Through the Looking Glass: Thoughts on the Financial System, Fertilizer Prices, and Our Food System

Posted by Gail the Actuary on February 28, 2009 - 10:46am
Topic: Economics/Finance
Tags: fertilizer prices, food systems [list all tags]

This is a guest post by Steve from Virginia. Steve is an artist, writer, photographer, horticulturalist and economic dilettante. He has first hand knowledge of fertilizer prices from his work growing orchids. In this post, Steve gives us his interpretation of our current situation.

Our world is changing, but we don't always understand how. We describe the situation in words, and the choice of words changes how we think about things. In the comments to Sharon Astyk's Down the Rabbit Hole post, commenter "x" expresses his frustration with the EROEI concept:

> This where I am coming from when I criticize abstract concepts like EROEI and other arguments involving abstractions so often posted on TOD. There seems to be an inability to differentiate an abstraction from the real. Energy is seen as real while the concrete forms of energy with all their differences are treated as subserviant to the abstract. . .

There is a paradox: Language annihilates what it describes. It is impossible to escape the subjective; our world is constructed in analog - by us - described to ourselves in our minds with language. The world we inhabit lacks the potency of the real which lurks fruitlessly out of reach. Because of our immersion in language, we have abstracted ourselves. The more 'successful,' the more intelligent, the 'smarter' we become, the less relevant to anything else we become. Behind the facades of 'reality' are more facades. The harder we try to get 'to real', the more elusive real becomes.

In this post, I try to look through some of what is hidden by language with respect to the financial system, and how this is affecting fertilizer prices, which in turn can be expected to affect food supply.

Our money system has seized up. Nobody can figure out what the problems are since they are real; now the tendency toward abstraction is hazardous. At the same time, the problems are abstract. We are less in a 'liquidity trap' than a 'rationalization trap'.

Banks are the focus: banks can print money, and without functioning banks there isn't enough credit available to finance 'growth'. Focusing on the banks is a mistake. Too much liquidity has been funneled into the financial system. First of all, this liquidity is not resuscitating bank credit expansion. The reduction in credit is deflationary. Lack of lending results in job losses. These job losses in turn further reduce credit formation, which results in additional job losses in a vicious cycle.

At the same time, the liquidity in the financial system represents a substantial systemic risk on its own account. So far this risk exists outside of the 'crisis' modeling that is represented in the various bailouts and liquidity injections. The reason this risk exists is because the individuals creating it are [blind to risk in general](#).

There are two, related aspects to this:

Consider for a moment, a large bank either in the US or abroad that is insolvent. This bank has received either 'emergency' liquidity in the form of discount window loans or has 'swapped' bad assets--loans to customers that will not be repaid to the bank--with the Treasury or with a Treasury proxy for government loans. In either instance, the money received from the government/ Fed is a loan, not a grant. Our bank is obligated to pay this money back.

The consequence of our bank's indebtedness to the Treasury is that it is loathe to risk further lending since doing so would risk increasing its upstream indebtedness. In the current deflationary context, the effect is similar to the principal amount of any loan increasing—even liquidity injections or asset swaps increase! In this instance the rate of interest that the Central Bank or the Treasury charges our bank is irrelevant. If the rate of deflation is ten percent a year (or much more if the business of the bank is centered in real estate), the principal will effectively increase by that amount, with whatever interest charged being added to that! The result is our bank is now very 'conservative' ... it will not lend at all, or will only lend to the central bank instead of to outside customers.

This 'Deflation Paradox' is the motive for all the calls by legislators for rules to compel bank lending. Legislators and banks themselves are powerless; an insolvent bank will instead wait for 'other institutions' to lend and cause credit expansion.

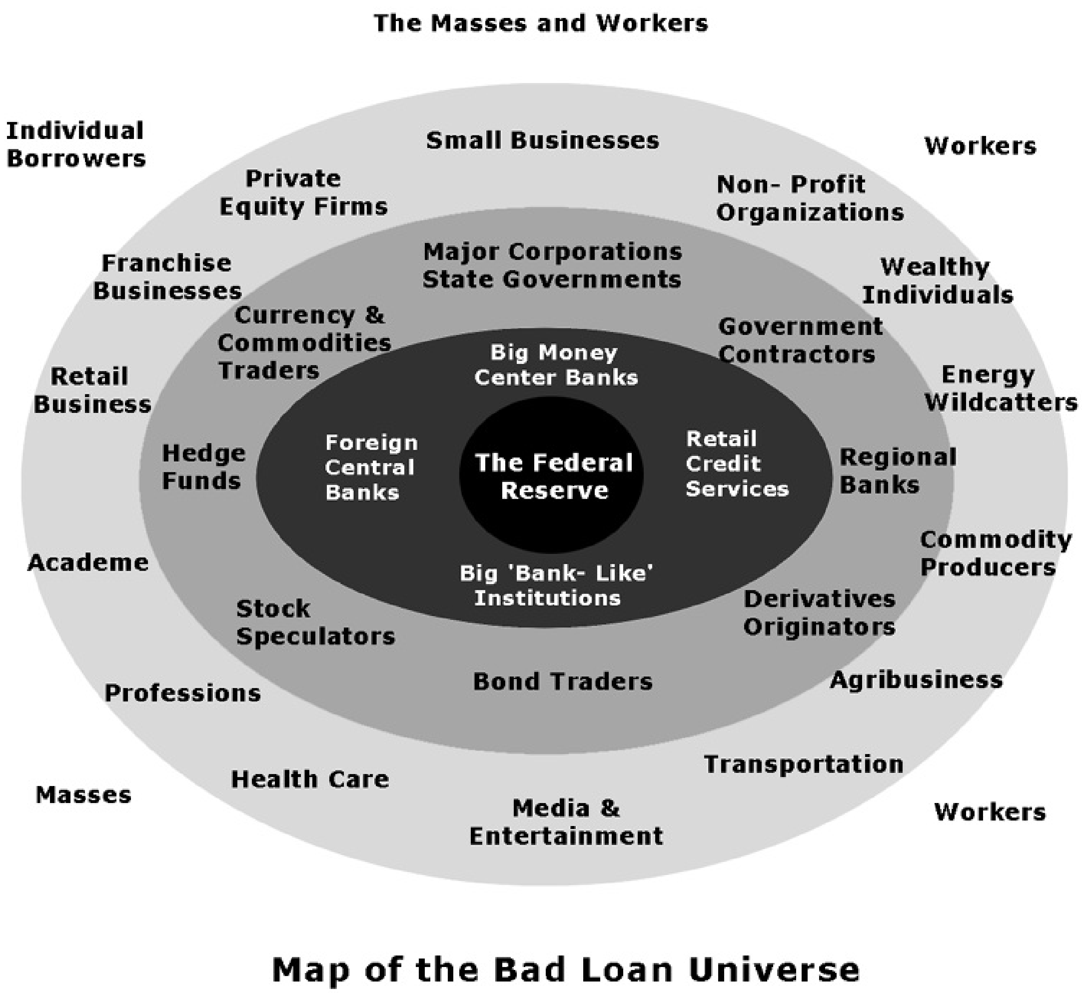
Unfortunately, ALL banks are insolvent, as debt defaults mount. There ARE no other banks or institutions that can expand credit by fractional reserve lending, whether in the US or in the rest of the world. The banks are on life support; institutions large enough to effect the GDP of the developed world's massive economies are unable to do so. For any to lend would be suicidal since the new borrowing would rapidly become deflationary liabilities which would in turn propagate downstream. Who would the banks lend to? The new borrowers would simply default. Without 'other banks' with 'other borrowers', there is no engine to propel credit expansion. This is the 'Liquidity Trap'; the government lends, but the lending is 'trapped' within the crippled banking system.

Simply lending to the insolvent banks makes them more indebted to the Fed and the Treasury who are by exchange insolvent themselves. At some point, simple insolvency becomes something absurd or metaphysical; in the language of seizures, 'Grand Mal Insolvency'.

If we don't have solvent banks on earth, perhaps we need is an invasion of banks from outer-space. Even this wouldn't work! The second risk is more dangerous: that the money lent to the banks may actually leak out of the liquidity trap.

Instead of being the intended panacea, the result would be catastrophic. The best way to understand this is to look at a map of the 'Bad Loan Universe', which is the particular universe we humans currently inhabit:

This is what the Bad Loan Universe looks like through a telescope. It's pretty but very dangerous.



My view of the bad loan universe, up close. Click for larger image.

At the center of the bad loan universe is a gigantic black hole: the Federal Reserve Bank. Surrounding it most closely are surrogates for the Fed: foreign central banks, money center banks, credit- card and corporate financing entities such as GMAC, American Express and GE. Outward from the center are more businesses and business-like entities, surrounding and enmeshed in all are the Masses and Workers, people like you and me.

Right now, most of the 'inner ring' has been sucked into the black hole of insolvency. Like all black holes, the more institutions that are sucked into the center, the more powerful the black hole becomes. Some of the second ring entities such as hedge funds, State governments and regional banks have teetered over the 'event horizon' and are now lost to insolvency. Any contact with the black hole expands its ambit. It affects all loans within range. Left unchecked the Black Hole will swallow up the entire universe after making all loans, 'bad loans'.

The mechanism of expanding its ambit is liquidity. Ben Bernanke and his Treasury buddies believe this liquidity--which is fancy term for printed money--will reinflate the universe. What is happening instead is the liquidity contaminates all it reaches; any institution obtaining liquidity--or rumored to need liquidity--is considered to be insolvent. Any bank needing liquidity from the Black Hole will wind up being sucked into it. Since deflation makes the principal of all loans increase over time, this 'Deflation Paradox' makes even good loans held by solid institutions uncollectible!

Deflation and liquidity feed on each other!

The outcome desired above all else by the Fed masters is for the Masses and Workers who make up most of the real universe to take up the Fed's liquidity and spend it ... on cars, houses, luxury vacations, second homes, flat-screen televisions and junk food. If the Fed understood the situation, it would realize the only way to increase desired economic activity is to permit the workers and masses to earn more real money. Unfortunately, this common sense approach is escapes the Fed Masters; they would rather blindly print and lend more and more 'liquidity'.

In this perverse universe, the liquidity remains trapped within the innermost rings. If it should emerge, those closest to the Black Hole would have the first claim on it: first, the money center banks, then the regional banks and corporations, then the smaller businesses and finally to the masses and workers. These last would have the final claim on the trickling liquidity.

That is, if they could or would accept more debt.

The liquidity would stop at the corporations and businesses. Prices of goods and services would increase first. Wages and benefits would increase last if at all. This is the danger, both to the Masses and Workers, and to businesses as well!

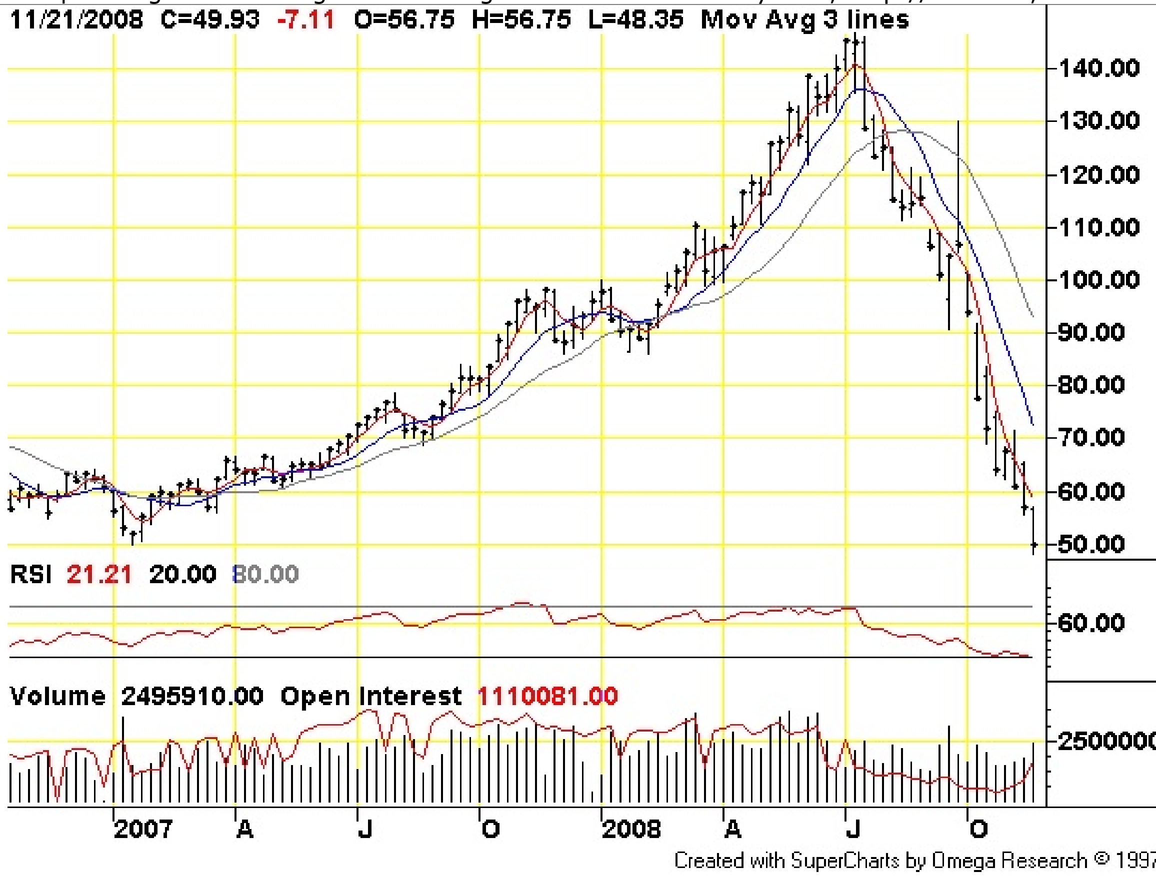
Driving this entire process is a mysterious force called 'supply and demand'. When there is a large amount of currency (supply) relative to the smaller amount of goods or services (demand), prices for the goods and services increase. While this is happening, money never reaches the masses and workers who consequently cannot afford to buy the increasingly expensive goods. The businesses are unable to SELL the increasingly expensive goods; the businesses price themselves into Chapter 11.

Businesses either refuse the liquidity and risk insolvency or make use of the liquidity which drives up prices ... and risk insolvency! This 'Heads-I-Win-Tails-You-Lose' mechanism caused many bankruptcies during the Great Depression.

The Masters of the Bad Loan Universe call this liquefaction Re-inflating the Economy. They don't realize they can only inflate PARTS of the economy--the wrong parts. Here, liquidity simply spreads deflation farther and faster.

What is saving us is the liquidity trap.

One place where liquidity is showing up is in higher input prices for agriculture. This is an outgrowth of last summer's ‘commodity bubble' in oil/metal/agricultural goods:



Oil price chart from Newsbusters.org

The 'partial bubble' affected cost while the means to pay the increased costs swooned. In agriculture, this is flirting with starvation. Fertilizer is essential to farm yields, particularly where soils have been misused or overtaxed. The liquidity trickledown is identical to that described above. A publication of the University of Illinois Extension says the following:

> About two months after grain prices peaked in early July (2008), fertilizer prices peaked and then plummeted along a parallel path with grain prices. Wholesale anhydrous ammonia that was once $800+ is now below $200 per ton. Wholesale DAP *[phosphorous fertilizer]* that was $1,000+ in September is now $350 per ton.
>
> Suppliers indicate that a “perfect storm” occurred with the economic collapse, large pipeline stocks of high priced product, and a late fall that prevented typical rates and volumes of application. The credit crunch diminished South American demand, and when US grain prices fell, so did the demand for fertilizer at any price. So fertilizer storehouses are full of unsold products, some of which has a very high price attached to it. Unfortunately for farmers, the closer they are to the fertilizer the higher the price of the product. If retailers are forced to cut prices, they will lose substantial amounts of money on their inventory, but Schnitkey says there are incentives for farmers to delay purchases in the hope prices decline.

Fertilizer prices rose to the stratosphere because the Fed- inflated a commodities bubble; legacy prices for fertilizer makes its use prohibitive in 2009 and into the future. The yields of 2008/9 were good. With expensive fertilizer languishing in warehouses, what will yields look like in 2010?

How will farmers overseas afford expensive fertilizer?

Will Ben Bernanke be held accountable if farm yields fall and people starve as a result?

The best thing for the US government to do (and at the cheapest cost to the Masses and Workers and their grandchildren) is to listen to Nassim Taleb and Nouriel Roubini and prosecute the malefactors, then quietly get rid of all the stimulus packages.

Never happen! That's too common sensical for the Masters of the Bad Loan Universe.