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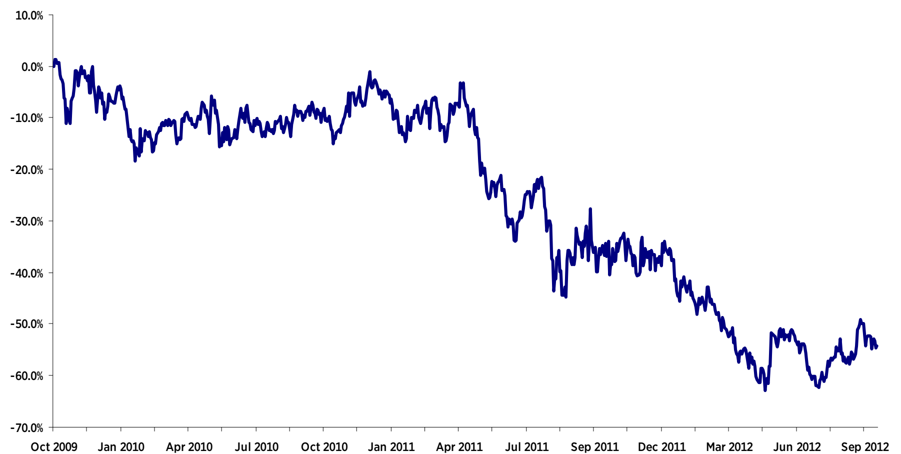
12 October 2012 | Thunder Road report

Thunder Road report

Is Gold a Giffen good?

We are at a critical point for gold and the gold equities. With regard to the latter, the long running underperformance versus bullion may be over for the time being with the recent double bottom in the chart of the HUII Index of large cap. gold stocks versus the gold price:

HUI "AMEX Gold Bugs" Index versus the gold price – bottoming out?



Source: Capital IQ

During the Summer, a portfolio manager from a large UK fund in a CNBC interview commented that "I wish I'd never met a gold miner." That kind of abandonment of hope can obviously be typical of market bottoms.

Time will tell, but the investment case for gold equities has received a boost from recent M&A transactions. This week saw the announcement of Minera Frisco's US$750m acquisition of the Mexican Ocampo mine from AuRico Gold. Minera Frisco is majority owned by Carlos Slim, touted in the media as the world's richest man. Other recent announcements should have raised eyebrows due to the (very) obvious theme:

7 August 2012 - Zijin Mining, the largest Chinese gold miner, acquired a majority stake in the Australian gold miner, Norton Gold Fields, for US$180m;

16 August 2012 - China National Gold announced that it was in preliminary discussion regarding an offer for Barrick's 73.9 percent stake in African Barrick Gold;

4 September 2012 – China's SEFCO Group announced the acquisition of the Zara gold project in Eritrea for US$80m;

19 September 2012 – China's Shandong Gold announced the acquisition of a 51% stake in the Australian gold miner, Focus Minerals, for US$238m; and

27 September 2012 - Zhongrun Resources announced the acquisition of a 42% stake in the Australian gold miner, Noble Mineral Resources, for US$88 million.

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Gold itself has had a strong move up since mid-August as the expectation of further QE became baked into expectations. We have moved into a new era of open-ended money printing across the developed world. Surprisingly, many people are prepared to believe that this will not be inflationary – but all in good time.

The failure of the gold price to breech US$1,800/oz so far can be attributed to aggressive short selling of various forms of "paper gold" by bullion banks. If we take the more transparent COMEX futures market, the CFTC's Bank Participation Report shows that between 7 August and 2 October 2012, almost the entire increase in open interest has been accommodated by an 86,486 contract increase in the net short position of the reporting banks. The total net short position is now 184,748 contracts, i.e. 18.47m oz of gold or 574.6 tonnes. The latter is the paper equivalent of 20.4% of world gold mine production and more than 50% of China's reported gold reserves…just on COMEX!

The London gold market (LBMA) is much bigger, but far more opaque. What most commentators fail to appreciate is that the convention for gold trading on the LBMA is in "unallocated" gold. This is an unsecured claim against a pool of gold held in the vaults of clearing members of the LBMA. In keeping with banking practice, it is a fractional reserve system. Smart money has been buying gold on the LBMA and specifying delivery of "allocated" bullion, i.e. where specific gold bars are segregated in the vault in the name of the purchaser, or (increasingly) removed by the purchaser from the banking system altogether.

In August 2011, S&P downgraded the US sovereign credit rating from AAA to AA+ which was the catalyst for the gold price to rise US$270/oz to hit an all-time high of US$1,920/oz on the morning of 6 September 2011. Beginning the following month, reports of heightened demand for physical gold in the London market began to filter through which have continued in 2012. For example:

21 October 2011 – King World News' "London Trader"
"We had a major, major physical buy order today. The Chinese bought a massive amount of physical today at the lows."

17 January 2012 – King World News' "London Trader"
"They (the Chinese) have recently taken another roughly 150 tons away from the Western central banks."

18 March 2012 - Jim Willie of the Hat Trick Letter
"My best gold trader source..The Chinese are the principal buyers, but he swears that China is not alone.. The battle is being won in the vaults, where the gold cartel is being depleted"

19 June 2012 - TF Metals Report
"London Good Delivery bars are being delivered to Eastern buyers. Instead of being vaulted inside the LBMA system, these bars are being sent directly to refiners. The bars are then being melted and recast in 1 kilogram sizes."

8 October 2012 - Egon Von Greyerz of Zurich-based Matterhorn Asset Management on King World News
"I would also note, Eric, that some of the refiners we are talking to, they are seeing business strongly increasing now, and in this environment they are actually increasing their margins and prices. So there is clearly an increase in short-term demand."

Whether the reported Chinese buying is "official" or not is unclear. However, it is worth remembering the surprise Chinese announcement in April 2009. This was from a China Daily news article at the time:

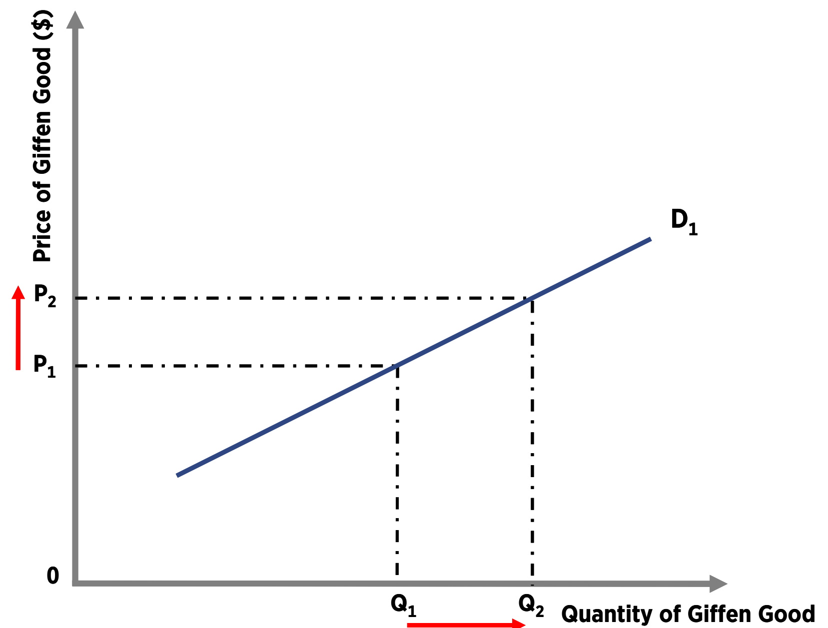
> "China, owner of the world's biggest forex reserves, said Friday its gold reserves had risen to 1,054 tonnes by the end of 2008. China is now the fifth biggest holder of gold reserves in the world, with only six countries having a holding of more than 1,000 tonnes, Hu Xiaolian, head of the State Administration of Foreign Exchange, told Xinhua in an interview. The new figure represents an increase of 454 tonnes from 600 tonnes in 2003, the last time China announced an adjustment of its gold holdings."

What's happening in the gold market reminds me of something I speculated could happen back in 2007 i.e. whether gold would some day exhibit the characteristics of a "Giffen good"?

Economists (I am not one) define a Giffen good as one which violates the normal laws of supply and demand, i.e. instead of falling, demand rises as the price increases. Wikipedia explains the paradox as follows:

> "In normal situations, as the price of a good rises, the substitution effect causes consumers to purchase less of it and more of substitute goods. In the Giffen good situation, the income effect dominates, leading people to buy more of the good, even as its price rises."

Giffen good - demand curve



Source: IB Economics

According to Wikipedia, the evidence for the existence of Giffen good is:

> "limited, but microeconomic mathematical models explain how such a thing could exist."

Please note that Giffen goods should not be confused with "Veblen goods". This is Wikipedia on the latter:

> "people's preference for buying them increases as their price increases (as greater price confers greater status)..decreasing their prices decreases people's preference for buying them because they are no longer perceived as exclusive or high status products."

Super cars and high-end luxury goods are examples of Veblen goods

Hermes "Birkin bag" - £6,000 to £100,000

Source: Hermes

In searching for examples of Giffen goods, the focus has normally been on low quality staple foods, i.e. as the price rises, people can't afford to buy better quality foods and are forced to purchase more of the staple.

For many years, the oft-cited example of a Giffen good was the potato during the Irish Potato Famine of 1845-52. When the famine broke out, approximately one third of the Irish population was believed to have been dependent on the potato as their major source of food. Subsequently, this example was discredited when it was realized that more potatoes could not have been consumed even by the poorest one third of the population since there was such a severe shortage of potatoes – at its nadir the potato blight caused an 80% reduction in the potato crop.

More recently, it has been suggested that rice and wheat in parts of China show the characteristics of Giffen goods. In "Giffen Behaviour and Subsistence Consumption", a 2008 paper by Robert Jensen and Nolan Miller of Brown and Harvard universities, the authors claim:

> "This paper provides the first real-world evidence of Giffen behavior, i.e. upward sloping demand. Subsidizing the prices of dietary staples for extremely poor households in two provinces of China, we find strong evidence of Giffen behavior for rice in Hunan, and weaker evidence for wheat in Gansu."

The amusing thing is that I saw a real time example of "Giffen behaviour" on Bloomberg News last week without needing to analyse consumption surveys from the Chinese hinterland. Before I get to that, when Alfred Marshall first publicized the idea of a Giffen good in 1895 he noted that:

> "As Mr. Giffen has pointed out, a rise in the price of bread makes so large a drain on the resources of the poorer labouring families and raises so much the marginal utility of money to them, that they are forced to curtail their consumption of meat and the more expensive farinaceous foods: and, bread being still the cheapest food which they can get and will take, they consume more, and not less of it."

In light of those remarks, let's turn our attention to the current hyper-inflation in Iran and a section from a Bloomberg News' article "Iranians Abandon Meat for Bread as Protests Flare" on 4 October 2012:

> "Iran's freefalling currency is turning meat into a luxury, sparking overnight price surges and spurring shoppers to stockpile goods.
>
> 'Most of my customers just look at products behind the window and pass,' said Behrouz Madani, 42, who owns a butcher shop in northwest Tehran. 'I see them going to the next store, which is a bakery, to feed their families with bread."

This is a perfect example of Giffen behaviour, but what about gold?

The lows in the gold price – there was a double bottom in 1999 and 2001 - were in the range US$250-300/oz:

Gold price 1996-2004 (US$/oz)

Source: Capital IQ

We are currently in the eleventh year of rising prices. What about demand for gold?

When it comes to the supply and demand for gold, many people don't understand that it is IMPOSSIBLE to measure accurately, as almost all of the physical gold ever mined is still available as theoretical supply in the form of bars, coins or (scrap) jewellery. This is reflected in gold's stock-to-flow ratio, i.e. the ratio of above ground stocks to annual mine production. The ratio for gold is between 60-70 and is FAR higher than any other metal or commodity. Silver is the only one other one which even troubles the scorers. While the high stock to flow ratio is one reason for gold's suitability as money, it also makes estimating supply and demand problematic:

The flows between the buyers and sellers of the existing above ground stock of gold held for investment purposes **CANNOT** be measured;

The supply and demand models created by the World Gold Council, industry consultants and banks are only estimates of the end demand for **INCREMENTAL ANNUAL PRODUCTION**; and

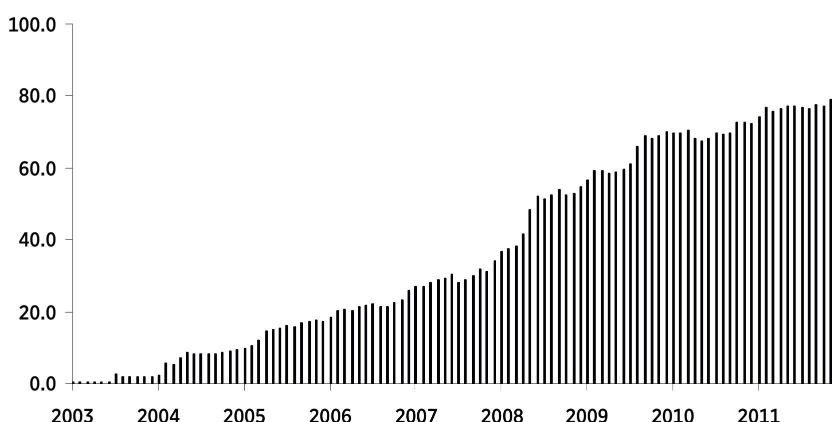
In some of these models, the demand for gold for "Investment" purposes is just a balancing figure.

The difficulties don't end there. It is well known that India's demand for gold is a significant factor impacting supply and demand for gold. This is Sandeep Jaitly in his October 2012 "Gold Basis Service" newsletter:

> "India remains the largest market for gold and silver by many magnitudes. What is not commonly appreciated is that whilst the recorded numbers for gold imports are big, the unrecorded are far larger. The 'black economy' of India is larger than that of any other country. Reported gold transactions courtesy of the well-known bullion organisations should always be taken with a pinch of salt."

However, there are some objective measures of key components of overall gold demand. Firstly, the aggregate amount of gold held in all known gold Exchange Traded Funds (ETFs). Bloomberg data goes back to October 2003 and is summarized in the following chart:

Total gold in all known ETFs (millions of oz.)

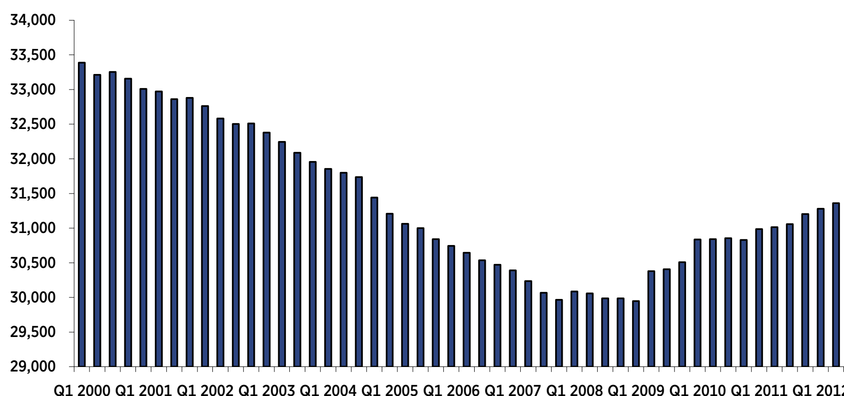


Source: Bloomberg

The current level is an all-time high at 82.958m oz (2,580.3 tonnes) - which is consistent with Giffen behaviour - demand for gold rising as the bull market in gold plays out.

Another source of measurable demand is from central banks, at least in terms of their reported activity. These venerable institutions have had an almost Damascene conversion as they have changed from sizeable net sellers to sizeable net buyers. We probably shouldn't be surprised that a) they were late joining the party and b) the inflection point was in 2008 – when the Great Financial Crisis hit - 7 years into the bull market.

Central bank gold holdings since 2001 (tonnes)



Source: World Gold Council

Once again, this is evidence of Giffen behaviour with respect to gold. The data above obviously doesn't take account of likely additional purchases by China's central bank as per the discussion above. I use the term "Giffen behaviour" deliberately. Some economists argue that there are three necessary pre-conditions for a Giffen good:

Firstly, there should be a lack of close substitutes. This is certainly true for gold as there are only two monetary metals - the other being silver - and the latter is both a monetary AND industrial metal. In contrast, other types of money, like paper currency and electronic credit, have no intrinsic value;

Secondly, it should be an "inferior good" – a good that people buy more of when their income goes down. Once again, gold scores well here as gold's attraction increases in response to a rise in inflation/inflation expectations which have a negative impact on real incomes; and

Thirdly, the good should constitute a substantial percentage of the consumer's income. This is much harder to argue in gold's favour. There is no doubt that growing numbers of people are allocating a larger slice of their savings (past income/future consumption) to gold, but that's about as far as the argument can be taken.

While two out of three "ain't bad", we'll stop short of attaching the term Giffen good to gold and instead focus on clear evidence of gold's Giffen behaviour.

Another point which shouldn't go unnoticed is the growing roll call of portfolio and hedge fund managers who, like the central banks, have been high profile gold advocates since the Lehman collapse in 2008. Here are a few relevant quotes:

Kyle Bass on CNBC on 12 March 2012:
You can call it what you want to call it..I call it money creation out of thin air and, therefore, gold has a lot further to go."

From WSJ's Market Watch on 15 August 2012:
"Hedge-fund managers John Paulson and George Soros boosted their gold holdings during the second quarter"

The "paper king" Bill Gross of Pimco, the world's largest bond fund, on Bloomberg TV on 5 September 2012:
"I just think it (the gold price) would be higher than it is today and certainly a better investment than a bond or a stock which will probably only return 3-4% over the next 5-10 years."

Ray Dalio when asked by whether he owns gold on CNBC on 21 September 2012:
"Oh yeah. I do...There's no sensible reason not to have some. If you're going to own a currency, it's not sensible not to own gold."

David Einhorn in the Huffington Post on 3 May 2012:
"I will keep a substantial long exposure to gold -- which serves as a Jelly Donut antidote (his characterisation of Bernanke's QE strategy) for my portfolio. While I'd love for our leaders to adopt sensible policies that would reduce the tail risks so that I could sell our gold, one nice thing about gold is that it doesn't even have quarterly conference calls."

Besides avoiding the quarterly conference calls, two other factors spring to mind:

> We are in the midst of the biggest debt crisis in history and there is only one financial asset which doesn't have COUNTER-PARTY RISK; and
>
> **From Philip Barton's "The Dawn of Gold":**
> "A stock of anything has to be started at a moment in time. A stock of 170,000 tonnes does not just suddenly appear. At some point, long ago, the decision was made to begin to hoard gold. No one hoards something that will not hold its value over time. No one would put a dozen eggs or an iron bar in the back shed and expect it to have value fifty years later. The crucial point to understand is that when the original decision was made to begin to acquire and hoard gold, it must have already been regarded as a store of stable value over time, otherwise the decision to store it would not have been made."

Imagine if in 2007, Ben Bernanke, Mervyn King, Jean Claude Trichet et al, had actually possessed the analytical foresight to see what was coming, organised a meeting with the world's media and explained how, using their collective wisdom, they would solve the problem.

> "There's going to be a massive global crisis, but there's no need to worry. We're just going to print money."
>
> "Is that it?"

How would most people have reacted then? I think they would have laughed out loud. Why are so many of us reacting differently now?

For some reason, what's happening reminds me of a skiing holiday years ago when one of my friends, after putting on skis for the first time, was persuaded to take the chairlift to the top of the mountain with the immortal words "Don't worry, you'll be fine." He wasn't.

The nature of markets is that they periodically forget the lessons of history. One of them is that low interest rates (how about ZIRP?) and extreme monetary stimulus cause financial bubbles. Confidence in the status quo seems as entrenched now as it was in 2007. In 2009, I remember talking to a former colleague and, having been bullish on gold, he had turned bearish, arguing that everybody was bullish and that it was a crowded trade. My response was that if that was the case, then "everybody" wasn't bullish enough. Needless to say, he wasn't convinced.

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