

Myrmikan Update

May 2, 2011

Cash Balances Risk an Inflationary Crack-up

Daniel Oliver Jr. Myrmikan Capital, LLC doliver@myrmikan.com (646) 797-3134 An astute follower of Myrmikan recently commented that the results have been correct, but for the wrong reasons. To wit, the thesis is that as credit levels fall, gold outperforms commodities, which causes gold mining margins to increase, with the most marginal mines generating the largest percentage gains. He pointed out that, in fact, since the inception of Myrmikan, the gold-commodity ratio has fallen (left) whereas gold shares have increased (right).



The point is a good one in terms of conclusion, but it overlooks the current dynamics. In a deflationary environment, credit concerns are foremost when market liquidity is an issue (because of the threat of default). When liquidity is threatened, investors get squeezed for cash, which raises the value of the dollar and lowers all nominal prices, even while gold rises in purchasing power. Therefore, one would expect the real value of gold to increase when, in fact, its nominal price is falling and vice-versa. It is certainly not a perfect fit, but the chart below shows that the for past four years this relationship has been more or less accurate (the gold-commodity ratio in red, gold in black): the lines generally move in opposite directions.



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Similarly, gold stocks would be expected to respond to liquidity in the immediate term and to gold only in the longer term. In this case, again, theory would predict that, in general, gold stocks would rise when the real value of gold falls and vice versa. The chart below (gold-commodity ratio in red, GDX Gold Miners ETF in black) shows the data in this case better fits the theory since gold stocks are more sensitive to liquidity than gold itself.



So, indeed, one could say that the increase in junior mining shares over the past year have been for the "wrong" reasons. They've gone up because of liquidity, not because of the rising value of gold. But, oddly, despite the recent surge in gold prices, gold stocks have gone nowhere, with most well below their December 2010 highs. This negative divergence between gold stocks and gold has happened before, right before the crash of 2008. And, as the chart above shows, the period from November 2007 to April 2008 looks suspiciously similar

to the period from November 2010 to today. If 2008 is the model, then gold shares should plummet even as the economics of gold improve, setting up another historic buy point.

Adding to the similarities of 2008, the trade-weighted dollar index is probing the exact levels of support which, if not breached, could serve as a long-term double bottom. These ominous technical signals with the backdrop of the planned termination of QE2, has many funds de-risking, which has put additional pressure on all mining shares, not just gold shares.

While it is certainly possible that a large correction is imminent, there are important distinctions between early 2008 and today. First, in 2008 central banks were caught by surprise – as late as January 2008 Bernanke commented that the Fed was "not currently forecasting a recession." Not so now, when central banks closely monitor banks and overall liquidity levels. Also, in 2007 most managed money was unaware of severe credit risks and maintained huge leverage.

The most important distinction, though, was that interest rates were falling and continued to fall in 2008, whereas now the stated fear is that interest rates will rise. While the conventional wisdom is that rising interest rates will increase the opportunity cost of holding gold, and therefore the price will decrease, it is interesting that in 2008 the exact opposite occurred: gold fell along with interest rates. Why, then, would it not make sense for gold to rise when interest rates rise?







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A Myrmikan research report in October explained that inflation can be caused either by money printing – increases in the supply of money – or by declining cash balance preference – decreases in the demand for money. Expanding on that theme, John Hussman in an April 11 commentary made an interesting observation that the amount of cash that economic agents are willing to hold is directly related to the opportunity cost of holding it as against the risk-free rate.

To gauge cash balance preference, Hussman divides the monetary base by GDP. In normal times, for any unit of economic activity, people hold a certain amount of cash. If the risk-free rate rises, they will use the cash to buy short-term government bonds in search of yield, lowering cash preference, which raises nominal prices. If the risk-free rate falls, they become less eager to get out of cash, and cash balances rise, lowering nominal prices, all other things being equal.

As the graph below demonstrates, the facts fit the theory. When interest rates are high, such as in the 1970s, no one wants cash. Whereas, when interest rates are near zero, such as now, the opportunity cost of holding cash as against the risk-free rate is very low, and cash per unit of GDP is very high.



Source: Federal Reserve of St. Louis

As the chart shows, the amount of cash held per unit of economic activity is currently at an extreme. If interest rates rise to a mere 0.25 percent, then, given historical data, one would expect the cash-to-GDP ratio to contract from the current value of over \$0.16 to less than \$0.10. There are only two ways this can happen: either the Fed could shrink the monetary base by 38% (nearly a trillion dollars) or nominal GDP would have to grow by 60%. In the former case, a trillion dollar reduction of cash would achieve the proper ratio only if GDP were to remain constant, an unlikely assumption. In the latter case, the only way nominal GDP can grow by 60% would be by a burst of massive inflation. If the Fed tightened further in a panic, the inflation would shoot even higher.

As an aside, a more cynical analysis might also observe that government can only use inflation to cut its debt-burden if the inflation is unexpected, not giving the market time to adjust interest rates. Of course, the dynamics described above for the latter case would achieve precisely that outcome.

The country has, in fact, been in this position before. In 1941 the monetary base to GDP ratio reached an extreme of \$0.17 as the U.S. geared up to fight World War II. In that case it took ten years for the ratio to revert to less than \$0.10, at a cost of a 43% increase in the CPI, the balance from real GDP growth. When interest rates rise this time, the reversion will be much swifter. In 1940 Federal Reserve liabilities were 84% backed by gold, making dollars

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a steady, risk free asset. As discussed in other materials, today the dollar is backed 15% by gold (at \$1550) and the balance by securities that are highly sensitive to interest rates.

Bernanke claims he can avoid the implications of the previous chart – in other words, allow for data points in the area where the legend is. His plan if interest rates rise is to pay interest on bank reserves so that the cash doesn't go into circulation. For example, if interest rates spike to 3%, the Fed could pay the banks 3.25% and keep the cash bottled up. This strategy may work temporarily, but in the absence of a realistic exist options, all it would achieve would be to commence an exponential compounding of the problem as, paradoxically, more and more cash were printed to keep velocity low – it is not sustainable in the long-term.

Blaming inflation on rising interest rates may seem backwards, but, in fact, it's exactly what happened to Volcker when he raised interest rates in late 1979. Only by holding interest rates high did inflation moderate, creating the beneficial long-term effects that allowed the Fed to lower interest rates later.

Similarly, the Fed's lowering of interest rates during the crash of 2008 reduced the opportunity cost of holding cash and counterintuitively accelerated the decline in asset prices in the short-term by increasing liquidity preferences. By holding rates at zero, the Fed has created sharply negative rates that are already unleashing inflation. If the Fed is going to enter a tightening stance, inflation will begin to rise, not fall.



A final observation from the chart on the previous page is that, as would be expected, gold peaks when cash balance preference troughs. It would be bizarre, and contrary to theory and history, if gold and other prices were to peak when cash balance preference is at a positive extreme, as it is currently.

Once rates begin to rise and inflation is unleashed, the trading dynamics of gold will likely change dramatically. Credit would no longer fear destruction through deflation and default, but instead dilution from inflation. The inverse relationship between changes in gold's nominal price and purchasing power would shift to a correlative relationship. The inflation in the 1970s illustrates the simplified relationships among gold, the real value of gold, and the gold shares, all of which correlate with each other in the short and long terms.



Of course, it is well documented that unexpected or accelerating inflation is very negative for the broader equity markets, which is why the chart above shows the DOW swooning even in nominal value as gold and gold stock spike.

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One day does not a trend make, but it is worth noting that gold's spike in price this month corresponded to a rise in the real value of gold. If this pattern continues, it could signal the phase-shift from a deflationary to inflationary mindset, and the lagging gold stocks ought to react violently to the upside. Most of the managed money, currently hedged, will be out of the market and will have to chase prices higher.



Perhaps there is one more deflationary round to go before the inflationary market changes to an inflationary mindset, but the point of holding insurance is not to produce trading gains but long term protection. For this reason, even aware of the substantial risks of a sharp pullback, the better strategy is to continue to buy and hold gold and gold equities. The broader markets, though, are a very different story, facing risks from either outcome.

As a final note, the recent increases in the monetary base has dramatically changed the graph of gold adjusted for the monetary base contained in the Myrmikan Thesis Presentation.



Currently, adjusted for the monetary base, the average price of gold since 1917 is \$5,140, the average price since World War II is \$3,734, the maximum price was \$15,715 in 1980, and the minimum was \$1,018 in 2001. The adjusted price for August 1971, when the U.S. was forced off the gold standard (because the price was fixed too low), is \$1699. The price of gold needed to balance the Fed's books (assuming the bonds to be worthless) now equals \$10,105.

In short, gold remains cheap at these levels. And the gold stocks remain levered to gold, at least in the medium term.



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