## What Next For Gold?

The price of gold has been coming down since reaching a high of \$1900 in Sep 2011. In fact, as the chart below shows, it is threatening to break down from the upward sloping trendline that it's been following since late 2008.



However, this is nothing new. Since gold began its long bull market in 2002, it has experienced 3 different phases of uptrends, as shown in the next chart.

The first phase stretched from 2002-2005. I distinctly recall this period to be the early phase of the commodity bull market. It was also a period where the US was recovering from its dotcom bubble and its housing market was getting into gear.

The second phase, a little steeper, stretched from 2005-2008. This was a period where the housing bubble in the US reached its peak, along with the commodities bubble. Do you remember how Peak Oil Theorists were having a field day warning the world that oil price was going to reach several hundred dollars per barrel? And the more extreme soothsayers were telling everyone to build underground bunkers stocked with food supplies because the world was going to run out of food?

The third phase, the steepest, began in 2008, around the time that central banks, led by the Federal Reserve, began using quantitative easing as the primary tool for digging the world out of the global financial crisis.



It would appear that quantitative easing is still happening, with the ECB's LTRO scheme and the BoJ's commitment to 1% inflation. Hence, gold should still be rising steadily. So, why isn't it?

In my opinion, gold is not rising because the central bank that prints the only currency that really matters in this world, the US\$, is on hold. In fact, the last major spike in the Fed's balance sheet occurred in early Dec 2011 and after peaking in mid-Feb 2012, the Fed's total assets has been dropping. (next chart)



The Fed is on hold because the US economy appears to be recovering. However, I question the longevity of this recovery.

The Fed has repeatedly declared that there can be no sustained recovery without a recovery in the housing market. Unfortunately, there isn't even a sign of stability in house prices, let alone a recovery. The Case-Shiller Index of house prices has just plummeted to a new low in Jan 2012, as can be seen from the next chart. It is now almost 6 years since US house prices peaked!



The US "recovery" is essentially the product of two parallel efforts – quantitative easing by the Fed and borrowing by the US government, both massive. The following shows the annual increase in US Treasury Debt since 1990.



Furthermore, a very significant threshold was crossed recently without a single news report covering the event. In early 2012, for the first time in its history, the US public debt exceeded its annualized nominal GDP. The US government gross debt to GDP ratio is now in excess of 100%. This ratio is far worse than Italy or Spain!



As can be observed from the chart of annual debt increases, this gorging on debt is not abating. Halfway through its fiscal 2012, the US government has already increased its debt by \$792 billion. This half-way mark rate of increase is the 3<sup>rd</sup> highest in history (the other 2 being the half-way marks for fiscal 2009 and 2010) and is already equivalent to 5.2% of last year's nominal GDP!

In fact, the average increase in debt for the last 4 years was 10.3% of each year's nominal GDP!

If increase in debt is 10% of GDP and GDP only grows 4%, the difference of 6% is exactly the percentage point increase in the ratio of total outstanding debt to GDP. This simple arithmetic suggests that the US has now reached an inflexion point where its total outstanding debt to GDP ratio will accelerate because there is simply no way for its nominal GDP growth rate to catch up with the rate of growth in its debt.

At the current pace, within 8 years, the US debt to GDP ratio will reach 150%. These are the debt to GDP ratios that make Greece and Japan unsolvable basket cases.

In the US, it now takes about \$3 of additional debt (by government, households and corporations) to generate \$1 of additional nominal GDP. As it accounted for 78% of total additional debt in 2011, the US government cannot cut back because GDP growth would collapse. Households cannot borrow if house prices don't turn up and corporations are cash rich.

It's a death spiral.

This year, the Bank of Japan will be buying almost ALL the debt issued by the Japanese government. The Fed, having already bought 61% of total net Treasury issuance last year, will probably buy about two-thirds.

The insanity of debt monetization is already well underway!

Short term concerns notwithstanding, there are still very strong reasons to hang onto gold for the rest of this decade.

As always, thoughts always drift back to what the appropriate price of gold ought to be. Among the many ways to think about gold price is to consider the gold that the US Treasury holds and **assume that the price of gold should be high enough that it is able to back the entire currency in circulation**. Let's call this the theoretical price of gold. One can plot a very long term graph showing the ratio of the actual price of gold to this theoretical price of gold.



From the above chart, between 1973-1990, this ratio was above 0.40. After 1990, it sank to a low of 0.12 in 2001 before beginning a long climb back to just above 0.41 recently.

Between 1973-1990, the ratio seemed to have 0.6-0.7 as its upper boundaries, if one ignores the spike of 1980.

One could argue that given the blatant debt monetization and prevalent quantitative easing worldwide, the ratio is far more likely to drift upwards towards 0.6-0.7 than to drift back down towards 0.12. In several years time, when US debt levels have reached panic proportions, this ratio could even spike like it did in 1980.

That being the case, gold would still appear to have \$2500 or beyond as a destination, assuming currency in circulation does not change. (note that US money in circulation post-WW2 has ONLY ever gone up!).

Another way of thinking about the price of gold would be to start with the argument that the **assets of the Federal Reserve Bank should be backed by the gold in the Treasury**. One can calculate a alternative theoretical price for gold using this method and derive a similar ratio chart when compared with the actual price of gold. (below).



What seems clear is that the ratio is actually at the lower bounds of its range over the past 20 years. A 20-25% ratio would put gold at between US\$2200 and US\$2700.

Conclusion : All the efforts of the US government and Fed has begun to yield some fruit in terms of positive economic momentum. For as long as the positive momentum exists, gold will be headed south. However, without a housing recovery, this momentum is not sustainable. Furthermore, the fiscal profligacy has just driven the US past an inflexion point where it will almost certainly accelerate towards a national balance sheet that looks like Greece and Japan - not in the distant future but within the next 8-10 years. The dollar crisis has yet to come. Meanwhile, some less common valuation methods suggest that the fair price of gold at this juncture should be well in the region of \$2500, give or take a couple of hundred. Footnote : Extract from Federal Reserve website.

http://www.federalreserve.gov/monetarypolicy/bst\_table1popup.htm

**Gold stock:** The gold stock of the United States is held by the Treasury and consists of gold that has been monetized: the Treasury has issued certificates reflecting the value of the gold to the Federal Reserve in return for a credit for the same dollar value to the Treasury's accounts. The gold stock also includes unmonetized gold, against which certificates have not been issued by the Treasury (although virtually all the Treasury's gold has been monetized since 1974).

The value of the gold stock is recorded on Federal Reserve and Treasury books at \$42.22 per troy ounce, the so-called official U.S. government price established by international agreement and confirmed by Congress in 1973. If the Treasury buys or sells gold, however, the purchase or sale is executed at market prices.

Acquisition of gold, and its monetization by the Treasury, can affect reserve balances at depository institutions. Acquisition increases reserve balances "Gold stock" and "Treasury cash holdings" rise, but the "U.S. Treasury, general account" balance falls. Monetization leaves the gold stock unchanged, but reduces Treasury cash holdings and increases the Treasury's general account. Monetization itself does not alter reserve balances, but these balances increase when the Treasury spends the proceeds or shifts the proceeds to the accounts that it maintains with depository institutions. Return