar falls in value against the referenced commodity portfolio, the payoff from your futures position automatically increases your nominal dollar holding by just enough to keep your real holding constant. The combination of dollar holdings and commodity futures is, in effect, a synthetic commodity reserve currency, but (unlike the Graham Plan) with zero actual inventories of commodities.

The problem is, who is on the other side of the futures contract? Commodity producers no doubt would welcome the chance to hedge their natural long commodity exposure, but they can already do this by trading with commodity consumers. The monetary demand for futures thus has no natural counterpart supply, and so tends to push futures prices away from fundamentals.

This way of looking at current events leads to a somewhat less sanguine conclusion than that offered by the FT. If (and it is admittedly a big if) current commodity price movements are being driven by unbalanced demand in the commodity futures market, then evolutionary change toward a multilateral national currency reserve system will work only if the currencies in question are able to meet that unbalanced demand.

To be continued.

- Crisis and Renewal
- The Money View

Posted by Perry G. Mehrling at 6:48 am

AIG on the Potomac

by Perry G. Mehrling on February 12, 2011

The Future of Government Mortgage Finance Support

Today's Financial Times articles: White House seeks wind down of Fannie and Freddie (Feb 11, 2011), Debate on Fannie and Freddie's fate looms (Feb 11, 2011)

The stockholders of AIG were wiped out because that company sold insurance on mortgage-backed securities that fell in value. Not only did it price its insurance too cheaply, but it also neglected to allocate capital reserves to the contracts that it wrote.

More or less the same was true of Fannie and Freddie, but without the associated capital resources of a global insurance conglomerate. The ultimate stockholder of Fannie and Freddie, so it turned out, was the U.S. Treasury, and hence the U.S. taxpayer.

Now comes the Treasury report "Reforming America's Housing Finance Market" which proposes (as Option 3) a system of "catastrophic reinsurance behind significant private capital" that would combine the private capital buffer of the AIG system with a scaled-back version of the public insurance system of Fannie and Freddie.

The idea seems to be that tail risk insurance is appropriately a public good, albeit one that needs to be priced, and reserved, more appropriately than in the past. First loss should be taken by the borrower, in the form of increased down payments. Second loss should be taken by the lender, in the form of increased capital reserve requirements. Only when all these buffers are exhausted would government insurance kick in.

This proposal represents a major pull back from governmental involvement in housing finance; actual funding of mortgages is to be largely eliminated. By my count, the word "private" appears sixty times in the thirty two pages of the report. Fannie and Freddie, the twin sources of the bulk of taxpayer losses in the crisis, are to be wound down as quickly as possible, with the speed limited only by the depressed state of housing markets.

Notwithstanding the dramatic transformation of government involvement, from outright intermediation to backstop reinsurance, in other respects the proposal rather proudly upholds American exceptionalism in housing finance. Securitization is here to stay, as are other distinctive features such as the pre-payable 30 year fixed mortgage. The report mentions the mortgage interest tax deduction only in passing; the non-recourse character of most American mortgages is not mentioned at all.

The future envisioned by the report is a restoration of the private securitization market, after fixing all of the (many) problems revealed by the crisis. The historic transformation from a bank lending-based credit system to a capital market-based credit system is thus to continue.

From a larger money view perspective, the most significant feature of the mortgage loan is that it amounts in effect to a kind of capitalization of future wage income; the house serves as collateral for the loan, but provides no cash flow toward paying back the loan. The mortgage market might better be viewed as a kind of human capital market.

Securitization was invented to allow humble households to tap capital markets, previously accessible only to government and the strongest corporate borrowers. It worked. In 2006, at the peak of the housing bubble, households accounted for an unprecedented 44.3% of total outstanding non-financial credit in the United States, more than business (32.1%) and more than government (23.6%).

The Treasury proposal would make it a bit harder for individual households to borrow against anticipated future wage income, but in the cause of making the resulting financial instrument more readily acceptable in world capital markets.

The way the global system worked before the crisis, the U.S. was a net purchaser of goods from the rest of the world, and it paid for those goods with promises to pay in the future. Foreigners wouldn't take mortgage loans, but they would accept mortgage-backed securities, at least before the crisis.

Perhaps the Treasury proposal will convince foreigners to dip their toes into our waters once again.

- The Money View

Posted by Perry G. Mehrling at 10:25 pm

A Money View of Global Imbalances

by Perry G. Mehrling on February 19, 2011

Who's afraid of finance?

Today's Financial Times article: "Bernanke says foreign investors fuelled crisis" (Feb 19, 2011).

The latest evidence is that Bernanke is moving in a money view direction, but he is not there yet. He is not yet moving from his "global savings glut" interpretation of the origins of the crisis, but he is adding a global portfolio dollar demand dimension to it. In a money view, we reason from the opposite direction.

What does it mean, "imbalance"?

People use the word to refer to a situation in which countries run large and persistent surpluses (or deficits) on current account. Surpluses mean that earnings from exports and foreign investments are greater than expenditures on imports and foreign debt service. Deficits mean just the opposite.

[VIDEO LINK]

But why "imbalance"? In the world as a whole, surpluses exactly equal deficits, as a simple matter of accounting. Indeed, surpluses must be financing deficits, else we would not see the surpluses and deficits in the first place. Surplus countries must be accumulating net claims on the rest of the world, and the rest of the world must be accumulating net claims on deficit countries.

"Imbalance" suggests that there is something wrong, something distorted or perhaps unsustainable, about the current pattern of international claim accumulation. Behind the scenes, there seems to be some counterfactual state of affairs, a "balanced" state, against which current patterns are compared and found wanting. What is that state, and is it even possible?

One seductive counterfactual is a world in which everyone runs a surplus, not really a possible world (as all economists know) but seductive nonetheless, and so highly influential in policy debate.

The nearest to this counterfactual would be a world of outside international money, such as a gold standard world. The non-gold-producing countries would all run current account surpluses which they use to accumulate gold balances, and the gold-producing countries would run current account deficits financed by drawing down their gold endowments, dug out of the ground and sent abroad.

In an fiat money world, the nearest we get to the seductive counterfactual is a world in which the international reserve currency country runs a deficit, financed by issuing currency that is accumulated by the rest of the world running surpluses. The exorbitant privilege of mineral endowment is replaced by the exorbitant privilege of the printing press.

Note that neither of these counterfactuals needs to involve any actual international capital flows at all. Under the gold standard world, the surplus countries are not accumulating claims on the rest of the world; they are just accumulating a pile of gold. The same goes for the fiat money world, but the pile is paper. Indeed, if we were to reclassify the gold as a commodity, then surpluses and deficits would both vanish—everyone would be in perfect "balance". The same is true if we were to reclassify fiat money as a commodity.

The point I am trying to make is that, behind this language of balance and imbalance lies an image of an ideal world in which there are no capital flows at all. No one is accumulating claims on anyone else. Everyone is perfectly free

of future encumbrance. “Neither a borrower nor a lender be,” says Polonius to his son. “When you run in debt, you give to another power over your liberty,” says Benjamin Franklin.

But this seductive ideal is not the world we live in, nor can our world be made to conform with it. Within the borders of every country, borrowing and lending is the very stuff of business, and indeed of individual life cycles. Even without net international capital flows, portfolio diversification would imply substantial offsetting gross flows as wealth-holders swap domestic claims for foreign claims.

Even more, the world we live in is an inside money world, a credit money world that is intimately bound up with the borrowing and lending world. Even without net international capital flows, wealth-holder portfolio demand would have the rest of the world holding dollar-denominated money claims, and the U.S. holding offsetting non-money claims on the rest of the world.

The point is that, basically, the U.S. is a bank. Long ago this point was made in a famous article “The Dollar and World Liquidity: a minority view” (1966) by Emile Depres, Charles Kindleberger, and Walter Salant. Apparently it is still a minority view, but no less illuminating for that.

From this starting point, so-called global imbalances look somewhat different. We expect the rest of the world to be accumulating dollar balances, but those dollar balances are not a pile of paper, rather the U.S. liability counterpart of an offsetting foreign asset position. So-called “imbalances” are a case where the increase in dollar balances exceeds the increase in foreign assets held, and so shows up as net capital flows into the U.S., most recently into the U.S. housing market.

The “imbalance” is really just discontent with how this system has been working. Fair enough. Some would prefer to see the capital flows directed elsewhere. Others would prefer to see the demand for dollar balances directed elsewhere. My modest point (to Bernanke, but also the rest of the G20) is that these are logically two separate issues, and we can engage them better if we keep them separate.

- The Money View

Posted by Perry G. Mehrling at 11:29 am

Brave New World

by Perry G. Mehrling on February 27, 2011

Financial Globalization and the Nation State

Today's Financial Times articles: Swiss central bank discord provides a warning bell (Feb 24), Sovereigns turn to pre-crisis financial wizardry (Feb 24)

On facing pages in the print version of the FT, the reader is invited to consider the encounter of the modern state with the modern market. On the left hand page the story is about the central bank, on the right hand page the story is about the Treasury, and on both pages the story is about the continuing reverberations of the Global Financial Crisis and the changing role of both central banks and Treasuries as a consequence of financial globalization.

In a piece ostensibly about the political trials of the Swiss National Bank in the face of losses after failed intervention to stem currency appreciation, Gillian Tett includes the following paragraph:

"But the SNB is not the only central bank that has recently taken bold gambits. The European Central Bank, for example, holds an (ever-swelling) pile of periphery Eurozone bonds; the Fed's balance sheet has more than doubled in size, to $2,500 bn, as it has gobbled up mortgage-backed bonds and Treasuries; and the Bank of England also holds a large pile of gilts and mortgage assets."

Tett does not say so explicitly, but the regular FT reader knows that each of these central banks is facing its own political trials as a consequence of its gambit, trials that differ according to local political configurations. Bernanke, Trichet, and King are all three facing one or another kind of attack.

The point that strikes me, however, is the commonality of the gambit. All over the world, central banks have been using techniques of war finance to support peace time capital market finance. The classic Bagehot crisis rule—"lend freely at a high rate"—has morphed into something quite new—"purchase freely at a high price"—and economic thinking lags behind economic practice. Lender of last resort has morphed into dealer of last resort.

Meanwhile, in a piece ostensibly about Portugal's decision to post collateral for its derivative positions (just as non-sovereigns typically do), Anousha Sakoui riffs also on the uncomfortable similarity between the European Financial Stability Fund and the purportedly discredited private Collateralized Debt Obligation used before the crisis to transform low-rated private mortgage debt into AAA-rated securities.

The connection between the two is driven home by a remarkable visual, showing side by side the five-year CDS spread for various European sovereign debtors and the analogous spread for European financial institutions. Sovereigns are banks, the visual says, and like banks they are driven to use the tools of structured finance, among other modern financial wizardry, to reduce their funding cost.

Against this background, Portugal's decision is described thus:

"The sovereign has sought to influence prices of its credit default swaps, a form of insurance against default…By posting collateral on its trades, the sovereign is seeking to drive the costs of its CDS lower with knock-on positive effects for its borrowing costs. By posting collateral, the risks are reduced for Portugal's counterparties, lessening their need to turn to the sovereign CDS market to hedge their exposure. The likely result, bankers argue, is lower CDS prices and thereby also cheaper borrowing costs for Portugal."

Let's understand this.

The underlying idea is an arbitrage relationship we might call CDP, for Credit Default Parity. The price of a risky bond plus the price of credit insurance on that bond should, arguably, be pretty close to the price of a riskfree bond. But if this is so, then it must also be so that the price of the risky bond should be pretty close to the price of riskfree bond minus the price of credit insurance.

Portugal is concerned, apparently, that its derivative counterparties have been hedging their exposure by buying sovereign CDS, so pushing up the price of credit insurance and (by CDP) pushing down the price of Portuguese sovereign bonds, so increasing the borrowing costs for Portugal. Portugal proposes to bear the cost of posting collateral, as an attempt to reduce the cost of borrowing.

The point that strikes me in all this is the implicit rejection of the efficient markets hypothesis. The underlying idea is that CDS prices are in some sense wrong, an exaggeration of the true risk of lending to Portugal. Portugal is offering to post collateral as a way of improving the efficiency of CDS pricing.

Brave new world indeed. At the center, central banks use their balance sheets to prop up dysfunctional markets; at the periphery, Treasuries acquiesce to market practice.

- The Money View

Posted by Perry G. Mehrling at 3:33 am

The Inherent Instability of Credit

by Perry G. Mehrling on March 03, 2011 7 comments

What kind of "Minsky Moment"?

Ralph Hawtrey, the British economist whose textbook Currency and Credit was the standard for an earlier generation, saw financial instability as the abiding tendency of credit markets, and the attempt to tame that instability as the abiding task of central bankers. His hope was that attentive discount rate policy could stem divergence, either upward or downward, before it built up strength and became unstoppable. Lender-of-last-resort responsibility brought with it an interest in avoiding the last resort.

[VIDEO LINK]

Hawtrey's vision of the underlying problem and the consequent mission of central banking, was the origin of both monetary thinking and monetary practice in the years of the fledgling Federal Reserve System of the 1920s. At both Harvard and Chicago, academic centers that would become poles of macroeconomic dispute in later years, Hawtrey was where everyone started.

In the event, discount policy proved to be a rather weak reed against the forces of instability, and policy attention consequently turned elsewhere, toward institutional constraints to control instability (the banking legislation of the 1930s) and then fiscal policy to moderate business fluctuation (the legacy of Keynes).

That the inherent instability of credit had not been solved, only suppressed, was the central message of Hyman Minsky in his so-called "financial instability hypothesis". A Depression-era student at both Harvard and Chicago, Minsky found his life's work in the task of updating Hawtrey for the conditions of post WWII United States, the 1950s and 1960s.

The idea that the Global Financial Crisis of 2007-2009 was a "Minsky Moment" has by now entered general consciousness. But the location of that financial crisis was not at all where Minsky had focused his attention.

Minsky was all about credit-fuelled spending for business investment; our crisis was clearly about credit-fuelled spending for household residential expenditure. Minsky was all about expansion of bank credit; our crisis was clearly about expansion of non-bank credit in the emerging capital market-based credit system. And Minsky developed his thinking in a largely closed-economy framework of the immediate post-Bretton Woods period; our crisis was clearly global, and its global reverberations continue to echo.

So we can hardly say "Minsky was right", and stop there. Rather, what Minsky was right about was the same thing that Hawtrey was right about, the inherent instability of credit. That also is not a place to stop so much as it is a place to start. Minsky found his life's work in updating Hawtrey, and the current generation will find its life's work in updating Minsky.

The big thing that has happened since Minsky is the rise of finance, and the globalization of finance. The institutional change was dramatic, and so was the intellectual change that came with it. As modern capital markets took over credit functions formerly served by bank lending, not only did we achieve increased efficiency but also we put behind us the inherent fragility of banking. That was the hope anyway.

False hope. The most important lesson of the global financial crisis is that the brave new world of capital market-based credit has inherited the "inherent instability of credit" gene, big time. The question facing us is, what to do about it?

Dodd-Frank is no Banking Act of 1933. Congress made a list of all the bits and pieces that went wrong in the crisis, and Dodd-Frank is the corresponding list of measures to address each of the bits and pieces. But there is no overall vision, and it is not at all clear that the individual measures are even consistent with one another.

Now comes the academic response. "Regulating Wall Street" is a critique of Dodd-Frank, concluding that the Act has not gone far enough in internalizing the externalities that are rife in the interconnections of financial balance sheets. The hope, apparently, is that if we get the prices right we will tame financial instability. Maybe so, but also maybe not. As Bagehot memorably said back in 1873, "Money will not manage itself, and Lombard Street has a great deal of money to manage."

"Can "It" Happen Again?" asked Minsky, and his answer was "No", given the enlarged and hence stabilizing role of government that had grown up since the Depression. But for our own Minsky moment, Big Government was not much help. It was the Fed that caught the financial system as it collapsed, expanding its own balance sheet as others contracted, not only domestically but also internationally.

I conclude that rethinking the role of the Fed is the place to start. Dealer-of-last-resort responsibility brings with it an interest in avoiding last resort.

- The Money View

Posted by Perry G. Mehrling at 10:33 am

The Illusion of Control

by Perry G. Mehrling on March 06, 2011

Exit Strategies and the New Normal

Now comes the ECB testing the water for a possible rate rise, and at the same time the Fed testing the water for a possible stand pat. The interesting thing is that both justify their policy with exactly the same argument—they are both trying to influence long run inflation expectations.

The ECB wants to raise rates in order to send the message that it is prepared to be tough on inflation. Rising commodity prices are seen as a harbinger of future inflation, so it is important to send a contrasting policy message now, as a harbinger of a different future.

[VIDEO LINK]

Meanwhile, the Fed wants to stand pat in order to send the message that it also is prepared to be tough on inflation. Rising commodity prices are seen as a temporary blip, while the five year ahead break-even inflation rate is seen as a signal that long-run inflation expectations are on track. So it is important to send the reassuring policy message now that policymakers, like the market, are looking through the immediate noise to longer term fundamentals.

Time was, long-run price stability meant defending short-run gold parity, and discount rate changes were seen as operating not on inflation expectations but rather on actual gold flows. If you were losing reserves, then you had to be ready to get them back, either from the market or from the foreign central banks to which the reserves were flowing. Raising the discount rate operated by raising the cost of delaying settlement, so those who could pay today would pay today.

In the years before our own Crisis, so-called "inflation targeting" was all the rage, the idea being that central banks would each direct their efforts toward long run domestic price inflation. If inflation expectations were stabilized, then so too would be exchange rates, at least in the long run since it is in the long run that purchasing power parity holds. The exchange rate, the trading ratio of dollars for euros, should be kept in line by the trading ratio of dollar goods for euro goods.

The whole point of the pre-Crisis consensus was that, under the cover of this long-run expectational stability, individual central banks would have room to maneuver in response to their different short-run circumstances. Policy interest rates could be different, exchange rates could move away from long-run inflation targets, and these price changes would facilitate adjustment to different shocks.

That pre-Crisis consensus is what is actually being tested here. The idea is to maintain long-run expectational stability even while short-run policies push in different directions.

What we are testing, to put it more provocatively, is whether the Crisis is over and, even more, whether the new post-Crisis normal is the same as the old pre-Crisis normal. Personally, I doubt it, and I suspect that a lot of policymakers doubt it also. Perhaps that is why they are just testing waters, not jumping in.

Time was, central bankers thought that discount rate policy was all the control they needed. The Depression shattered that illusion for a generation, only to see it re-emerge in different dress during the Great Moderation.

The Global Financial Crisis has, I think, shattered the illusion of control for the present generation, but without yet giving rise to a believable alternative. Central banks can, as the Crisis has shown, put a floor on financial collapse, but only insofar as they are willing to catch the falling structure on their own balance sheets. It remains to be seen if

central banks have the tools to ward off the last resort before it happens; the short term policy interest rate looks once again like offering much less control than is likely to be needed.

We are living in historic times.

- The Money View

Posted by Perry G. Mehrling at 3:10 pm

Shadow Banks and Narrow Banks

by Perry G. Mehrling on March 09, 2011 1 comment

A Money View

One enduring lesson of the crisis is the truth of the old saw "banking is as banking does." It has never made much intellectual sense to confine attention to a particular class of regulated entities that are called banks, or to track the movements of their assets and liabilities while ignoring the assets and liabilities of entities doing functionally identical business.

If policymakers did so at one time, it was for practical reasons—they were responsible for the things called banks, and had some control over them as well. Non-banks, even if they were functionally identical to banks, were someone else's problem, and a tough problem too since there were no very evident points of control.

It turned out, of course, that the someone else was all of us, and a tough problem now confronts us all. The politics are tough to be sure, maybe even tougher than the economics, but the economics are tough enough even without the politics, so let's focus there.

Maybe the solution is simply to outlaw shadow banking? And while we are at it, since banking is as banking does, why not outlaw non-shadow banking as well? In the United States, this line of thinking is called variously narrow banking, 100% banking, or simply "The Chicago Plan". (British readers please note, what Mervyn King calls narrow banking is something much broader.)

Henry Simons, in his "Positive Program for Laissez Faire" (1934), explicitly called for "abolition of private deposit banking on the basis of fractional reserves". Milton Friedman, in his "Monetary and Fiscal Framework for Economic Stability" (1948) imagines a world not only without banks but also without private credit of any sort.

Simons was writing in the midst of the Depression-era collapse of private banking, and in opposition to New Deal measures to prop the system up. Friedman was writing in the midst of war-time conflation of the Treasury with the central bank, which enabled unprecedented expansion of government debt (and money), and repression of private credit.

In a sense the current global financial crisis combines features of both historic periods. We have seen collapse of the non-bank banking system, and we have also seen methods of war finance employed to prop the system up.

Not surprising then that a version of the narrow banking idea has surfaced again, this time from the pen of my colleague Larry Kotlikoff, under the name "Limited Purpose Banking." Unlike his predecessors, Kotlikoff doesn't want to outlaw private credit (and he has serious reservations about the state of public credit!), but like Henry Simons before him he definitely wants to abolish private deposit banking on the basis of fractional reserves.

It is not going to happen, of course, but why not? The political opposition would be enough, but we are putting that aside. The deep economic question is, What is it about the way the actual economy works that stands in the way? What does the money view perspective have to say about narrow banking?

The short answer is that narrow banking would eliminate the banks' dealer function—no more two-way market at par between bank deposits and cash. Bank deposits would be just cloakroom tickets, with exactly as many tickets as cloaks. The world of money would be severed completely from the world of credit.

From a money view perspective, this is not a world that would work very well. Put another way, there would be powerful incentives in this world for profit-seeking man to rejoin what the hand of the state has put asunder. Such, anyway, is the lesson of history. Indeed, those powerful incentives are the origin of fractional reserve banking, and also of so-called shadow banking.

Now comes Sandra Krieger, head of the Credit and Payments Risk Group at the New York Fed, speaking about "Reducing the Systemic Risk in Shadow Maturity Transformation". She doesn't want to abolish banking, but she definitely wants to draw a line between banks and shadow banks, and to treat them differently.

"We were reminded during the financial crisis of how banks are special—they have access to direct and explicit official credit and liquidity backstops…It is a different story for financial intermediaries without this type of

backstop. [During the crisis, the Fed lent freely to both.] Thus, the defining characteristic of the shadow institutions and their obligations—the absence of direct and explicit access to official credit and liquidity—was violated."

As a student of Bagehot, I understand drawing a line between different kinds of credit, some eligible for discount and others not. I do not understand drawing a line between different kinds of banks, some eligible to take collateral to the discount window and others not, even if it is the same collateral.

The lesson of this crisis, which should be uncontroversial, is that banking is as banking does. The social purpose of central banks is not to safeguard individual (special) banks, but rather the banking system as a whole.

- The Money View

Posted by Perry G. Mehrling at 7:00 pm

IMF Calls for New Economic Thinking

by Perry G. Mehrling on March 13, 2011

Or Does It?

History will record that the IMF's conference last week (March 7-8), titled "Macro and Growth Policies in the Wake of the Crisis", marked a turning point in mainstream economic debate within academia, probably only one turning point in the crooked road that lies ahead, but nonetheless a significant moment.

Olivier Blanchard, Director of Research at the IMF, struck the significant note in the opening minutes of the first session (2:50 in Session 1). According to him (and I paraphrase), before the crisis, mainstream economic thinking had converged on a beautiful construction in terms of monetary policy, namely "inflation targeting". We had convinced ourselves that it was enough to focus our attention on one target (inflation), and one instrument (the policy interest rate) to achieve that target.

One lesson of the crisis is that the pre-crisis consensus is not right--"Beauty is not synonymous with truth"--and we have to reconsider. The policy problem is one of multiple targets and multiple instruments, and the mapping from instruments into targets is complex. Economic policy is consequently much more complicated and messy than we had thought pre-crisis.

Where do we go from here? On the research front, so Blanchard continues in his closing remarks (8:00), the "brave new world" of policy-making is very exciting. We have the chance to revisit a large range of macroeconomic issues but now with the right microeconomic foundations, for example agency theory, imperfect information, and behavioral economics.

On the policy front, however, we must simply face the limits of our knowledge, and hence go slow. We cannot give up on inflation targeting, but must proceed step by step, pragmatically, to add additional targets and instruments one by one, in an experimental fashion, in order to find out what works and what does not. We must "keep hopes, our hopes, in check". Crises will probably happen again and we probably won't be ready for them.

In summary, we need new economic thinking, but we can start from where we were before the crisis, with a conception that the underlying problem is microeconomic distortion of one kind or another away from the perfect market ideal. And we need new economic policy also, but again we can start from where we were before the crisis, with the inflation targeting model that Otmar Issing says "doesn't help you at all" in practical terms. That is one message anyway.

I take away a different message.

To me, the importance of this conference comes simply from the very public assertion that the pre-crisis consensus was wrong--okay, "not right"--and that we need now to be working toward something else. The significant point is that there is no consensus on what that something else should be. Some people, perhaps even most economists currently practicing, will work from the pre-crisis consensus, tweaking this or that.

But there is room also for more fundamental departures, for new approaches that have not yet been tried. Unless I mistake him, I think Blanchard would agree. (He apparently asked conference participants to be provocative.)

Otmar Issing, for example, offers a Nobel for anyone who provides a proper theoretical treatment that combines credit and money, financial quantities and financial prices. That is what practicing central banker economists like himself have always been looking for, and not found yet, certainly not in the pre-crisis academic consensus.

A decade ago, Olivier Blanchard wrote an influential paper, "What do we know about macroeconomics that Fisher and Wicksell did not?", in which he put forth a kind of Whig history of the progress of macroeconomic thinking up to 2000. Compared to today, suggested Blanchard, macroeconomics pre-1940 looks like "a period where confusion reigned, for lack of an integrated framework".

According to his account, the inter-temporal general equilibrium model (DSGE) provided that missing framework. Now, ten years later, we can see that framework in a different light, as the origin also of the "beauty" that economists mistook for truth, and apparently still do, if only by force of intellectual habit. The important takeaway is that the crisis has opened the ground for alternative frameworks as well as tweaks of the existing one.

To be provocative, let me put it this way. We are living today in a period not unlike the inter-war period, a period where confusion reigns for lack of an integrated framework. We are living in a period of exploration and experimentation, not only in the policy world but also in the world of ideas. Let the new economic thinking begin.

To be continued….

- The Money View

Posted by Perry G. Mehrling at 6:36 pm

Navigating the Turning Point

by Perry G. Mehrling on March 16, 2011 2 comments

From MIT to IMF

By the evidence of the recent IMF conference, there is apparently now consensus that the global financial crisis has killed--"shattered" (David Romer), "destroyed" (Stiglitz)--pre-crisis academic economic orthodoxy. But that orthodoxy had many dimensions, and there is no consensus on where repair efforts are most immediately necessary.

Instead, we see a division of labor emerging in which everyone focuses on that one dimension where they feel themselves to have some special expertise. In such a situation, an overall map may be helpful for making sense of the reconstruction effort as a whole.

The map reveals five tectonic shifts:

1) Shift from academia to practitioners (both public and private)
2) Shift from the North to the South
3) Shift from market to state
4) Shift from national to international
5) Shift from specialists to systems thinkers

Five is too many to remember, hence my proposed summary slogan, "shift from MIT to IMF". (That means we should pay particular attention to the opening remarks of Dominique Strauss-Kahn and the luncheon speech of John Lipsky, which frame the entire event.)

Pre-crisis academic orthodoxy was organized around the DSGE model and its variants, which suggested a minimal role for macroeconomic management, more or less limited to monetary policy at the level of the nation-state. The economies of the North were farther along the path of adopting this advice than were the economies of the South, but the trend of history seemed clear; the South would be following the North in due time. As each country achieved monetary stability, market forces were sure to deliver price stability, output stability, and financial stability at the level of the country itself. And as more individual countries achieved stability, international stability (including exchange rate stability) was sure to follow.

The death of pre-crisis orthodoxy is thus more than the death of a model; it is the death of an entire road map for history.

Which raises the central question, How can we steer a course if we have lost sight of the destination? By their own admission, academics have little to offer practitioners, the North has little to offer the South. And yet, by the evidence of the conference, policy makers seem less disoriented than academics; they have plenty of problems immediately in front of them to keep them occupied. Also, the South is less disoriented than the North; they were less far along the road than the North, and also have remaining sources of indigenous resistance that provide genetic reserves of intellectual diversity.

It won't last. The globalization engine that has pulled economic growth for the last decade needs a guiding metaphor at the top to orchestrate its complex adaptive operations further down. New economic thinking is the order of the day. For my money, the road forward is best presaged by the presentations of Hyun Song Shin (Session III, 43:20) and Olivier Jeanne (Session VI, 20:15). Check 'em out.

A map of current turnings

Pre-Crisis Orthodoxy	Post-crisis Rebalancing
From academia to practitioners:	
Economics is enough	Political economy
Abstract beauty is enough	Realism
Logic is enough	Practical wisdom

One best way monoculture	Diversity is robust
Economic theory:	
Price stability is enough	Output/ Financial/ Exchange Rate stability needed
Monetary analysis is enough	Credit and finance needed
DSGE is enough	Banking and finance needed
Equilibrium analysis is enough	Complex adaptive system
Policy Application:	
Market discipline is enough	State supervision/orchestration needed
Inflation targeting, using interest rate rule	Multiple targets, Multiple instruments needed
Monetary policy is enough	Fiscal policy needed, plus macroprudential
Microeconomic inefficiency focus	Macroeconomic instability focus
Practitioner wisdom:	
Good national policy is enough	International coordination needed
North is source of stability	North is source of instability
Northern demand is source of growth	Southern supply
North is source of knowledge/fiscal capacity	South is rising

- The Money View

Posted by Perry G. Mehrling at 12:28 pm

Global Crisis, Global Reform

by Perry G. Mehrling on March 20, 2011

Capital Flows, Cross-border Banking, Shadow Banking, and the Dollar

Inspired by the recent yen kerfuffle, in which the G7 central banks intervened to take the opposite side of the speculators' trade that was driving up the yen, let's try to connect some dots on the way to drawing a picture of the monetary side of financial globalization.

First big dot, global imbalances. The big story is of course the Chinese trade surplus, and its counterpart the US trade deficit. For our purposes, more important is the mirror image of these trade imbalances in capital flows, meaning foreign asset accumulation in China and foreign borrowing in the US.

[VIDEO LINK]

The trade balance is multilateral but crucially the financial balance is less so, given Chinese preference to accumulate disproportionately Treasury and GSE assets. That means that the decision to bail out Fannie and Freddie was in part a geo-political decision to avoid forcing losses onto China. It follows that reform of US housing finance will only be done when there is sufficient explicit government backstop that China is once again willing to fund US mortgages.

Second big dot, cross-border banking. To simplify tremendously, think of global banks lending in dollars outside the US, and funding these loans with wholesale dollar borrowing in world markets. And think of the recipients of these loans as domestic banks in emerging economies, which borrow in dollars and lend in the domestic currency. In the crisis, both the global and domestic pieces of this "dollar supply chain" faced difficulties rolling their funding.

Global banks relied on their own private branches inside the US to get access to wholesale dollar funding, which turned out in the crisis to mean reliance on Fed backstop of dollar funding markets. Emerging economy banks relied on their own "self-insurance" reserve balances, but that turned out still to mean reliance on sovereign backstop and access to IMF funding, since reserve balances were not so easy to tap in the crisis; central bank liquidity swap lines at the Fed also came into play, for the very first time.

With the exception of the swap lines, all of these mechanisms had been developed in prior crises and, though the present crisis sorely tested them, they coped rather well. The global character of the global financial crisis did not come, as it was feared it would, from contagion to emerging market economies.

Third big dot, shadow banking. As a consequence of Chinese portfolio preferences, the rest of the world had to accumulate disproportionately private dollar assets, specifically mortgage backed securities. But their own portfolio preferences called for safe and liquid, as well as dollar, assets. They were accustomed, after all, to funding the existing cross-border banking mechanism, which involved holding Eurodollar deposits or dollar-denominated money market mutual fund shares.

The familiar cross-border banking dollar supply chain could have worked if only the global banks had been willing to hold mortgage backed securities directly, or to provide funding for others who would. Some of this did happen (think UBS) but not enough to get the job done. Enter shadow banking, which used the mortgages, or more specifically their AAA-derivatives, as collateral to tap the wholesale money market directly.

In this way of thinking, shadow banking was an evolution of cross-border banking, insofar as it relied heavily on the dollar supply chain that had been forged by the global banks. The difference was that the lending was in dollars to US borrowers, and securitization made it possible to move much of the lending off balance sheet.

That difference was crucial. Whereas in standard cross-border banking, emerging market banks could turn to local sovereign backstop and thence to the IMF, shadow banks had no country. They were reliant on world funding markets and so, in the crisis, they got squeezed out. Dumping of collateral was the significant mechanism for global contagion in this crisis, contagion from short term funding markets to long-term security markets, and thence throughout the world.

Fourth big dot, the dollar. Demand for dollar balances is only recently coming to be adequately appreciated as a driver of the boom, and of all the institutional innovations that came with it. The shadow banking system was a response to that driver, not a cause of it. The crisis did not mute that demand; quite the contrary the crisis increased it. And now regulatory response to the crisis is institutionalizing that heightened dollar demand in the form of regulatory liquidity ratios.

I conclude that a revival, in some form, of the dollar cross-border funding system is an inevitable part of our future financial system. Devising mechanisms of regulatory control and support of that system should be top priority.

- The Money View

Posted by Perry G. Mehrling at 11:23 am

Paper Profits

by Perry G. Mehrling on March 23, 2011

The concept of bank capital

"Not yet, Bank of America," says the Fed, "but the rest of you guys go right ahead. Yes, even you, Citi."

Thus the second round of stress tests came to an end with the conclusion that key players in the banking system are sufficiently well-capitalized that they can be allowed once again to pay dividends to shareholders.

The economists' debate about bank dividends has so far been between those who see payment of dividends as a drag on recapitalization through retained earnings (as Admati), and those who see the same payment of dividends as a first step toward acceleration of recapitalization through stock offerings (as Isaac).

Now comes the Fed itself, announcing its own record dividend payment to the U.S. Treasury. $79.3 billion is a lot of money, even on the Fed's swollen $2.4 trillion balance sheet. We are talking 3.3% of total assets—which is apparently what you get, after expenses, when you borrow at near zero percent and lend at near 4%.

This same carry trade is of course the origin of the recapitalization of the private banking sector (albeit with somewhat higher "expenses"). The difference is that the dividend is paid to private shareholders, mostly in the form of increased stock valuation, but now also in the form of actual cash dividends.

Looking forward, maybe the banks will be required to raise more capital, so diluting existing shareholders. But the more significant dilution has already happened, namely dilution of the taxpayer interest. Indeed that was the whole point of the exercise—to restore the buffer of private capital that stands between bank losses and the taxpayer.

From a money view perspective, the interesting issue raised by the entire exercise is not so much whether this is the best way to raise bank capital, but rather the prior question, What exactly do we mean by the concept of bank capital?

What we mean by bank capital is the difference between assets and liabilities, which is to say the difference between the present value of future cash inflows and the present value of future cash outflows. But what value should we put on these future flows? It is a familiar problem in corporate finance, but banking presents a special challenge because of the greater relevance of the survival constraint.

Moment by moment, the significant constraint on a bank is not solvency but liquidity, meaning the ability to meet promised cash outflows with actual cash inflows. This "survival constraint" binds today, and also tomorrow and the day after that, on into the future. This has consequences for valuation.

Consider the valuation of a bank with and without a guaranteed source of refinance. With the refinance guarantee, we know the survival constraint will never bind at any point in the future, so we can ignore it for valuation purposes. But without the guarantee we have to make a judgment about the probability of hitting the survival constraint, not just tomorrow but on into the future; present valuation will be lower.

It is of course entirely possible that, for any given banking entity, valuation is positive or negative under both assumptions. Those are the easy cases. Sometimes I think the regulatory reform process is driven by the dream that somehow we can fashion a world in which these easy cases are the only cases!

The hard case is the one where bank valuation is positive with the refinance guarantee, but negative without. Refinance guarantee, and nothing more, makes the difference between solvency and insolvency.

From a money view perspective, the whole problem with the debate about bank capital is that it does not adequately appreciate that this hard case is not a special case, but rather the general case. The whole business of banking inherently involves making a specialty of dancing close to the edge of the survival constraint, so that the rest of us can choose a different specialty. For banks, refinance always matters because sometimes it is the only thing that matters.

In boom times, it doesn't seem to matter much, since everyone has access to the world money market. Asset values thus come to reflect the idea that the survival constraint does not bind, that refinance is guaranteed, that liquidity is a free good. But then comes the crisis, and suddenly it does matter. Access to the central bank is everything. If you have access to the central bank, then you are liquid, then you are solvent; if you don't, then you aren't, then you aren't.

The fundamental issue, from this point of view, is not capitalization but rather access to central bank refinance.

To be continued…

- The Money View

Posted by Perry G. Mehrling at 4:33 pm

In Gold They Trust

by Perry G. Mehrling on March 27, 2011 4 comments

The illusion of black swan-proofing

It is easy to poke fun at those in Utah, and not just in Utah, who think that the road to safety is paved with gold. But much the same survivalist ideology shows up also in more financially sophisticated circles, in calls for greater "diversity and self-sufficiency".

Here is none other than Gillian Tett, channeling Nassim Taleb, in a recent column:

[VIDEO LINK]

"The mark of a truly advanced society … is to accept that pre-modern black swans can appear – and then create systems that can survive, even when our modern prediction techniques go wrong. Most notably, instead of building systems which are extremely interconnected, complex and opaque – which makes them liable to collapse if a shock hits – we could design simpler systems that could break into self-contained small units at a moment of disaster. Diversity and self-sufficiency, in other words, can prevent disastrous forms of contagion; or, as Taleb puts it, create a 'black swan-proof world'."

Taleb himself puts it even more strongly:

"Economic life should be definancialised. We should learn not to use markets as storehouses of value: they do not harbour the certainties that normal citizens require. Citizens should experience anxiety about their own businesses (which they control), not their investments (which they do not control)."

We could I suppose call this the "yeoman farmer illusion", to emphasize the self-sufficiency dimension, but for present purposes I'll call it the "outside money illusion", to emphasize the dimension that contrasts most sharply with the money view.

From a money view perspective, my cash inflow is your cash outflow, and my financial asset is your financial debt. At the level of society as a whole, the fabric of current economic relations is knit together with a web of promises to pay in the future. Going forward, my ability to make good on the promises I have made to you depends not only on my own efforts, but also in part on the efforts of everyone who has made promises to me. And their performance depends in part on the efforts of all those who have made promises to them, and so on, and so forth.

From this perspective, financial assets are all inside assets, and as a general rule monetary assets are all inside assets as well. Gold is an exception, but apparently a terribly seductive one. The outside money illusion is the illusion that a de-centralized market economy could operate without a web of mutual promises, and interdependencies, to give it form and direction.

We live in a time of great uncertainty. During the crisis, private promises on which we depended, promises that were rated AAA by institutions we trusted, failed us. Government stepped in to prevent the larger web from unraveling completely, but at the cost of large and uncertain future liabilities, collective promises that we fear may constrain our future in ways we cannot yet see clearly.

Now, as always, the web of interlocking commitments is like a bridge we spin collectively out over the void toward shores not yet visible. The leading edge of our bridge has collapsed; the shore toward which we were spinning is now clearly beyond reach.

In the aftermath of crisis, we yearn for solid ground, for gold, for self-sufficiency. It is an understandable yearning, but it is an illusion.

Investment is an uncertain business because life is an uncertain business, and our demand for money is of a piece with our yearning for impossible certainty. The reality of inside money means that safety lies not in isolation and self-sufficiency, but rather in reconstruction of the web of mutual promises.

A certain amount of definancialization is inevitable in the short run; the leading edge of the bridge must be dismantled before we can begin to build again. But in the longer run the answer is not definancialization, but rather refinancialization, and on a more solid and robust basis than before.

- The Money View

Posted by Perry G. Mehrling at 5:50 pm

Greenspan Calls for New Economic Thinking

by Perry G. Mehrling on March 30, 2011 4 comments

But not by him

"Unredeemably opaque", so Alan Greenspan terms the operation of the invisible hand that guides international financial markets.

He means this literally. "The problem is that regulators, and for that matter everyone else, can never get more than a glimpse at the internal workings of the simplest of modern financial systems." If he had said "hardly ever get" rather than "can never get", I think we could all agree.

Indeed pretty much every economist I know thinks that a big part of the road forward is a much enhanced effort at data collection, so that in future we do get more than a glimpse. That is the whole point of the Financial Stability Oversight Council and the Office of Financial Research.

But Greenspan also thinks that, even if we do manage to get a glimpse, it would not help us much, because the system is "more complex" than we contemplate, on account of "the degree of global interconnectedness of recent decades." Why collect data, if you will never be able to understand it?

To which I, and again pretty much every economist I know, would answer, What else is science but the possibly quixotic belief that application of effort and reason will eventually be sufficient to unlock the mysteries of the universe? Even if some mysteries remain beyond our ken, we can never know that in advance. If it looks like a big job, then best to get started, and if it is too daunting for you, then please step aside and give others a chance.

No question about it, Dodd-Frank is a patchwork product, a list of fixes for a list of dike-busting leaks. For lack of any overarching intellectual framework, there is no guarantee at all that the resulting regulatory structure will be internally consistent, and every expectation that it will provide ample scope for regulatory arbitrage of various kinds.

No question about it, Dodd-Frank is a product of Old Economic Thinking. Over the last 30 years, the U.S. has moved from a bank lending-based credit system to a capital market-based credit system. Dodd-Frank focuses its attention on the old system, with only a nod to the new one.

No question about it, Dodd-Frank is as much a political Act as it is economic. Like all epochal financial legislation, it was thrown together in a hurry in an attempt to show that our leaders are in charge. The real devil will be in the details—and very likely in a second legislative effort, if past history is any guide—to be worked out in the years to come.

We will of course have to understand the new system before we can properly regulate it. The place to start is by realizing that what others call "the shadow banking system" and I call "the dollar cross-border funding system" is not an aberration but the very heart of how the new system works. Data lags behind, and understanding lags even farther behind. Old intellectual habits continue to organize our conversation, but only for the time being, not forever.

One is tempted to turn the tables on Greenspan, noting the "unredeemably opaque" prose for which he was famous as chairman of the Fed. But I don't think it is opaque, and certainly not unredeemably so, as I hope I have demonstrated. The author understands all too well the stakes that are in play at this epochal moment.

Put simply, the central issue is financial globalization. Complexity mostly arises from the cat-and-mouse game between bankers and regulators—the parallel construction is intentional—where bankers are global while the regulators are national. It follows that if the regulators were to stop regulating, the system would be a lot simpler.

But would it work better?

Greenspan concludes: “The vexing question confronting regulators is whether this rising share of finance has been a necessary condition of growth in the past half century, or coincidence. In moving forward with regulatory repair, we may have to address the as yet unproved tie between the degree of financial complexity and higher standards of living.”

Good question. Let’s address it. As I say, Greenspan calls for new economic thinking, but not by him.

- The Money View

Posted by Perry G. Mehrling at 6:36 pm

Regulating the Shadow Banking System

by Perry G. Mehrling on April 03, 2011 2 comments

(Way) Beyond Diamond-Dybvig

The problem with Dodd-Frank, and with Basel III as well, is that they start with the banking system, not the shadow banking system.

Give credit where credit is due. Everyone (I hope) now appreciates that so-called "microprudential" safeguards are not enough, and this is so even if we extend the traditional focus on solvency (capital adequacy) to include also liquidity.

"Macroprudential" safeguards are needed also, to put bounds on the apparent instability of the system as a whole. Everyone says it, but what does it mean?

[video: http://www.youtube.com/watch?v=VRJK8DCPuX8]

Click the fullscreen icon in the bottom right of the player to enlarge.

What it used to mean was control of financial aggregates, back when Hawtrey's writing about the inherent instability of credit translated the trained instincts of practical bankers into the King's English. If aggregate credit is expanding too fast, then watch out. If aggregate money is also expanding too fast, then take action immediately, since it will soon be too late.

This ancient central banker's wisdom is resurfacing today, but mainly for lack of anything better. We heard it from Otmar Issing at the recent IMF conference. Here is Adair Turner's version, from his 16 March speech at Cass Business School:

"It is therefore likely that one of the root causes of the crisis was that the aggregate maturity transformation performed by the financial system grew significantly in the pre-crisis years but that, fatally, we failed to spot this."

What Turner means by growth of "maturity transformation" is expansion of aggregate credit financed by expansion of aggregate money. This return to Hawtreyan thinking is a huge step forward, comparatively, but it is only the first step. What we need is Hawtreyan thinking, but applied to modern shadow banking conditions.

Hawtrey's idea, appropriate to the conditions of his own time, was that macroeconomic instability stemmed ultimately from excessive expansion of bank credit, meaning credit expansion financed by monetary expansion. But the modern credit system is not a bank-lending system, rather a capital market system. That is one reason we failed to spot the emerging problem.

My message is that, pace Turner, it is not going to be enough simply to extend the Hawtreyan analysis to include the assets (credit) and liabilities (money) of the shadow banking system on equal footing with the traditional banking system. Light on the shadows is a good thing, but not enough—what is happening in the shadows is not the same thing that was happening in the light.

Here is an example of what I mean. Think of an old-line asset manager, taking in client money and investing it in a portfolio of risky bonds. Now think of a new-line asset manager, offering exactly the same risk exposure to clients by buying credit default swaps and interest rate swaps, while investing the client money in a portfolio of short term riskfree money market assets.

One way to think about shadow banking is that it is just the mirror image of this new-line asset management

strategy. Shadow banks bought risky bonds, but sold off the risk exposure using derivatives, and funded the portfolio in wholesale money markets. The key point is that the division of old-line asset management into new-line management on the one hand, and shadow banking on the other, showed up statistically as a simultaneous increase in the demand and supply of money.

If we simply extend the Hawtreyan analysis, then this institutional realignment looks like a case of credit expansion fuelled by money expansion, but that analysis misses the key role of the derivatives market. The derivatives exposure of the asset manager is just the mirror image of the derivatives hedging of the shadow bank. And standing in between them is an OTC derivatives dealer, making markets and making money on the bid-ask spread.

From this point of view, OTC derivatives reform is at the very center of any attempt seriously to engage with the problem of regulating the shadow banking system. We learned in the crisis that, under modern conditions, central banks serve as dealer of last resort, essentially backstopping the key market-making function of security dealers. But what about normal times?

The Federal Reserve Act of 1913 created the Fed as a democratically accountable analogue to the former private lender of last resort, J. P. Morgan, and his club of New York bankers. The issue of the current day is how to create a similarly accountable alternative to the club of New York dealers. This is the subtext of current debate about moving derivatives trading to central counterparty clearinghouses or exchanges.

- The Money View

Posted by Perry G. Mehrling at 10:45 pm

The Future of the Fed

by Daniel H. Neilson on April 06, 2011 1 comment

The Fed changed over the course of the global financial crisis. This graph tells a big part of the story. It's the asset side of the Federal Reserve's balance sheet, from just before the crisis through the present.

[PICTURE: http://inet-dev.civicactions.net/sites/inet.civicactions.net/files/fed_bs_crisis_assets.svg]

Prior to the crisis, fluctuations in the size of the Fed's balance sheet were minimal—just the small adjustments needed to keep the Fed Funds rate on target. After Lehman failed in September 2008, the Fed added over a trillion dollars in assets. With QE2, it is in the process of adding half a trillion more.

What does this change mean, and what does it tell us about the Fed's future?

The crisis hit hardest in parts of the financial system that the Fed wasn't quite prepared for. The emergency funding facilities—some never even used—make the graph colorful, and record the Fed's attempt to catch up.Until Bear, the Fed thought it could rely on normal monetary policy—it had to work a little harder to keep rates stable, but no more than that. Bear's failure showed that that was wrong. From Bear to Lehman, the Fed thought it could wade gingerly into the shadow banking system, providing liquid collateral here, improving discount-window lending there. Lehman (and AIG, and the other events of the fall of 2008) showed that that was wrong too.

From Lehman to the end of 2009, the Fed took a very different path. Everyone wanted out of their positions in mortgage-backed securities, and the normal system of securities dealers could no longer make that happen. The Fed did what the dealers could not—it took the system's MBS position onto its own balance sheet, to the tune of $1.25 trillion. This is the expansion of the Fed's balance sheet, the big jump in the graph above. (The steps it took to get there are enlightening too—stay tuned.)

Now the subprime crisis is over, but none of the reform plans on offer will fundamentally change the parallel banking system—what some call the "shadow banking system"—that created it.

I am not an apologist for the Fed, but neither do I think we should end it. When the next financial crisis rolls around, we need a Fed that is up to the task. To get such a Fed, we need to understand what happened to it during the last crisis. This also means getting a clearer picture of the parallel banking system, and designing regulations that make it safe (and that don't just create new loopholes).

- The Money View

Posted by Daniel H. Neilson at 1:47 pm

TSLF and the price of good collateral

by Daniel H. Neilson on April 14, 2011

In my last post I argued that if we want a Fed that is ready for the next crisis, we had better understand what happened to it during the last one. Perry, Dave Grad and I have just wrapped up a paper on the subject. Now I'm using the liquidity program transaction data, released in December 2010, to flesh out that work. I will post interim results here.

TSLF is a good place to start. To understand what the Term Securities Lending Facility did and what problem it was trying to solve, we have to understand what broke in the repo market, a key ingredient in the modern financial system. Repo is collateralized lending, allowing a borrower to obtain an amount of money against securities of slightly greater value. It is a very cheap and liquid source of funds, as long as you've got collateral that someone will accept.

This graph shows how the crisis began to show up in the repo markets:

[PICTURE: http://inet-dev.civicactions.net/sites/inet.civicactions.net/files/repo-spreads-1D.svg]

Before the crisis, overnight financing cost you the same amount whether it was against Treasury or agency-backed MBS collateral. Then, in mid-2007, the rate for Treasury repo falls relative to the MBS repo rate—the blue line falls relative to the green line.

Following a big downgrade of subprime MBS securities by Standard and Poors, the rating agency, the situation worsened. Big spikes down for Treasury repo, big spikes up for MBS repo. Translation: the market was demanding good collateral.

Even more, since lenders can take collateral that they receive and turn it around to obtain financing themselves, lenders were working hard to get the best collateral, which is why those downward spikes were so deep. The premium was on the *collateral*, and if you had it, you could borrow for cheap.

Trouble was, nobody had good collateral. So the Fed created TSLF: borrowers could swap their low-quality securities for Treasuries, which they could turn around and put out on repo. The Fed was keeping the repo system going.

This graph shows the market value of Treasuries outstanding (black line) and the types of collateral accepted.

[PICTURE: http://inet-dev.civicactions.net/sites/inet.civicactions.net/files/tslf_collateral.svg]

More on the intricacies of TSLF next time. But if you look back up to the first graph, you can see that it worked: repo spreads narrowed between Bear's acquisition and Lehman's bankruptcy. TSLF was expanded when spreads widened after Lehman, and the spreads came down again quickly. Here's a more thorough investigation of the effects of TSLF.

- The Money View

Posted by Daniel H. Neilson at 3:49 pm

After QE2, what then?

By Perry G. Mehrling on April 18, 2011

And what was QE about anyway?

Now that the end of QE2 is in sight, everyone is wondering what happens next. Is a QE3, focused perhaps on outright purchase of municipal bonds, in the offing? Or will we once again start hearing about "exit strategy"?

And how, if at all, does policy on the QE front interact with general interest rate policy? The ECB has raised its policy rate, arguably more as a signal to European political authorities that they should not continue to rely on the ECB alone to manage problems in Portugal and elsewhere, but nonetheless reminding markets that interest rates will eventually rise, even in the United States.

Inevitably, policy debate about these questions runs largely in intellectual grooves formed before the crisis. Notwithstanding the revolution in modern finance, the deepest groove remains apparently the Tobin-era portfolio choice approach. From this point of view, QE2 and QE1 were both about the Fed taking duration risk out of the market, so reducing the market equilibrium spread between long rates and short rates. According to this point of view, when QE2 ends, duration risk will remain on the Fed's balance sheet, and hence the term spread will remain at current levels, ceteris paribus.

In the money view perspective, by contrast, the Fed is not conceived so much as a financial intermediary but rather as a kind of dealer or market maker that is able to influence market prices only insofar as it is willing to buy at a higher price (or sell at a lower price) than anyone else. Buying at a higher price means absorbing all the supply offered at that price, and that means financing the resulting asset positions either by selling something else or by borrowing. The social purpose of such intervention is to keep asset prices from getting too far away from fundamental value—if markets themselves kept prices close to values there would be no need for such intervention.

The consequence of the Fed's interventions can be seen in the transformation of its balance sheet over the last three years. Dan has shown the asset side consequence over time. Here is the current (April 14 release) balance sheet, both sides, in trillions:

Assets	Liabilities
1.3 Treasury notes and bonds	1.0 Currency
1.0 MBS and GSE	1.5 Reserve deposits
0.3 Other	0.1 Other

Over the last three years the balance sheet has more than doubled, but also the composition has changed dramatically. Before the crisis, assets were almost entirely short term Treasury bills; now they are almost entirely long term Treasury plus MBS and GSE. Before the crisis, liabilities were almost entirely currency, now reserve deposits are larger than currency.

In my previous post, I emphasized how the rise of shadow banking can be seen as the counterpart of the transformation of traditional asset management. Shadow banks supply the quasi-money demanded by asset managers, while derivative dealers act as risk intermediaries, offering risk hedging to the shadow banks and risk exposure to the asset managers.

Following this line of thought, we can understand the transformation of the Fed's balance sheet as the consequence of its intervention to backstop this new system of funding and risk intermediation.

But we can't see it very clearly in the accounts as they are customarily presented. Instead, it is helpful to rewrite the Fed's balance sheet as:

Assets	Liabilities
2.3 Treasury notes and bonds	2.3 Treasury bills
1.0 MBS and GSE	1.0 Treasury notes and bonds
2.3 Treasury bills	2.3 Currency and reserve deposits
0.3 Other	0.3 Other

All I have done is to add 1 trillion of Treasury notes and bonds and 2.3 trillion of Treasury bills to both sides; the net exposures are exactly the same. But now we can see the risk intermediation interventions clearly, and separately. The top line shows interest rate exposure; the second line shows credit exposure; and the third line shows liquidity exposures.

To see the point even more clearly, it is helpful to view the exposures as synthetic derivatives and to write the balance sheet as:

Assets	Liabilities
	2.3 Interest rate swap
	1.0 Credit default swap
	2.3 Money market swap
0.3 Other	0.3 Other

Consistent with my previous posts, I am showing these derivative exposures as liabilities. An interest rate swap involves receiving interest at a fixed rate and paying interest at a floating rate; a credit default swap involves receiving interest at a risky rate and paying interest at a riskfree rate; a money market swap involves receiving interest at a riskfree rate and paying interest at a liquid money rate.

Before the crisis, the Fed balance sheet was essentially a money market swap of about 800 billion. Three years later, we can see that the Fed's response to the crisis was to triple this original exposure, and to add also 1.0 trillion of CDS exposure and 2.3 trillion of IRS exposure.

All of these exposures arose as a consequence of the Fed's dealing activity—it offered to buy risk exposures at a price that the market, given disruption, found attractive. QE1 was about buying MBS with reserves, hence both CDS and IRS exposure, as well as MMS; QE2 was about buying Treasury notes and bonds with reserves, hence IRS and MMS only.

This way of thinking about what the Fed has been doing can help us to understand better what is at stake in the end of QE2, and any eventual exit strategy. Each of the three exposures can, and should, be considered separately. This will be the subject of my next post.

- The Money View

Posted by Perry G. Mehrling at 9:42 am

Exit Strategy, or New Normal

by Perry G. Mehrling on April 24, 2011 1 comment

War Reparations, or Prosperity

In September 2008, when the Fed first began to expand its balance sheet while the U.S. Congress dithered over TARP, I likened what was happening to war finance.

In World War I, and then even more in World War II, the Fed served as dealer of last resort for U.S. government debt, creating money as needed to meet the exigencies of war spending. In September 2008, the Fed used the same powerful emergency mechanism to support collapsing private debt markets; the current swollen balance sheet is the result.

After World War I, the world embarked for a while on a fantasy voyage, imagining that defeated Germany would somehow pay reparations to its European opponents sufficient to allow them to repay massive war debts to the United States. That ship soon enough hit the rocks; the result was world depression and a second world war.

As the second world war came to an end, that reality voyage was in everyone's mind as a paradigmatic example of what not to do. In the event, the Marshall Plan for reconstruction of Europe came first, and the Treasury-Fed Accord of 1951 came second. First we dealt with the debt mess, and only then did we deal with the money mess.

[VIDEO LINK]

That historical experience has lessons for us today.

It is clear that we are nowhere near having dealt with the debt mess. In the U.S., we have moved a good chunk of private debt onto the public balance sheet, and urged "extend and pretend" for the rest, but that is all. In the Eurozone, the absence of a Europe-wide public balance sheet has meant that the debt mess is playing out differently from the U.S. But who doubts that, if there were a Euro-bond, the S&P would be issuing a negative outlook for it just as much as for U.S. debt?

I draw the conclusion that, much as I sympathize with the Fed's anxiety over its current exposures, any talk of imminent exit is highly premature, bordering on fantasy. Nevertheless threats of exit may serve a useful political purpose, insofar as they draw attention to the unfinished business surrounding the debt mess.

Here are the concrete dimensions of the current exit fantasy, according to the FT:

"Most officials still endorse the basic sequence discussed last year: first, scrap the promise of ultra-low rates for an "extended period", then drain reserves out of the banking system, raise short-term rates and only after that begin sales from the asset portfolio. Mr Kocherlakota argues that tightening policy will happen via interest rates and shrinking the balance sheet can be kept separate."

Let's consider what this means, as applied to the current balance sheet of the Fed, reconfigured as in my previous post as a set of three different risk exposures. Each of these exposures can be thought of as a swap, initially zero net value but potentially in-the money to the benefit either of the Fed or of its private counterparties.

Raising short term interest rates would likely increase the Fed's net payout commitment on its various swap positions. Thus there would be capital losses, although the accounting would probably not show it since the Fed need not mark to market. Because the Fed can hold its positions to maturity—no survival constraint--over time these losses would be offset by the Fed's usual carry profits from borrowing short and lending long.

On the other hand, “draining reserves” and “sales from the asset portfolio” would mean closing out some of the implicit derivative positions before maturity, and that would mean realizing capital losses (and capital gains for the Fed's counterparties). That is not necessarily a bad thing—the whole point of a central bank is to focus attention on the needs of the system, not on its own profitability.

From a money view perspective, instead of focusing on short rates and asset sales, it is more natural to consider the underlying risk exposures directly. One piece of that is what I am calling the money market swap, the standard instrument for Fed operations before the crisis, now swollen by about three times, from about .8 trillion to 2.3 trillion. The other pieces are new, 1.0 trillion of what I am calling credit default swaps (arising from QE1), and 2.3 trillion of interest rate swaps (arising from QE2 but also earlier interventions).

This way of thinking makes clear that the usual talk about exit strategy is underspecified. Which of the risk exposures are we supposed to be imagining is no longer required? Which of the risk exposures is it proposed to liquidate first? And how would we know what is the right thing to do?

In this respect it is helpful to think of the Fed as dealer of last resort, stepping in to absorb temporary imbalances in supply and demand for various risk exposures. The Fed acquired all these exposures by selling insurance when everyone else wanted to buy. It will be able to liquidate these exposures when the private sector is once again eager to sell.

Meanwhile, the debt mess remains. We are sailing in uncharted waters.

- The Money View

Posted by Perry G. Mehrling at 9:53 am

Desperately seeking collateral

by Daniel H. Neilson on April 28, 2011

The Term Securities Lending Facility (TSLF) was one of the bigger (in dollar terms) emergency programs implemented by the Fed during the crisis of 2008. With increasing data available about how the programs were run, we are learning more about how about the financial system worked before the crisis, and how exactly it broke.

My last post gave some context for TSLF; this one uncovers more of the details. TSLF was about upgrading collateral: borrowers could swap bad collateral for good collateral (i.e. Treasuries) with the Fed.

Most of the story is in this graph:

[PICTURE: http://inet-dev.civicactions.net/sites/inet.civicactions.net/files/tslf_collateral_0.svg]

The blue line is the market value of Treasuries the Fed had lent; the black line is par (face value). The colored regions are the market values of collateral accepted.

What was going on here?

The repo market had come to doubt the value of anything less than U.S. government debt as collateral. So everyone needed Treasuries, and with TSLF, the Fed was providing them.

From Bear to Lehman, the program was taking mostly MBS, both agency (pale blue) and private-label (gray). After Lehman, collateral standards were widened, and corporate bonds were put up as well. By accepting low-quality and offering high-quality collateral, the Fed was effectively writing insurance. Indeed, it might have chosen to write credit-default swaps on the low-quality collateral and, perhaps, gotten the repo market working again just as well.

There's a more subtle story here too. In the graph, the market value of Treasuries lent by TSLF (blue line) is above the par value (face value) of those same securities (black line)—because interest rates were so low (as they still are), they were worth more on the market than their face value. The Fed's balance sheet from the period when TSLF was in force called the program "fully collateralized" (see Table 1A, note 3). From the graph above, this is only the case if you look at par value.

In other words, *TSLF was supporting the financial system in a second, more obscure way*: the securities it was lending were worth more to the borrowers than what the Fed was booking for them. Borrowers could take the Treasuries, which the Fed marked at face value, and turn around and use them to get further funding, *at the higher market value*.

Desperate times...

For the technically inclined

The graph is based on the TSLF transaction data, but it takes some work to extract it. Here's what I did. Market values for all securities, and par values for Treasuries lent, are reported as total amounts outstanding, by borrower, on each transaction date. So to produce a total value for each category, for each date that the program was in effect, I

1. find the most recent loan for each unique borrower
2. if it is still outstanding on the date in question, add the reported value to the total for that date.

This means that my graph does not catch the change in market value between loan dates (not an issue for par), which is why it's a step function rather than a daily series. Note that the data is not clear on how the collateral is being valued.

- The Money View

Posted by Daniel H. Neilson at 2:09 pm

Regulating the Shadow Banking System, Part Two

by Perry G. Mehrling on May 01, 2011

Learning How to Swap

"Extra time granted" on over-the-counter derivative reform in response to dealer complaints, so reports the FT. At stake, and at issue, is the Dodd-Frank call to move OTC derivatives into clearing arrangements for reasons of pricing transparency as well as safety. And it is not just the dealers pushing back, but also the European Commission and the U.S. Treasury. What is going on?

Let's start at the beginning, with the fundamental notion of a swap.

In its essence, all banking is nothing more than a swap of IOUs. I give my banker a sheaf of papers that say, essentially, "I owe you $100,000", and my banker gives me a deposit account that says the same. The result is an alchemical conversion of my uncertain future earning prospects into current spendable cash.

Although the present value of the two IOUs is the same, the future value is not. The difference is the source of my banker's expected profit, and also of my banker's risk that is compensated by that profit. Most immediately there is liquidity risk, since likely I will be transferring my deposit to someone else, so triggering a reserve outflow for my banker. In the longer run there is solvency risk, since my banker is on the hook for the transferred deposit even if I fail to repay my loan, or if rates rise so that my loan falls in value.

[PICTURE]

Traditionally, the art of banking is the art of managing these risks, for example by using diversification to manage credit risk, or using liability duration matching to manage interest rate risk. In modern banking, swap contracts are used for the same purpose. A credit default swap can be used to hedge credit risk, and an interest rate swap can be used to hedge interest rate risk.

The shadow banking system made extensive use of these swap contracts. That is why OTC derivatives reform is at the very center of any attempt seriously to grapple with the problem of regulating shadow banking. Dodd-Frank deserves credit for putting the issue on the table whether or not one agrees that the Dodd-Frank proposed solution is the answer.

As we get closer to the Dodd-Frank deadlines, it is becoming clearer how centrally important these reforms will be, and hence how important it is to get them right. In this way of thinking, it is good news that Brussels is taking a second look at the excessively cozy CDS clearing arrangements that have been set up by the biggest CDS dealers. "Improving fairness" is fundamentally about making these markets work better, rather than blindly banning them, and that means understanding them.

And it is definitely significant news that Geithner's Treasury has moved to exempt foreign exchange swaps from Dodd-Frank, notwithstanding their role during the crisis. Assistant Treasury secretary Mary Miller states somewhat disingenuously: "Throughout the financial crisis the foreign exchange swaps and forward markets continued to operate." Those who lived through the crisis will remember, to the contrary, that it was central bank cooperation, including the infamous liquidity swaps, that backstopped that market when it was ceasing to operate.

As I have emphasized in previous posts, shadow banking was about using wholesale money markets to fund private loans. But it was also about using derivative markets to manage the risk of those loans, and from this point of view the role of derivative dealers was critical.

CDS dealers, like dealers in any other security, make money by making markets, quoting one price at which they are

willing to buy and another (higher) price at which they are willing to sell, and absorbing the resulting order flow onto their balance sheet. The ideal so-called “matched book” refers to a balance sheet in which short positions and long positions exactly offset, so that risk (other than counterparty risk) is eliminated and profit comes from the difference between the sell price and the buy price. In a decentralized market, dealers trade with one another to square up the book that results from client order flow. In a centralized clearinghouse, the counterparty for these trades is the clearinghouse itself.

Foreign exchange dealers similarly meet client demand and then trade among themselves to control the resulting risk exposure, but with one big difference. Central banks, whatever they may say in public, are typically not indifferent to the exchange value of the currency that they issue as their own liability. And they can do something about it, by trading in foreign exchange swaps and forwards for their own account. Transparency for the dealer goose would presumably mean transparency also for the central bank gander, a new thing and not perhaps an unmitigated good thing, at least from the standpoint of central bankers.

I conclude that we are sailing in uncharted waters, so it is probably a good idea to proceed with care. We are learning how to swap.

- The Money View

Posted by Perry G. Mehrling at 10:11 pm

The New Fed and the Real World

by Perry G. Mehrling on May 06, 2011 2 comments

Breaking the Silence

The global financial crisis has revealed to everyone the central importance of the Fed for supporting financial markets, both domestic and international, but there is widespread uneasiness about that revelation. Indeed, the crisis has brought to the fore a long-standing and deeply-rooted uneasiness about the relationship between the Fed and government finance, between the
Fed and Wall Street, and between the Fed and international money markets.

Here is a talk I gave recently at a Roosevelt Institute conference on the Future of the Fed.

Perry Mehrling, Future of the Fed from Roosevelt Institute on Vimeo

Here is a transcript of an earlier, and longer, version of the talk that I gave back in January.

- The Money View

Posted by Perry G. Mehrling at 9:55 am

Mr. Market's Rorschach Test

by Perry G. Mehrling on May 08, 2011 2 comments

Currencies or Commodities?

Last Thursday, the ECB announced that it would not be raising the policy interest rate, and hinted strongly that it would not be raising the rate in June either. This latter was a surprise, and Mr. Market did not like it much, as reflected in the slide of the euro against the dollar. (Here is an interview I did about the ECB decision that was taped Thursday morning.)

Now comes news of private meetings on Friday night at which the Greek debt problem was discussed in the context of a possible Greek departure from the euro, news that presumably factored in to the ECB decision on Thursday.

More or less simultaneously with all of this, silver retreated in the context of rising margin requirements, but so did a wide range of other non-monetary commodities in what soon got called a commodity rout.

[PICTIRE]

The Rorschach test is this: Is this inkblot a picture of speculators trying to figure out which of the major currencies is least weak? That's what Lex says it is.

Or is it a picture of short squeeze, in which those getting squeezed were trying to short all currencies relative to commodities, in a world where even the dollar no longer qualifies as a riskless asset?

The two perceptions are not of course incompatible, so both could be operating, feeding on one another. The important point is that in both perceptions the essential drama is about financial globalization versus the nation state.

In the first perception, Mr. Market is picking among nation states. In the second, Mr. Market is trying to avoid exposure to all nation states.

For me, the inkblot is about the encounter of the modern (nation) state with the modern (financial) market; it is about central banks, Treasuries, and public balance sheets on the one side versus their private counterparts on the other.

Remember the crisis. The way we stopped the collapse was by shifting the problem from private balance sheets to public balance sheets, and that is where it sits to this day. Inevitably, Mr. Market is now looking for a way to avoid the consequences of that shift, by avoiding exposure to the public credit.

The essential drama is about financial globalization versus the nation state. The crisis was the first act of the drama, and we are now living through the first scenes of the second act. This play has a long way yet to run.

- The Money View

Posted by Perry G. Mehrling at 10:19 pm

Shadow money, still contracting

by Daniel H. Neilson on May 11, 2011 2 comments

These days, one hears worries of impending inflation. These worries are misguided, and get taken down by informed commentators who point to low core inflation, low TIPS yields, or to high unemployment and low wage growth. There's another response, which responds more directly to the indictment and which I don't often hear articulated. Here goes.

The Fed's balance sheet has expanded, to be sure. I discussed the asset side recently. Here's the liability side:

[PICTURE]

One of the things that this graph says is that the monetary base (liabilities of the Federal Reserve, mostly currency and the reserves of the banking system) was expanded dramatically after Lehman and a bit more since then, and that the net expansion was effected through the creation of reserves.

The inflation argument, charitably interpreted, must stand on a mechanical interpretation of the equation of exchange, which would then say that expanded monetary base must lead to higher prices: inflation. I don't think that the equation of exchange actually says much that is of interest. But whether it does or not, there is a fundamental question here, which is *whether the money supply has expanded at all*.

Base money has, to be sure. But other things are money too—retail bank deposits, for example, which are part of the M1 measure of money supply, but not of M0. You could pull up lots of measures of the amount of money and start comparing them.

I will just look at one such measure, which focuses on banking activity done outside of traditional banks. The following is a recreation of Figure 1 of Zoltan Pozsar et al.'s (2010) Fed staff report Shadow Banking, following their footnote on the same page. (Errors are my own, but it does seem to agree with their figure.)

[PICTURE]

Like the deposit liabilities of commercial banks (black line), the liabilities of shadow banks, or parallel banks if you like, can serve as money. Money funds (MMMFs) issue shares that can usually substitute for FDIC-insured deposits. Repo lending is money too, as you go a bit deeper into the financial system. And so on.

What the figure makes clear is that, from the peak of the crisis to the present, this measure of shadow money has collapsed, by at least $5 trillion. This dwarfs the expansion of base money, and commercial bank liabilities are stagnant, not making up the difference.

All this is to say that when someone argues that post-crisis money creation will lead to inflation, we can challenge not only the effect, but also whether there has even been post-crisis money creation.

- The Money View

Posted by Daniel H. Neilson at 12:32 am

In the Crosshairs

by Perry G. Mehrling on May 15, 2011 1 comment

Sense about Social Security

"The financial health of Medicare and Social Security is deteriorating faster than expected," so says the Financial Times, my own favorite paper of record, reporting on the newly issued annual Trustees Report. But is it true, and even if it is, what is the underlying cause?

Three sets of numbers, buried deep in Appendix F, are key to putting the rest of the report in perspective.

Everyone knows that slowdown in population growth plus increased longevity is posing a big demographic challenge to retirement security—the ratio of the old (65 and over) to the working age (20-64) is projected to double from 2011 to 2085 (Table V.A2, p. 88).

So is quite astonishing to find that the fraction of GDP paid out in OASDI benefits is projected to rise only from 4.85% in 2011 to 6.01% in 2085 (Table VI.F4, p. 187), nowhere near double. (This is the first key set of numbers.)

Even so the financial health of the program is in jeopardy, and the reason is that the fraction of GDP being paid into the OASDI program from all sources is projected to rise only from 4.55% in 2011 to 4.55% in 2085 (same table, same page), which is to say not at all!

In plain words, Social Security is not being asked to shoulder very much of the burden of the demographic challenge ahead of us, and it is not being allocated the resources to do even that much.

The biggest cause of the problem is a deterioration in the tax base that supports the program, a deterioration that has been substantial over the last decades and is projected to continue on into the future. One reason is rising inequality, which means that an increasing share of wage income is paid to workers earning more than the taxable earnings cap ($106,800 in 2010). The other reason is the rising cost of health care which means that more and more of total compensation is in a form not reached by the Social Security tax.

We tend to think of the tax as very broad based, since everyone pays it, but really it isn't. In 2011, taxable payroll is only 36.3% of GDP, and that fraction is projected to decrease to 34.2% by 2085 (Table VI.F5, p. 189). We are trying to support a rising burden on a shrinking tax base—that is the fundamental problem.

Further, we tend to think of the Trustee's Report for Social Security as analogous to the reports required under the 1974 ERISA legislation for private pensions, but really it isn't. The main asset of Social Security is the present value of its current claim to 10.6% of the taxable wage bill, an asset that has no observable market price that can be compared to the present value of accrued benefits. It follows that what the Report calls the "unfunded balance" is not really the same thing as a private unfunded pension liability.

Once upon a time, I thought it might be possible to talk sense about Social Security by explaining how it is a kind of Social Mutual Fund, a mechanism for making claims on future wages available to fund retirement in much the same way that regular mutual funds make claims on future profits available to fund retirement. That way of thinking would, I thought, make clear how fantastical were proposals to "privatize" Social Security, for the simple reason that they would place the entire demographic burden on one set of claims, rather than spreading it more widely.

The larger point is that Social Security is only one of the mechanisms that currently channel income to the elderly.

[VIDEO LINK]

The larger retirement system includes also private pensions, individual savings, and home ownership. These three parts of the U.S. retirement system appear to be of approximately equal importance in the aggregate, though Social Security is relatively more important to lower income groups, and private pensions and saving are more important to higher income groups. (About 80% of households over 65 own their own homes.)

The point to emphasize is that the projected aging of the population is putting pressure on all the mechanisms through which non-workers gain access to current income, not just Social Security. The economic (and political) question is how that pressure should be spread among the various component parts of the retirement system.

- The Money View

Posted by Perry G. Mehrling at 2:53 pm

The New Lombard Street

by Perry G. Mehrling on May 19, 2011

Further Thoughts

In the aftermath of the Lehman-AIG collapse of September 2008, I set myself the challenge to write a kind of update of Bagehot's famous 1873 Lombard Street: A Description of the London Money Market. Bagehot argued, from history and the institutional structure of the British financial system, that the Bank of England not only must act as lender of last resort, but also that in fact it had so acted, lending freely at a high rate during financial crisis.

In my own book I argued, analogously and also from history and institutions, that in the rather different conditions of the American financial system as developed throughout the 20th century, the Fed not only must act as dealer of last resort, but also that in fact it had so acted, supporting liquidity in the capital market during financial crisis. Even so, in the global financial crisis that began August 2007, dealer of last resort intervention came only after the collapse of Lehman and AIG in September 2008, and only after the Fed had tried its best to stem the tide with more standard, albeit very aggressive, lender of last resort intervention.

[VIDEO LINK]

One reason for the delay, so I argued, was that the Fed (and everyone else too) was operating with a mental framework inherited from the past, and unsuited for the actual conditions they were facing. I traced the origin of that framework to the very origins of the Fed, when popular opposition to the establishment of a central bank was overcome by public (indeed legislated) conceptualization of the Fed as an institution dedicated to provision of short term credit to the Main Street economy, i.e. nothing to do with long term capital markets and nothing to do with Wall Street.

This original conceptualization was politically attractive but unfortunately it was not well-suited to the actual organization of the American credit system. As a consequence the Fed was in effect intellectually disarmed in the face of the crisis that became the Great Depression. Remembering that failure, it did better this time around, taking advantage of the huge loophole provided by Section 13(3) for "unusual and exigent circumstances".

The pressing task now is to learn the lessons of the crisis, which means adapting our mental frameworks to the contours of the real world as revealed in the crisis. The adaptation that I emphasize in the book involves reconceptualizing the role of the central bank for a world where the capital market, not bank lending, is the primary source of credit for the real economy.

What I did not emphasize in the book, indeed hardly even mentioned, was the international dimension of the crisis and the international dimension of the Fed's response. Here I fear that I was myself operating under my own constraining mental framework, a particularly American deformation that abstracts from the effects of U.S. policy on the rest of the world.

This mental framework also traces to the origin of the Fed, when no one imagined that the dollar would soon enough be called upon to serve a global function as world reserve currency in replacement of the pound sterling. No such provisions are in the enabling legislation, nor could they be inserted today, but the facts are what they are. During the crisis the Fed was called upon to serve as international lender of last resort, and it answered that call, most prominently through the liquidity swap lines with foreign central banks.

Another pressing task therefore also lies ahead, as we learn the lessons of the crisis. Our financial system is not only fundamentally a capital market system, but it is also fundamentally a global system, and the global dollar funding system on which the world depends is the very same dollar funding system on which our domestic economy depends. Adapting our mental frameworks to this particular contour of the real world will pose, if my own experience is any guide, an even more wrenching intellectual challenge in the years to come.

- The Money View

Posted by Perry G. Mehrling at 1:19 am

New Economic Thinking on Greece

by Perry G. Mehrling on May 22, 2011 1 comment

Bailout, Default, or Plan C

The Greek debt crisis is once again upon us, and the FT is filled with articles about ramifications for the Eurozone, and recommendations for what to do now. (See here, here, here, and here.) Understandably so, since the Eurozone is now the largest creditor of Greece, perhaps soon to be even larger if, as I would expect, the Eurozone takes the IMF's ill-considered exposure onto its own balance sheet. (California has no IMF package, and neither should Greece.)

Jurgen Stark, of the ECB, tells us that restructuring, whether soft (reprofiling) or hard (default), would be a disaster for the Greek banking system, but the Greek banking system has much less total exposure than the Eurozone, including the ECB itself. Stark is talking his own book, and there is nothing wrong with that. To the contrary, rational discussion about the road ahead requires facing up to the magnitude of the European exposure, today and going forward.

[PICTURE]

Last week I was in Athens, and found myself by accident on the edge of a demonstration against the government's austerity measures. It was my first ever taste of tear gas, but for the Greeks around me it was apparently a more or less everyday experience. The picture above shows the Parliament, and the riot police in formation waiting for the crowd.

Yesterday I was in Istanbul for the annual conference of the European Society for the History of Economic Thought, and heard a paper by George Stathakis titled "The fiscal crisis of the Greek economy: a Kaleckian framework" that put the whole problem in a new perspective for me. The reference to Kalecki is a signal that Stathakis thinks distributional issues are at the core of the macroeconomic problem.

It turns out that the size of the Greek debt, relative to GDP, is not a new thing at all; it dates back to the 1980s when Greece, catching up to its European neighbors, expanded its welfare state. Ever since, Greece has been subject to one stabilization plan after another, but never with any more than temporary success. Given that history it would seem wise, before putting a lot of eggs into yet another stabilization plan basket, to ask why previous plans failed, and to consider alternatives.

The problem is also apparently not the size of the Greek welfare state—which is below the Eurozone average—although efficiency of service delivery (and corruption) is a definite problem; Greeks are not getting good value for money. Rather, the heart of the problem is in the antiquated revenue system that supports that state, which results in a budget shortfall consistently about 10% of GDP. Stathakis claims—perhaps overstating the case somewhat for effect?—that the top 20% of the income distribution in Greece pay no taxes at all. No wonder there is a fiscal crisis.

To make the problem worse, export earnings also seem to face their own structural cap that is consistently exceeded by import spending, which means that the debt that finances the government shortfall is increasingly held abroad. The debt is issued under Greek law, but now it is payable in Euros which Greece is powerless to print. In this sense, ironically, the fiscal crisis is a consequence of Greece's success, after a long preparation, in joining the European Union, and hence giving up its own currency.

The point is that, if this analysis of the source of the problem is correct, then standard IMF austerity policy is unlikely to do much to help. If the problem is not the level of wages, or the size of the welfare state, then pushing wages down and shrinking the welfare state is not going to do much.

Angela Merkel likes to say that no real economic union is possible if one party to the union (Greece) works shorter hours and takes longer holidays than another (Germany). What she should say is that no real economic union is possible if the governing class (top 20%) of one party to the union consistently evades its fair share of the cost of that party's own state expenditure, expecting the union either to pay the bill itself, or to force the bottom 80% to pay it.

From this perspective, the Europeanization of the Greek debt appears as potentially a promising development for the future. The Greek fiscal trouble is ultimately a political economic problem, and it requires a political economic solution. The road forward is for Eurozone holders of Greek debt to make common cause with the Greek taxpayers who are on the hook for that debt.

- The Money View

Posted by Perry G. Mehrling at 11:46 pm

International money, take 1

by Daniel H. Neilson on May 25, 2011 1 comment

As a matter of accounting, if the U.S. as a whole buys from the rest of the world more than it sells to the rest of the world, then it must, on net, also be borrowing from the rest of the world. Perry has previously put this into a money-view context.

In this post, I'd like to take a first step toward putting the mechanics of this into an empirical context. Here is the graph, which is my update of one from Brad Setser.

[PICTURE: Trade deficit and custodial holdings]

The red line is the 52-week trade deficit (on goods and services). The blue line is the accumulation of U.S. government securities held in custody by the Federal Reserve Bank of New York for the rest of the world. The green line is like the blue, but it represents only Treasuries (the difference between the two being agency debt).

In money terms, we could say that all U.S. imports are covered by U.S. exports. Some of those are exports of current goods and services, and the rest are claims on future goods and services. Such claims take the form of U.S. liabilities, which will one day be redeemed for dollars (another U.S. liability), which will in turn eventually be used to buy U.S. output.

The trade deficit is just the amount of current imports not paid for with current exports, and so it is, equivalently, the amount of claims on future U.S. product that are being accepted by the rest of the world as payment instead. Those promises take the form of claims on U.S. entities, and here we see that FRBNY custodial holdings of claims on the U.S. government account for a significant fraction of them.

There's a bit of a story in this graph. Remember, the U.S. government was close to fiscal balance in 2001, so the rest of the world had to accumulate some other kind of claim on the U.S.—that's the big gap between the blue line and the red line. If you wanted to accumulate claims on the U.S., you had to find something other than Treasury debt. A lot of that demand ended up in the parallel banking system, ultimately financing increased borrowing on the part of U.S. households.

From 2005 until the height of the financial crisis at the end of 2008, much of the accumulation was of agency debt—as seen in the widening gap between the blue and green lines. During the crisis, that reversed rapidly, and the rest of the world sold agency debt for Treasuries; Treasuries (green) were accumulating faster than the total (blue) in 2009 and 2010.

At the same time, the rest of the world rapidly slowed its accumulation of non-government U.S. liabilities—the gap between the trade deficit and the change in custodial holdings almost disappears. Again, this shows up in the quantity of money in the parallel banking system, this time as a contraction.

There has been a fair bit of confusion on the U.S. external balance, unsurprisingly as there are a lot of moving parts. A money view of the issue keeps things straight. I'll pick up this topic again soon, and take a look at the debate on the status of the dollar as the international reserve currency.

- The Money View

Posted by Daniel H. Neilson at 10:08 am

Single-tranche open market operations: there's a bigger picture

by Daniel H. Neilson on May 31, 2011 1 comment

We continue to learn about what the Fed did during the crisis. Bob Ivry of Bloomberg sifted through documents obtained through a FOIA request, and his report, released last week, offers some thorough detective work. Yves Smith and Felix Salmon picked up the thread, and Dave Altig of the Atlanta Fed responded.

Discussion thus far has missed the big picture, and the issues raised are a distraction from the real problems that are revealed by this data.

First, about that 0.01 percent loan. The figure comes from the Fed's data on its open market operations. (I have retrieved the relevant transactions and put them here.) The stop-out rate, the lowest rate at which loans were made, indeed reached 0.01 percent, or 1 basis point, in the final $20B operation. At the time, discount window lending would have cost you 50 basis points. So the Fed has, one might argue, foregone 49 basis points of interest on a loan. This loan must have been for less than $20B, since the average rate was higher. But let's use $20B to get an upper bound.

The interest on a 28-day loan of $20B at 49 basis points is $7,622,222 (that is, 0.0049 * (28 / 360) * $20B).

The real story here is much bigger than eight million dollars.

What were these loans all about? ***The Fed was acting as lender of last resort, not to banks, but to securites dealers. This was a major shift in the Fed's thinking***, a shift that it made only reluctantly, and only when it felt it had no other choice.

Between March and September 2008, the Fed supported the dealers with the special liquidity programs PDCF and TSLF. PDCF provided overnight loans (of money) to primary dealers, while TSLF made one-month loans of securities.

Like TSLF, single-tranche open market operations provided term loans; like PDCF, ST OMO provided loans of money (and not of securities). The three should be grouped together, as the Fed did itself when it released its discussion of 2008 open market operations in January 2009.

The Fed had to support securities dealers, because in the decades leading up to the crisis, the financial system had changed. Tradable securities (MBS, for example) came to play a role that bank credit had once played. Dealers are indispensable in such a system, but the Fed did not have a ready-made way to support this function.

Altig draws a line (starting at "Another aspect" in his post) between ST OMO on the one hand, which he considers to be business as usual, and TSLF and PDCF on the other, which "relied on the authority granted under 'unusual and exigent circumstances' by section 13(3) of the Federal Reserve Act".

But this claim ignores the rationale underlying all three programs, which was genuinely new regardless of the formalities. As the Fed itself reported, single-tranche open market operations were "intended to...provide the primary dealers a steady financing source for Agency MBS" (see p. 11). But normal open market operations are about affecting the reserve balances of banks, with dealers making markets in which the Fed can intervene. ST OMO, like PDCF and TSLF, was specifically and explicitly about supporting dealers, which was not at all business as usual.

To be clear, I am not defending the Fed; it is completely right to find fault with the Fed's handling of the crisis. But those who want a safer financial system should choose their lines of attack with some care. The Fed's failure here is

not eight million dollars of subsidy. The failure is that, prior to the crisis, the financial system changed, but the Fed didn't. The failure is that, three years on, it still hasn't.

We have had very much to say on this issue, and will continue to do so.

- The Money View

Posted by Daniel H. Neilson at 7:43 am

Kansas City-style Financial Reform

by Perry G. Mehrling on June 05, 2011

A New Glass-Steagall?

Jazz, barbecue, and now Kansas City has also its own distinctive style of financial reform, put forward in a recent paper by Hoenig and Morris, respectively President and Vice President of the Kansas City Fed. Whereas the 1933 Glass-Steagall Act drew a sharp line between investment banking and commercial banking, Hoenig and Morris propose to draw a similarly sharp line between complex/risky banking and comprehensible/core banking. Only the latter institutions would continue to benefit from the public safety net, and also be subject to public regulation and supervision.

The proposal comes at an opportune moment, as authorities are considering the specifics of the new post-crisis regulatory regime, which increasingly seem to be falling short of any fundamental reform (see here, and here, for example).

The proposal emerges from a distinctive account of the origin of the crisis, which the authors see through the lens of traditional commercial banking, not to say Jimmy Stewart banking, or safe and sound banking. Starting in 1971, the deposit taking side of that traditional business suffered erosion from money market mutual funds, while the lending side suffered continuing erosion from finance companies and other market-based sources of funding. The end result of decades of financial innovation was a parallel or shadow banking system that provided all the core banking services but without the regulatory burden of the traditional banking system, and also without explicit access to the public safety net.

Because it was outside the regulatory structure, the shadow banking system blurred the sharp edges of Glass-Steagall, with the result that core banking activities got intertwined with complex and risky activities, specifically securities dealing and market making, brokerage, and proprietary trading. “The financial system has become less stable over the past 30 years as banks and other financial companies have expanded into more complicated activities that are not supported by a public safety net or subject to prudential supervision.”

The road forward, in this view, is once again to separate essential core banking from inessential complex banking, just as we did in 1933. This time, however, the authors propose to include underwriting and advisory services, as well as asset and wealth management services, among the essential core functions. The sharp line of division is not between investment banking and commercial banking, but between inessential complex activities and essential core activities. The explicit rationale is to control the risk exposure of the public safety net; the implicit rationale is to support the franchise of traditional commercial banking.

To their credit, the authors appreciate that a new Glass-Steagall will be subject to much the same erosion by regulatory arbitrage as was the old Glass-Steagall. Specifically, they worry that their proposal will offer incentive for rebuilding the shadow banking system, and to make sure that does not happen they propose two additional measures. Their strategy is essentially to cut off the funding of the shadow banking system.

In their proposal, money market mutual funds would no longer be allowed to offer accounts that fix net asset value at $1 (and so offer close substitutes for commercial bank deposit accounts), but rather would be required to have floating NAV like other mutual funds. This would presumably make such accounts unattractive to corporate treasurers, and restore the deposit funding of commercial banks.

Second, repo would no longer be exempt from the automatic stay in bankruptcy, which would make repo lending less attractive relative to commercial bank deposits, even though repo is secured.

In short and in sum, the Kansas City vision for the future of finance involves a substantially enlarged and revitalized traditional commercial banking sector. The whole point is to split the shadow banking system into essential and inessential activities, and to shift the essential ones into the commercial banking sector while letting the inessential ones, shorn of their connection to the public safety net, wither away.

I choose these words carefully, in order to bring into the foreground the underlying assumption of the whole proposal, namely the inessential character of the forbidden activities, specifically securities dealing and market making, brokerage, and proprietary trading. In the Kansas City version of the history, the rise of shadow banking is entirely about regulatory arbitrage; the shift in the last thirty years from a bank loan-centered credit system to a capital market-centered credit system is simply a mistake that we now have the opportunity to correct.

Maybe so, but maybe also there are other reasons for the shift to a market-centered credit system. The important point is that, to the extent the market-centered credit system is here to stay, the institutions that support the liquidity of that market system are also here to stay. Even more, to that extent we should view those institutions as essential to the operation of our credit system. The problem is not, as KC would have it, how to keep those institutions out of the safety net but rather how to bring them in explicitly, along with a reformed system of regulation and supervision that ensures their safety and soundness. That problem has been, and will remain, a central concern of the Money View blog.

- The Money View

Posted by Perry G. Mehrling at 10:57 am

Chinese property: a money view

by Daniel H. Neilson on June 10, 2011

The Chinese property market may finally be boiling over; there are certainly enough signs that the bubble is ready to burst. I won't try to call the peak. What's more useful is to try to understand all of the moving parts, and a money view of the problem lets us do exactly that.

Start with the symptoms. The FT informs us that the property market is failing to clear in Hainan: sellers offering no-questions-asked refunds just to try to lure potential buyers; a moribund secondary market. Inventories are starting to pile up.

[PICTURE: *Source: CREIS, Standard Chartered Research, via FT Alphaville*]

Who is holding this unsold property as an asset, and how are they financing it? Mostly developers, who finance with loans. These come from banks, or increasingly, as Victor Shih points out, from private underground banks.

To stem inflation, the PBoC has been raising reserve requirements on regular banks. Higher reserves means banks can lend less out on a given deposit base. Credit is already contracting to small and medium enterprises, leading to a cash crunch. Since the reserve requirements don't affect underground banks, borrowers will draw on them as credit tighens elsewhere. But underground banks have limits too, and they will either raise borrowing rates or deny credit as demand for loans increases.

What happens when developers can no longer roll over their financing? They are in a long squeeze, and have to sell. Property prices are already falling, and buyers becoming scarcer. A wave of inventory will have to be sold to pay off borrowing, pushing prices down further and exacerbating the underlying problem (developers' insolvency).

To the extent that banks have to write down losses on these loans, other credit may contract as well. The central government just took 2T–3T yuan renminbi of loans to local governent finance vehicles (LGFVs) off of banks' balance sheets. These loans finance infrastructure and other local projects. Patrick Chovanec estimates that there are plenty more bad loans where those came from. If credit is choked off to such projects, it will clearly restrain GDP growth.

Where does this end? Someone has to write down losses on these loans. If the central government buys them up and eventually writes them off, that's the taxpayer. If the banks are forced to do it, they will need to be recapitalized, perhaps via negative real interest rates on deposits, which is just a tax on depositors, as Michael Pettis has repeatedly emphasized.

In the meantime, a collapsing property market will be devastating for China's local governments, who have come to rely on land sales to fund current expenditures.

There's not enough detail here to make a real prediction of the timing or of the scale of the problem, and it would be unwise to underestimate the central government's willingness to take on private and local-government debts in the interest of keeping growth high and inflation low, which could delay the unwinding of the bubble for some time yet. What cannot be denied is that property is tied tightly into the financial system and the rest of the economy, and that when the correction comes, the effects will be far-reaching.

- The Money View

Posted by Daniel H. Neilson at 1:54 pm

Are banks firms?

by Perry G. Mehrling on June 12, 2011 1 comment

New Thinking about Modigliani-Miller

In the debate over financial reform, one of the major themes has been the need to protect the public purse from the cost of future bailouts by requiring too-big-to-fail banks to hold a larger buffer of private capital. <!--break-->In support of this requirement, and against bank lobby claims that it would raise their cost of funds and hence the price of credit, economists have weighed in with a standard argument from corporate finance, the Modigliani-Miller theorem.

Unfortunately, as suggested in a forthcoming article in the Harvard Business Law Review, this argument may not work as well as its proponents think it does because banks are, in important ways, not like the ordinary firms to which the theorem is intended to apply.

[VIDEO LINK]

The Modigliani-Miller theorem is sometimes summarized as saying, in effect, that cutting a pizza into more slices, or into square slices instead of pie-shaped slices, does not change the size of the pizza. More technically, under certain assumptions, it can be shown that the value of a firm is not affected by its capital structure, in particular by the fraction of its capital structure that is equity.

Check it out: the original article is here and a more readable retrospective is here.

Applying this line of thinking to banks, it has been argued (most prominently by Anat Admati here and here) that requiring banks to fund themselves with more equity and less debt, especially short-term debt, should not in principle change the value of the banks, and hence should not change their cost of funds. If in practice it turns out that the cost of funds does go up a bit, that would only be because the market has been including the implicit call on the public purse as an asset of the firm, a calculation that it is the appropriate purpose of financial reform to eliminate.

I have to say that, when I first heard this argument, it sounded wrong to me, but I couldn't immediately see why, so I put the matter aside to think about later, when I had more time. Last week, that time came during a stimulating intellectual interchange at a pro-seminar on "Re-theorizing Liquidity" sponsored by Harvard's Institute for Global Law and Policy.

For that gathering, Morgan Ricks, a Visiting Assistant Professor at Harvard Law who spent much of the crisis working at Treasury, supplied as background his forthcoming paper "Regulating Money Creation after the Crisis". On page 527 of that paper he asks the crucial question "Does the Modigliani-Miller theorem hold true for maturity-transformation firms?" The answer, he argues, is "No".

Now Ricks is a lawyer, by training and by practice, but his reasoning is impeccable economics. He appreciates, as pizza slicing analogies do not, that the underlying logic of Modigliani-Miller relies on arbitrage. The reason that capital structure does not matter for the value of the firm is that (by assumption) investors can undo the capital structure decision of the firm managers by their own portfolio decisions. Specifically, if they want more risk than an outright equity position offers, they can add leverage to their holding of the equity.

Ricks argues that this arbitrage argument fails in the case of banks precisely because banks can fund themselves with monetary liabilities while investors cannot. If banks were forced to term out their funding, i.e. fund their assets with longer term and equity claims, they would no longer be banks, they would be finance companies. And

the former holders of money claims would not be able to do anything about it, since their own liabilities do not pass as money.

Investors may be able to roll their own leverage but in general they cannot roll their own liquidity. Quite the opposite in fact, investors are demanders of the liquidity that the banks supply by issuing money claims. Nothing of this is captured in the world of Modigliani-Miller.

"Standard capital structure principles do not necessarily apply to these firms, because most of their funding comes not from the capital markets, but from the money market."

The key point is not so much that banks fund themselves in a market inaccessible to the rest of us, since we know from shadow banking that non-banks also have access. The key point is that money market funding is at lower rates than capital market funding. Society is apparently willing to pay a premium (lower yield) to hold money claims rather than capital claims. Why is that?

Ricks does not say, and frankly standard economics and finance does not either. The resulting asset price "anomalies"—the failure of the Expectations Hypothesis of the Term Structure—remain puzzles, but leave that for another time.

For present purposes, the pressing question is whether this means that the bank lobby is right to oppose requirements for increased equity funding? NOT AT ALL. It just means that we need a different intellectual framework to think about the problem. We need the money view.

More generally—and going beyond what Ricks argues—from a money view perspective a bank is a special kind of dealer, so the question of appropriate bank capitalization is actually a larger question about the appropriate capitalization of dealers more generally, who fund themselves primarily in the wholesale money market, using repo for example.

I don't know the answer to that larger question, but it seems to me definitely the right entry point into the problem. Models (like M&M) that abstract from liquidity, the very business of dealers, cannot be expected to address the question of appropriate dealer capitalization very satisfactorily. New thinking is required.

- The Money View

Posted by Perry G. Mehrling at 8:27 pm

Are banks firms? (continued)

by Perry G. Mehrling on June 16, 2011 1 comment

Liquidity versus Solvency

In response to my last post, Zvi Bodie writes to suggest that I may be simply rephrasing a point that he and Robert Merton made in a series of papers some years ago (the seminal paper is here). I don't think so, but the suggestion brings into the foreground the question of the relationship between the money view and the finance view. <!--break-->For some financial intermediaries (insurance companies) the finance view is arguably most of the story most of the time, but for others (banks) the money view is often the main part of the story.

Here is how Zvi Bodie summarized his point in an email to me:

"One has to distinguish between the customers and the investors of such an institution. *MM [the Modigliani Miller theorem] applies only to the investors' capital*, not to the total liabilities on the RHS [right hand side] of the balance sheet. While it is true that depositors are providing funds to a bank, they are *not* investing in it. Policyholders of an insurance company are providing funds to the insurance company, but they are not investors. The required capital is the amount of total investor capital (debt + equity) needed to make the customer claims secure. It could be 0 for the case of a matched book narrow bank, or for the case of a mutual fund where the customers are also the investors."

Bodie is thinking about the financial intermediary as a firm holding a portfolio of assets with a given risk-return profile, and issuing liabilities that slice that risk-return profile into various tranches. "Customers" hold liabilities that are sheltered from the solvency risk of the firm itself; conceptually, that risk is all shifted to the liabilities held by "Investors".

In this way of thinking, problems potentially arise whenever the government guarantees the liabilities held by Customers, since this guarantee takes on the risk exposure that would otherwise be borne by the Investors. In effect the government becomes an Investor, but unlike other Investors it is not necessarily insisting on fair market compensation for the risk it is bearing. Indeed, when the guarantee is implicit rather than explicit, it might not be insisting on any compensation at all. The consequent mispricing of risk is a distortion of efficiency and also of incentives.

For the insurance industry, I think this line of analysis has a lot to offer. The question is how well it works for banks.

At first glance it seems like a straightforward extension. Bank deposits are liabilities held by Customers, while bank bonds and equity are liabilities held by Investors. Most bank deposits are insured by the government, so the government is also an Investor, and the policy question is whether the government is charging the right price, and whether its guarantee provides incentive for bank owners and managers to increase the riskiness of their asset portfolio by levering up in one way or another.

But that is not the only way to think about banks. Bank deposits are not merely a secure store of wealth, sheltered from possible insolvency of the bank. They are also a liquid means of payment, sheltered from possible illiquidity of the bank.

When and why is this shift of focus important?

When I buy a house, I do so by borrowing from a bank. When my counterparty sells the house, she does so by accepting as payment a bank deposit, which is to say by lending to a bank. From the bank's point of view, there are two risks involved in standing between me and her. First, I may default on my loan; this is solvency risk. Second, she may spend her deposit or otherwise transfer it to another bank; this is liquidity risk.

The point is this. Even supposing that the bank is completely successful in shifting solvency risk away from Customers onto Investors, that leaves **liquidity risk that cannot be shifted to Investors**. Let's be clear about this. By assumption, investors hold claims that are not payable on demand, so they are bearing liquidity risk and presumably being compensated for doing so. (Concretely, if Investors need to make a payment, they have first to sell their bank bonds and equity for the going price, whatever that may be.) But this bearing of liquidity risk by Investors does **precisely nothing** to ensure that Customer claims are payable on demand.

This is where the money view comes into its own. The way that banks ensure that Customer claims are payable on demand is by holding some of their assets in liquid form (market liquidity), and by maintaining borrowing and lending relations with other banks in the wholesale money market (funding liquidity). The important backstop for both is not the FDIC (deposit insurance) but the Fed (discount window).

Banks, and other dealers, make money by making markets, which involves bearing liquidity risk. That is what they are selling, and what their Customers are buying. Abstracting from liquidity, as is standard in the corporate finance literature that stems from Modigliani-Miller, including Merton-Bodie, means in effect abstracting from banks, or at least from the dimension of their business that the money view is all about. As we think through the problems of financial reform, the finance view is not going to be enough. New economic thinking is also needed.

Merton, Robert C., and Z. Bodie. "On the Management of Financial Guarantees." *Financial Management* 21 (winter 1992): 87-109. http://www.jstor.org/stable/3665843

- The Money View

Posted by Perry G. Mehrling at 1:27 pm

Brinkmanship or Statesmanship?

by Perry G. Mehrling on June 22, 2011 3 comments

The Political Economy of Debt

For the sake of argument, let us stipulate that the United States is solvent but that Greece is not. What is remarkable to me is how little this apparently fundamental difference helps us to understand events on the ground, in either case.

In both countries, the problem is not economics but politics, or better yet political economy because a narrowly political frame—focused on electoral prospects, without connection to economics—does not help us much either. Intellectual progress requires renewal of older intellectual traditions that once joined what academic, and career, specialization has put asunder.

[PICTURE: Jack-in-the-pulpit]

Consider Greece, and consider the plan put forward by the former central bank governor of Argentina. He calls in effect for explicit Europeanization of the Greek debt in a new agency (Esdra), and asserts plausibly that such a solution would be eagerly embraced by Mr. Market. The economics are perfectly sound, but the politics are not. All very well for an outsider to assert, in effect, "You owe it to yourselves!", but for a European insider the distribution of Greek losses is exactly the sticking point.

And even this European political frame falls short for ignoring the political economy internal to Greece itself. Tony Barber's column begins to say what needs to be said, but what has tragically remained unspoken until this 11th hour. Put bluntly, the Greek debt has been engaged by Greece's near-hereditary political elite and their clients, while IMF-EU sponsored austerity plans would force repayment by "the Syntagma protesters, who speak for the squeezed middle classes of the private sector as well as Greece's jobless youth."

I have said it before and I'll say it again. "The road forward is for Eurozone holders of Greek debt to make common cause with the Greek taxpayers who are on the hook for that debt." Europeanization of the debt is the beginning, not the end, of that particular road.

Consider now the US, and the debt limit kerfuffle. Mr. Market has shrugged it all off as merely politics—the world seems to want Treasury bills and, in the absence of an alternative, is even willing to pay a negative expected yield to accumulate more of them. Meanwhile economists weigh in on one political side or the other, depending on their sense of which is the more important immediate policy emphasis, long-term fiscal balance or short term fiscal stimulus.

Both the narrowly political and the narrowly economic frames miss the underlying political economic dimension of the problem. Already cutbacks in federal stimulus funds are gutting Medicaid, the state-level health plan for the poor and elderly. If this is any indication of what commitment to long-term fiscal balance means, no wonder it is so difficult to arrive at that commitment.

My point is a simple one. The problems of sovereign debt, both in the US and in Greece, are not fundamentally economic problems, to be dealt with by fiddling with the dials of the aggregate economy, the G (government spending) and t (tax rate) of simple macroeconomic models. They are political economic problems, and everyone knows it, even if economists have lost the language we need to speak about it.

For lack of a robust tradition of political economic debate, we get brinkmanship not statesmanship, both in politics and in economics, and we are the poorer for it.

What does all this have to do with the money view?

The point is this. The survival constraint—the requirement to make payment when payment is due—is the binding constraint, for states as well as individuals, not the intertemporal (solvency) budget constraint which is always conjectural, the future being always conjectural. The brinkmanship we are seeing in politics is a (negative) consequence of the survival constraint. The statesmanship we might see, in our own world or in some alternative universe, is also a (positive) consequence of that constraint.

How the hangman's noose focuses the mind.

- The Money View

Posted by Perry G. Mehrling at 7:20 pm

Can It Happen Again?

by Perry G. Mehrling on June 27, 2011 3 comments

The view from BIS

Now comes the Annual Report of the Bank for International Settlements, one of the few official agencies to raise alarm about potential crisis before the actual crisis occurred. As I read their Report, they are raising alarm once again. We should pay attention.

The first thing to be said is that this is a wonderfully comprehensive report, pulling together a vast amount of data and using it to paint a genuinely global picture of the state of monetary matters. I have in previous posts attempted to sketch my own guess about the overall picture, but these guys have the data, and they (some of them anyway) also have a money view that informs their interpretation of the data.

[PICTURE: BIS Annual Report 2010/11, p. 42]

Most important, in this respect, is their emphasis on the importance of gross financial flows (and the resulting accumulated exposures) across borders, rather than the net current account balance. The picture above shows what we know about those flows, but that is only what the existing statistical net captures. Financial globalization has left our existing statistical net behind.

The second thing to be said about the Report is that not all of the pieces yet fit together, and there are clear signs of competing interpretations among those who put the Report together. Like me, the authors are writing the history of events still in progress, and are keenly aware that multiple futures are possible.

The future that most worries them, throughout the Report, is a possible repeat of the credit bubble that produced the financial crisis of 2007-2009, this time in the emerging market economies rather than the United States. More or less the same global imbalances remain as the underlying fuel, but this time extreme monetary ease in the US and UK is also adding to the problem. Asset price inflation and commodity price inflation, already evident in the data, are unfortunately only contemporaneous indicators of the problem. The magnitude of the potential danger would show up best in gross financial flows, and the consequent buildup of balance sheet mismatch exposures at a global level, but unfortunately our statistical net is poorly designed to capture these numbers. It might be happening again, right under our noses, but without us being able to see it until too late.

The prospect of another crisis is especially worrisome, so they suggest, because the system is not yet recovered from the last one. Most important, excessive debt burdens remain, in both private and public sectors. "Crisis-related expansions of sovereign debt have worsened what were already unsustainable fiscal policy trajectories, and private sector debt remains too high. The result is that, today, policymakers and households have virtually no room for manoeuvre." (p. 1) "Since the government acts like an insurance company, it needs a reserve fund. This means that running a cyclical balance, in which budget surpluses in booms neutralise budget deficits in recessions, is not good enough." (p. 11)

The fiscal consolidation the BIS recommends is obviously tough medicine for the advanced countries, already stuck in the low-speed lane of the two-speed global recovery, so it is important to emphasize their underlying rationale. It is NOT that government has been profligate and now needs to tighten its belt! Rather, the argument is that the US, and other countries as well, have during the boom over-invested in the construction and finance sectors of the economy, to the detriment of other sectors. Return to growth will happen only when that misallocation is fixed.

"For the advanced countries that were most affected by the crisis, undue delay in the normalisation of the monetary policy stance entails the risk of creating serious financial market distortions, the postponement of deleveraging and the misallocation of resources. Moreover, the unusually accommodative monetary conditions in advanced

economies have probably been an important factor behind the recent large capital flows to emerging market economies." (p. 62)

Translated into English, what this quote means is that the advanced countries are using monetary policy to avoid necessary adjustment, and in doing so they are not only delaying their own recovery but also threatening the rest of the world with a repeat bubble. The mechanism of that repeat bubble, so the authors suggest, is the carry trade—borrowing in the low rate advanced countries and lending in the high rate emerging market economies. The mechanism of the potential collapse is the growing risk exposure involved in that trade: mainly interest rate risk, foreign exchange risk, and counterparty risk.

But this is only one scenario in the Report. Alternatively, it is also suggested that the implementation of Basel III will come in time, and will work to force reduction in risk exposures. That's the hope. How much of a hope is it? I leave you with a final quote from the Report:

"In an ideal world, policymakers would have a unified theoretical framework for identifying and quantifying systemic risk. Such a framework would capture all key drivers of systemic risk, such as market structure, institutional incentives, risk (mis)measurement and market participants' reactions to events. But no such framework exists."

Translation: new economic thinking is needed.

- The Money View

Posted by Perry G. Mehrling at 2:11 pm

A PBoC balance sheet primer

by Daniel H. Neilson on July 05, 2011 2 comments

Last time, I looked at the Chinese property market. The last link in that chain of financial interlinkages is the People's Bank of China, the Chinese central bank. This post gives a quick introduction to the main monetary challenges faced by the PBoC. Next time I'll connect the property bubble to the central bank.

[PICTURE: PBoC balance sheet, 2006-present]

The graph shows the PBoC balance sheet from 2006 through the end of 2010, in my preferred representation (see this post and this post for the Fed's balance sheet in a comparable format). Assets are shown as positive numbers, liabilities as negative numbers.

The organizing principle of the PBoC balance sheet is the secular expansion in foreign assets, which are the quantitative consequence of the country's exchange-rate policy. The effect is almost mechanical: China pegs the dollar/renminbi exchange rate, and to hold the peg, it must stand ready to buy and sell renminbi at that price. Over the period shown, pressure has always been for renminbi appreciation, so holding the peg means that the PBoC must buy dollars and sell renminbi. (If it did not, renminbi would be in excess demand, dollars in excess supply, and the renminbi would have to appreciate, breaking the currency peg.)

Dollars enter China through its export sector, so the central bank buys them from exporters' banks by issuing new liabilities, mostly bank reserves.

What happens now? This newly created high-powered money eases commercial banks' reserve constraint, and if no other action were taken, the banks would be free to expand renminbi lending proportionally. This lending would go to fund new domestic spending, whether on investment or consumer goods.

Such credit expansion would likely lead to domestic inflation, and the Chinese government is quite sensitive to the social consequences of rapid price rises. So the PBoC tries to offset the effect on domestic prices. This used to be done with so-called sterilization bonds (which sought to "sterilize" the inflationary consequences of exchange-rate intervention), which show up in the graph as "Bond issue". These bonds replace a more money-like liability of the central bank, reserve deposits, with a less money-like liability—a bond that cannot fund credit expansion.

These days sterilization bonds are less used, with the preferred policy tool now being the required reserves themselves. Rather than compelling banks to buy bonds, it simply raises the amount they have to hold in reserve against deposits. Now newly-created renminbi reserves do not immediately translate into new lending, and so domestic price rises are contained.

The system has basically worked, at least in the medium run—China has shown consistently high growth while price rises have been contained.

But this masks an increasingly fragile financial configuration. Internally, repeated reserve increases limit lending by the formal banking system. But while export demand is high, investment demand and thus demand for loans will also remain high. This creates opportunities for the informal banking sector. And these loans add to price pressures anyway, negating the whole intent of the policy.

There are external fragilities too. We see signs that the PBoC is interested in diversifying out of dollars. Yet as long as the US continues to run the trade deficit that is the counterpart of China's trade surplus, it will mostly continue to accumulate dollar-denominated assets. If the PBoC wants to sell a large amount of dollars for some other currency, it will drive down the dollar exchage rate, quite possibly causing the renminbi to appreciate, again negating the intent of the policy.

The property bubble has the potential to put particular strain on the PBoC balance sheet, as we shall see next time.

- The Money View

Posted by Daniel H. Neilson at 11:12 am

Ron Paul's Modest Proposal

by Perry G. Mehrling on July 09, 2011 6 comments

A Monetary Rorschach Test

Is it just an accounting gimmick, or something more?

Ron Paul proposes that the Fed should forgive the $1.6 trillion it is owed by the Treasury, thereby giving the Treasury an additional $1.6 trillion borrowing capacity so as to avoid the looming debt ceiling. Dean Baker then endorses the proposal, Greg Mankiw comments, and the thing goes viral (see here, here, here).

Viewed as a solution to the debt ceiling problem, the proposal is definitely nothing more than an accounting gimmick. The point is that the debt of the Fed, the $1.6 trillion of reserves that currently funds the Fed's holding of Treasury securities, does not count toward the debt ceiling, while the $1.6 trillion that the Treasury owes to the Fed does. (Fed Balance Sheet is here.)

[VIDEO LINK]

From a monetary perspective, however, there is a lot more at stake. What you think about the proposal depends on what you think the Fed actually is. Is it a government bank or a banker's bank or, as I would argue, a hybrid of the two?

If you think of the Fed as a government bank, then you think of the liabilities of the Fed, cash and reserves, as essentially the same kind of thing as Treasury bills, just paying lower interest. The fact that the Fed holds Treasury bills as an asset has no economic importance; it is just a matter of intra-governmental accounting. The fact that the Fed pays its net profits every year to the Treasury, most of those profits arising from the fact that Fed liabilities pay lower interest than Treasury liabilities, shows you that the Fed is essentially a way of providing the government with a cheap form of finance.

If you think of the Fed as a banker's bank, however, then you think of the liabilities of the Fed as the ultimate means of payment that banks use to settle with each other at the daily clearing. The Treasury securities held by the Fed are the assets backing the value of the liabilities. Forgiving $1.6 trillion of assets would leave $1.6 trillion of liabilities with no backing. The fact that these assets are debts of the Treasury has nothing to do with it; forgiving the $1 trillion of mortgage-backed securities that the Fed also holds would leave $1 trillion of liabilities with no backing. Either way, viewed as a bank, the Fed would be insolvent, and some fraction of its liabilities would be transformed instantly into mere fiat currency.

Which view is correct?

I think we have to say that both perspectives are legitimate, that both capture important dimensions of the hybrid institution that is the modern central bank. In wartime, the government bank dimension tends to be dominant since the government finance problem is dominant. In peacetime, the banker's bank dimension tends to be dominant as private credit takes on more importance. But both are always in the picture.

So what would happen today if Ron Paul's proposal were actually to be adopted?

I think markets would probably appreciate that the Fed's liabilities are in fact backed by the Treasury, even if the actual Treasury securities were no longer in the Fed's vaults. (Remember, the markets appreciated for years that the GSE liabilities were implicitly backed by the Treasury, an implicit backing that became explicit as a consequence of the financial crisis.) Implicit off-balance sheet backing would thus replace explicit on-balance sheet backing, a step backward in transparency, but otherwise not much economic effect.

So as to remove any possible doubt, I do not favor Ron Paul's proposal. Transparency is important. Even more, the Fed is too important to be used as a temporary accounting gimmick.

As a banker's bank, the Fed is the original too-big-to-fail bank, and the only legitimate one.

- The Money View

Posted by Perry G. Mehrling at 8:44 am

Wanted to buy: $2T in safe assets

by Daniel H. Neilson on July 17, 2011

Two FT pieces by Tracy Alloway caught my eye this week: this article from Tuesday's print edition, and this post on Alphaville today. The phrase "collateral upgrades" from the former caught my eye: this is the latest of several—quite diverse—variations on a theme that have played out in recent years.

The first variation comes from the global supply of savings. On this topic I think of Martin Wolf's *Fixing Global Finance*. For the issue at hand, Anton Brender and Florence Pisani's *Globalised Finance and its Collapse* (especially chapter 4) is even more relevant. Both note that the economic policies of developing countries, especially China, led them to generate a large supply of savings. Holders of these savings sought to minimize credit and liquidity risk, and as emphasized by Brender and Pisani, financial innovation allowed them to do so.

They offer a very stylized example in balance sheets:

[PICTURE: A Chinese household's savings finance an American household's mortgage.]

The balance sheets labeled "Risk-taker" and "US commercial bank" are really stand-ins for a great many possible chains. The point is that much of the risk inherent in the ultimate use of funds—credit and liquidity risk arising from the mortgage loan—is transferred away before the chain leaves the US; the asset held by the Chinese central bank has neither of those risks, nor do the assets to the right of it in the chain.

Savers wanted safe assets, in other words, and financial innovation created them out of risky assets. The rise of the shadow banking system is, in large part, about meeting the demand for such assets. Developing-country savers were one source of this demand, but there were others too—everyone wanted to eke out some yield while taking as little risk as possible.

This macro situation had its counterpart in the short-term money market: the expansion of collateral eligible for repo borrowing. The short story here is that, especially after 2005, a wide variety of securities, most notably MBS, became much easier to finance. You could use the securities themselves as collateral to borrow in the repo market the money needed to buy them.

In the expansion of repo eligibility, as in the global flow of savings, the transfer of risk was not fully understood, nor was it correctly priced. As the housing market deteriorated, for example, neither securitization nor CDS—two mechanisms for creating safe assets out of risky ones—quite performed as promise. What had seemed to be AAA assets deteriorated rapidly, and the cost of borrowing against them skyrocketed. One policy response was TSLF, by which the Fed sought to meet demand for safe assets in the repo market by lending Treasuries out against lower-quality collateral.

Now Tracy Alloway points us toward new rules for derivatives clearing, which will push up collateral requirements for participants in those markets. Some of those participants do not have ready access to high-quality assets. As Alloway notes, Morgan Stanley and Oliver Wyman estimate $2T of additional collateral may be needed.

This creates a business opportunity, because banks and brokers can provide collateral upgrade as a service to their derivatives clients. But where will the safe assets come from? Not everyone can hold Treasuries. Yet the demand for safe assets is there, and someone will find a new way to meet it.

The ultimate conflict here is simple and universal. Everyone—Chinese savers, repo lenders, derivatives clearing counterparties—wants to hold safe assets. But throughout the economy, much of the credit that is extended is risky. Risk can be redistributed, but not eliminated from the system. Financial stability depends on our understanding where the risk has gone, and how to respond when it manifests.

- The Money View

Posted by Daniel H. Neilson at 7:05 pm

Deficits and Money

by Perry G. Mehrling on July 19, 2011 10 comments

Alchemy or Banking?

A recent post of Paul Krugman brings to my attention a few paragraphs near the end of Jamie Galbraith's testimony to the Deficit Commission which call out for a money view explication. To my mind, Krugman's toy model does not really engage the issue, and Galbraith responds to that toy model rather than providing the needed explication. Both men are really more interested in deficits than in money, but not me, so here goes.

[VIDEO LINK]

The title of Section 9 of Galbraith's testimony gives the gist: "In Reality, the US Government Spends First & Borrows Later; Public Spending Creates a Demand for Treasuries in the Private Sector." Krugman, perhaps sniffing MMT heresy, translates: "deficits are *never* a problem, as long as a country can issue its own currency." But that's not what Galbraith is saying, at least not in my reading.

Galbraith begins with the government making a payment by writing a check, for concreteness let us say a Social Security check. The immediate effect is to expand both sides of the balance sheet of the banking system by the same amount, additional reserves on the asset side and additional deposits on the liability side. On the Fed's balance sheet, this same operation shows up as a debit from the Treasury account and a credit to the bank's account.

Matters could well simply stop here. In Flow of Funds language, the Treasury has financed a cash outflow by dishoarding, by drawing down its money balances at the Fed.

But matters will likely not stop here. After the payment, the banking system has reserves that it didn't have before, and they are paying only .25%. By hypothesis, banks would like to acquire an asset with a somewhat higher yield. That's what Galbraith means when he says spending (by the government) creates a demand for Treasuries (by the private sector). But why Treasuries, as opposed to other private securities?

The key point—and here I aware of filling in a few steps that Galbraith jumps over--is that logically there are two different ways to satisfy the private sector demand. One is for asset prices to rise, and yields to fall, until the private sector decides that it is happy holding reserves that pay only .25%. The other way is for asset prices to stay the same and for the government to pay whatever interest is required to keep the private sector happy holding the incremental reserves.

In practice, if the Fed pegs the Fed Funds rate, then the latter road is the one chosen, more or less as a matter of course. Noting the downward pressure on the Fed Funds rate, the Fed sells a Treasury security, and its balance sheet contracts on both sides. On the other side of the transaction, the bank uses its low-yield reserves to buy the Treasury security. Galbraith likes to say it is just like moving money from a checking account to a saving account.

At any rate, the end result is that the private sector owns more Treasury debt than it did before, even though the Treasury has not issued any more debt. Where did it come from? The balance sheet analysis makes clear that the debt that the private sector now holds is debt that was formerly held by the Fed; it was the Fed's asset-side counterpart to the liability-side deposit that the Treasury used to make the payment.

But what if the Treasury does not have a positive balance to begin with? No difference really. In this case, the Fed honoring the Treasury's check just means granting an overdraft, which means that the Fed's balance sheet expands on both sides by the same amount, additional reserves on the liability side and additional assets (the overdraft) on the asset side.

Personally I would be inclined to call this borrowing, but I can see why Galbraith might not; there is no increase in the Treasury's indebtedness to the private sector, although there is an increase in the Fed's liabilities. As in the previous case, the increase in the Treasury's indebtedness to the private sector comes when the private sector trades in Fed debt (unwanted reserves) for Treasury debt that the Fed was already holding, checking to saving once again.

Note that so far I have not said anything at all about deficits. Everything I have said is entirely about the mechanics of payment and clearing, and it holds just as much when the government is running a budget surplus as when it is running a budget deficit.

The difference is that, when the government is running a surplus, it will be enjoying cash inflows more than sufficient to offset the cash outflows from its spending, so it will be regularly rebuilding its positive balances at the Fed or repaying its temporary overdraft. If the government is running a deficit, on the other hand, balances will not be rebuilt and overdrafts will not be repaid, so unless something else happens the Fed's holding of Treasury bills will gradually be replaced by Treasury overdrafts.

This Treasury overdraft system is not so different from what happens in wartime, and here I think we get closer to the way Galbraith is thinking about the problem. (He is, as I have said, not as interested in the plumbing as I am.) He says: "There is never a shortfall of demand for Treasury bonds; Treasury auctions do not fail." Quite so, but why so? Because the Fed stands in the wings as buyer of last resort, and as lender against Treasury collateral to banks and dealers who are buyers of first resort.

Instead of telling a story about the Fed pegging the Funds rate and accumulating Treasury overdrafts as the Treasury spends more than its tax receipts, we could tell a story about the Fed accumulating Treasury securities by setting the minimum price at auction. Same story really.

This is the money side of the deficit story. No alchemy, just banking.

- The Money View

Posted by Perry G. Mehrling at 7:00 pm

Refinance Euro-style

by Perry G. Mehrling on July 22, 2011 4 comments

Grand Bargain at last?

Big doings in Europe on the Greek debt crisis. As I read it, the new plan has three essential elements.

First, and essential, is a recognition of losses. There is to be a bond swap, risky old Greek debt for riskfree new debt of the European Financial Stability Facility. For debt holders, face values may stay the same, but maturities will be drastically extended (up to 30 years) and interest rates drastically reduced (3.5% is mentioned). More or less these same terms will then be applied to a refinancing of Greece itself by the EFSF.

[VIDEO LINK]

Second, there is a mechanism for handling the immediate fallout of this loss recognition. Greek banks, but also French and German banks, and even the ECB will take this loss as a hit to capital, and so may need to be recapitalized. That too is to be the task of the EFSF, but with the credit risk taken by individual governments; the EFSF lends to the individual government (say France) which uses the funds to buy preferred shares in its ailing banks. This is basically TARP, Euro-style.

Third, there is a mechanism for handling the longer run fallout of the loss recognition, fallout that will play out in the market for the debt of Portugal, Ireland, and perhaps others. Again the EFSF is to be the agency, and it is empowered to use its lending authority proactively, even going so far as directly to buy sovereign debt on the secondary market.

I would think this third feature is key from the point of view of the ECB. For lack of something like the EFSF, the ECB has been more or less forced into using its own lending authority to keep the music going. Now it is going to have to take losses for doing so, which no central bank likes, but the sweetener is that in future there will be an EFSF as the first resort.

The overall bottom line is that there is to be a Europeanization of the Greek debt, and by implication also the debt of other individual European states, and this feature will be key from the point of view of the IMF. For lack of something like the EFSF, the IMF has also been more or less forced into using its own lending authority to keep the music going.

There is vague language about continuing involvement of the IMF, which to me suggests that there is unfinished business about loss recognition on that score. The more important thing, however, is that Europe is taking care of its own business. The IMF would never get involved in the debt problems of California, and now with the EFSF it will not again be called upon to get involved in the debt problems of individual European states.

For Europe, the EFSF is a step toward a Europe-wide fiscal authority, but not the whole way to an American-style Treasury. EFSF bonds are, in effect, Eurobonds but the immediate backing for them is the assets held by the EFSF not the taxing authority of any Europe-wide fiscal authority. Individual states jointly guarantee the EFSF debt, but there seems to be an attempt to ensure that the assets are low risk, so that this guarantee is backstop only.

For private holders of European peripheral debt the news is apparently good also. They are not going to get out at par, but they have a variety of options, and in all of them there is now a floor underneath the value of their bonds. Even more, and notwithstanding strong language about Greece being a one-time deal only, everyone knows that this deal is the template for any future deal elsewhere. No one is going to want to run over again the tortuous road that has finally led to the present deal.

- The Money View

Posted by Perry G. Mehrling at 5:13 am

When $3 trillion is not enough

by Daniel H. Neilson on July 26, 2011 1 comment

I interviewed Victor Shih, political scientist at Northwestern, at INET's Bretton Woods conference earlier this year. The interview, his presentation, and the paper have since become one of my key reference points for understanding the state of China's financial system.

Here is the interview:

[VIDEO LINK]

I'll emphasize the key points.

1. Though China has capital controls in place, export-driven growth necessitates a fairly open current account. Wealthy Chinese households can move money out of the country by over-paying for imports, and using the excess to create a deposit account abroad.
2. The PBoC has $3T in reserves, but it cannot in practice liquidate all of that. For example, some substantial fraction may be invested in shares of Chinese banks, and selling those shares could spark a banking crisis. Shih estimates that these problems kick in by about the time that outflows reach $1T.
3. Shih estimates, in the main empirical contribution of the paper, that the wealthiest 1% of urban Chinese households control something like $2T–$5T in deposits. The point is that if something made them nervouse, they could drain that $1T in a hurry. These households are likely to be sophisticated enough to take advantage of the current-account porosity, and may have other ways to get money out of the country as well. It is reasonable to suspect that the next 9% of households also control substantial deposits, and may also be able to move money fairly easily.

Here is how the unwinding Shih is talking about would play out, in balance sheets. (I'm omitting the balance sheet for the rest of the world.)

[PICTURE]

Depositors withdraw, and illiquid loans cannot be drawn down, so reserves are drained from the system. If funds were only being moved within China, there would be no systemic problem. But they are being moved out of country, so reserves are being drawn down for the Chinese system as a whole. This happens on the PBoC's balance sheet.

The PBoC makes payment abroad on the banking system's behalf by drawing down its foreign-exchange reserves, reducing reserve balances correspondingly. It could liquidate sterilization bonds as well. This payment ends up funding a foreign deposit for the household, perhaps via import invoicing. Shih estimates about $1T in deposits could leave the country in this way, and then the situation would get interesting.

All the above is Shih, as spelled out in the paper. What I take away, as I say at the end of the interview, is that Chinese policymakers are engad in a complex juggling act. They're trying to control the exchange rate, the capital account, and fix lending and deposit rates, all at the same time. When the system starts to give, it could crumble quickly.

- The Money View

Posted by Daniel H. Neilson at 11:04 pm

Moral Hazard in Congress

by Perry G. Mehrling on July 29, 2011 4 comments

Fed to the Rescue?

The solvency of the U.S. government is not in any serious doubt. The imminent S&P downgrade of Treasury debt is not about economics; it is about politics. It is, at root, about the public display of political dysfunction in Congress.

One symptom of this dysfunction is the current brinkmanship over the debt ceiling. Since there is no real solvency problem, the point seems to be to provoke a liquidity crisis, and to use that crisis to force the other guy to back down.

On this point, impressively, bi-partisan agreement is the rule.

Liquidity crisis is serious business, as we found out in 2007-2009.

Personally, I think the prospect of even technical default is vanishingly remote. If worse comes to worst, the Fed will certainly backstop markets in Treasury securities, so holders will have no trouble turning them into cash.

What worries the markets, and what worries me, is the willingness of Congress to provoke such a crisis in the first place. Liquidity crisis is serious business, as we found out in 2007-2009.

But we also found out that, in the last resort, the Fed can and will backstop markets. Economists fuss about the consequent moral hazard—bankers who know they are going to be bailed out have incentive to take more risk.

What we are watching in Congress is a public sector equivalent—politicians who know they are going to be bailed out have incentive to take more risk, and they are taking it.

But it is not just them, enticed by their safety belts into driving too fast on a deserted road. We are all on that road. The liquidity crisis they are threatening to provoke is a world liquidity crisis. That is what the markets are reacting to.

Even supposing that I am right about the Fed's backstop of Treasury securities, it is not at all clear that the Fed is prepared to backstop everything else. In 2007-2009 it took a while before "unusual and exigent circumstances" empowered action under 13(3). And even that action brought down on the Fed's head a mountain of unaccustomed criticism, most recently the Government Accountability Office one-time audit. The Fed would be even more reluctant to act today.

And now, after Dodd-Frank, the Fed's hands are tied much tighter; the Fed is much less able to act as well. Take a look at the new 13(3). The approval of the Secretary of the Treasury is not required for discount of Treasury debt, but it is for everything else—Section 13 (3) B.iv.

That is what the markets are reacting to, a Congress that seems determined to provoke world liquidity crisis as a way of forcing the other guy to back down, and a Fed that has been hobbled by that very same Congress.

- The Money View

Posted by Perry G. Mehrling at 5:08 pm

Haircuts and Instability

by Perry G. Mehrling on August 03, 2011 2 comments

Updating Hawtrey for the Shadow Banking System

Notwithstanding the U.S. debt deal—which takes default off the table--dollar money markets remain queasy, and longer term capital markets show clear signs of flight to safety, as market rates on the best stuff fall and rate spreads to the next best stuff widen.

[PICTURE: Slowly, but surely]

Most people seem to be reading this as Wall Street reaction to changed expectations about the fortunes of Main Street. Economic slowdown in the real economy is coming, probably globally, and consequently there is a premium on safe assets to ride out the storm.

Maybe that is part of the story, but there seems also to be an important dynamic internal to the financial system that most commentary is missing. We see this best when we focus not on the price of the 5 year Treasury but rather on the price of overnight general collateral repo, not on the capital market but on the money market.

Andy Haldane's recent "Haircuts" speech (see notices here and here) posits pro-cyclical haircuts for securitized lending as a mechanism through which the financial sector amplifies economic fluctuation. From a money view perspective, Haldane is talking about what Ralph Hawtrey used to call "the inherent instability of credit".

Hawtrey was of course talking about trade credit in a bank lending system. (My favorite Hawtrey reading is "The Art of Central Banking" published in his 1932 book of the same name.) What Haldane is pointing out is that the very same inherent instability is a feature of the modern capital market credit system. But the mechanism is quite different.

The problem is that our monetary policy apparatus has evolved, and also been designed, to handle instability of the Hawtrey-type, whereas the instability that we actually face is of the Haldane-type. Here is Haldane:

"In the model, one of the key channels for contagion is the secured financing market as banks hoard rather than lend liquidity when haircuts rise. The liquidity feast then turns to famine as secured and unsecured financing markets dry up. The system switches to a low-liquidity equilibrium. These liquidity droughts were perhaps the defining feature of the financial crisis during 2007 and 2008."

Haldane is not, I suppose, denying that there was a solvency dimension to the financial crisis—let it be stipulated that there was a lot of bad underwriting—but rather emphasizing that the liquidity drought is what turned a minor subprime mortgage collapse into a global financial crisis.

From this perspective, the recent queasiness in money markets speaks volumes. As during the financial crisis, the problem is in secured credit markets and the mechanism is haircuts on repo lending.

Haldane's talk references a paper in which he and co-authors explore possible policy responses to haircut procyclicality, mostly designed to constrain upward instability. Authorities might, for example, impose minimum haircuts, say 20%. Or they might require compensating increases in liquidity balances whenever haircuts are reduced.

Upward instability is not our current problem. The problem we face today is how to buffer downward instability, which seems poised for quite a run. We have seen where that instability can lead, and the massive intervention required to put a floor on it once it gets going. Let's not do that again, please.

In the emerging market-based credit system (now out of the shadows) funding liquidity is mostly about secured lending, which requires collateral. The value of collateral however depends on market liquidity, especially market liquidity in derivative contracts that reference the securities used for collateral.

Here is one way to understand what is happening. Suppose a shadow bank holds risky securities and also a derivative credit insurance contract that references those very same securities. When the value of the securities falls, the value of the derivative hedge rises, and vice versa, leaving total assets unchanged. But if those assets are funded using the securities as collateral, then when the value of the securities falls, or even just threatens to fall, haircuts rise and funding dries up. Liquidity crisis.

It doesn't have to be that way.

Consider an asset manager, holding the other side of the various shadow bank exposures, writing credit insurance to get risk exposure and holding its assets in repo. When the value of the securities falls, the value of the manager's contingent liability falls, and that loss is recognized as a fall in the value of the customer capital entrusted to the asset manager. In effect, that customer capital is the capital of the market-based banking system.

That means that it makes no sense for the asset manager to refuse to roll his repo lending, simply because of worries about the collateral behind that lending. The asset manager himself has insured that that collateral! The problem is that he can't see it, because his counterparty for both the repo and the derivative is not the shadow bank itself but rather some financial intermediary.

- The Money View

Posted by Perry G. Mehrling at 9:40 am

Okay, leadership, but by whom?

by Perry G. Mehrling on August 06, 2011 2 comments

And heading where?

The deficit in political leadership, both in the US and Europe, is the focus of FT commentary today (see here, here, and here). It seems clear that another financial crisis is brewing, with its epicentre this time in European sovereign debt problems rather than U.S. subprime mortgages, but policy response has so far been woefully inadequate to the task.

But what would you have them do?

As John Authers points out, "sovereign credits are no longer available for use. The rebound of 2009 came once it was clear that governments were prepared to put their own credit behind the troubled banks. This time around, sovereign credit itself is at issue."

[VIDEO LINK]

All eyes then to the world's central banks, where the ECB's resumption of bond buying for Ireland and Portugal only focused attention on what the ECB was not yet buying, namely Spain and Italy. Meanwhile, in the U.S., traders eagerly read the entrails of Bernanke's speeches looking for signs of delivery from on high, QE3.

No question about the immediate liquidity crisis. We see it in the demand for yen and Swiss francs, in gold, and in the negative interest rates at BNY. The Fed may well be gearing up to respond, even now. But I would raise serious questions whether conventional lender of last resort is the right answer.

The ECB is following in the footsteps of the unconventional Fed last resort intervention during the last crisis, a new kind of intervention that I have characterized as dealer of last resort rather than lender of last resort. But even dealer of last resort just puts a floor on the crisis; it doesn't fix anything.

It doesn't have to be that way.

I propose that we should think about these crises as the birth pangs of a new financial system, a new GLOBAL financial system, a system based on inside liquidity rather than outside liquidity, and a system that requires a fundamental rethink of the role of the central bank.

In my last post, I provided a verbal sketch of the outlines of that new system, but it was apparently too sketchy. Readers asked for a video. The video attached to this post could equally well go with that previous post.

Bottom line, the pressure to move funding markets onto the balance sheet of the Fed can be seen as a symptom not of immediate crisis but of deeper structural shifts in the organization of global finance. Unless and until policy makers engage those structural shifts, bailouts will be the order of the day.

- The Money View

Posted by Perry G. Mehrling at 5:28 pm

Sympathy for the Devil

by Perry G. Mehrling on August 11, 2011 3 comments

Privatizing QE3

Pity the plight of the central banker. The halcyon days of inflation targeting recede ever farther into the past, along with the glorious simplicity of agonizing whether 25 bp is enough. Instead, the fate of the world seems to hang in the balance, even while the Fed Funds rate remains stuck at zero.

All over the world, central banks are stepping in to catch the falling knife dropped by their ostensible political masters, the issuers of sovereign debt. Most notably, the ECB has extended its bond-buying to Spain and Italy, and the Fed has guaranteed another two years of ZIRP.

[PICTURE: Green Shoots! Japanese Garden, Boston Fed]

But central bank balance sheets are still swollen from the private sector rescue of 2008. And central bankers are under much closer scrutiny than in 2008—no chance this time that the Fed will be able to double its balance sheet before Congress notices.

That's why QE3 is happening off the Fed's balance sheet, rather than on it.

To see this, it is helpful to recall QE1 and QE2. QE1 was about buying mortgage-backed securities, and QE2 was about buying long-dated Treasury securities. In both cases, the purchase was made using the Fed's own liabilities; that's what the $1.6 trillion of excess bank reserves are funding.

This time around the Fed is not buying anything, so why do I say it is doing QE3?

Basically, the ZIRP provides strong incentive for carry trades of all kinds. If you can borrow at zero, and can roll your borrowing for two years, then anything with a positive yield looks good. If a hedge fund borrows at zero and buys MBS, that is QE1 private-style. If a hedge fund borrows at zero and buys long-dated Treasuries, that is QE2 private-style.

The difference is that, since the Fed is not doing the trade on its own balance sheet, it has no control over which trades get made. Private speculators can also buy yen or Swiss francs, and central banks intent on preventing currency appreciation are forced to take the other side of the speculation, so doing their own QE. And speculators can also buy gold, or indeed any other asset, so long as expected capital gains exceed storage costs.

Another difference is that private-style QE gets financed with private money expansion (private debt secured by the asset purchased) rather than public money expansion (Fed debt which is bank reserves).

From this perspective, private-style QE3 looks like a repurposed shadow banking system.

As everyone now knows, the collateral that stood behind the original shadow banking system turned out not to be the AAA credit it was claimed to be. But, at the time, demand for private money backed by that dodgy collateral was sufficiently strong that there were strong incentives not to look too closely.

Today, even as the Fed's ZIRP creates incentives to rebuild the shadow system, there is no question that the demand is still there. (Zoltan Pozsar's recent paper, glossed by Gillian Tett, establishes this point convincingly. Read it now.) The question is where to find the collateral needed to back the corresponding supply. The search is on.

After the collapse of the original shadow banking system, we met demand for a while with an extraordinary expansion of public money. Not this time.

This time it will be private money, and that means that the profit motive is key. As we were building the original shadow banking system, that profit motive led to all kinds of weird and wonderful engineering, all directed to creating AAA collateral. This time, end investors are likely to be looking more closely at the underlying credit.

Nevertheless, just like last time, collateral transformation is the name of the game. Anyone who can figure out how to create AAA collateral from existing non-AAA assets can, in effect, coin money.

The search is on.

- The Money View

Posted by Perry G. Mehrling at 6:58 pm

Copper standard

by Daniel H. Neilson on August 19, 2011

I am late to the party on the inventive use of copper by Chinese companies seeking alternative sources of funds. FT Alphaville and Michael Pettis had the story in the spring: Chinese companies would obtain trade finance to purchase copper abroad, warehouse it, and use the inventory as collateral to obtain letters of credit on Chinese banks, which could be used to fund investments totally unrelated to copper. Goldman says the authorities have cracked down on this scheme, as does Pettis.

On its surface the scheme seems to be just another way to access credit in a constrained financial system, a spigot that has now been sealed off. The urgency of the situation thus removed, it is worth giving this a deeper read.

The fact that the scheme made use of copper, a fungible, storable coinage metal, is suggestive. The suggestion is amplified by what appeared to be round-trip importing and re-exporting of copper to and from Shanghai. Pettis speculated in his May 1 newsletter:

Even when London [copper] prices are above Shanghai prices, companies eager for loans are importing copper in order to get back-door financing, whereas local traders, noticing that domestic demand isn't strong enough to justify those import quantities, and perhaps eager to arbitrage the prices, are selling copper abroad. The weird distortions in the banking system, where credit isn't rationed by price but by quantity and hierarchy, has turned China, at least temporarily, into a revolving door for copper imports and exports.

I couldn't help but think of gold points, the deviation in exchange rates under a gold standard at which it becomes profitable to ship gold across the ocean. Under such a system, one unit of each country's currency buys a fixed amount of gold. When the exchange rate between, say, the gold-backed pound and the gold-backed dollar gets out of line, you can buy gold with dollars (say), ship it across the ocean, sell it for pounds, and convert back to more dollars than you started with. As long as gold can be safely shipped, the existence of this arbitrage prevents exchange rates from moving much outside of the gold points, and limits the amount of gold that is actually shipped across the ocean.

While copper financing was going strong, the metal traded at two prices: the inflated London price reflected the credit demand for copper, while the lower Shanghai price reflected speculative or industrial demand. Collateral copper had to be bought in London because that's where trade finance was available. The round-trip exports would have continued until the prices made it unprofitable.

In a sense, then, the two prices reflect a kind of misaligment in exchange rates. In the face of high credit demand in a constrained financial system, the market was seeking funds abroad, by making its own money. It is global imbalances writ small—China's exchange-rate policy leads to overinvestment, which needs credit. Credit clampdowns lead borrowers to find other sources of funds, including international borrowing against copper. The imbalances play out as price distortions and redundant commodity flows.

The whole phenomenon underscores the difficulty Chinese policy-makers face. In our recent conversation, Victor Shih noted the tension between China's open current and closed capital accounts. In his paper, import overinvoicing is a way for wealthy households to move funds out of the country.

Copper financing exploited another loophole: copper is an industrial good, which flows easily through the open current account, but it is also a plausible store of value, since it is fungible and storable and trades in a liquid market. Buying copper, that is, is not so different from obtaining a foreign deposit.

Chinese companies continue to demand liquidity because they continue to want to invest. Reserve requirements and interest rates have tightened monetary conditions within the regulated banking sector. Rather than dampening investment, however, these policies have simply moved credit off of banks' balance sheets and into the shadows.

The copper spigot may have closed, but 9% GDP growth, driven by investment spending, continues apace. So another spigot is open, somewhere.

- The Money View

Posted by Daniel H. Neilson at 11:35 am

Fizzle at Jackson Hole

by Perry G. Mehrling on August 29, 2011

One silence, and one silo

So no QE3, at least not on the Fed's own balance sheet, and not yet, but that was no surprise since expectations had been managed down by the time Bernanke gave his speech.

What Bernanke did not say, maybe could not say, is that the major worry confronting central bankers today is Europe, and contagion from whatever happens there. He didn't say it, because he remembers all too well being dragged over the coals in Congress for the $600 billion credit line he opened for foreign central banks after Lehman, when the Fed stepped in as international lender of last resort at a time when global dollar funding markets were frozen.

But the worry is there, even if Bernanke can't talk about it. We can talk about it here.

Gillian Tett draws attention to the reliance of Eurozone banks on short-term funding markets, and to the recent withdrawal of US money funds from those markets. Unlike 2008, the problem is not a dollar shortage, not now and not in the future either, given the Fed's quiet reopening of the liquidity swap facility. (Someone tested that facility with $500 million just to make sure, so now everyone knows that the Fed's backstop is for real.)

The problem is funding, and it arises from fears that the Eurozone banks may well be insolvent. In such a circumstance, private funding sources inevitably back away from unsecured lending, and from term lending, and begin to pay closer attention to the collateral being offered for secured lending.

That is one way to understand the sterilized ECB bond-buying program. The ECB is taking bad collateral out of the market and replacing it with good collateral. So far it has worked, but for how much longer?

Right now, the ECB is like the Fed before Lehman, selling off its Treasuries and lending out the proceeds. And already there is big-time pushback, objections that even this much intervention is too much intervention. But suppose it is not enough, and the ECB needs to do even more. Will the ECB be able, as the Fed was after Lehman, to double its balance sheet more or less overnight, if it is called upon to do so?

In this respect, recall how much the Fed's efforts post-Lehman relied on coordination with the Treasury. When the money funds demanded Treasuries, the Treasury issued more and deposited the proceeds at the Fed, which used the money to meet the funding needs of the banks shut out by the money funds. But there is no European Treasury, and no one really knows how the EFSF is going to work. The ECB does not have the degrees of freedom that the Fed enjoyed after Lehman.

It's a worry.

If the ECB cannot contain the problem, it will spill over into world funding markets, including dollar funding markets, and then it will be the Fed's problem, just like last time. That's the scenario that the Fed is likely, notwithstanding its understandable silence, even now to be scrambling to avoid.

That's the silence. Now for the silo.

Not only is there no talk about the most important challenge of the moment, but also there is no language to talk about it. The line of analysis that I just explored would be impossible if I had constrained myself to talk the language of the Dynamic Stochastic General Equilibrium model, the lingua franca of academic macroeconomics before the crisis, and today as well.

I am not one who thinks the DSGE is a complete blight, but I must say that I find myself nodding in agreement with the recent words of John Kay, imagining a possible economics different from the present economics:

"Even if sharp predictions of individual economic outcomes are rarely possible, it should be possible to describe the general character of economic events, the ways in which these events are likely to develop, the broad nature of policy options and their consequences. It should be possible to call on a broad consensus on the interpretation of empirical data to support such analysis. This is very far from being the case."

In this regard, I take hope from the recent op-ed of my colleague Mike Woodford. His headline is pure DSGE: "Mr Bernanke can and should use his speech today to explain how his policy intentions are conditional upon future developments." (The idea is to signal a firm Fed policy rule, a conditional ZIRP, that private agents can feed into their intertemporal optimization routines.) But the prose that surrounds the headline quite nicely describes the "general character" of previous QE1 and QE2, pointing out the crucial difference between them—the first involved the frozen and illiquid mortgage-backed securities market, while the second involved the highly liquid Treasury market.

Even more, Woodford goes on to argue, the problem with seeing the world through the lens of the simple quantity theory of money, MV=PY, is that it blinds you to exactly that crucial difference between QE1 and QE2, and hence to the reason that QE3 is likely not to be very successful.

Yes indeed. Models do that.

Sometimes MV=PY helps us, and sometimes it doesn't, and the same goes for DSGE. Not everything that we need to be talking about today can easily be shoehorned into a model that was never intended to engage the kind of problems we are experiencing today.

- The Money View

Posted by Perry G. Mehrling at 7:22 am

Bank of the World

by Daniel H. Neilson on September 05, 2011 2 comments

The first graph shows US financial flows over the past five years. The BIS recently reminded us to look at gross flows, which I think is good advice. Just so, the blue line shows increases in US liabilities[1] to the rest of the world, the green line increases in US financial assets abroad. The red line is the difference between them, plus a (sometimes considerable) statistical discrepancy.

[PICTURE/GRAPH]

A few observations.

The current account deficit is two things, as a matter of accounting. First, as I have shown it in this graph, it is the net increase in US liabilities abroad. Second, it is (roughly) the trade deficit, exports from the US less imports to the US. The two must be equal, since every good or service bought abroad must be paid for abroad. The international dollars needed to make payment can be acquired either by selling an export or by borrowing them abroad.

As the graph shows, however, the relatively stable current-account balance can conceal wild fluctuations in the corresponding gross financial flows since the onset of the financial crisis in 2007. Plenty of borrowing and lending, that is, goes on without a direct connection to trade flows, and this is why the gross flows are important.

Kindleberger's collection of essays *International Money* has been on my desk for a few weeks. He likes to think of the US as a bank, its liabilities serving as liquid assets for the rest of the world. The next graph shows the US liabilities line from above, along with two of its components.

[PICTURE/GRAPH]

The blue line is the same as the blue line in the first above. The green line shows the world's accumulation of Treasury debt. This was going strong for much of 2010, but QE2 slowed it down by the end of the year and into 2011. The red line shows what happened as a result: the rest of the world sold its Treasuries to the Fed and deposited them in US banks. The world accumulated deposits instead of government debt.

One way to read all of this is that the US continues to provide the world's reserve assets. Notwithstanding China's grumblings about reserve diversification, the S&P downgrade, and the absence of any particularly good economic news, US liabilities are still what the world wants to hold.

Next time, I'll look at the asset side of the ledger and complete the picture.

[1] Note that all of this data is from the Flow of Funds accounts, table F.107, where the accounts are presented from the point of view of the rest of the world. So their assets are my liabilities and vice versa.

- The Money View

Posted by Daniel H. Neilson at 5:11 pm

Bank of the world, three ways

by Daniel H. Neilson on September 12, 2011

By Daniel H. Neilson

The U.S., in aggregate, acts as a bank to the rest of the world. The precise role of that bank has evolved over the course of the crisis.

Last time, I laid out the idea of the U.S. as a bank to the rest of the world and looked at the liability side of its balance sheet. The idea has taken a bit more shape since I wrote it down, so I'll take another stab, and also work the asset side into the picture.

First, the liability side again:

[PICTURE]

Much of the financial crisis and its aftermath is written into this picture. Through mid-2007, the world was accumulating U.S. liabilities, but not Treasuries. The massive buildup, which ran up until the beginning of the crisis, was in corporate bonds, including asset-backed securities. As this market turned toxic at the end of that year, international purchases of these liabilities came to a halt (the blue line cliff-dives into 2008), bringing also to a halt the pre-crisis bank of the world.

I'm a bit uneasy putting too much on this data—quarterly observations at this level of aggregation is a too coarse to see what was really going on. All the same, I think that the right place to pick up the story is in the red line, interbank liabilities. As the crisis reached its height in late 2008, European banks rushed to support their US funding vehicles, frantically lending international dollars to them (the red line spikes up). This reversed in 2009, which represents, I think, US banks borrowing from the Fed's emergency facilities and onlending to their parent companies abroad. This was the in-crisis version of the bank of the world, which provided liquid funds to its customers abroad.

The anemic post-crisis recovery gives us a third kind of bank of the world. As in the pre-crisis version, the world wants liquid U.S. liabilities, but now only safe liabilities will do. QE2 fits into this; it was about replacing Treasuries with money, meaning a decline in foreign accumulation of Treasuries and instead a rise in foreign deposits.

This characterization—pre-crisis issuer of ABS, in-crisis provider of dollars via the Fed's liquidity backstops, post-crisis issuer of safe liabilities—helps interpret the asset side of our bank's balance sheet as well:

[PICTURE]

Before the crisis, issuance of ABS funded a mix of international assets, including FDI and private deposits, as shown.

In the height of the crisis, as European banks scrambled for dollars, even breaking CIP. The U.S. was meeting the demand for dollars as best it could with the central bank liquidity swap lines. (These are the black line above, the series's description in the data as "nonofficial" notwithstanding.) These were expanded at the end of 2008 and contracted in early 2009.

This gives a way of understanding the evolution of the U.S.'s international financial position, but not, I'm afraid, an easy way out of our current troubles. The debt-ceiling debacle, the austerity debate, and the U.S. as a relative safe haven amid the Eurozone crisis can all be understood through this lens.

- The Money View

Posted by Daniel H. Neilson at 11:17 pm

Bazooka

by Perry G. Mehrling on September 18, 2011

Understanding QE3

Liquidity is not a problem within the Eurozone, insisted European Central Bank president Trichet last Monday. But the markets didn't believe him. The question now is whether the announcement last Thursday of a coordinated central bank intervention—by the ECB and also the Swiss National Bank, Bank of Japan, Bank of England, and the Fed--gives more reason to believe.

The biggest reason for doubt is the Fed. Everyone except the Fed has announced unlimited dollar offering, but no one except the Fed can create new dollars. The Fed has reopened its liquidity swap facility, and so in principle must be prepared to meet demand. But in practice it would face considerable domestic political opposition were it to do so. (The "End the Fed" brigade is no doubt already mobilizing.)

So let us suppose that the Fed cannot directly serve as international dollar lender of last resort, as it did in the aftermath of Lehman. Is there another way?

The Eurodollar market was born to provide a way for dollar lenders and dollar borrowers to find each other outside the reach of the U.S. monetary authority. It is the Eurodollar market that European banks are having difficulty tapping in order to fund their dollar assets, and that is whole reason behind the recent central bank announcement.

Foreign central banks already hold about $100 billion deposits at the Fed, so that's available for them to lend. But the more important point is that their dollar lending is not limited to their dollar reserves, any more than a private bank's lending would be. Private banks lend term Eurodollars by creating term Eurodollar deposits, and so can public central banks. All that is required is that the ultimate dollar lenders find central banks acceptable as counterparties.

Just as with private banks, reserves do not fund lending so much as they absorb temporary imbalances between cash inflow and cash outflow. Viewed in this way, $100 billion is a sizeable fractional reserve, especially so given the backstop of the Fed's swap facility.

The point is that QE3 is happening without any necessity for the Fed balance sheet to expand by a single dollar. It is happening on the balance sheets of other central banks. Operation Twist, designed to drive longer term Treasury yields lower, will help by making foreign dollar liabilities more attractive.

- The Money View

Posted by Perry G. Mehrling at 8:16 pm

China as bank of the world?

by Daniel H. Neilson on September 20, 2011 2 comments

By Daniel H. Neilson

Can the renminbi displace the dollar as the world's international money?

Writing in the FT last week, Arvind Subramanian argues that, "sooner than almost anyone thinks," the renminbi will begin to take the dollar's place in that role.

[T]he renminbi could displace the dollar as the premier, reserve currency within the next decade or soon thereafter. Sceptics will scoff for two reasons.

First, even if China's economy overtakes America's, the renminbi's rise could be delayed...

Second, China is far from creating the policy and market environment for the renminbi to become a reserve currency. China's capital account is still largely closed...

In other words, loyalty to the dollar and China's lack of the policy prerequisities seem to make the renminbi's rise a distant possibility.

Count me with the skeptics, though I do not scoff: the question is laden with difficult economics, not to mention politics, and no simple outcome is likely. In his newsletter, Michael Pettis responds to Subramanian that, first, growing RMB deposits in Hong Kong are more likely to be an attractive one-way bet on appreciation than reserve diversification; and second, that a widespread move from dollar reserve holdings into RMB would have to be absorbed on the balance sheet of the PBoC, adding to pressure on China's exchange rate and growth model.

I agree with Pettis, but my focus is distinct enough that it warrants being spelled out.

To answer a question about money one should start with banks, since a bank is an entity whose liabilities are money. A successful bank must make a liquid two-way market in those liabilities. Insured checkable deposits do the trick for transactions at the retail level, and our collective willingness to depend on them is a measure of banks' success in market-making. Liquidity is ensured because there are liquid markets for USD assets that banks can buy and sell as needed to manage their balance sheets.

At the interbank level, reserves at the Fed do the trick, and monetary policy during normal times helps ensure that this market also remains liquid. This in turn supports liquidity at the retail level, since reserves are what is needed to clear those transactions.

International money, in turn, needs an international "bank". The dollar is international money because the US financial system, as international bank, makes a global, liquid, two-way market in dollar liabilities. The Fed helps ensure this in normal times, by ensuring the liquidity of the market for US Treasuries, and in crisis times, by supplying dollar liquidity *outside the US* via swap lines with other central banks.

The eurodollar market achieves this for the USD by allowing non-US entities to take dollar deposits. Correspondent balances with banks in the US ensure that the connection back to the US is maintained. The consequence is that *every dollar, domestic or international, is an obligation of the US financial system*. These circulate as money because of the world's volume of dealings with the US, and because the liquidity of the market makes it a good choice, even in dealings between third parties.

What would be needed for China to take on this role? For China to allow international banking in RMB would not just require liberalization of the financial sector and of the capital account, as Subramanian seems to suggest. It would also test the capacity of the Chinese financial system to make a worldwide liquid market in its own liabilities. This system, in aggregate, would have to buy and sell RMB deposits to all comers, giving up a measure of control over its own balance sheet. Liquid RMB asset markets would also be needed to support deposit-market liquidity.

China could do this with only limited capital-account opening, but it would mean at least allowing the creation of something like a eurorenminbi, which Chinese banks would need to be able to freely create and destroy as they accept and extinguish RMB liabities. Aside from its being a linguistic abomination, the eurorenminbi would be many steps beyond the limited liberalization China has already permitted. The alternative would be onshore RMB deposits, which seems even less likely.

Least likely of all is the prospect of the PBoC as RMB lender of last resort. Only the PBoC can create the highest-powered RMB liabilities, and so only it could resolve a major liquidity crisis in RMB. In the depths of the crisis in 2008, and now again in the depths of the eurozone crisis, the Fed has backed the dollar. It is not easy to pitcture the PBoC doing the same.

My reading of this situation could be mistaken; perhaps liquid markets for RMB deposits in Hong Kong and London can be developed quickly and with limited flexibility on the part of Chinese policymakers. I doubt it, but either way, let us understand the issue—if China wants to be bank of the world, it will have to become a market-maker, and be willing to do all that is necessary to keep that market running.

- The Money View

Posted by Daniel H. Neilson at 3:58 pm

Twisting in the Wind

by Perry G. Mehrling on September 25, 2011

While waiting for TALF

Bernanke did everything he could last week, short of a QE3 expansion of the Fed's balance sheet, but apparently the market was expecting more. A creature of habit, the market was fixated on the balance sheet that has done the global heavy lifting since Lehman, rather than on the balance sheets that are poised to do the heavy lifting now, namely the other central banks that jointly announced unlimited dollar lending last week, especially the ECB.

Bernanke is going to sell $400 billion of Treasury bills (< 3 years maturity) and buy an equal amount of Treasury bonds (6-30 years maturity), in effect an interest rate swap. And he is also going to reinvest the principal payments on current holdings of Mortgage Backed Securities into additional MBS instead of Treasuries, thus maintaining rather than shrinking the Fed's credit swap position.

Big money, but no big deal in the larger scheme of things. It is not Treasury bonds but rather peripheral Europe bonds (and the banks that hold those bonds) that need the help.

[VIDEO LINK]

Geithner was in Europe last week to urge a European version of the Fed's Term Asset-backed Lending Facility (TALF). The idea is to use the 440 billion euro capacity of the European Financial Stability Facility (EFSF) not to buy sovereign debt outright but rather to guarantee it so that private investors will be willing to buy it themselves. And the further idea is to use the unlimited balance sheet capacity of the ECB to lend private investors the money they need to finance those purchases, given the somewhat precarious state of European money markets at the moment.

This is more or less the same strategy that Geithner and the Fed initially proposed two years ago to restart the market in Mortgage-Backed Securities in the U.S. But it didn't work, so the Fed wound up buying MBS outright instead; that operation is now known as QE1. My sources tell me that the reason TALF didn't live up to its promise had to do with complications involved in U.S.-style mortgages, but those complications are presumably not present in sovereign bonds. Maybe TALF can work in Europe?

Observe that the ECB is already buying peripheral bonds, and is under pressure to buy more, given the inadequate resources of EFSF. A Euro-TALF would take that pressure off, even as it multiplied the resources of the EFSF several fold in preparation for Italy and/or Spain. (If EFSF took a 20% first loss exposure, the multiple would be five.) The ECB would no longer be exposed to credit risk (no doubt a welcome development), but its balance sheet would expand to a multiple of its current size (probably not so welcome).

What to think about all this?

The first thing to say is that these measures address the liquidity problem, and punt on the solvency problem. Fair enough, according to me, since one thing this crisis should have taught us is that liquidity kills you quick, solvent or not. No doubt the underlying problem is insolvency, of some sovereigns, of some banks that hold the debt of those sovereigns, and therefore also of some creditors of the banks. That is going to play out, and the sooner the better. But meanwhile doubt about how exactly it will play out is freezing markets, and that is the problem at immediate hand.

Remember the slow motion train wreck that started four years ago. Until March 2008, and the collapse of Bear Stearns, the Fed's main response was simply to lower the Fed Funds rate from 5% to 2%. After that, policy shifted to classic lender of last resort, in which the Fed sold off its holding of Treasury securities and lent the proceeds to a

widening collection of needy counterparties against a widening category of eligible collateral. That's where the Fed was on the eve of Lehman, and that is more or less where the ECB is today.

After Lehman, the Fed's first action was essentially to backstop the wholesale money market by offering its own balance sheet as counterparty for both lenders and borrowers. That was the origin of the initial balance sheet expansion. In a way that kind of intervention can be viewed as nothing more than an extension of pre-Lehman lender of last resort, now financing loans with borrowing rather than asset sales. In light of what happened after, I prefer to view it as a new kind of intervention, dealer of last resort, in which the Fed in effect posted a bid and ask in the wholesale money market, and absorbed the resultant order flow on its balance sheet.

This kind of money market dealer of last resort is already in view at the ECB, as some lenders are shifting their deposits, and some borrowers are seeking alternative sources of funding. In a way the ECB's task is easier than the Fed's was, since the global funding market is primarily a dollar market not a euro market. But the ECB has to be prepared in case the euro funding crisis turns into a dollar funding crisis; that is what the dollar funding commitments are all about.

From this perspective, Euro-TALF looks like nothing more than an extension of money market dealer of last resort. Essentially the ECB offers financing to purchasers of sovereign debt, and raises the funds by offering its own money liabilities, first euro but maybe eventually also dollars.

But the key to making it work is the guarantee by EFSF, which operates to put a floor on the price of the sovereign debt. Here I think we have to see the proposed TALF rather as an extension of the ECB's bond buying program, which is dealer of last resort in the capital market. The credit risk is to be shifted onto the balance sheet of the EFSF, but the funding comes from the ECB. The bonds may nominally sit on the balance sheet of private investors, but the risk and the funding are both on the balance sheet of the public sector. I'd call that dealer of last resort, wouldn't you?

In the above, I have so far been focusing on the ECB, and left aside the role of the Bank of England and the Swiss National Bank, much less the Bank of Japan, not to mention the IMF, or Brazil, or China, or.... We are facing a global crisis, and everyone is going to be swept up in it before we are done. To be continued...

- The Money View

Posted by Perry G. Mehrling at 9:29 am

Europe Ground Zero

by Perry G. Mehrling on September 30, 2011 1 comment

Financial Globalization versus the Nation State

At its core, this rolling crisis is really about financial globalization. Both words are important. When I say globalization I do not mean primarily trade in goods and services, but rather the integration of previously national money markets and capital markets. Securities markets are increasingly global as pools of investable capital seek out the highest risk-adjusted return, on individual investments but also on diversified portfolios of investments from around the world. And money markets are also global, as national borrowers who seek more funds than domestic lenders are offering inevitably find what they need in global funding markets, especially dollar funding markets.

Financial globalization has created the modern world, and it is being tested to the core by the current crisis.

Previous smaller crises of financial globalization were typically triggered by funding problems in peripheral nations—think Mexico, or East Asia. Typically these involved a combination of currency crisis as well as banking crisis, because the lending was in dollars and the currency risk was backstopped in one way or another by the state. Just so, typically the agent of deliverance was some combination of the IMF and the United States.

To my mind, the LTCM crisis of 1998 was the first crisis of the emerging market-based credit system, but its relatively easy resolution left a misleading impression. LTCM was a hedge fund trading both long and short in global capital markets, and funding those trades in global money markets. The crisis was resolved by wiping out LTCM's equity holders, and by forcing its other creditors to take equity positions. Meanwhile, the Fed intervened to maintain stability of the domestic dollar money market generally, which translated easily into stability of the world dollar money market.

In retrospect LTCM was just a warning shock, and today we are in the middle of the main event. Unlike LTCM, the current crisis has gone beyond private balance sheets and is taking the form of a fiscal crisis of the state, both in the US and in Europe.

In both the US and in Europe, central banks have been the key players, straddling as they do the line between private and public finance. In the US the trigger came from household mortgages while in Europe it is coming from sovereign debts, but in both instances the crisis quickly involved the central bank because a good chunk of the debt was funded short term, in the money markets. In both cases, when the crisis hit, the first approach taken by central banks involved intervention in the money market. In both cases, it wasn't enough.

The problem was with the collateral, in both cases long term debt quite different from the kind of short term trade credit that was the focus of Bagehot's classic 1873 analysis of central banking in times of crisis. Liquidity crisis showed itself not only in sudden demand for money but also in sharp falls of security prices, hence rising "haircuts" for the securities offered as collateral. The market for secured funding froze up because lenders of money did not want to risk getting stuck with illiquid security collateral.

Understanding this dynamic, both the Fed and the ECB responded by extending their traditional "lender of last resort" remit to include what I call "dealer of last resort". They intervened not only in the money market but also in the capital market directly by buying particular classes of securities whenever their price fell too far below what the central bank considered to be fundamental value. Central banks became not only bankers' banks, but also dealers' dealers.

Both the Fed and the ECB were careful about what securities they bought. In the U.S. the Fed bought Mortgage Backed Securities, but household mortgages have a long history of special treatment (think Fannie and Freddie), so it could be argued that the Fed was simply building on that history, rather than deviating from its own history. In Europe, the ECB bought peripheral sovereign bonds, but again the whole European Union project involves special

treatment for members, so again it could be argued that the ECB was simply building on that history rather that deviating from its own history.

From this point of view, it could possibly be argued that the extraordinary interventions of central banks can be justified as an extension of their accepted legitimate role as government bank. There is a case to be made.

But that case fails to explain why people are so upset. I think we have to take on board that central banks have been doing something dramatically new—using techniques of war finance to save private finance, and using techniques of national finance to save financial globalization—and try to understand what it means for the future.

Financial globalization has been the theme of world growth for the last three decades. Financial deglobalization could well be the theme of world contraction for the next decade. Those are the stakes.

Deleveraging is an enormous headwind, but behind that headwind is an enormous political economic problem: the shifting relationship between private finance and the nation state. Unless and until we confront that challenge, continuing contraction is inevitable.

- The Money View

Posted by Perry G. Mehrling at 10:00 am

Lords of Finance Redux

by Perry G. Mehrling on October 02, 2011 1 comment

Forget the G7, Watch the C5

Martin Wolf endorses Adam Posen's call for quantitative easing at the Bank of England, and then goes one better, calling for direct monetary finance of government spending, i.e. helicopter money.

Problem is, the world doesn't want pounds, it wants dollars. But the Fed has no intention of meeting that demand, ergo we are seeing dollar appreciation as rising demand meets rigid supply. For lack of gross dollar flow from the US "bank of the world", the world is insisting on net dollar flow from US trade deficits, which of course only exacerbates the underlying global imbalances.

Once upon a time, the Fed's QE2 brought appreciation of the Brazilian real, as well as gold and US equities. More recently, the Fed's failure to mount QE3 brought just the opposite. But the Fed's hands were tied, and those who expected it to act otherwise were not paying attention.

The challenge now is apparently to mount a global QE3 without involving any expansion of the Fed's own balance sheet.

[VIDEO LINK]

The Swiss National Bank is showing us how it can be done. Committing to prevent appreciation of the Swiss Franc beyond 1.2 Euro, the SNB is in effect committing to printing CHF liabilities to buy Euro assets, expanding its balance sheet in the process. This is QE, and it was already happening even before the formal announcement. Recently released figures show the SNB balance sheet expanding from 250 billion to 366 billion CHF in the month of August alone.

We don't know exactly what the SNB is buying--the breakdown of SNB assets by currency is reported quarterly not monthly. But we do know that the ECB is selling in order to make room on its balance sheet for the peripheral bonds that it is buying, so we might as well assume that the SNB is buying what the ECB is selling. That means that the SNB QE is economically equivalent to ECB QE, if we think of SNB liabilities as effectively Euros on account of the peg.

This is Euro QE, not Dollar QE, but it does show how dollar QE could happen on the balance sheets of other central banks. The C5 (Bank of England, ECB, SNB, Bank of Japan, and the Fed) have publically committed to unlimited dollar lending. They can only deliver on that commitment if they are at the same time committing to support one another's dollar borrowing.

From this point of view, the main point of Operation Twist must be to provide $400 billion more Treasury bills, to buyers everywhere but in particular to banks and central banks for whom Tbills are reserves. Dollar credit expansion can happen on balance sheets outside the US, but only if unconstrained by dollar reserves.

Liaquat Ahamed reminds us how central bankers failed to save the system the last time policy makers froze up. It looks to me like they are determined not to fail again this time. For lack of political leadership, we are getting QE3. For lack of the Fed's own balance sheet we are using the balance sheets of the other central banks.

Forget the G7, watch the C5.

- The Money View

Posted by Perry G. Mehrling at 11:48 am

First Liquidity, then Solvency

by Perry G. Mehrling on October 06, 2011 1 comment

First ECB, then EFSF

Tightening money market conditions in Europe have now claimed their first victim, Dexia, and in so doing shifted the focus of policymakers from sovereign debt to banking recapitalization. But it is just a change in approach; the underlying problem remains the same.

The demise of Dexia should remind everyone that liquidity kills you quick. In this regard, Trichet's reminder that no European bank should worry about liquidity is reassuring, or should be anyway.

[VIDEO LINK]

In plain language, he is signalling willingness to move wholesale funding markets onto the balance sheet of the ECB if need be. Creditors unwilling to roll their exposures to Drexia, or any other troubled bank, can instead make deposits at the ECB, and the ECB will take over the lending to Drexia.

This solves the liquidity problem, so no quick death. Even insolvent banks can continue in business for quite a while provided their immediate liquidity needs are met, so solving the liquidity problem buys time to solve the solvency problem.

So what about that solvency problem? The solvency problem is at heart really just a problem of recognizing and then allocating losses that have already happened. It is about which balance sheet takes the losses. That is the question at the center of the current debate about how exactly to recapitalize the banks.

If France and Germany each separately take responsibility for recapitalizing their "own" banks, then the losses of the French banks are absorbed by holders of French bank equity and the French taxpayer, and the losses of the German banks are absorbed by holders of German bank equity and the German taxpayer.

If however a Europe-wide institution, such as the EFSF, does the recapitalization, then the losses are spread Europe-wide. But also, and this to my mind is the more important point, if a Europe-wide institution does the recapitalization, that is the moment when it will be easiest to establish a Europe-wide regulatory apparatus.

Learn from the US mistake. If you recapitalize first and reform second, you won't get the reform you need.

- The Money View

Posted by Perry G. Mehrling at 12:44 pm

The price is wrong

by Daniel H. Neilson on October 10, 2011

Focus on quantities

By Daniel H. Neilson

Debate continues over what is the right level for the dollar–renminbi exchange rate. I find it hard to see how focusing on this one price will lead to a productive outcome, politically or economically. Debating the exchange rate focuses the attention on the metric that guides policy. A better approach is to focus on the other side of the coin, namely reserve accumulation.

China's accumulation of US dollar reserves, mainly Treasury debt these days, is not a by-product of its exchange-rate policy. It **is** the exchange-rate policy.

The approach of the PBoC is to print renminbi to buy up the flow of dollars entering the country via its current account, in fact mostly via its trade account. Policymakers sit down in the morning and decide on a target exchange rate, and initiate a quantity of asset purchases that they believe will make the exchange rate hit the target. (As with other forms of monetary policy, expectations and credibility also play a role.)

It could just as easily be called a trade-surplus policy. Policymakers would sit down in the morning and decide on a target level of the trade surplus, and initiate a quantity of asset purchases that they believe would make the trade surplus hit the target.

With China's capital account relatively closed to most private actors, the public sector is relatively free to choose the level of net lending abroad for the country as a whole. Net lending abroad is, in turn, equal to the trade surplus: each dollar China lends abroad that is not borrowed from abroad must come from net exports. This is moneyflows accounting, with both sides shown as net figures:

[PICTURE]

A trade-surplus policy would be, to a first approximation, *identical* to targeting the exchange rate itself. Either way, the PBoC buys dollar assets to counter an inflow of dollars deriving from net exports. (To a second approximation, there would be differences: the trade surplus cannot be observed every day; expectations could be harder to manage; and so on.)

The natural consequence of focusing on quantities, rather than prices, is a discussion not of what level to target for the dollar–renminbi exchange rate, but of how to bring down the US trade deficit with China.

Adjustment to a smaller US–China trade balance is likely to be messy. As Yao Yang noted in last Friday's *Financial Times*, reducing the flow of Chinese imports into the US would not necessarily increase domestic demand—imports could just shift to other source countries.

What Dr. Yao did not note is that buying fewer US would be a very difficult choice for Chinese policymakers, as it would immediately take a toll on economic growth there, and would almost certainly undermine the expectations that underpin the massive extension of credit to export industries and, indirectly, to property holdings.

In the medium run, both China and the US must develop domestic sources of demand. Focusing on the exchange rate seems like a losing proposition for both sides. Turning the discussion to reserve accumulation would be an improvement.

- The Money View

Posted by Daniel H. Neilson at 5:14 pm

Making Markets

by Perry G. Mehrling on October 17, 2011 2 comments

Plumbing Matters

The last few days have brought a remarkable, but as of yet unremarked, convergence of attention to the matter of making markets.

We hear about the difficulty of implementing the so-called Volcker Rule, which requires drawing a bright line of some kind between proprietary trading (not allowed) and market making (allowed).

We hear about banks getting out of the market making business, leading to unusually large spreads in corporate bond markets, large enough possibly to tempt others into the business.

We hear about attempts to rein in High Frequency Traders, at least those who make markets in good times but then disappear in bad times.

And of course, behind the scenes, there is the looming role of central banks as dealer of last resort. If the ECB won't or can't do it, then why not mobilize the EFSF, suggests the FT.

Time was, most economists thought that investors themselves would provide all the liquidity that markets needed. If price fell just a little bit below value, investors would buy, and if price rose just a little bit above value, investors would sell. Thus, whether you wanted to buy or sell, you could expect to be able to do so quickly, in size, without moving price very much. Efficiency implied liquidity.

No more.

Today we understand that the source of liquidity is the presence of dealers (or their equivalent) who offer trading options in the form of bid and ask prices at which they are willing to buy and sell. The current bible for this point of view is Larry Harris' Trading and Exchanges: Market Microstructure for Practitioners, but for the deeper economics at stake there is still no substitute for John Hicks' last book A Market Theory of Money. Taken together, these two books are the best way to explore the fourth tenet of the money view: the importance of dealers for knitting together the different hierarchical layers of money and credit into a unified whole.

This way of thinking tells us that it is essentially impossible to separate market-making from speculation (sorry, Paul). The source of liquidity is the willingness of the dealer to use his own balance sheet to absorb imbalances between supply and demand. That means inventories, and inventories mean risk, both price risk and funding risk, hence speculation.

This way of thinking also tells us that regulatory attempts to prevent banks from taking on these risks, by imposing capital charges or liquidity ratios, will cause market-making to migrate elsewhere in the system, where it is more profitable.

And it says that the problem with HFT is not so much the speed, but rather the question whether the traders are offering trading options, or accepting the offers made by others. The former supplies liquidity, while the latter absorbs it.

Finally, most important, this way of thinking helps us to understand the liquidity dimension of the sovereign debt crisis. In recent days, there has been a push to use the EFSF for bond insurance (see here, and here). The idea is to absorb the first loss, say 20%, but nothing beyond that, and certainly not tail risk.

But this is exactly the opposite of what is needed.

The microstructure literature tells us that the ultimate source of liquidity is the value trader who is willing to buy or sell when the price deviates far enough from value. It is the value trader who creates the "outside spread" that ultimately backstops the ability and willingness of the dealer to quote a much tighter "inside spread".

In Europe right now, the concern is that private value traders will quote only very wide outside spreads, so that if you need to sell you have to accept a very low price. Fischer Black famously estimated that, even in normal times, the outside spread only keeps price within a factor of two of value. And today the times are not normal.

If the wide outside spread is the problem, then the solution is yourself to quote your own outside spread, inside that of the private value traders. That is what the EFSF could do.

Of course, if the public bid is higher than the private bid, then all sales will be to the EFSF, and it will build up its own inventories, which carry with them price risk and funding risk. That prospect is apparently what is holding everyone up.

But the public value trader is different from the private value trader.

To the extent that price risk for sovereign bonds is really political in origin, the public is the source of that risk and so can internalize it better than the private value trader can. In this way, the solution to the liquidity problem points the way to the solution to the solvency problem.

Furthermore, funding risk is much less of a concern for a public entity whose liabilities would presumably be eligible collateral for discount at the central bank. If expansion of the balance sheet of the EFSF is acceptable QE, then by all means let us do it that way.

I see daylight ahead.

- The Money View

Posted by Perry G. Mehrling at 7:25 pm

Margin Call--"Mama there's wolves in the house"

by Perry G. Mehrling on October 24, 2011 2 comments

Jack Bauer comes to Wall Street, in the person of Sam Rogers, played by Kevin Spacey. The thriller frame is achieved by compressing the slow motion train wreck of 2008 into only 24 hours. (The time acceleration of the opening Manhattan shot foreshadows this compression, even as it pays homage to the opening shot of Inside Job.) See reviews here and here.

"It's the same thing, over and over. We can't control it...just react and make a lot of money." So says the Jeremy Irons character CEO "Tuld", in the closing stanza of a speech in which he lists the dates of every significant financial crisis of the last two centuries. Financial instability is the generic model in this movie.

"They want what we have to give them", says Will Emerson (Paul Bettany), the "they" in question being a reference to what everyone now knows as the 1%, the OWS label that post-dates the movie. We make them rich, says Emerson, without having to get their own hands dirty. Stunning economic inequality is thus a further subtext of this movie. (Twenty-three year old trader Seth Bregman, who earned $250,000 last year, is astonished by the $2.5 million pulled down by Emerson, which of course pales in comparison to Tuld.)

The ticking time bomb in this thriller is the various components of mortgage backed securities, which are sitting on the balance sheet of the unnamed firm for only a month until the package can be put together and sold off. Eric Dale (Stanley Tucci) hears the ticking, and is on the track, but gets laid off in the opening scene, although not before he manages to pass on a flash drive to 28-year old uber quant Peter Sullivan (Zachary Quinto)--"Be careful"--and the game is afoot.

Working late, Sullivan discovers that the firm has already breached its risk limits multiple times in the past two weeks, and that things are getting worse. That is where Sam Rogers, his new boss, enters the picture, called back into the office at 11:30 pm. From there, over the next hours, the problem gets kicked up to wunderkind Jared Cohen (Simon Baker), and thence to CEO Tuld who arrives in his own chopper.

Tuld, more concerned about himself than the firm, makes the decision to liquidate immediately. "There are three ways to succeed: be first, be smartest, or cheat", and his way is to be first. If that means stuffing hapless counterparties, so be it. And if it also means precipitating financial crisis, so be that as well, since after the crisis there will be wonderful bargains. And so the order goes out.

Sam Rogers' job is to execute, which means persuading his army of traders at a pep talk before trading opens the next morning. We suspect he will do it since we hear him giving a similar pep talk after the opening scene--"Now they are gone. They are not to be thought of again."--but there is sufficient doubt to sustain dramatic tension for a while. When the moment comes, the persuasion is fundamentally monetary, $1.3 million for individual performance, and an additional $1.4 million for group performance.

It may or may not be the right thing for the firm, but it is definitely the right thing for Tuld, and money is enough to get everyone else to go along. These payoffs are presumably the margin calls to which the film's title refers.

Everyone in this film has his price, including the just-fired Eric Dale. He gives a nice speech about the bridge he once built, 22 years ago when he was an engineer, which has since then saved a cumulative 1531 years by providing a more efficient way of getting from town A to town B. But even he is willing to take $176K an hour to sit on his hands in the office of his former employer while the dastardly deed is being done.

Sam Rogers executes, so he rationalizes, because he needs the money. Although he is aware that his actions will cause the market to tank, he gives no warning to his own son, saving his empathy for his dying chocolate Labrador. The movie ends with him digging a grave for the dead dog in the lawn of his former home, now the home of his ex-wife. As the credits roll, the sounds of shovel on soil carry us out of the theater.

Most reviewers are reading this film as a fictionalized version of the Lehman story. But the unnamed firm survives, whereas Lehman did not. The film calls for a deeper reading, that looks through the cinematic acceleration of time. Up on the roof, in the middle of the night, Will Emerson opines that fear of heights is not so much fear of falling as it is fear of giving in to the temptation to jump. And jump is of course exactly what the fictional Tuld does. He jumps first so as to survive, at the expense of others who hesitate and are lost.

- The Money View

Posted by Perry G. Mehrling at 12:32 am

NGDP target, in practice

by Daniel H. Neilson on October 25, 2011 13 comments

By Daniel H. Neilson

Last week Goldman Sachs published a note in favor of the Fed's adopting a formal nominal GDP target, while Fed-watchers caught a whiff of a possible change in policy in the works. The proposal, specifically, is for the Fed to announce a target level for nominal GDP over the next 12 months, and to commit to undertaking asset purchases if it seemed that NGDP would come in too low. Scott Sumner, who has long advocated such a policy, felt vindicated, and other market monetarists also voiced their support. Even Paul Krugman seemed to think it might do some good.

Nominal GDP targeting is unlikely to work. I am sympathetic to the arguments given by Duncan Black, Robert Waldmann, and Brad DeLong, but to add something to the debate, my emphasis here will be different.

How do proponents defend the idea? First, asset purchases will raise nominal income. Spending on newly produced goods and services is currently too low because people prefer to hoard money rather than to spend it. The Fed's buying up assets with a sufficient amount of new money, they argue, will eventually satisfy this desire to hoard, after which any new money will be spent instead. Second, setting an explicit nominal target will amplify the effect of the asset purchases. Knowing that the Fed will be pulling out all the stops to reach the target level of NGDP, businesses will invest or raise prices today in anticipation of higher demand over the next 12 months, which will itself increase nominal spending toward the target.

It would work, that is, because the Fed could reach the target with sufficient asset purchases, and if the target is credible, those purchases will not have to be too large.

I disagree, in the first instance because the proposal ignores the context in which the Fed operates. The Fed is a banker's bank. When the Fed buys assets from "the public", only a very specific part of the public is meant—commercial banks and securities dealers. These may be able to find lots of things to do with the money thus obtained other than spending it on newly produced goods and services. If more asset purchases are coming, then the smart and easy thing to do is to obtain assets that the Fed is soon going to have to buy.

Just keep buying assets, say the defenders. Seriously massive amounts of quantitative easing may be necessary. Eventually the desire to hoard will be sated and spending will begin. But the banks are already holding a record $1.6T in reserves; why not another trillion? And they have on hand plenty of other assets to sell to the Fed before having to go looking for new ones. How large could the Fed actually get, before political constraints start to bind? At over $2T expansion since the beginning of the financial crisis, real threats to the Fed's independence have surfaced. What if another $2T, or $10T, proved necessary? Would the Fed's independence remain secure? I do not think it would.

My third objection is perhaps the most fundamental. Deleveraging by households and businesses continues:

[PICTURE]
That makes this a balance-sheet recession, to Richard Koo and many others, and it seems to me to be a good description of what's going on. Demand will remain depressed until debt is paid down or written off. But households have nothing that can be sold to the Fed, so asset purchases help them at best indirectly.

It is quite right to have this debate; our situation is dire enough that nothing should be off the table. But NGDP targeting is not a panacea; to think otherwise is to ignore the environment in which the Fed must operate.

- The Money View

Posted by Daniel H. Neilson at 10:37 pm

Euro Summit Statement Explained

by Perry G. Mehrling on October 27, 2011

Okay, so here is the statement, but what does it mean? Felix Salmon offers an unnamed advisor's flowchart. Let's see if Money View thinking can do better.

Words are of limited help here (unless perhaps you are a Munchau!). What is important is to understand the balance sheet relationships, and that takes a video.

[VIDEO LINK]

The upshot of this video is to appreciate how the EFSF is supposed to support the market for peripheral debt, in much the same way that the national banking systems of the affected countries were themselves doing, until their own credit came into question. That way of thinking about the problem points to the credit of Germany and France as the key to making the thing work which, as other commentators have pointed out, is a problem.

Behind the scenes however, and unmentioned in the Statement, is the ECB, prepared presumably to provide whatever short term liquidity is necessary to put this structure, or some suitably revised version of it, into place. It is not the credit of Germany or France as fiscal entities that matters, rather the credit of the ECB as a bank.

So here is the key question: fund or bank?

The entire Summit Statement reads like an attempt to create an intra-European version of the IMF, with fixed quotas (the initial 440 Euros). It is going to be able to issue its own version of SDRs through the special purpose vehicle, but the amount will be limited. All the language is fund language, not bank language.

If investors look through the structure and find Germany and France at the anchor point, that is one thing. All of the fancy apparatus creates lots of employment for analysts to figure out how to value the resulting complicated paper. And very likely it won't work.

On the other hand, if investors look through the structure and find the ECB at the anchor point, or even a consortium of central banks working in concert with the ECB, that is another thing entirely. Watch this space for further developments.

- The Money View

Posted by Perry G. Mehrling at 3:06 pm

Economics in Uncertain Times

by Perry G. Mehrling on November 02, 2011 2 comments

My first TV chat show performance:

[VIDEO LINK]

- The Money View

Posted by Perry G. Mehrling at 3:00 pm

Liquidity, Public and Private

by Perry G. Mehrling on November 15, 2011 2 comments

A week ago, Mark Carney, chairman of the Financial Stability Board, warned of emerging global consequences of the escalating eurozone crisis. The problem, he said, is contraction of global liquidity.

What he is worried about, apparently, is disruption of the global funding system as continental European banks retrench. In normal times, these global banks serve as funding intermediaries, gathering short term funds from all ends of the earth at one price, and lending them on to other ends of the earth at a slightly higher price. Trouble for these banks means trouble for global credit markets.

[VIDEO LINK]

The underlying problem, as everybody knows, is sovereign debt. Once considered riskfree, and accepted at par by the ECB as collateral, today sovereign debt is anything but. Timid purchases by the ECB have perhaps stemmed disorderly rout, but orderly rout is still rout.

Some private investors, notably MF Global, saw opportunity and stepped in to fill the gap left by public authorities. We know how that worked out. Funding sovereign bond holdings with "repo to maturity" left MF Global exposed to liquidity risk; liquidity kills you quick. Having seen the fate of MF Global, other private investors are understandably loathe to step in. Contraction of global liquidity is the consequence.

All eyes then are on the public authorities. In a characteristically incisive column, Wolfgang Munchau puts his finger right on the problem. "As of last week, the eurozone no longer had a functioning sovereign bond market...As of now, there is only one significant risk-free asset in the eurozone--German government bonds." The supply of risk-free assets has thus shrunk even as the demand for risk-free assets has expanded. It is not a matter of price--there are simply not enough risk-free assets to go around.

Munchau pushes (again) for launching a Eurobond as the long-term solution but also, recognizing that such a launch will take time, for endowing the EFSF with a banking licence as the short-term solution. The former, he says, is a prerequisite for the latter because it offers a credible exit strategy from the short term monetary expansion using the balance sheet of the EFSF.

Be that as it may, his idea is essentially to use the EFSF to do what the ECB seems unwilling or unable to do--act as dealer of last resort by announcing "unlimited purchases of national soveeign bonds to keep their spreads under an agreed cap--say 2 per cent for 10 year bonds". The ECB would backstop the EFSF, but the monetary expansion would be at the EFSF not the ECB. (See also here.)

The world is watching, but more specifically the world's central banks are watching. For lack of decisive action by the ECB, we have seen balance sheet expansion first at the Swiss National Bank, then at the Bank of Japan, and now perhaps the Bank of England. "Forget the G7, Watch the C5" has been my slogan for a while, and last week's G20 fizzle confirms.

- The Money View

Posted by Perry G. Mehrling at 7:43 am

Financial (De)Globalization and the European Experiment

by Perry G. Mehrling on November 23, 2011 2 comments

Europe is embarked on a grand experiment, managing modern financial crisis without a dealer of last resort, so refusing to follow the lead of the 2008 Fed. The scientist in me thrills at this opportunity to gather new data from unexplored territory; the citizen in me quails at the brinksmanship, what Martin Wolf has called "just in time, just enough".

The global markets don't much like European sovereign debt--even German debt!--and they don't much like banks that hold a lot of European sovereign debt. Forget solvency, liquidity will kill you first, solvency or no. That is why the world iscutting its exposure to Europe, big time, and who can blame them.

It is true, as many commentators have pointed out, that Europe is in rough trade balance with the rest of the world; it has no deficit that requires funding. Small comfort. The current problem is all about gross flows, not net flows. In short, the world cannot cut its exposure to Europe unless Europe increases its own exposure to Europe.

But Europe too wants to cut its exposure to Europe.

Cut off from global funding markets, European banks are selling what they can sell (non-European credits), pulling back from lending commitments outside Europe (especially Eastern Europe), and tapping their lender of last resort, the ECB, tofill the funding hole that remains. In effect, they are retreating to the core, focusing on their current European exposure. They are in no mood to take on the exposure that the rest of the world wants to shed.

The European banking system is one big MF Global, but unlike MF Global it can replace its market repo with central bank repo, and it is well on the way to doing so.

The ECB can hardly refuse, if only because it is the banker for the individual national central banks, and because these individual national central banks can hardly refuse to accept the debt of their own sovereign as discount collateral. (See herefor details.) On the other side of the balance sheet, German banks and the German national central bank can refuse to lend to other European banks and even to other European central banks, but they can hardly refuse to lend to the ECB. So the ECB balance sheet is expanding, on both sides, notwithstanding the reluctance of the ECB.

In this way, Europe is retreating to the core, focusing on funding its current European exposure that the rest of the world is no longer willing to fund in global money markets.

But it is not enough, and it is not in time. Because the underlying problem is not funding liquidity but market liquidity. Not only does the rest of the world not want to fund the European banks, given their exposures, but also it doesn't want to hold European sovereign debt. Who will take it off their hands, and at what price?

Suppose the ECB holds fast in its refusal to backstop European sovereign debt, notwithstanding the rising chorus pressuring it to do so. So far as I can see, such a road requires the European banks to embrace the MF Global model ever more firmly, taking onto their own balance sheets all the European exposure that the rest of the world is trying to shed, and funding it (in the last resort at any rate) at the ECB.

That seems to be where we are going, for better or for worse. Make no mistake, we're talking about financial deglobalization, as Europe gives up ROW exposure to take back Euro exposure, and the ROW does the opposite. That's where we are going. The question is, is that where we want to be going?

- The Money View

Posted by Perry G. Mehrling at 9:03 pm

What a liquidity crisis looks like

by Daniel H. Neilson on November 29, 2011 5 comments

Bloomberg's reporters continue their diligent work looking back on the Fed's lending in the subprime crisis. Matt Yglesias, Yves Smith, Paul Krugman, and others have picked up the story. Meanwhile, the world looks ahead to the next development in the eurozone crisis. To read these crises correctly, liquidity should be front and center. It is missing in Bloomberg's work, and it is missing in European policymaking.

A bank, or any firm, or indeed any economic entity, must constantly evade the survival constraint (a term from Minsky). When it can't pay its bills, its creditors can resort to the legal system and shut it down. This is the moment of illiquidity—the inability to come up with the cash to meet obligations.

The payment system has facilities for ensuring that the failure of payment by one party does not lead to the failure of payments by other parties. The private money market allows firms to postpone this day of reckoning, at a price. The central bank, at the center of the payment system (in the US as in Europe), ensures the availability of bank reserves so that one day's postponement can be obtained at its target price. In an everyday, non-systemic liquidity crisis, a single payment fails, and the system flexes just enough so that this failure does not spread. Little crises like this happen all the time, and usually the system contains them.

A liquidity crisis becomes systemic when many payments fail, enough that large parts of the system are squeezed up against the survival constraint. Mortgage defaults come in higher than expected, so payments to holders of mortgage-backed securities come in lower than expected, so guarantor banks have to come up with cash quickly.

In both cases, solvency is a concern at some level. But what finally gets the lights shut off is that the electric bill doesn't get paid—illiquidity, that is, whether or not the household, or bank, or country is solvent. Our understanding of the central bank's role as lender of last resort is that, when the risk is that a large part of the financial system will go dark, so to speak, it is better to bite the bullet, provide liquidity, and keep the lights on. This is from Bagehot, of course, but also Minsky, Kindleberger, and Hawtrey.

What is missing from Bloomberg's extensive report is an understanding of the liquidity dimension of the crisis of 2008. Bloomberg argues, for example, that banks earned $13B of profit on these loans, a figure based on net interest margin, the difference between the interest earned on a bank's assets and the interest paid on its liabilities, a claim that has been uncritically accepted by many in the blogosphere.

The figure assumes that the funds were just routine deposits, that were turned around and lent out to routine borrowers. But this view makes the entire crisis look like one of solvency, when it was evidently one of liquidity—Bear and Lehman were gone, AIG was on life support, and no one would extend credit beyond overnight for fear that the money would not come back. What if the Fed's lending had not been there? Deleveraging would have been the likely result—asset sales into a falling market to raise cash. Below-market interest rates may not have been too high a price to pay to induce banks not to contract their balance sheets at the height of a crash.

As I have argued before, the Fed made far graver failures than can be seen in Bloomberg's documents. The Fed failed to adapt to a changing financial system, it failed to protect the payment system from excessive risk-taking, and it failed to react quickly enough as the crisis erupted. The liquidity shortage was of a different kind than the Fed was prepared to meet.

Today in Europe, policymakers dwell on austerity measures and the idea of a fiscal union, assuming that if these solvency concerns are resolved, the liquidity problems will solve themselves. But illiquidity is what will take down major European financial institutions first, solvent or not. Before too much longer, let us fully absorb the liquidity lessons of the last crisis.

- The Money View

Posted by Daniel H. Neilson at 3:44 pm

First the ECB, then the IMF

by Perry G. Mehrling on December 06, 2011 7 comments

The fact of the matter is that European bank funding markets are collapsing onto the ECB balance sheet. Forget about the €200 billion of outright peripheral bond purchases--small potatoes. National central bank exposures, through the TARGET clearing system, now exceed €400 billion, and private bank exposures, through discount lending and deposit facilities, are the same order of magnitude.

[VIDEO LINK]

Apparently everybody, borrowers and lenders, public and private, wants the ECB as their counterparty. Reluctant though the ECB may be to step into that role, and vocal as the ECB has been about that reluctance, what we are seeing in practice is that it has no choice, literally.

Clearing imbalances within the Eurozone that cannot be resolved in the interbank market show up mechanically as imbalances between national central banks on the books of the ECB (see here for details). The ECB lends to the central bank of the deficit country and borrows from the central bank of the surplus country, so expanding its own balance sheet on both sides. (Think Greece on the asset side, and Germany on the liability side.)

Something quite similar happens when private banks settle private clearing imbalances not by shifting reserves from deficit to surplus but rather by the deficit bank borrowing from the ECB and the surplus bank lending. Again, the ECB balance sheet expands on both sides.

Why is this happening?

The underlying problem is that deficit central banks and deficit private banks increasingly have nothing to sell (or to pledge) that surplus central banks and surplus private banks want to buy (or accept as collateral for a loan). The ECB is also reluctant to buy--it is serving as pawnbroker of last resort, not dealer of last resort.

The consequence is that the ECB is more or less forced to lend, against more or less whatever collateral is offered; even bad collateral is better than no collateral. (The famous Bagehot Principle offers an out, since it urges valuation of collateral at non-stress prices.)

Now comes the latest deal over eurozone fiscal rules, presumably the deal that ECB President Draghi asked for last week. It is a deal about sovereign budget discipline. But if I read Draghi's speech right, we should not expect him to be buying sovereign debt. (That will be the IMF's job, if anyone's, and with strict conditionality; details to be sorted later.)

Instead, he'll be buying bank debt, specifically the debt of the banks that hold the sovereign debt. Banks currently borrowing from their own national central banks will therefore be able to repay, and consequently the national central banks will be able to repay the ECB. This takes national central banks out of the picture on the asset side.

What about the liability side? Here, perhaps in a longer time frame, I think the logical move is again to take the national central bank out of the equation, by replacing liabilities to the Bundesbank with deposits to the credit of private banks. Freed from the responsibility to fund ECB loans to other central banks, the Bundesbank will be able to return to its preferred asset holding, German sovereign bonds.

Bottom line, we're not going to be using the payment system to hide imbalances any more. The ECB is going to serve as a proper lender of last resort to the banking system, affirmatively and up front rather than mechanically and through the back door. But it will be doing so only to the banking system, not to sovereign debtors. It is a first

step, taken only because hiding imbalances in the payments system was beginning to cause problems in the payment system, but it is the right step and opens the door to more.

- The Money View

Posted by Perry G. Mehrling at 12:50 pm

The IMF and the Collateral Crunch

by Perry G. Mehrling on December 09, 2011 9 comments

[N.B.: This post, while intended to stand on its own, should be understood as part of a sustained analysis that we have been carrying on over a series of posts. Readers who find themselves baffled by this post may want to start with earlier posts in the thread: specifically here, and here.]

Why is the IMF getting involved in the Eurocrisis, and why is its involvement taking the form of lending to individual member states of the Eurozone? One reason, which is the focus of most commentary, is the IMF's long-honed reputation for "conditionality" as a condition for lending. The ECB is simply not in a position to insist on conditionality, so if you think conditionality is needed, then you think you need the IMF.

But there is a second reason also, which has been neglected in most commentary, and that has to do with solving the collateral crunch currently underway in the Eurozone. The breakdown of unsecured interbank markets has meant that whatever interbank lending is still taking place involves a transfer of collateral. But this is only one source of the demand for collateral.

[VIDEO LINK]

A second source of demand for collateral is the discount lending by national central banks to their own private bank clients.

And a third source is the Eurosystem lending between national central banks, which takes place more or less automatically through the operation of the TARGET2 payments system.

That's a lot of collateral! Some of it can probably be used more than once, but each time it is used there is another haircut, and the haircuts are getting bigger all the time. Consequence, collateral crunch.

So here's where the IMF can help. If the surplus NCBs (Germany) shifted their lending to the IMF instead of the Eurosystem, they would not require collateral. And if the IMF in turn bought the sovereign debts currently held by private banks, then those banks would not need to finance their holding, and hence would not need collateral to do so.

One consequence of such a refinancing would be to shift existing TARGET2 imbalances off the balance sheet of the Eurosystem--the accumulated stock is not going away soon and so long as it sits on TARGET2 it blocks current flows. Thus the refinancing itself will restore the ability of TARGET2 to absorb temporary imbalances, and so restore normal functioning of the Eurosystem. Good thing in itself.

But a second consequence would be to free up collateral that is now frozen. A LOT of interbank lending is required to support sovereign debts on the balance sheets where they now sit, and in current circumstance ALL of that interbank lending soaks up scarce collateral that is needed, and in normal times used, for other purposes. All the collateral freed up by the IMF intervention would immediately be free to support other activities of the financial system, such as market-making in securities, and non-financial lending.

Would that end the collateral crunch? Would it also end the price distortions caused by that crunch? Would it, pray God, maybe even reverse the payment imbalances that are the source of the interbank lending stresses in the first place. Personally, I think there are other, more systematic reasons for collateral shortage--let me cite here the latest Pozsar and Singh working paper--and so expect it be a recurring problem. But the IMF trick is a start, and perhaps shows us the way.

In sum, what the system needs is someone to do some unsecured borrowing. If it isn't going to be the ECB, then maybe the IMF will do.

For both the ECB and the IMF, ECB for the banking system and IMF for the sovereigns, the borrowing should probably be thought of as unsecured borrowing of last resort (UBLF?). The EFSF, and now ESM, seem intended to serve as first resort, but their success depends crucially on the backstop provided by ECB and IMF.

- The Money View

Posted by Perry G. Mehrling at 11:31 am

Is there an ECB?

by Daniel H. Neilson on December 09, 2011 9 comments

The ECB has always been the protagonist of the eurozone crisis story. At times it has seemed the arch-villain, coldly standing on principle even as the financial system crumbles around it. At other times it has seemed the hero in waiting, ready to step in at the eleventh hour to bring a moral-hazard-free end to the turmoil with its unlimited balance sheet.

What is becoming increasingly clear, however, is that the plot is taking a twist. The question is no longer whether the ECB is villain or hero, but whether it exists at all. (And today's collateral eligibility expansion doesn't resolve the question.) Let me explain.

The meaning of European monetary union is that a euro is a euro, whether you are in Greece or in Germany. If you have a euro on deposit in a Greek bank, you can use it to make payment in Germany, or anywhere in the eurozone. What's essential is the payment system, which guarantees this, and it is the normal operation of the payment system that the guarantor of monetary union must ensure.

All payment systems are based on credit. As a first resort, banks can extend credit to one another to clear payments between their customers, credit which will net out as payments flow the other way in the near future. If two banks do not wish to extend credit to each other, a third party can stand between them, extending credit to both parties. The central bank commits to doing just this to uphold monetary union: if a balance sheet must expand to complete a payment, and no one else will do it, then the central bank must. If it does not, then a euro in Greece is not a euro in Germany, and monetary union will have come to an end.

The Eurosystem, the eurozone's central banks taken as a group, sit at the center of the eurozone payment system, TARGET2. As European banks have become unwilling to extend credit to one another privately, persistent payment imbalances have accumulated as TARGET2 liabilities.

Specifically, Germany's Bundesbank has accumulated a nearly €500B TARGET2 asset on its balance sheet, and to sterilize this impact, it has sold nearly its entire stock of private-sector debt. This is shown in balance sheets here: a Greek bank pays a German bank through TARGET2, and the Bundesbank then sterilizes.

[PICTURE: Payment from a Greek bank to a German bank results in a TARGET2 liability. Below the dotted line, the Bundesbank sterilizes this transaction.]

Yet the payment imbalances continue, and for payments to continue to clear, the Bundesbank will have to continue to extend credit to TARGET2. It can no longer do so without expanding its balance sheet, which in practice means accepting deposits from the private sector to fund expanded TARGET2 lending. Yet such an expansion may prove politically difficult for the Bundesbank, so it may wish to avoid it.

So now the question: is there an ECB? If the eurozone is a functioning monetary union, then its payment system will be upheld. Someone's balance sheet must expand, almost certainly the Bundesbank's. If it does not, then one of two things must follow.

If the Eurosystem national central banks are prepared to accept unlimited imbalances among themselves, then there is an ECB. If not, then there are a bunch of national central banks facing a classic balance-of-payments crisis, and they will need a supply of international money to resolve it. More to come.

- The Money View

Posted by Daniel H. Neilson at 12:29 am

John Whittaker: Eurosystem balances explained

by Perry G. Mehrling on December 12, 2011 2 comments

[*The following guest post is by John Whittaker, from whom we have learned much of what we know about how the European payments system works. See his terrific papers here and here, both of which reward close study. He has been looking over the last couple Money View posts, and the comments to those posts, and has this to say.*]

I'm having some trouble dealing with who said what and where, but let me just try to deal with a couple of points.

1. The SMP (outright) purchases of peripheral government debt 'by the ECB' reside on the balance sheets of the NCBs. This may be verified by looking, for instance, at the notes to asset line 7.1 in the accounts in the Bundesbank 2010 annual report. The aggregated figure for SMP across all NCBs is included in the consolidated financial statements of the eurosystem "Other claims on euro area credit institutions in euro".

2. The confusion about whether the TARGET2 debts of the peripherals are to the ECB or the NCBs is largely irrelevant. According to the ESCB statute, the debts are to the ECB (and so are the claims of those in TARGET2 credit). But what matters is who bears losses in default; legally, this would be all NCBs in proportion to their capital keys but, practically, it would be those NCBs that can afford to. And for NCBs, you can read governments, since they are the owners of NCBs. So I don't share the concern expressed by some writers about the ECBs or the NCBs running out of capital: all losses ultimately accrue to governments: any NCB that is deemed insolvent (according to the accounting system being used) will be recapitalised by its government.

3. Tornell and Westerman (and others) argue that the Bundesbank's TARGET2 lending is limited by the zero bound on its lending to its banks (refinancing). This is not correct. If Bundesbank refinancing falls to zero but its banks continue to receive transfers from other eurozone banks, then the German banks acquire claims on the Bundesbank or 'excess reserves'. They would be in the same position as British or US banks are as a result of quantitative easing. Granted, they might not like the low (currently 0.25%) interest rate at the 'deposit facility', but there are other avenues by which the Bundesbank could provide them with a higher reward. The bottom line is that there is no limit to TARGET2 balances (unless the ECB decides to cut eurosystem credit to, say, Greece, which would result in Greece being chucked out of the euro - a point I deal with in my later paper).

- The Money View

Posted by Perry G. Mehrling at 8:00 am

Fixed exchange rates

by Daniel H. Neilson on December 23, 2011

By Daniel H. Neilson

As we prepare to digest the implications of this week's ECB move, it seems worthwhile to take a look at the monetary economics of fixed exchange rates.

There are two basic ways to hold fixed the exchange rate between the money of two communities: peg the exchange rate or create a monetary union.

With an exchange-rate peg, typically one central bank targets the price of some reserve money against its own liabilities. To fix ideas, focus on a surplus central bank resisting appreciation. Any net inflows purchases of domestic money for reserve money would lead FX dealers to bid up the exchange rate, so to hold the peg the central bank must meet the demand for domestic money on its own balance sheet, by buying the reserve money coming in and issuing new domestic money. On the central bank's balance sheet, shown also with the deficit-area central bank and the issuer of reserve money, the transaction looks like this:

[PICTURE]

What about a monetary union? At first blush it seems completely different. The real essence of a monetary union is to ensure that money is money, anywhere within the union. A dollar deposited in San Francisco extinguishes a dollar of debt in New York. A euro deposited in Athens extinguishes a dollar of debt in Berlin, at least for now.

This is guaranteed by the payment system. If far-flung banks cannot settle a payment bilaterally, they can go through a series of trusted intermediaries, the district FRBs in the US or the national central banks in the eurozone. To complete payments, these central bank branches maintain clearing liabilities among themselves. A payment through such a system is shown here in balance sheets:

[PICTURE]

The first point is that the balance sheets for a monetary union have a structure identical to those for an exchange-rate peg. The important part is that in both cases, the liabilities of a trusted intermediary provide the mechanism to clear payments across the system.

The second point is that, though the balance-sheet structures are the same, the two systems differ significantly because of what might be thought of as the reversibility of the peg. So long as domestic money has its own name, and local debts are denominated in it, the peg can be exited unilaterally. But in a monetary union, domestic money loses its identity, and exit may become much more complicated.

- The Money View

Posted by Daniel H. Neilson at 11:50 pm

Heterodoxy and The Economist

by Perry G. Mehrling on January 03, 2012 8 comments

When I started this blog, almost exactly one year ago today, my thought was to provide commentary on the financial events of the day, using the Financial Times as my primary source of information about those events. I felt, as Mr Skinner writes in his letter today, that the public does not know much about banking. He recommends starting from the text "Where Does Money Come From?", which seems to me fine advice. But the hard thing, as always, is applying such textbook knowledge to the real world events of the day; that's what I was determined to do in the blog.

I started from a distinct point of view, what I call the "money view", that I had distilled from my reading of past economic thinkers--especially Minsky, Copeland, Hawtrey, and (late) Hicks. But I was also keenly aware that their thinking was for their own times, and that new thinking would be needed for the new world of today. (Modern finance was the most obvious lacuna.) The challenge I posed myself was to attempt such new thinking, in real time and in public, using the blog.

The money view is certainly not a majority perspective, and never has been, at least among academics. (Practitioners, especially central bank practitioners, are another story; think Goodhart and Borio, for example.) But neither is the money view necessarily heterodox, at least as heterodoxy is catalogued by the Economist: neo-chartalist, market monetarist, and Austrian.

All banking is a swap of IOUs, so the neo-chartalists are correct to remind us that all the Fed can do is swap assets. (The Fed is, after all, a bank.) It does not follow, however, that such swaps have no real effects. When a bank swaps its IOU with me, the bank gets an illiquid asset and I get purchasing power that I didn't have before. The same goes for the Fed, when it swaps its own IOUs with banks.

Base money--a liability of the Fed--is better money than bank money (M1) or shadow bank money, so the market monetarists are certainly correct to remind us that Fed swaps have real effects. It does not follow, however, that sufficient swapping can stabilize nominal GDP. The quantity equation is an identity, and neither velocity nor the money multiplier is necessarily a constant (nor even a stable function).

In a capital-using economy, illiquidity is a fact of life, so the Austrians are correct to remind us of the limits of central bank legerdemain. It does not follow, however, that there is nothing to fear from private bank legerdemain. What Hawtrey called the inherent instability of credit (and Minsky formulated as the Financial Instability Hypothesis) can certainly be exacerbated by unwise central bank policy, but central banks are also bankers' banks, not just instruments of state power. The real institutional alternative to the Fed is not some idealized world of free banking but rather private central banking, i.e. J.P. Morgan.

Notwithstanding these critical comments, it is important to emphasize that each of these heterodox schools exist, and persist, because it is organized around some essentially correct insight about how the banking system works. Further, the reason the Economist is writing about them is not the internet, but rather the ongoing financial crisis. The internet is just a technology that makes these insights more easily available. The public does not know much about banking, but not until the crisis did the public realize that their ignorance was potentially life-threatening.

The problem is that, so far as I can see, each of the heterodox schools has part of the truth, not the whole thing. The same could be said about the orthodoxy against which the heterodox schools define themselves (and of course also about the money view itself). We don't therefore want to choose which school to belong to; rather we want to determine which of these correct insights provides the most useful explanatory frame for whatever issue is currently at hand. Today it might be one; tomorrow it might be another. That is what the debate is about, or should be anyway.

Thinking in real time and in public about the financial events of the day has absorbed a lot more of the past year than I thought it would. Looking back, I find that it was worth it. I know more today than I did a year ago; that's what matters.

- The Money View

Posted by Perry G. Mehrling at 4:27 pm

Nobody understands money

by Daniel H. Neilson on January 05, 2012 3 comments

A correspondent sends us to a column of Paul Krugman's that asserts that "nobody understands debt". Fair enough. To my mind, this line stands out:

And because foreigners tend to put their U.S. investments into safe, low-yield assets, America actually earns more from its assets abroad than it pays to foreign investors.

The US sells low-yielding liabilities and buys higher-yielding foreign assets, and profits on the spread. This is exactly what a bank does. The US as bank of the world is an idea I've taken up before. For me the idea comes from Kindleberger, Despres, and Salant, though they may have gotten it from somewhere else.

From the flow of funds accounts, we can construct a balance sheet for the US. (Debt owed by US entities to other US entities, including the government, nets out.) First US liabilities:

[PICTURE]

About one third each deposits plus government securities, corporate securities, and everything else. On the asset side:

[PICTURE]

Some two thirds goes to outbound FDI and foreign equities.

What's going on here? In decreasing order of liquidity, the US funds itself (to the tune of about $12T) with deposits, government securities, corporate debt, and corporate equities. In increasing order of liquidity, the US acquires foreign equities and FDI, with something left over for foreign bonds and deposits.

The US, in short, is a bank, intermediating between the rest of the world's savers, who want liquid US liabilities, and the rest of the world's borrowers, who wish to fund illiquid investments. The US is selling liquidity, and the price of that liquidity is net foreign investment income. Foreign savers forgo higher returns so as to be able to hold liquid claims on the US.

Krugman looks at US external debt and finds it benign: what we owe abroad costs us less than we earn on what we own abroad. But the big risk that banks face is illiquidity—the sudden inability to raise funds. If the US is a bank, could it fall victim to a bank run?

In a Jimmy Stewart bank run, depositors want to stop lending to the bank and be paid in a better form of money—cash, say. The bank fails because its assets are illiquid, and can't be readily turned into cash.

A run on the US is hard to imagine. What better money would creditors be seeking out? Euros? Renminbi? For now, the world wants liquidity and there is no better source than the US.

- The Money View

Posted by Daniel H. Neilson at 11:43 pm

Does the Current Account Still Matter?

by Perry G. Mehrling on January 13, 2012 4 comments

The title is the same as that of Maury Obstfeld's Ely Lecture, delivered Jan 6 at the AEA meetings in Chicago. Yours truly was at the meetings mainly to deliver a paper on "Three Principles for Market-Based Credit Regulation", about which more in a later post. And for most of the rest of the time I was locked in a hotel room interviewing candidates for an assistant professor slot at Barnard College (which gave me a good overview of the current state of macroeconomics, again fodder for a later post).

But I did manage to get to the Ely Lecture, and boy am I glad that I did. The text for the lecture is not on-line yet, so I am writing from memory and some sketchy notes, caveat emptor. [**UPDATE**: Obstfeld sent me a copy of a Dec 2011 lecture which is along the same lines as his Ely lecture, and more emphatic about the importance of gross positions.]

The empirical context of the lecture was financial globalization. The question was whether financial flows are now so efficient that the current account between countries is of no more importance than the current account between states within a country (which we don't even measure). Obstfeld's answer, "No", implies that the current account still matters.

But why does it matter?

Obstfeld makes a big point that the current account represents an intertemporal trade, where the deficit country obtains current tradeable goods in trade for future tradeable goods. Borrowing from the future in this way may be perfectly fine, but it may also be an "important indicator of potential macro and financial stresses". The stress he has in mind comes from the fact that, at some future point, the deficit country is going to have to come up with the promised tradeable goods, which means running a current account surplus.

So far so orthodox, you say, and I agree. What made the lecture worthy of notice is the very large amount of attention paid, in the pages between the setup and the payoff, to the gross flows, of both goods and financial assets, that lie behind the net flow measured in the current account. Obstfeld seems to be moving in the direction of the Money View, but not yet all the way.

Just so, consider his distinction between "intratemporal" and "intertemporal" trade. He emphasizes that most of the gross trade of goods is intratemporal, which is to say the outflow of one kind of current good and the inflow of another kind of current good. Only the net flow is intertemporal, the inflow of current goods against the promise of future outflow, and that is the potential indicator of stress.

Shifting attention to the capital account, he makes the same distinction between gross financial flows ("intratemporal") and net financial flows ("intertemporal"). Again, the net flow is the main potential indicator of stress, but now maybe not the only one. A good part of the talk was concerned with the cumulative gross flow and the possibility that valuation changes in net asset balances could be a source of fragility.

Such valuation changes are, Obstfeld emphasized, quite large, often swamping the net flow. Indeed one of the reasons that the U.S. has been able to continue running large current account deficits is that valuation changes have been large and in the opposite direction. In effect the US has been borrowing without incurring debt--nice work if you can get it! The worry is apparently that valuation changes might possibly move in the same direction as the net flow, but empirically valuation changes seem mostly to be transitory. Conclusion, valuation changes of gross positions can pose temporary problems, and also temporary solutions (as in the US), but in the long run the action is in net flows.

Good stuff, but here is my money view quibble, maybe more than a quibble.

First, intertemporal trade arises not only from net flows, but also from gross flows. The United States, viewed as a bank (following Kindleberger), borrows short and lends long. Even if net borrowing were zero (so no intertemporal exposure according to Obstfeld), this maturity mismatch creates a potential vulnerability. We are promising near-future goods to our creditors, while accepting promises for distant-future goods from our debtors. Gross flows involve intertemporal trade just as much, and maybe more (given volume) than net flows. [BTW, the same could be said about gross flows of goods, as for example when outflow of current services is matched with inflow of long-lived capital goods.]

Second, the money view would go even further. The vulnerability is perhaps not so much about intertemporal mismatch as it is about liquidity exposure. The balance sheet of a bank like the U.S. involves systematic exposure to a "survival constraint". If creditors all demand their money at the same time, the reserve outflow can become impossible to sustain--that's a bank run. The point is that creditors don't want current goods, they want money. The current reserve status of the dollar may hide this fact, but it remains behind the scenes in the gross balance sheet exposures.

At one level, neither of these points change the answer to the question of Obstfeld's title. The current account does still matter. But other things matter too, and maybe more. A current account deficit is neither a sufficient nor a necessary condition for vulnerability. In the brave new world of financial globalization, gross flows also matter, and so do gross stocks (liabilities and assets both). Indeed, in the short run where we all live, gross flows and gross stocks may well sometimes be all that matters.

- The Money View

Posted by Perry G. Mehrling at 3:00 pm

Delicate balance

by Daniel H. Neilson on January 18, 2012

The current account still matters, but other things do too, and maybe more. In light of recent focus on gross flows, here and elsewhere, I want to argue for the language of the balance of payments. This language has a quaint feel to it, and my sense is that economists view it as archaic and outmoded. I am certain, at least, that one can get through grad school with no fluency in it.

Yet it can be enormously clarifying. The current-account balance is a just a net figure computed from a few selected entries in the balance of payments, basically net exports plus net factor income from abroad. Likewise the capital-account balance, the net increase in domestic claims on foreign residents less the net increase in foreign claims on domestic residents. But *which numbers get netted out is a choice*, a choice that should be made according to the problem at hand. Making that choice wisely, I think, could cast some light on issues that remain obscure.

Take first the issue of U.S.–China bilateral flows of trade and capital. The net flows can be described easily: China runs an export surplus, and its central bank, wishing to prevent appreciation, absorbs the resulting net capital flows. This scale of this absorption is determined by targeting the USD/CNY exchange rate, though China is accumulating assets in other currencies as well.

Debate in the U.S. about this state of affairs has centered on the exchange rate, but the case can be made more clearly in the language of balance of payments. Underlying the claim that China is holding down the value of its currency is a view on what payments imbalances are sustainable. The U.S.–China trade imbalance, the argument goes, is unsustainable because it depresses demand for U.S. output and thus U.S. employment. The imbalance will have to narrow because low employment will not be tolerated forever. The capital-account imbalance is unsustainable, in this view, because accumulated capital flows will one day have to be reversed, meaning that some consumption will have to be foregone.

This version of the argument in considerably clearer. On the trade side, in my view, it is probably right that demand for U.S. output is depressed. On the capital side I am less convinced. It is a commonplace to call China the U.S.'s banker, thinking of U.S. debt as borrowing. But this has it backwards: China holds dollar assets for their liquidity (foregoing the higher yields it could earn elsewhere). *It is the U.S. that is the banker, and China the depositor.* Make no mistake, the sustainability of this situation could still be questioned. But the issue is how big a bank the U.S. wishes to be, and how much of its assets China wishes to keep in liquid form, not how the U.S. is going to pay China back. The balance-of-payments perspective makes this much clearer.

The eurozone crisis can also be naturally framed in terms of payments imbalances, in this case among member nations. Some observers have looked to intra-eurozone current-account imbalances, but in fact these do not tell us much. If you want to look at a single net figure, a better bet is to look at flows of money, whether they arise from current- or from capital-account transactions. Facilitating such flows is the essential function of the banking system, and their interruption, actual or anticipated, is the essential problem of a liquidity crisis.

Enabling money payments is the job of the private banking system, and guaranteeing that private system is the job of the public banking system, the Eurosystem in this case. Imbalances of money payments, if they cannot be resolved elsewhere, end up as accumulated imbalances in the payment system. This is the reason for our attention on this blog to TARGET2 balances. Commentators elsewhere, and private correspondents, argue that the payment system operates mechanically, and that the imbalances therefore have no economic importance. When the system is operating normally, I agree. When the system is close to the brink, it is precisely this mechanical operation that comes under question.

We should move from discussions of the current account and the capital account to discussions of gross flows, but this comes at a cost of additional complexity. The language of the balance of payments can be a guide.

- The Money View

Posted by Daniel H. Neilson at 1:13 pm

Why did the ECB LTROs help?

by Perry G. Mehrling on January 22, 2012 9 comments

From a money view perspective, the central issue is settlement of TARGET balances between national central banks within the Eurozone, and the key is to understand TARGET balances as a kind of interbank correspondent balance. What I want to suggest is that the ECB's Long Term Refinance Operation can help settle the troublesome TARGET balance overhang.

[VIDEO LINK]

From time immemorial, banks have used correspondent balances as a way of economizing on reserve holding, as well as on the cost of reserve transfers. Suppose that, over the course of a year, the payments between Bank A and Bank B net out. Then there is no need for daily transfer of scarce reserves; daily net flow can simply be added to or subtracted from the outstanding correspondent balance. Fundamentally, that is what TARGET balances between National Central Banks are all about.

Sinn and Wollmershaeuser, in their recent paper glossed by Martin Wolf here, express concern that TARGET balances are not being used as correspondent balances but rather as a political tool, to fund capital transfers within the Eurozone. And they call for Europe to adopt the U.S. rules for running a monetary union (p. 29), most importantly the U.S. practice of periodic settlement of outstanding balances.

The chart below shows how those rules have played out in the U.S., both in normal times and during crisis.

[PICTURE]

Before the financial crisis of 2007, interdistrict balances were small, and were settled annually in April by transfer of assets from deficit districts to surplus districts. During the crisis, however, interdistrict balances were much larger (almost as large as the TARGET balances), and April settlement did not eliminate the balances. Why not? According to U.S. rules, district banks need only settle the average balance over the last year, not the full amount outstanding at the moment of settlement. (You can see the April 2010 jump clearly.)

By contrast, here is Sinn and Wollmershaeuser's chart of the TARGET balances from their paper (Figure 2):

[PICTURE]

What I want to suggest now is that the ECB Long Term Refinancing Operation has the effect of providing deficit National Central Banks with assets that they can use to settle TARGET balances over time, so that the future TARGET chart for Europe can look more like the current interdistrict chart for the U.S.

To make all this clear, it will help to remind ourselves how correspondent balances work.

For concreteness, suppose that over the first half of the year the flow of net payments is from Bank A to Bank B, eventually totalling 100, while over the second half of the year the flow of net payments is the other way, also eventually totalling 100. That means that Bank A is, on average, borrowing 50 from Bank B. It follows that symmetry in the payments system, and hence minimum total credit exposure, can be achieved by Bank A transferring to Bank B an asset worth 50, accepting as payment a deposit at Bank B. (If Bank A and Bank B were not equally creditworthy, that fact could be reflected by an initial asset transfer of either more or less than 50.) That eliminates the average borrowing, and opens the door for pure correspondent banking.

At the start of the year, A has a deposit at B worth 50. Over the first few months, A settles net payments by drawing down that deposit, hitting zero at 3 months and then going into overdraft. By mid-year, A has a liability to B worth

50. But then the net flow of payments reverses, and by end-year A has a deposit of 50 again. Each Bank spends half the year in debt to the other, with maximal exposure of 50.

That's the theory but in practice, of course, no one knows in advance what the average over the next year will be. The Fed's way of handling that uncertainty is to adjust the amount of the asset transfer based on the average borrowing over the last year. Banks that have been in surplus exactly as much as they have been in deficit pay nothing at the settlement, even if they are currently in deficit. But Banks that have been in deficit on average have to settle the average deficit over the last year, which might be more and might be less than current deficit.

When a deficit bank settles, its balance sheet shrinks by the amount of the settlement--both assets and liabilities shrink, as it uses an asset to pay off a liability. When a surplus bank settles, its balance sheet stays the same--it just swaps a settlement account asset for some other acceptable financial asset.

The problem facing the Eurosystem of Central Banks is ultimately a problem of whether the deficit central banks have acceptable assets with which to settle their TARGET liabilities. My point is simply that the LTROs, or at least some of them, can serve such purpose, if not immediately then over time. And there are 489 billion Euro of LTROs, with more to come, a number quite comparable to the 450 billion Euro German balance that worries Sinn and Wollmershaeuser.

The market has responded favorably to the first round LTROs, with most commenters seeing LTRO as a kind of backdoor QE, providing a profitable carry trade for banks which buy sovereign debt with cheap ECB funds. Be that as it may, a money view perspective puts primary emphasis instead on the "survival constraint", i.e. the requirement to settle net payments at the clearing.

As the crisis unfolded, the buildup of TARGET balances between national central banks was the mechanism that allowed private banks to meet their own survival constraints. But ultimately NCBs are also banks, and as such face their own survival constraints. As the crisis proceeded, balances built up and the NCB survival constraints became more and more binding. What the LTROs do is to provide a way to settle some of those balances, so relaxing the survival constraint for a bit.

We haven't seen much actual settlement yet, although TARGET balances at the Bundesbank were down by 32 billion Euro in December. But the important thing for financial markets is of course much more the prospect of future settlement than the actual fact of current settlement. And that prospect looks a lot more rosy today than it did a month ago. Maybe the market sees what Money View sees?

- The Money View

Posted by Perry G. Mehrling at 2:57 pm

Bank or no bank?

by Daniel H. Neilson on January 30, 2012 7 comments

A money view of SDRs

In a market economy, when you need something, you go out and buy it. Liquidity is no different, in that respect at least. If it is market liquidity that you need, you go to a dealer, who stands ready to buy what you are selling. You pay for the convenience, though—the dealer is getting more for the same asset than you are. If it is funding liquidity that you need, you go to your bank, who stands ready to lend. You pay for the convenience, though—the bank is paying less for its funds than you are.

Stick with funding liquidity for a moment. A bank is well suited to provide such liquidity, since a bank's liabilities are money, and it can create them at will. If the need for funding liquidity is systemic, the bank that can provide it must be the one whose liabilities are interbank money—the central bank.

And if the need for liquidity is international? The country that issues the world's reserve money can create more of it, and that might be enough to stave off the crisis. Might some other asset do the job?

The eurozone crisis has sparked fears of a global need for liquidity. Domenico Lombardi and Sarah Puritz Milsom propose that a new allocation of special drawing rights could increase eurozone countries' ability to backstop the peripheral sovereign debt that still constrains their banks' ability to raise funds.

Do SDRs provide international liquidity? Can the IMF serve as a bank, creating more money to meet the world's need for liquidity?

The SDR is a reserve asset, in fact a reserve asset only for the top of hierarchy of money, as they can be held only by central banks. The SDR is opaquely defined as "a potential claim on the freely usable currencies of the IMF member countries". This linguistic muddle reflects the bureaucratic muddle that surrounded the SDR's creation. "Paper gold" or credit money, went the debate, and in the end the SDR is neither.

Gold—outside money—is distinguished by its aggregate stock's independence of short-term liquidity needs. Credit—inside money—is highly responsive to short-term liquidity needs arising from ordinary banking business. The SDR, for its part, is created with the consent of 85% of the votes of IMF members, so it has neither the indifference of gold nor the responsiveness of credit.

In that they are a purely financial concoction, SDRs are arguably more like credit than they are like gold. But credit money is a claim on the issuer, and SDRs are carefully described as potential claims, and not claims on the IMF, but rather claims on the "freely usable currencies of the IMF member countries".

In practice, this means that the IMF acts as a broker in the market for SDRs, matching buyers and sellers. But it does not—can not—act as a dealer by buying and selling on its own account. What happens, then, when a seller cannot be matched with a buyer? The IMF can, in theory, assign the transaction to a member central bank, who would be obligated to provide national currency for the SDRs. This is in sharp distinction to a bank, which must allow its own balance sheet to fluctuate in size in the handling of payments.

SDRs could back the extension of guarantees of eurozone sovereign debt to European banks. But the eurozone's funding needs are surely in the hundreds of billions of euros, if not into the trillions. If those guarantees were called upon, it would be euros, not SDRs, that would have to be paid to make whole the private holders of sovereign debt. The SDRs would have to be sold. The IMF would be powerless to assign them in sufficient size to generate the needed euros.

The IMF, this is to say, is no bank. Because it cannot, in practice, make liquid the market for SDRs, a new allocation would turn a funding liquidity crisis on the part of European banks into a market liquidity crisis on the part of central banks. Rather than eurozone banks being unable to borrow, the Eurosystem would have no way to sell a trillion euros' worth of SDRs. Such a crisis unlikely to come about, I hasten to add. Market participants and central bankers will look through the proposal and see that it creates no new liquidity.

- The Money View

Posted by Daniel H. Neilson at 9:32 am

Fed, ECB balance sheet update

by Daniel H. Neilson on February 24, 2012

Perry and I extend our apologies for the unplanned hiatus. By way of breaking radio silence, it seems appropriate to check in on our two favorite banks. Here's the Fed's balance sheet, asset side first:

[PICTURE]

Though the financial crisis and its many liquidity programs are receding into history, its aftershocks still reverberate, in employment and output and, no less so, on the Fed's balance sheet. QE2 dominated 2011, giving way late in the year to the re-emergence of the central bank liquidity swaps to provide liquidity support to the ECB. The graph shows what I normally consider to be the inflection points in Fed policy-making. Whether the swaps turn out to be a blip or another inflection point remains to be seen.

[PICTURE]

On the liabilities side, we see that the expansion continues to be financed by an expansion of reserves. A quick point, to be expanded upon in a future didactic post: the Fed chooses the size of this reserve position, not the banks, and it is not an indication of hoarding or refusing to lend. Lending shifts reserve deposits among banks, but leaves the overall position unchanged. (FT Alphaville has been careful about the same issue on the ECB's balance sheet.)

Meanwhile, across the Atlantic:

[PICTURE]

I sometimes find it difficult to parse the Eurosystem balance sheet, but December's LTROs are easy to spot, to the right. By all accounts these operations eased the strains around year-end, but imbalances continue to accumulate in the payments system, and it is not yet clear how they will be unwound. In that vein, this final chart I find most interesting for what it omits: the intra-Eurosystem claims that get netted out in consolidation.

[PICTURE]

These issues remain live, and we continue to follow them. More to come.

- The Money View

Posted by Daniel H. Neilson at 3:42 pm

Crisis Averted: Understanding LTRO2

by Perry G. Mehrling on March 01, 2012

Fundamentally, the ECB is trying to keep the ongoing sovereign debt crisis from turning into a full-fledged bank credit crisis. Three things they are worried about (see here, here, here).

First, the looming maturation of about 700 billion euro in bank debt, and the likely difficulty of refinancing that debt in private markets, given unresolved questions about underlying bank solvency. With 530 Euro this time, on top of 489 Euro last time, I'd say we can stop worrying about that one for three years, notwithstanding continuing questions about solvency.

Second, the increasing reliance of banks, finding themselves shut out of private capital markets (at any reasonable price), upon short term money market funding from national central banks and the clearinghouse, a reliance that casts a cloud over the interbank payments system, not at some distant future moment but at the daily clearing, every single day. Here too, I think we can be hopeful that the LTRO has been successful in regularizing the debt, lengthening its maturity and removing it from the payments system.

Third, the ongoing credit crunch as European banks prepare for higher capital and liquidity ratios, preferring to shrink the denominator rather than increase the numerator of the ratio in order to avoid diluting existing stockholders. Here, I'm afraid, the jury is still out.

Let it be stipulated that there is enough refinance to keep banks from having to liquidate current asset holdings, and this in itself is likely to prop up asset prices (most importantly sovereign debt prices) that have been artificially beaten down by necessitous selling. (Market discussion about price moving because of new debt purchases financed by cheap LTRO money seems to me exaggerated; the stock of debt already on bank balance sheets is the big thing to watch here.)

Aggressive refinance seems thus likely to be sufficient to keep a sovereign debt crisis from morphing into a bank credit crisis. But it is not likely to be enough to get the economy moving again, especially in face of the austerity headwinds coming from the fiscal side. Even were banks flush with money, it is not clear that they would lend it, concerned as they must be with their own survival. And even if banks were willing to lend, it is not clear that viable businesses in the real economy would be willing to borrow it, concerned as they must be with their own survival.

The ECB has bought some time, three years in fact, but no more than that.

One final thought. As I look at the trillion euro LTRO, it strikes me as analogous to the American Fed's trillion dollar purchase of legacy mortgage-backed securities, beginning in March 2009. Initially, the Fed wanted simply to lend short-term, through TALF, to others who would buy the securities, but the Fed could not get the program to work. So instead it facilitated the refinance of legacy mortgage-backed securities by committing itself to buy new RMBS for its own account, 1 trillion dollars worth. The ECB, having dabbled in outright purchase of sovereign debt, decided instead to use its big guns to refinance bank debt, in effect purchasing 1 trillion euro of 3-year notes, substituting its own balance sheet for the frozen market in bank paper.

In both the US and Europe, central banks have had to go beyond the familiar lender of last resort backstop, and in effect to embrace a new role as dealer of last resort; as one-sided dealer in RMBS in the US, as one-sided dealer in bank bonds in Europe. The reason, in both cases, is the transformation of the modern credit system from a bank lending system to a capital market credit system.

We now have two examples of how to conduct last-resort rescue in the modern credit system. Apparently we know how to avert crisis. The problem is that we have yet to figure out how to generate prosperity. For that, monetary measures are likely not enough.

Update (12:30 pm, Mar 1):

The post above was stimulated by an interview I did with CNBC-India which you can find here. If you watch the interview, you will see that the headline they use is a bit misleading.

- The Money View

Posted by Perry G. Mehrling at 8:46 am

Liquidity: Not Like Water (part 1 of many)

by Daniel H. Neilson on March 05, 2012 2 comments

Discussion of the results of the ECB's LTRO2 has revolved around the question of hoarding, specifically whether banks are using the newly-created reserves to fund new lending. Answers to this question usually make reference to the amount of overnight deposits held by eurozone banks at the ECB.

This is the wrong place to look—the amount of overnight deposits doesn't tell you what banks are doing with the borrowed funds. The error, it seems to me, comes from thinking of the liquidity provided by the ECB as being like water, something that can fill up the banks' liquidity-holding vessels and spill over via lending into those of non-financial corporations. The metaphor provides a nice turn of phrase ("drinking water from a fire hydrant"), but does not enlighten.

LTROs, like any liquidity-providing open-market operation, expand on both sides the balance sheets both of the Eurosystem (the consolidation of the euro area national central banks) and of the borrowing bank:

[PICTURE]

So far so good. What about the liability side? Those who point to the high use of the ECB's deposit facility seem to think that banks should draw down these reserves and lend them out to businesses. But what actually happens when banks lend? Just as the Eurosystem expanded its balance sheet on both sides in lending to the banks, the banks expand theirs when lending to their clients:

[PICTURE]

What if the borrower then goes on to draw down that deposit, for example to pay for new investment spending? The borrower's banks clears the payment by transfering reserves to the recipient's bank. Reserves change hands, but the total amount of reserves remains the same.

In fact the only way to destroy reserves is to purchase an asset from the ECB itself, which happens at the central bank's discretion, when it decides to contract its balance sheet.

There is, it should be said, a grain of truth in the hoarding story. If banks were to make loans that increased their deposit liabilities, their required reserves would rise. (Required reserves and excess reserves can be distinguished on the Eurosystem balance sheet.) The marginal reserve ratio is 1%, so EUR 777bn in new reserves could fund EUR 77.7 *trillion* in new lending.

Even the most diligent of bankers would find it hard to shovel money out the door that quickly, and it does not seem that this should be the standard by which to judge the success of LTRO. The ECB is rightly worried about avoiding a bank credit crisis, and by this measure is having some success.

- The Money View

Posted by Daniel H. Neilson at 3:20 pm

Eurocrisis Redux

by Perry G. Mehrling on March 13, 2012 1 comment

Entangling alliances or entangling leagues are nothing to the entanglements of cash owing—Keynes

The recent BIS Quarterly Review article "European Bank Funding and Deleveraging" takes a stab at connecting all the dots in the Eurocrisis. It is only 12 pages, but with 8 (triple) graphs, there is a lot here to digest. Let's take a stab.

In the FT gloss of the argument, the whole crisis was caused by the BIS itself, in the form of Basel III requirements to boost bank capital, or rather by the European Banking Authority which more or less endorsed the BIS requirements last October. Here is the origin of the stress.

There were only two ways for banks to meet the new requirements, raise their capital levels to meet the size of their balance sheets, or shrink their balance sheets to meet the size of their capital. The prospect of the latter is what unsettled markets and valuations, since necessitous sellers sell what they can sell, never mind fundamental value. Distortion of asset valuations (even mere prospective distortion) then undermined bank balance sheets, so undermining their ability to fund themselves, in euros but especially in dollars. Capital markets were effectively closed (at any reasonable price) but so were funding markets, and liquidity kills you quick.

From this perspective, the important thing about the LTRO operations of the ECB was that they stopped the downward liquidity spiral by providing the funding that banks needed. The hope now is that, having put aside immediate funding problems, banks can proceed in a more orderly way to raise capital, either in equity markets or more slowly by retained earnings. Maybe so, but maybe not.

Today, Paul de Grauwe connects the dots in a different way. The fundamental problem, according to him, is not bank capital requirements but rather sovereign debt, which threatened to become a bank crisis because banks held so much sovereign debt. ECB intervention does very little to settle the underlying debt markets, or to restore reasonable valuations, since there is no guarantee that banks will use the LTRO funds themselves to support sovereign debt markets. Indeed, nothing prevents a new round of selling, and what will the ECB do then? Even worse, austerity measures now worsen the fiscal prospects for Europe, and so further undermine bond values.

Myself, I am reminded of the words of John Maynard Keynes, in his Economic Consequences of the Peace, written in aftermath of World War I and the disastrous Treaty at Versailles:

The final consideration influencing the reader's attitude to this proposal must, however, depend on his view as to the future place in the world's progress of the vast paper entanglements which are our legacy from war finance both at home and abroad. The war has ended with every one owing every one else immense sums of money. Germany owes a large sum to the Allies, the Allies owe a large sum to Great Britain, and Great Britain owes a large sum to the United States. The holders of war loan in every country are owed a large sum by the State, and the State in its turn is owed a large sum by these and other taxpayers. The whole position is in the highest degree artificial, misleading, and vexatious. We shall never be able to move again, unless we can free our limbs from these paper shackles.

Read the BIS report with this quote in your head, and the graphs tell a different story. Financial globalization has ended with every one owing every one else immense sums of money. That is the big picture, and European bank deleveraging, as well as the European sovereign debt crisis, need to be understood as symptoms of this larger disease.

- The Money View

Posted by Perry G. Mehrling at 8:34 am

Renminbi Swap Lines

by Daniel H. Neilson on March 28, 2012 4 comments

Last week the central banks of China and Australia announced the creation of a $31bn currency swap line. Like every such agreement, it was hailed as another step towards the renminbi's displacement of the dollar as the world's reserve currency. Are the renminbi swap lines in fact a genuine step forward for the internationalization of the RMB?

How do these swap lines work? When activated, they become, economically speaking, a swap of IOUs: the PBoC lends renminbi to the RBA, which lends back Australian dollars. The pair of transactions lasts for a fixed term, and at maturity both loans are reversed. Typically the loans would be made and unwound at the same exchange rate, and the compensation to the lender would be in the form of an interest rate fixed for the term.

The transaction appears on the central banks' balance sheets like this:

[PICTURE]

(In practice, the central banks may account for the transactions differently. The Fed, for example, thinks of its dollar swap lines as assets, loans collateralized by foreign exchange.)

First, a swap line such as this one is at its heart a liquidity arrangement. It is similar to the other swap lines that have been in focus of late, namely the dollar swap lines between the Fed and the ECB (among other C-5 central banks). As the eurozone crisis peaked, funding for European banks grew extremely tight, and the pinch was felt most in dollar funding markets. The ECB drew on its swap line to the tune of about $100bn, enabling it to lend dollars to its clients, the European banks. The Fed was the ultimate source of those dollars, as it must be, and the swap line provided the channel to get them to Europe.

With a renminbi swap line in place, the RBA can obtain the Chinese currency, in size, and lend it on to Australian banks short of liquid renminbi funds. In this sense, the deal is opening a channel by which the PBoC may one day be able to act as lender of last resort to Australian banks' renminbi-denominated operations.

In a future with large amounts of cross-border RMB financial activity, this channel could be an important source of stability, and thus its establishment could be understood as building the infrastructure of a comprehensive RMB system.

But such a system does not yet exist, and the establishment of swap lines is not the major obstacle to the emergence of one. A reserve asset, is something demanded for its liquidity, that is the ease of entering and exiting a position. Because of China's tight capital account, foreigners can obtain and dispose of renminbi in only a limited number of ways. One way is via the trade account, and the swap lines are advertized as being in support of trade.

Another way to get RMB is via the dim sum market for renminbi-denominated bonds in Hong Kong. Dim sum bonds can be used to raise funds for investment on the mainland, subject to fairly heavy regulatory control. They have been also used to raise funds that can be swapped into dollars or euros in the private currency swap market. But what liquidity there is in the dim sum market seems to come at least in large part from the pool of speculative RMB deposits in Hong Kong, looking for a parking spot while waiting for RMB appreciation.

China's capital account remains closed, meaning it is difficult for funds to move in and out of the country except as payment for trade. It is difficult to imagine the RMB serving as international money until it is backed by a fully functional offshore banking system, meaning high liquidity in capital-account transactions. This does not necessarily mean that the mainland's capital account must be open, as Hong Kong and London could serve as financial centers for renminbi.

But for there to be sufficient liquidity, there must be a reliable way to get and get rid of RMB. For the dollar, the size and openness of the US economy, with the Fed's guarantee of liquidity in government debt, ensure this. For China to provide such a guarantee, it will have to loosen its grasp on its capital account, or its exchange-rate policy, and—either way—on its growth model. Swap lines might point the way, but big steps toward internationalization they are not.

- The Money View

Posted by Daniel H. Neilson at 4:52 pm

World Without Money Reconsidered

by Perry G. Mehrling on April 08, 2012 7 comments

FT Alphaville has picked up on my friend James Sweeney's latest, and since James cites the latest writings by other friends Zoltan Pozsar, Manmohan Singh, as well as my own most recent, the piece reads like a discussant's comments on a shadow banking symposium. (Further discussion here.) As one of the putative participants of that symposium, I am roused to respond.

[VIDEO LINK]

One of the things that made me a bit cautious about Sweeney, when I first read his stuff, was his fixation on measuring the quantity of money. I had taken to heart Fischer Black's dictum, in his first published article in 1970, that in a world of uncontrolled banking:

"it would not be possible to give any reasonable definition of the quantity of money. The payments mechanism in such a world would be very efficient, but money in the usual sense would not exist. Thus neither the quantity theory of money nor the liquidity preference theory of money would be applicable."

Coming from this point of view, Sweeney's work looks a bit like an attempt to revive the quantity theory of money by expanding the definition of money to include shadow money. The collapse of this shadow supply of money, he says, is the monetary shock that caused the crisis, and the expansion of the public supply of money is the policy response that put a floor on the crisis. So far, so MV=PY.

Now back in 1970 Fischer was thinking about the world of his friend Jack Treynor's CAPM, a world of risky equity securities and short term riskfree bank deposits, in which those wealthholders with the greatest tolerance for risk increase their exposure by borrowing (from banks) while those with the least tolerance for risk decrease their exposure by lending (to banks). For Fischer, the important consequence of this way of thinking was that asset prices, not only the price of risk but also the risk free rate, reflect the balance at any moment between the bulls and the bears, not the actions of the central bank. I call this the "finance view".

Sweeney's world, by contrast to Fischer's, is a world of risky and safe debt, which is to say a world of shadow banking. Safe debt is more or less a perfect substitute for a bank deposit, since at any moment it can be used as collateral to obtain a bank deposit. Risky debt is a less perfect substitute, because its price is less stable and also (because of that), the haircut for use as collateral is a lot higher and more volatile.

As I say, I worried about Sweeney, until I saw the connection between his world and Fischer's. The connection is this. Risky debt is just safe debt plus an interest rate swap and a credit default swap. Fischer himself emphasized this in an unpublished paper from 1970:

“Thus a long term corporate bond could actually be sold to three separate persons. One would supply the money for the bond; one would bear the interest rate risk; and one would bear the risk of default. The last two would not have to put up any capital for the bonds, although they might have to post some sort of collateral.”

Fischer's dream in 1970 is our current reality. What Sweeney measures as the quantity of shadow money is not so much the quantity of money as money is traditionally understood; rather it is the monetary value of available collateral.

From this point of view, my most recent paper can be thought of as an attempt to see the shadow banking system through the eyes of Fischer Black. What is important, from that point of view, is not so much the balance between the risk tolerant and the risk intolerant, but rather the balance between two kinds of financial intermediaries that I call the Capital Funding Bank and the Asset Manager. In accounting terms their balance sheets are mirror images,

but it is the movement of prices--the prices of risk as well as the riskfree rate--that make these two types of agents happy to hold those balance sheets at any moment.

Where I depart from Fischer of 1970 is my emphasis, following the Money View, on the dealers that stand in between the Capital Funding Bank and the Asset Manager. I emphasize two types, the Global Money Dealer who trades in money and the Derivatives Dealer who trades in risk.

In emphasizing the role of these dealers as market makers, I provide a way of understanding the role of the central bank in the modern market-based credit system. Backstopping both of these kinds of dealers, the central bank serves fundamentally as dealer of last resort. Abstracting from market makers, as Fischer did, means abstracting from the reason for a central bank. Bringing market makers back in, as I do, means also bringing the central bank back in.

- The Money View

Posted by Perry G. Mehrling at 2:46 pm

Mehrling on Soros

by Perry G. Mehrling on April 16, 2012 5 comments

The text below is the comment I offered on Mr. Soros' opening speech at INET's Berlin Conference April 12, 2012. The text of Mr. Soros' own speech is here. Video of the entire session is below--my bit starts at 55:00.

[VIDEO LINK]

I first encountered Mr. Soros and his theory of reflexivity back in the spring of 1987 when he visited The Brookings Institution to talk about his book The Alchemy of Finance. I was there on a Dissertation Fellowship, working on a set of papers I called "Toward a Credit Theory of Money". Because of my topic, I was interested in what Mr. Soros had to say. But I was also unprepared to take it all in since I knew very little finance, and anyway I was trying to finish the dissertation not to launch out in a new direction. So I missed that opportunity, and consequently I am grateful for a second chance today, some 25 years later, to engage with Mr. Soros' newest thinking.

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Mr. Soros accuses economists of a fundamental mistake, two mistakes really, 1) a mistaken conception of the object they are studying which has led them to, 2) a mistaken method for studying it. Let us stipulate that Mr. Soros is right about that. The next question, to my mind, is: Why are economists so wedded to these fundamental mistakes and so resistant to correction? I'm sure there are many reasons—the usual accompaniments of human endeavor, hubris, status, power--but the theory of Mr. Soros suggests to me one additional candidate explanation.

Mr. Soros has referred to the European Union as a fantastical object.

I want to propose right here at the beginning of the conference that we seriously consider the possibility that intertemporal general equilibrium functions for economists as a "fantastical object".

Observers of economics easily miss this, focusing instead on the fights between those who think government intervention is the solution and those who think government intervention is the problem. But typically both sides of this fight have vividly in front of them the very same fantastical object; they are fighting about how best to make that fantastical object a present reality, but they are in agreement about resisting Mr. Soros' attempts to get them to let go of their fantastical object.

David Tuckett teaches us that fantastical objects play a key role in the way fund managers handle their jobs, which require them to make myriad consequential decisions under conditions of radical uncertainty. But the situation of the fund manager is just a more extreme version of the situation we all face. We all try to figure out how the world works, but inevitably we have imperfect knowledge. And no matter how hard we try, our understanding of the world never quite catches up with where the world actually is, and sometimes our understanding can fall quite far behind. Why is this? Why is our knowledge inevitably imperfect?

One reason is that the world is rapidly evolving—institutional evolution and technological change routinely transform the world outside our window. Every ten years or so, something becomes routine that only ten years before was on no one's radar screen as even a possibility.

Another reason is that the world is complex, with many moving parts that interact in ways that it is hard for anyone, or even for any supercomputer, to predict in advance.

Mr. Soros himself emphasizes yet a third reason, that the deliberate actions we take, based on our understanding of the world, actually change the world outside our window. I don't suppose he is talking about people like me, a

simple professor slaving away in the archives. I suppose he is talking about people like many of you, men and women of affairs, in business or politics, whose decisions directly change the world.

This is an important distinction, I think, and perhaps a direction in which Mr. Soros might develop his theory further, because it links up with another one of his fundamental themes, the inherent instability of credit.

The point is this. We all face the same existential situation, the necessity to act under conditions of radical uncertainty, and we all grab on to fantastical objects for succor as we do so. But some of us, some few of us, have the opportunity to make our fantastical objects a reality, or anyway to try by our actions to do so. Great wealth or great power provide that opportunity, but so does credit.

Everyone has a vision of a possible future, but those with credit have the opportunity to build out a little piece of their imagined future in the actual present. And in this way, they have an opportunity to actually create the future they only imagine, or anyway to try it out. And for other people watching, this credit-financed "trying out" amounts to actual evidence, concrete present evidence, in favor of a particular vision of the future. In this way, one man's fantastical object becomes another man's fantastical object, and if the second man also has credit, he too has an opportunity to build out a little piece of the now-shared vision, and--hey presto--more evidence that the fantastical object is a plausible candidate for future reality. That's how bubbles get started.

But the more fundamental point is this. The interlocking structure of credit is a bridge that we build from the present out into the unknown future, from the present shore out over the void toward shores only imagined. The credit system privileges some visions of the future over others; that's how the bridge gets started on one direction rather than another, but there is always a bridge.

And there is always a reality check—what Hyman Minsky called the "survival constraint". Credit is a promise made; the reality check comes when the promise comes due, when it becomes clear that reality is in important respects not aligned with the fantastical object. The failure, or necessitous extension, of one promise calls into doubt all the others based on the same fantastical object, and the whole structure threatens to collapse.

I say that it threatens to collapse, because when you are dealing with credit, you are dealing also with banks and central banks, which can themselves extend promises not kept, or even cancel them. For a while, maybe, banks practice forbearance because they genuinely believe in the prospect that led them to make the loans in the first place. But at a crucial point, they switch to a different fantastical object, the prospect of catastrophic cascading default, a prospect which can be avoided only by strong and forthright action in the present, not by themselves but by their own banker, the central bank. Lender of last resort, dealer of last resort, and outright bailout becomes the order of the day. Liquidation is delayed, and in the meanwhile maybe something turns up.

But though fear of collapse may be enough to prompt action to prevent collapse, expansion cannot be reignited until a new positive fantastical object has a chance to take hold, and we start again to build our next fantastical bridge, out over the void into the future.

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Mr. Soros is concerned about Europe, and he suggests that the road forward involves recommitment to the old fantastical object, the European Union as the embodiment of open society. But Mr. Soros is also concerned about economics, and there he suggests that the road forward involves rejection of the old fantastical object, and commitment to an open-ended exploration of new economic thinking. Probably most economists, present company excepted, take exactly the opposite view, preferring to give up on the dream of Europe and recommit to the dream of intertemporal equilibrium.

So that's where we are as we come together today, exquisitely poised between the known but discredited fantastical objects of the past and unknown fantastical objects of the future. For me, that's what this conference is all about. It is about considering which fantastical objects we will choose to help us on the next stage of our journey, and which

we will leave behind as so much dead weight. Multiple possible futures spread out before us, no one knows which is the one that will actually happen, but nonetheless we have to act, we have to place our bets.

- Paradigm Lost
- The Money View

Posted by Perry G. Mehrling at 3:50 am

The Clash of Economic Ideas: A Review

by Perry G. Mehrling on April 26, 2012 4 comments

[PICTURE]

When Paul Krugman paints John Maynard Keynes as a pioneering critic of dominant free-market economics, he exaggerates wildly, both about the rigidity of orthodoxy and about the pioneering character of Keynes' critique. So says Larry White in his book The Clash of Economic Ideas and, speaking as a sometime historian of economic thought, I am inclined to agree. It's less black and white than Krugman makes it out to be.

And yet, White organizes his own book along similar black and white lines as an account of Manichean struggle between advocates of capitalism versus socialism, free markets versus government planning, spontaneous order versus deliberate design, and the Mont Pelerin Society versus the Fabian Society. It is a struggle epitomized by the clash between Hayek and Keynes, and readers learn quickly that White is always rooting for Hayek, and for Hayek's adoptive ancestry Carl Menger and Adam Smith. This is a book with a definite point of view.

Indeed, the best that can be said on the other side for Keynes is that he, along with his Fabian fellow-travelers, was an unwitting dupe of the real enemy of freedom, Vladimir Ilyich Lenin. The worst that can be hinted is that Keynes may himself have been one of those enemies of freedom whose skill in wielding political power allow them to get ahead in a system where political power controls everything (p. 166, 277). For White, following Hayek, The Road to Serfdom is a veritable sheet of ice, a slippery slope that can easily sweep the unwitting traveler off his feet and land him in servitude. Luckily England pulled back from the edge in time, but other countries were not so fortunate. India's experience with central planning is presented as an object lesson to all others who might be so tempted; Germany's miraculous postwar recovery is the counterexample on the other side.

The book recounts, as its subtitle announces, The Great Policy Debates and Experiments of the Last Hundred Years. They are listed in the first sentence of the Introduction:

"the adoption of central banking in the United States and elsewhere; command economies during the First World War; communist central planning in the Soviet Union, Eastern Europe, and China; fascism in Mussolini's Italy; National Socialism in Hitler's Germany; the New Deal in Roosevelt's United States; the Bretton Woods international monetary system and the adoption of Keynesian macroeconomic policies after the Second World War; major nationalizations in postwar Great Britain; the reemergence of free-market principles in postwar Germany; Soviet-style Five-Year Plans in India; the final abandonment of gold in favor of a system of fluctuating exchange rates among unanchored government fiat monies; regulation and deregulation and reregulation around the globe; the collapse and repudiation of communism in Russia and Eastern Europe; market-led growth policies in the East Asian "tigers' and then in China and India; "neoliberal" policies promoting the globalization of economic activities."

Whew!

Let it be stipulated that the book covers a lot of territory, and also that it is rip-roaring read. I learned, for example, that according to biographer Harrod, Keynes' "recipe for the young economist was to know his Marshall thoroughly and read his Times every day carefully." If Keynes were alive today, I'm sure he'd agree with me that is the Financial Times you want to read every day carefully.

So I had fun reading the book, but let me now turn to a bit of criticism.

My main concern is with the way essentially every one of the debates and experiments is read through the very same constricting lens. So far as I can see, all are viewed as variations on the long-ago Socialist Calculation Debate between Oscar Lange and Ludwig von Mises. Can a centrally planned economy even work, much less outperform a free market economy? According to White, Mises was right and Lange was wrong, but unfortunately the matter did not end there, but rather has been playing out on the world stage ever since.

You might think I would be more sympathetic to White's way of framing the policy debates of the 20th century, since my own assessment of the Walrasian turn in economics is probably even more negative than White's. He singles out Lange as the origin of the tendency. In my own research, I have put the spotlight instead on Jacob Marschak, but leave that aside. The important point is that the Walrasian turn imagined that the economy could be envisioned as a set of simultaneous equations, and the market-clearing set of relative prices as the solution to these equations. This vision captivated postwar economics, monetarists and Keynesians alike (Friedman and Tobin), and today new classicals and new Keynesians alike as well.

White doesn't like it for Hayekian reasons, having to do with information and time. As for me, I don't like it for Frank Hahn reasons—it has no place in it for money. But either way, the important historical fact is that this way of thinking about economics rose to become dominant, pushing White's favored Austrian tradition into the background, and also my own favored Money View tradition.

When I agreed to discuss this book, I imagined that we might have our own clash of ideas on the subject of money, where Larry is an advocate of free banking, including competitive note issue. I imagined I would ask him whether he views the shadow banking system as an example of competitive note issue! Unfortunately he doesn't say very much about money in the book. There are only two money chapters, one on Bretton Woods (Keynes) and one on postwar inflation (Milton Friedman). Nevertheless, it is pretty clear that he views central banking through the same lens as everything else—it is just another example of government stepping in to do what free markets do better, in this case replacing the bankers' clearinghouses that predated modern central banks.

I beg to differ. I align myself with Bagehot, who famously stated that "Money will not manage itself, and Lombard Street has a great deal of money to manage". More generally, I align myself with the larger tradition of British central banking thought of which Bagehot was a part, including Ralph Hawtrey, Charles Goodhart, and I would even say John Maynard Keynes. Like all central bankers, Keynes was trying to find ways to keep an inherently unstable system from blowing apart, not just domestically but also internationally; the international role of the pound was in decline throughout Keynes' life, but very much present as an intellectual context for his thinking and writing. This is a very different frame from White, but also, I hasten to add, very different from Krugman.

Krugman serves White as a kind of stalking horse, probably in hope that Krugman will attack the book and so sell more copies! But for my purposes Krugman is interesting for a different reason, as a concrete example of how different American Keynesianism was from the economics of Keynes. The Keynesian economics that White explains in Chapter 5 is more the economics of Krugman than it is the economics of Keynes. White traces it, correctly, back to Samuelson and even farther to Alvin Hansen, but he sees Hansen as nothing more than a popularizer of Keynes. That's the standard view, but as someone who has written a biography of Hansen, I have to take issue with this account.

Maybe I make things worse for Hansen by saying so, but I must insist that Hansen be understood fundamentally as an American institutionalist, very much akin to those who made Roosevelt's New Deal. For White that makes things worse because he sees the American institutionalists—Ely, Commons, et al—as successors to the German historical school, the Marx-influenced "socialists of the chair" who supported Hitler and fascism. Indeed, for White as for Hayek, the important thing about Hitler's national socialism is that it was socialism; behind Hitler (and Mussolini too) is Lenin. So for him the American institutionalists are, like the British Fabian society, tainted by the intellectual company they keep.

I beg to differ. The American institutionalists were just as much rejecting Marx and the classical economics tradition as they were Marshall and the neoclassical tradition. For better or worse, they saw these theories as products of class-ridden tired old Europe, not applicable to the New World. For them government was not the agent of the oppressive king but rather the collectivity of town fathers gathering together to solve common problems. Europeans—including Keynes and Hayek equally—typically found it difficult to understand what these Americans were up to, and also tended to treat them as intellectual inferiors. But the Americans were up to something, and it wasn't fascism or socialism; it was democratic self-government.

I have already indicated that I trace one side of my adoptive intellectual ancestry to the tradition of British central banking. I trace the other side to the American institutionalists. In both respects, I am coming from a different place than Larry, so I expect we will have a bit of "clash of ideas" in the Q&A. But I submit to you that what separates us is more obscured than illuminated by viewing subsequent debate through the narrow lens of the socialist calculation debate, much less the emotionally charged lens of enemies versus defenders of freedom. He and I, along with pretty much every other economist I have ever met, are all defenders of freedom, each in our own way.

- The Money View

Posted by Perry G. Mehrling at 7:37 am

Banks as creators of money

by Daniel H. Neilson on May 01, 2012 17 comments

In conversation recently, I was called upon to defend the claim that banks are in the business of creating and destroying private money. This has been for me a working hypothesis for so long that I was unable to respond effectively or cogently to the argument. My interlocutor followed up in e-mail with a Cowles Foundation paper by Tobin in support of her case. Here is my response to Tobin, hopefully better articulated than I managed on the fly. In this post, I'll stick to the theoretical claim (the practical context was bank capital requirements).

I agree wholeheartedly with Tobin's dismissal of the

mystique of "money"—the tradition of distinguishing sharply between those assets which are and those which are not "money," and accordingly between those institutions which emit "money" and those whose liabilities are not "money,"

but rather than enclosing the difficult word in quotes, I prefer to try to understand it. By all means let us not draw an abritrary line between money and non-money. But Tobin is wrong to conclude that there is nothing special about money at all.

There is indeed something special about money. All of the traditional functions of money come down to the certainty that one will be able to get rid of it, at a reasonably certian price, for a reasonably long distance into the future. That certainty amounts to money's liquidity, and the institutional setup of the payment system—including commercial banks, the central bank, and deposit insurance—all exist to support it. It is costly to do so; *liquidity is not a free good*.

This moneyness is not something that is inherent in the thing; it is present when institutions and individuals provide and maintain it. Participation in the payment system is an expression of a bank's willingness to trade at par deposit claims on itself with those on other banks. To do this is to guarantee the liquidity of the bank's deposit liabilities—if a depositor wishes to enter or exit a position in some bank's deposits, it can do so, in size, without moving the price from par (i.e., from one). The central bank supports this guarantee by ensuring banks' access to clearing balances for the processing of interbank payments; deposit insurance supports it by protecting banks from runs.

Moneyness should, moreover, be viewed as a property which can be possessed in degrees. No arbitrary line should be drawn, but some things are more like money than others: federal funds are very money-like, T-bills less so, equity shares not so much at all. The degree depends on how deeply the liquidity of each type of claim is supported by the banking system.

Asking whether the fact that their liabilities are monetary means that banks have priveleged access to funds, Tobin finds that

[t]his advantage of checking accounts does not give banks absolute immunity from the competition of savings banks; it is a limited advantage that can be, at least in some part for many depositors, overcome by differences in yield.

Tobin imagines banks raising funds by issuing various kinds of securities—checking deposits, savings deposits, bonds, shares—and competing on yield with other issuers to raise funds. But the differences among those liabilities are not to be found only in yields. They possess moneyness to varying degrees, and when the need is for liquidity, no yield is high enough to entice lenders. Yield and liquidity are not commensurate, especially in a crisis.

Asking whether, in aggregate, an expansion of bank lending necessarily entails an expansion of deposits, he says that

[i]t depends on whether somewhere in the chain of transactions initiated by the borrower's outlays are found depositors who wish to hold new deposits equal in amount to the new loan.

That is, Tobin says, the deposit that a bank creates for its borrower is soon spent, and so this deposit cannot be said to fund the loan for that bank. Moreover, it can neither be said to fund the loan for the banking system as a whole, because deposits will be held only if someone wishes to hold them.

On this point Tobin is simply wrong. He neglects to consider who has the initiative in deposit creation and destruction. A bank's role in the payment system, and the very reason that its deposit liabilities serve as money, is that they guarantee conversion of bank deposits at par, conversion into cash or conversion into deposits elsewhere in the system, *at the initiative of the depositor*.

A borrower can exit a position in bank deposits in two ways—by selling them to a non-bank, for example by buying real goods, or by selling them to a bank, for example by buying bank bonds. The former does not destroy aggregate bank deposits, it just moves them from one bank's balance sheet to another's. The latter does destroy aggregate bank deposits, but only if some bank is willing to sell bonds. Thus *deposit destruction can happen only at a bank's initiative*.

All this is to say that what is important about the fact that banks issue monetary liabilities is that those liabilities are liquid—that you can be sure that you can get rid of them at par—and that that liquidity is provided and guaranteed by the banks, supported (for commercial banks, anyway) by the Fed's guarantee of the payment system. Banks guarantee the liquidity of their deposit liabilities, not that of their other liabilities, so someone who wishes to hold them faces a market price, not guaranteed by anyone.

- The Money View

Posted by Daniel H. Neilson at 9:25 am

Insights from Bagehot, for these Trying Times

by Perry G. Mehrling on May 11, 2012 3 comments

Here is a talk I gave recently at Wake Forest University. It is pretty long, but you can page through the video (on the left) by paging through the powerpoint (on the right), and anyway the last twenty minutes are devoted to questions. I couldn't figure out how to embed it in the blog, but the link will get you there.

- The Money View

Posted by Perry G. Mehrling at 12:24 pm

Maynard's Revenge: A Review

by Perry G. Mehrling on May 22, 2012 4 comments

[PICTURE]

Below is a revised version of a talk I gave at the New School University, at a conference to launch Lance Taylor's latest book. The date of the event was April 28, 2011, more than a year ago, and the delay in revision was entirely my fault--overcommitment and pressing deadlines on many fronts. Sorry about that.

Lance Taylor, Maynard's Revenge: The Collapse of Free Market Macroeconomics (Harvard 2010).

In the Preface, Lance tells us that he has written this book with two audiences in mind. I think of myself as falling into his first group: "people who are willing to put their feet up on the table, nose to the grindstone, and so on and think about how Keynes and his closest followers did macroeconomics." I love the image--both feet up and nose to the grindstone, at the same time! I would like to stipulate that I read the book this morning sitting in my favorite easy chair (feet up), but starting at 5am sharp (grindstone).

The central theme of the book is that Keynes and his fellow travelers or "OId Believers" (another pregnant image), were "correct about how to do macroeconomics", which is to say they were methodologically on the right track. The biggest thing they were right about was the importance of blending both history and equilibrium or "thinking in historical and logical time" (as Joan Robinson put it). The reason this is so important is that the economy itself is a constantly changing and evolving entity, which means that individuals face epistemic problems of uncertainty, not just risk. In a world like that, historico-institutional methods provide a kind of knowledge that mathematico-statistical methods simply cannot, knowledge to inform individual decisions but also social policy.

Concretely, the way Keynes blended the two methodological approaches was by building his theoretical structure on the solid foundation of the National Income and Product Accounts, whose development he played some role in stimulating. The accounting framework gives us a picture of the economy as a whole, and macroeconomic theories are essentially about how various elements of that accounting framework fit together, in a system of mutual causation. Keynes little pamphlet "How to Pay for the War" is perhaps the epitome of this kind of approach.

The Old Believers who built on Keynes used the same method, but with a progressively widening accounting basis, extending from NIPA to Flow of Funds (Copeland 1952) and Wynne Godley's Stock-Flow Consistent accounting (Ch. 5), and then on to global balance of payments and net foreign assets accounting (Ch. 8). Corresponding to these extensions of the accounting basis are extensions of macroeconomic theory, most importantly extensions to money and finance in the work of Minsky and Kindleberger.

The virtues of starting with the accounts are never spelled out explicitly but they seem to be two. First, the approach provides a tether that keeps our thinking in tight connection with the real world, but not too tight a tether since, and this is the second virtue, it permits (even encourages) a rather open theoretical space in which a range of insights can flourish simultaneously. In this respect I note the repeated emphasis in Ch. 8 that we have a number of plausible stories about what determines exchange rates, so we must pick and choose among them which one yields the most insight at any particular moment. Exchange rates are "overdetermined" by our theories, Lance says, and this seems to be the flip side of the fact that our theories are "underdetermined" by the underlying accounting frameworks. The resulting open economics is a good thing.

There is a lot to like about this approach to macro. We need look no farther than Lance's own work to appreciate its flexibility and utility. His Structuralist Macroeconomics (1983) is clearly an attempt to find the right blend between historico-institutionalist and mathematico-statistical method, and it clearly works. Indeed, I appreciate it more today that when I first encountered it. I admit to not quite understanding what Lance was up to when I first came into contact with his work as a graduate student twenty five years ago.

Indeed, what Lance identifies as the characteristic methodological moves of Keynes seem to me more descriptive of Lance's own work than of Keynes himself. But Lance is certainly not the first person to look at Keynes and see himself! (Minsky does much the same in his John Maynard Keynes.) As a sometime historian of thought and intellectual biographer, if I were asked to characterize how Keynes did macro, I would put more emphasis on the man of affairs—both statesman (as Economic Consequences of the Peace) and speculator (as partner with Oswald "Foxy" Falk in the Syndicate)—learning by doing in the first place, and only later trying to formulate what he had learned in the language of academic economics, as a way of communicating to others. Just so, I read the Tract on Monetary Reform not so much as a an attempt to build on the quantity theory tradition, and more as a struggle to express ideas that came from somewhere else using existing acceptable language.

Contra Lance, I also do not read Keynes as very much of a NIPA theorist—that's another projection of Lance, who is clearly a real side macroeconomist in his bones. Lance plots the price of goods against the price of assets and it is clear which he thinks is the more reliable index of economic reality; part of his difficulty with the exchange rate is that it is at the same time both a goods price (as PPP) and an asset price (as UIP). Here is Lance at the end of the book, commenting on the road ahead after the crisis: "The real policy challenge in this area is to build a firewall between finance and the real economy so as to shield the rest of us from the bankers' excesses."

Now, Keynes of course famously distinguished between speculation and enterprise in the General Theory, but I think he lived too much in the world of speculation ever to imagine that Lance's firewall could hold. Minsky's financial Keynes is a projection of Minsky's own theory onto the great man, but it captures a side of Keynes that is not visible if we see him through NIPA lenses. Had the Flow of Funds accounts been available earlier, the course of macroeconomics might have been different—and that different course is still available to us.

Lance's Keynes is more Taylor than Keynes in another respect as well, namely his emphasis on the centrality of distributional concerns for macroeconomics. Richard Goodwin's celebrated predator-prey model of the class struggle is not very Keynesian, but it is very Taylorian. Similarly, Lance's lifelong concern to find a macroeconomics that is relevant for the problems of the Third World comes from a sense of the importance of distributional concerns between nations as well as between classes. Keynes, by contrast, in his policy contributions was arguably more focused on prolonging and propping up what remained of the dying British Empire.

But these are quibbles. Keynes remains an attractive exemplar of how to do macroeconomics, and not just because of his repeated deep insights into the problems of his own day. One of the main sources of attraction is by contrast with other economists, both before and after Keynes' own day. Lance does not have a high opinion, shall we say, of most of what passes for macroeconomics. He sees it as either nothing more than playing games with models, or nothing less than apologetics for neoliberal political trends. Modern finance in particular comes under sustained assault as "an intellectual elixir for deregulation and the proliferation of exotic financial instruments that led into the boom and crash."

From this perspective, the global financial crisis presents itself primarily as a reality check. The world is not as free market macroeconomics would have us believe. It is in fact more as structuralist macroeconomics would have us believe. Maynard Keynes' Revenge is also Lance Taylor's Revenge.

- The Money View

Posted by Perry G. Mehrling at 7:58 am

Swexit - When will Switzerland exit the euro?

by Daniel H. Neilson on June 06, 2012 9 comments

Since September 2011, the Swiss National Bank has held a floor of 1.20 francs per euro. This floor has in practice been a peg, as the pressure has been in only one direction, downward (that is, in the direction of CHF appreciation).

[PICTURE: *Image via FT Alphaville*]

As funds fled the euro crisis last summer and fall, the Swissie appreciated, putting in jeopardy the competitiveness of Swiss exporters. The SNB first intervened, first in an ad hoc way and then as a formal policy commitment. As long as the pressure is toward appreciation, this policy cannot run out of ammunition: the SNB can always meet the demand for francs against euros by creating new franc-denominated reserves to purchase euro-denominated assets. Before it runs out of ammunition, though, the policy could run up against other constraints, about which more below.

By fixing the exchange rate, Switzerland was joining the euro, albeit in a limited way. A unified payment system is what knits together a monetary union. Within the eurozone proper, this role is played by TARGET2. A euro deposit in Athens is guaranteed to extinguish a euro of debt in Berlin, and that guarantee is backed by the operation of TARGET2. The national central banks allow claims among themselves to clear payment flows for the system as a whole.

To hold fixed the exchange rate between the CHF-denominated Swiss banking system and the EUR-denominated eurozone, the SNB is in effect creating on its own balance sheet a payment system for the Swiss banking system, carrying correspondent balances for exchange against EUR for all its member banks. To achieve this, the SNB gives up the initiative in managing its balance sheet—it meets all demand for Swissies at 1.20 per euro. Here it is in balance sheets:

[PICTURE: The SNB expands its balance sheet to prevent CHF appreciation.]

When you look at it this way, you can see the other side of the transaction too: the SNB is facilitating the world's portfolio reallocation out of EUR and into CHF. Even fixed at 1.20 francs per euro, funds have been fleeing the euro area as the crisis heats up again. The SNB's policy means that any net flow results not in price adjustment, but in fluctuations in the size of its own balance sheet. This permits expansion of CHF-denominated claims for the entire Swiss system. Now we see that this expansion is not fast enough to prevent all price adjustment: via Zerohedge, the yield on 2-year Swiss government debt has now gone negative.

By fixing the exchange rate, Switzerland has, in a way, unilaterally joined the euro. As a haven destination, Switzerland faces problems not unlike Germany's. Just as the Bundesbank's claims on TARGET2 swell, so too are the SNB's euro-denominated assets:

[PICTURE: *From a speech by Hervé Hannoun of the BIS*]

This entails some credit risk—if a peripheral country exits the euro, either central bank could take losses. Switzerland has some choice about what EUR assets it buys, where TARGET2 requires Germany to accept claims on other eurozone national central banks (though after Jens Weidmann complained, maybe BuBa is getting collateral for its TARGET2 assets?).

What if the SNB releases the peg? (Swexit is an unfortunate term, but it seems like the right one.) If the SNB abandons the peg, the Swissie will appreciate rapidly against the euro. Even leaving aside the consequences for the Swiss trade account, this will mean an immediate loss on the central bank's asset portfolio. The SNB faces no

liquidity constraint in CHF, so this is not immediately catastrophic, but prudent central bankers will want to avoid insolvency all the same.

There is also the risk of speculative attacks. We cannot yet see the SNB's balance sheet as of May 31, but as conditions in e.g. Spain have worsened, it is likely that it has grown again after being mostly stable since the peg was introduced. If policy is credible, no one will risk loss by testing it, but as soon as doubts enter, the SNB will quickly have to absorb large speculative flows to defend the peg. Again, the SNB has the ammunition to do so, but it would be an uncomfortable situation.

I won't hazard a forecast yet as to when the policy will come to an end. But Switzerland has put itself in an interesting and challenging position in the wider eurozone crisis, and Swexit will definitely come, sooner or later.

- The Money View

Posted by Daniel H. Neilson at 3:00 pm

Lethal Embrace? A Thought Experiment

by Perry G. Mehrling on June 19, 2012 11 comments

At the heart of the Eurocrisis lies a vicious circle where once there was a virtuous one. Over the last week or two, the FT has been reflecting on the connection between the sovereign debt crisis and the bank crisis, conjoined twins (as George Soros has put it) of the current Eurocrisis. See here, here, here.

[VIDEO LINK]

Historically, banks have stepped in to help sovereigns in their time of need, such as the stresses of war finance, by expanding their own balance sheets, offering bank liabilities (money) in exchange for sovereign debt that has no alternative ready market.

Contrariwise, sovereigns have stepped in to help banks in their time of need, offering central bank liabilities (reserve money) in exchange for bank debt to allay periodic liquidity crises, and sometimes going so far as to offer sovereign Treasury liabilities in exchange for bank equity issue that has no alternative ready market.

The problem Europe now faces is that monetary union, a fait accompli, left in place the historical symbiosis between national banking systems and national sovereignties, as well as the pattern of thinking formed by generations of experience with that symbiosis. As a consequence, when the crisis hit, national banking systems stepped in to help their national sovereigns, and national sovereigns stepped in to help their national banking systems.

Both thought they were doing the right thing, based on past experience. But the consequence has been to transform isolated sovereign debt crises into systemic bank crises, and to transform isolated national bank crises into systemic sovereign debt crises. What started as a problem of the periphery (the famous PIIGS) is now threatening the very core of Europe, both sovereigns and banks. The ongoing run on Greece et al. is now threatening to become a run on Europe, both European sovereigns and the European banking system.

The problem is that banking is no longer national, and neither is sovereignty.

Calls for "fiscal union" are calls for replacing lost national sovereignty with something new, supra-national sovereignty. The EFSF, and then the ESM, were supposed to be steps on the road toward a common European Treasury, and a common European sovereign debt (Eurobonds and Eurobills). Maybe it could work, from an economic point of view, but by now it looks like too big a step to be achieved in the time available, from a political point of view. Angela Merkel is not wrong when she says we are in a race between politics and the market, and we know which one of these is the hare and which one the tortoise.

That is the background needed to understand properly the shift, in recent weeks, toward focus on "banking union" instead. But old patterns of thinking still stand in the way. If you think of banks and sovereigns as inherently symbiotic, then it is hard to conceive of banking union without fiscal union, and vice versa. (See here the FT article today that finally inspired me to put my developing thoughts on the record.)

Here is the main point. History tells us that there is nothing inevitable about such a symbiosis. Banking, indeed even international banking, existed long before the modern nation state. The origin of the lender of last resort function of the modern national central bank is in the operation of private bankers' banks. (In the US, before the Fed there was J. P. Morgan.) There is no logical, or economic, necessity for sovereign backstop of banking. It follows that there is no logical, or economic, necessity for fiscal or political union to precede, or even coincide with, banking union.

Of course today the balance sheets of European banks, including the ECB, are stuffed with sovereign debts of one kind or another, and that fact by itself makes it hard to think about banking union without fiscal union. But let's try, as a little thought experiment.

Let us imagine a special purpose vehicle, a private vehicle without supra-national backstop, which issues its own private securities of various types and uses the proceeds to buy sovereign debts of various types. (For those who remember fall 2007, think of it as an analogue to the super-SIV idea, except that the assets are sovereign debts rather than tranches of securitized subprime mortgages.) In this way, sovereign debt could be removed from the banking system and replaced with cash, which (suppose) banks use to repay liabilities so shrinking their balance sheets by the size of their debt holdings. No doubt some banks would still be in trouble, but we can imagine banking union proceeding as the Europe-wide solution to that remaining trouble.

But wait, you say, what about deposit insurance, currently national and so currently a second channel of lethal embrace? But this is just another asset of the bank and another liability of the sovereign. Since we are just thinking, let's imagine that we place a market value on this asset and have the SPV buy it as well. Note that, by making this implicit asset explicit, bank capital will be increased. Even so, no doubt some banks would still be in trouble.

The point of this thought experiment is to enable us to think separately about the sovereign debt crisis and the banking crisis, and to conceive of the possibility of addressing each separately. At the end of the day we will be left with a range of private banks, some insolvent, some merely illiquid, and perhaps a few that are okay. That is one side of the problem. And we will be left with our SPV; that is the second side of the problem.

But, most importantly, we will also have broken the lethal embrace. Investors who are thinking about lending to private banks, or perhaps taking up a new equity issue or taking over the existing equity ownership, can form estimates of value without having to consider the fortunes of the bank separately from the fortunes of the sovereignty where that bank has its headquarters. And investors thinking about lending to a sovereign, or perhaps taking up the securities issued by the SPV, can form estimates of value without having to consider the fortunes of the banking system that happens to be headquartered within the national boundaries of that sovereignty.

If we think the lethal embrace of banks and sovereigns is currently taking both down together, then breaking that lethal embrace should improve the fortunes of each separately. It's a win-win.

Historically, the origin of the embrace between sovereigns and banks was pragmatic. They did it because it was a win-win. Today it looks like the win-win involves dissolving the embrace.

- The Money View

Posted by Perry G. Mehrling at 8:14 pm

The fix was in

by Daniel H. Neilson on July 29, 2012 1 comment

In Friday's FT, former Morgan Stanley trader Douglas Keenan traces banks' LIBOR manipulations back to 1991, when he observed, from the futures desk, LIBOR fixings come in at levels different from where he new the market to be. "My naivety seemed to be humorous to my colleagues," he writes.

There is an easy story in the Barclays LIBOR scandal, one with a good bit of truth to it: avaricious bankers manipulated their submissions to quasi-official benchmark rates, taking advantage of what had naively seemed a clean measure of interbank lending conditions. During the crisis, the same sort of manipulation was used to hide banks' weak financial positions.

There is truth to this story, without question, and blame to go around. But that a bank would consider every action strategically, even its LIBOR submissions, and that at least some would misrepresent their submissions for profit, does not seem like a revelation. The story, however, also exposes some rather deeper truths about banking. To get there, some mechanics are necessary.

To make a business taking deposits, a Jimmy Stewart bank must stand ready to exchange depositors' funds into cash and back, at the depositors' initiative. It gives up, that is, a measure of control over its own liabilities. On the other side of its balance sheet, it holds a portfolio of assets that, it hopes, will yield enough cash to meet depositors' demands with something left over.

If ever such a bank cannot make good on its obligations, the central bank ensures the availability, at a price, of reserves. Such a guarantee of liquidity means that depositors can be sure that their bank will always be able to make payment on their behalf.

Instead of putting principal on deposit with the bank, its customer might instead do something more fundamental. What it really wants is to forgo the floating payments it might earn on its cash in favor of receiving fixed payments. The bank can oblige by standing opposite the customer in an arrangement to simply swap the cash flows, fixed for floating, never mind the principal, which gets returned in full eventually anyway. The customer gives up the possibility that rates will rise for the certainty of receiving a fixed payment, and the bank accepts the fixed payment for a fee, and for the possibility that rates will fall.

Such an exchange of cash flows, called an interest-rate swap, is the most basic instrument of banking. To make a business dealing in such swaps, a derivative bank must stand ready to swap with its customers from fixed into floating and back, at the customers' initiative. Sometimes the bank's trades will net out, leaving the bank with no exposure. More often, trades will not quite net out. The derivative bank can adjust its posted prices to help it achieve a net position that, it hopes, will yield enough cash to meet its swap obligations with something left over.

Swaps (and much of this discussion applies no less to interest-rate futures) tally the floating side using a reference rate, BBA LIBOR and EBA EURIBOR being two of the main such rates. These rates are fixed each day based on surveys, opening the door to manipulation by false reporting. What is more, swap payments depend critically on the fixing of the reference rate on a single key day—the reset date—meaning the payoff to a well-timed manipulation could be large.

When a swaps dealer is short of the reserves it needs to settle periodic payments on its swaps contracts, there may not be an easy recourse to the central bank. The dealer must rely on backstops from its banks, whether they are separate firms or different parts of the same universal bank.

The swaps dealer could avoid reliance on these backstops, though, if it could exert some control over the reference rate. By making a market in swaps, it has sold liquidity to meet its clients' demand. By pushing the reference rate around, it creates a free supply of liquidity. Not perfect, because the LIBOR fixing depends on the submissions of

many banks, and because the scope for manipulation was only a couple of basis points. And not even free, in the end, as Barclays has learned. But a good enough source of liquidity that it was done dozens of times.

What felt to derivatives traders like a looming loss on their books appears at a higher level as a liquidity shortfall. For deposit-taking banks, a large system has been built up to prevent such shortfalls from ruining them. When the same business is done with derivatives, no such system exists. The rules for LIBOR submissions turned out to be the weak link, and so they broke down. If something new is to be installed as the reference for trillions of dollars' worth of derivatives, it might provide an opportunity to address this asymmetry.

- The Money View

Posted by Daniel H. Neilson at 6:38 pm

QE3

by Daniel H. Neilson on September 19, 2012 16 comments

Last Thursday, the Fed announced its anticipated third round of balance-sheet expansion, at a fixed rate of about $40B per month "until [substantial] improvement [in unemployment] is achieved in a context of price stability". A relief, perhaps, to see some attempt at boosting the economy. But in a column that appears to praise Bernanke for doing something—anything—Martin Wolf still suspects the policy will fail to live up to hopes, and I am inclined to agree.

How should we understand QE3? The Fed promises to buy MBS, and possibly other assets, at a fixed and steady pace until employment improves. The immediate effect is to absorb such assets from elsewhere in the financial system. This is, in the first instance, a boost to the liquidity of these securities: when a big-time buyer is out there, it will be easier to sell, and knowing that a big-time buyer will continue to be out there, others will be more likely to buy.

Large-scale purchases (and $40B a month is quite large-scale) can also be expected to raise the price of the securities, and anticipation of such effects went immediately to the benefit of bank share prices, which spiked after the policy was announced.

The existing supply is unlikely to be enough to meet the Fed's demand for too long, and so it will have to be met with new origination of the underlying mortgage loans. The Fed's statement says it aims to "put downward pressure on longer-term interest rates." What channel would make this work? The Fed could be hoping that its presence as a buyer will support new lending. If this new lending facilitates an increase in sales of new homes, equity withdrawals (or refinancing) to finance consumer demand, it could increase aggregate demand and GDP.

In balance sheets, the channel looks like this:

[PICTURE]

But this is quite an indirect way to generate demand. Narrowly, a spread already seems to be opening between rates faced by borrowers and MBS yields—the origination channel, so to speak, can not be counted on to transmit the asset purchases all the way to households. The yield on MBS rises, but rather than mortgage rates falling, originators are capturing a wider spread between the two rates. The rise in MBS prices, that is, leaks out as increased fees to the financial sector.

At the highest level, finally, does QE3 get at what is keeping aggregate demand down? If the problem remains, still, overindebted households unwilling to increase their demand for newly produced goods and services, then this liquidity-providing operation will have very little effect. If there is too much debt out there, and it is to be reduced, someone will have to write that debt down against equity. This is not a feature of QE3 as announced.

Special video feature

This final observation on QE3 offers a passable segue to the ECB's announcement of outright monetary transactions earlier this month, and George Soros's plan to address eurozone sovereign indebtedness. After a conversation this morning, I decided to take the US, in words, and Perry took Europe, in a video:

[VIDEO LINK]

- The Money View

Posted by Daniel H. Neilson at 3:51 pm

Ring-fencing Explained

by Perry G. Mehrling on October 03, 2012 3 comments

Everyone wants to ring-fence something, but they can't agree on what: Vickers, Liikanen, Volcker.

In all proposals, the idea is to have bank capital separately allocated for some activity, and to prevent that capital from being exposed to any other activity. Some people want to lock the wild animals in a cage to keep them away from us; some people want to lock the tame animals in a cage to keep them safe from the dangerous world outside.

Vickers wants to ringfence retail banking, with the idea of trying to protect Main Street from the other more risky activities of banks. Liikanen wants to ringfence all trading activities (i.e. Wall Street), apparently in the hope of keeping the rest of the bank safe from them. And Volcker wants simply to ring fence the market-making aspect of trading, in order to separate it from so-called proprietary trading which exposes bank capital to price risk.

All three proposals represent attempts to come to regulatory grips with the dramatic changes in the nature of banking over the last 30 years or so, changes that were revealed to the world by the global financial crisis that began in August 2007 and continues to this day.

My own view is that we need to begin by thinking of banking more generally as dealing, and distinguish between money dealers who quote buy and sell prices for funds, and risk dealers who quote buy and sell prices for risk. I think both of these activities need backstop, not just the money dealers, but different kinds of backstop since funding liquidity is a different thing from market liquidity.

Further, in both cases, we need to distinguish between matched-book dealing and speculative dealing. That's essentially what Volcker is trying to do, but probably I get to this view from a different chain of logic. The ideal of matched book is to have offsetting risk exposures that exactly net out; if you could really do this, you would not need any capital since you would be bearing no risk. But there is one kind of risk that does not net out, and that is liquidity risk which is systemic.

The larger the scale of the matched book position, the larger the liquidity risk, even if all other risks net out. Because of this, there is always an implicit liquidity put from matched book dealers, both money dealers and risk dealers, to the central bank. My view is that we should make that liquidity put explicit, and then argue about the details, including how much it should cost.

Speculative dealing is an entirely different animal, at least conceptually. It is true that liquidity risk is involved, again in both money and risk dealing, but price risk is the big thing, so this is where you want there to be capital requirements, or other ways of ensuring that the taxpayer is not providing implicit capitalization.

Where does that leave me in terms of the proposals on the table?

I don't think it makes sense to try to ring fence either Main Street or Wall Street. Shadow banking brought them together—money market funding of capital market borrowing—and the collapse of shadow banking has torn them apart. We could of course simply adopt a regulatory structure that reads that experience as the verdict of history, and so strives to keep the two sides apart forever more. My concern is that maybe that is just piling on, rather than constructively trying to imagine an ongoing engagement between the two, a market based credit system that is shorn of the worst elements of the shadow banking system.

Europe is having its Glass-Steagall moment, and maybe they just have to go through it. But the US has been there and done that. I'm with Volcker that we need to try to distinguish matched-book market making from speculative position taking. The former involves liquidity risk, and requires liquidity backstop, which should be forthcoming. (Maybe we should actively try to concentrate it at central clearing counterparties?) The latter involves

price risk, and requires capital backstop, which should be demanded by counterparties in the first place, and by regulators protecting the public purse in the second place.

- The Money View

Posted by Perry G. Mehrling at 1:23 pm

Liquidity, Down the Drain

by Daniel H. Neilson on October 17, 2012 2 comments

[PICTURE]

China released quarterly GDP figures this week. Wen Jiabao emphasized the parts of the release that pointed toward stabilization, and one can certainly find some logic to that view. Stabilized or not, China's target of 7.5% growth marks a steep slowdown over recent growth rates.

Other major economies, facing weak demand, currency crisis, and high unemployment, have pushed monetary policy to the hilt with various forms of central-bank balance sheet expansion—QE3 in the US, OMT (announced, not yet used) in the euro zone, and maintenance of a currency peg in Switzerland. What about China?

The PBoC has certainly not been sitting still. Earlier this week it lent RMB 30bn ($5bn) to the money market, on the heels of a near-record injection of RMB 265bn ($42bn) into the Chinese money market earlier this month. This has come in the form of reverse repo operations:

[PICTURE]

It is worth remembering what is the immediate effect of such injections on the financial system. In a contracting economy, borrowers are coming up short, unable to meet their maturing obligations as they come due (in China as in any financial capitalist economy). The strain falls onto the banks, who can absorb it when the shortfalls are small. When the shortfalls become too large to be absorbed by any one bank, the biggest bank around, the PBoC, can create new money to meet the strain, which is the economic substance of these short-term liquidity operations.

They have been successful in pulling down overnight interest rates, but not at even slightly longer tenors, including the normal measure of Chinese interbank conditions, the seven-day repo rate. The RMB 265bn ($42bn) injection was enough to bring down the seven-day rate by just 3bp. One problem is that the reverse repo operations themselves have a fairly short term, and so they will have to be refinanced or unwound over the next few weeks, depending on whether the PBoC continues accommodation.

The context of all of this is the question of whether China will be able to rebalance incomes in its economy away from investment and toward domestic consumption. If the current high level of investment is unsustainable, it will surely come to an end. Coming to an end means, practically speaking, that producers of capital goods (and inputs to those goods) will be coming up short at the end of the month.

There is evidence, albeit anecdotal, on this score. In his latest newsletter, Michael Pettis points us to Bloomberg:

Copper inventories at bonded warehouses in Shanghai probably climbed to a record as import premiums dropped to a four-month low, signaling demand in China may not be improving as much as expected after a summer lull.

Other similar stories can be found. Simply put, as investment spending falls, industrial inputs like copper will go unsold. Inventories will pile up, and producers will find it hard to pay their bills. This will in turn bubble up as unmet obligations and, ultimately, liquidity strains in the banking system.

There are two ways out: either chronic shortfalls leading to bankruptcies in the capital-goods sector and contraction of investment, or sufficiently rapid growth of consumption to rebalance the economy without allowing capital-good production to contract.

The trouble for the PBoC is that, in the first case, the shortfalls are not going to go away in seven days or even in three months, so liquidity is no help; and in the second case, a major structural change needs to play out, so liquidity is still no help.

China has avoided large-scale stimulus in the current cycle, perhaps looking ahead to the Party Congress and leadership change in November. So perhaps the PBoC, not entirely unlike the Fed, feels that monetary policy must be used, even if fiscal policy would be more appropriate under the circumstances.

The Fed, the ECB, the SNB, and the PBoC have taken stock, and each has decided that large amounts of liquidity are called for. Rough seas ahead seems a safe prediction.

- The Money View

Posted by Daniel H. Neilson at 4:54 pm

OMT: Slouching toward Eurobills?

by Perry G. Mehrling on October 31, 2012 4 comments

The Eurocrisis has many dimensions—bank solvency crisis, sovereign debt crisis, political unity crisis, and economic/unemployment crisis—but time after time it has been the liquidity crisis dimension driving events, and ECB response to the liquidity crisis driving institutional evolution. The reason is simple. Liquidity kills you quick.

Most people, probably, think that the real point of Outright Monetary Transactions is to support the price of sovereign debt, notwithstanding Draghi's claim that it is about fixing a broken monetary transmission mechanism, since low policy rates seem not to be transmitted to low sovereign debt rates. But maybe Draghi has more of a point than most people realize. From a money view perspective, let's consider the possible connection between proposed Outright Monetary Transactions and the ongoing problem of burgeoning Target 2 balances between surplus and deficit national central banks of Europe.

[VIDEO LINK]

If there were Eurobills, balances could be settled periodically by transfer of assets, just as is done in the Federal Reserve System. More precisely, if there were a System Open Market Account at the ECB, in which all of the national central banks held shares, settlement could be made by transfer of shares.

From this perspective, OMT can be seen as the first step toward a kind of system open market account, and the shares in that account would be a kind of first step toward a Eurobill.

We know that the Bundesbank is not happy that it has accumulated such large Target 2 balances, which are essentially unsecured claims against the Eurosystem as a whole. We know also that the Bundesbank would be quite happy receiving German bonds as settlement for those claims, but that is not going to happen and everyone knows it. So the question is whether Spanish sovereign bills would be acceptable, and it seems that maybe the answer is positive, especially if the sovereign commits to some kind of conditionality before hand.

Even better however if the Bundesbank could receive shares in a system open market account, representing a portfolio of the various assets held by the Eurosystem. The point is not so much diversification as it is security. In effect, these shares would be a kind of proto-Eurobill, maybe not yet traded in private money markets, but traded nonetheless in settlement between national central banks. So maybe we should be pushing for a package deal, not just Spanish OMT but also others (Italy and maybe also France), in order to begin creating a system open market account at the ECB. (See here for such a proposal).

If it works, OMT holds out the prospect to finally settle the Target 2 overhang. Start with Spain. Suppose that Rajoy asks for OMT. Spanish banks sell Spanish bills to the ECB, use the proceeds to repay loans from their national central bank, which then uses the proceeds to repay Target 2 loans from the Eurosystem. Hey presto, settlement.

But now the ECB has new Spanish bills as an asset, and new deposits as a liability, and both have to be booked at one of the national central banks. Book them at the Bundesbank and the deposit liability cancels against the Target 2 repayment, leaving Spanish bills as an asset. In effect, Target 2 balances are replaced by Spanish bills. That's why the crux of the matter is whether the Bundesbank commits to accept Spanish bills.

The larger point of this post is the simple observation that the Bundesbank will more readily accept Spanish bills if in some sense these bills are the joint and several liability of all the European sovereignties. If Spain, Italy, and France all went in for OMT together, and the resulting assets were segregated in a system open market account in which all national central banks held shares, we would be halfway there.

The unsecured liabilities of the Eurosystem, such as Target 2 balances, are already the joint and several liability of the national central banks which capitalize the ECB. A system open market account in which national central banks

hold shares is just a secured version of the same thing. This is the sense in which Draghi's OMT offers the prospect of a kind of backdoor Eurobill, essentially a secured clearinghouse certificate now, but possibly something more in the future.

- The Money View

Posted by Perry G. Mehrling at 8:01 am