Gold Bug Galore

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Introduction

Gold bug: "Term frequently employed in the financial sector and among economists in reference to persons who are extremely bullish on the commodity gold as an investment and or a standard for measuring wealth. Depending on the circumstances the term can have one or a combination of closely related and often overlapping themes that extend beyond the support for gold as an investment, including in some cases the use of the term as a pejorative."[1]

A "gold bug" believes gold is the best way to preserve wealth in general, and during times of "unorthodox" monetary policy in particular.

Gold bugs are often mocked for their beliefs. Warren Buffett, the renowned investor, famously dismissed gold in a speech given at Harvard in 1998:

> *"Gold gets dug out of the ground in Africa, or some place. Then we melt it down, dig another hole, bury it again and pay people to stand around guarding it. It has no utility. Anyone watching from Mars would be scratching their head."*[2]

While it is true that gold has little utility (other than dental fillings and connectors for semiconductors) the same could be said about a dollar bill (you can start a fire with it). Gold is simply very practical for storage purposes; it does not rust or deteriorate as it does not react with most substances. It does not have to have a utility; if it had, it would be used and consumed for that purpose.

The main condition for something to have value (in the material world) is rarity. You cannot sell air, for example in plastic bags. But, compressed air in a can has a certain value and can be sold for money. Separate air into its constituents (oxygen, nitrogen) and you will be able to ask for an even higher price.

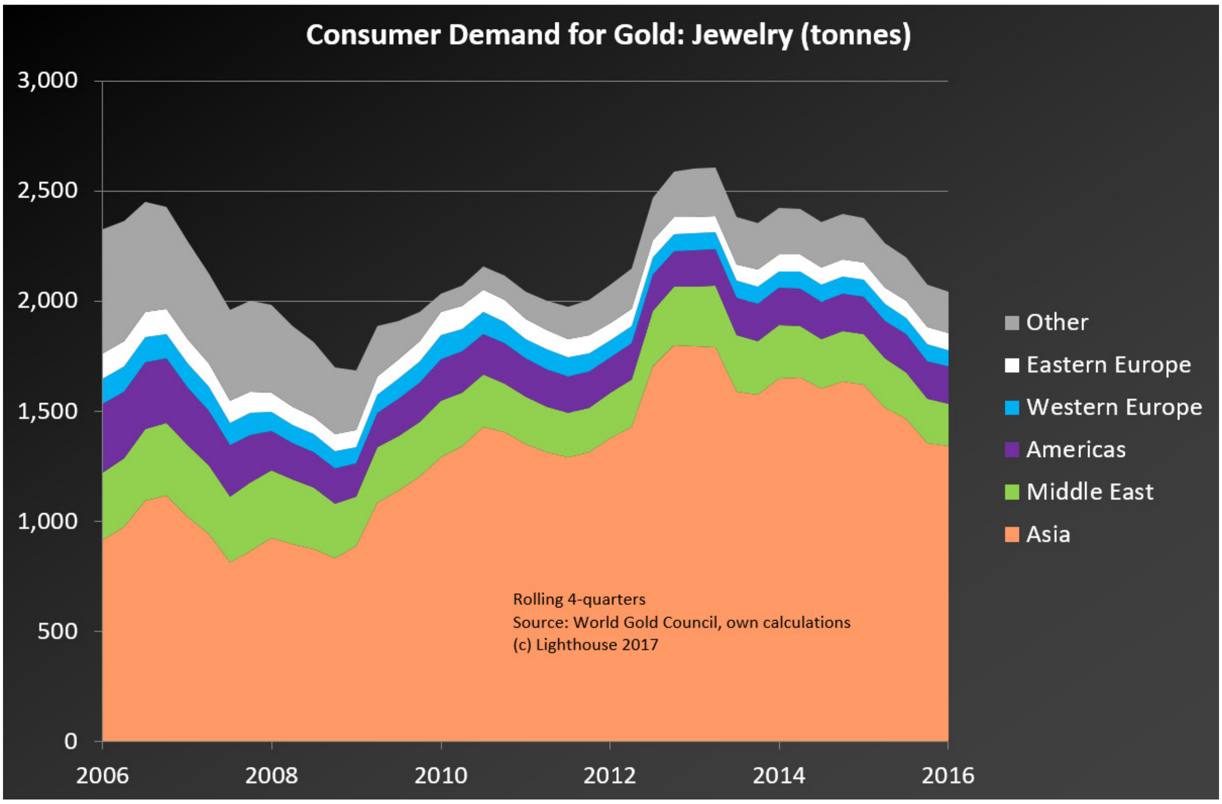
Average mining grades are generally 1-10 grams of gold per ton of rock. That means you must move, grind and process up to 1 million times as much rock to obtain one part of gold. This makes gold mining expensive and keeps gold rare.

In this report we look at global gold supply and demand.

If you are not a "gold bug", doesn't that make you a "fiat bug"?

[1] "Gold bug" - Wikipedia
[2] Warren Buffet, speech at Harvard University in 1998, in: The Times (UK), July 21, 2003

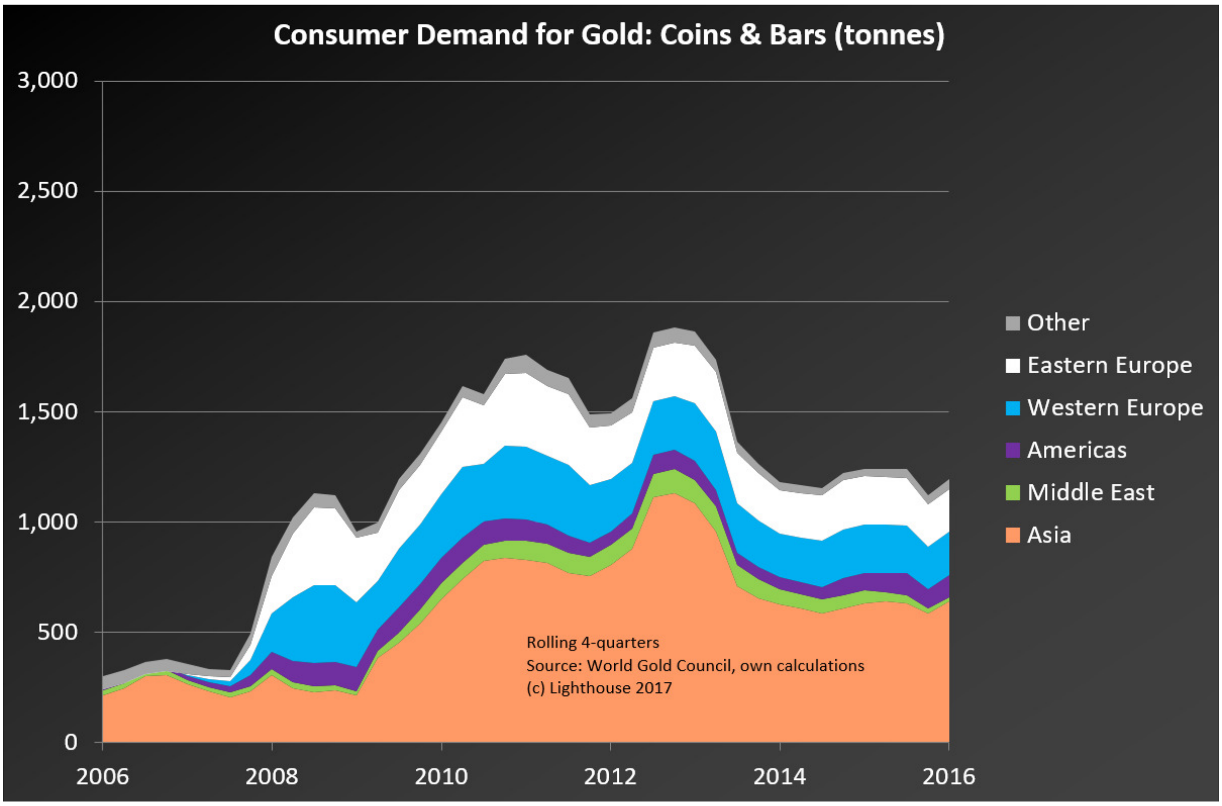
Consumer Demand: Jewelry



- Around half of consumer demand for gold, roughly 2,000 tonnes per year, stems from jewelry
- Asia makes takes the largest share, with Greater China[3] demanding 700 – 1,000 and India 500 – 650 tonnes per year. Gold as dowry for marriages plays an important part in Asian societies.
- Strong economic growth and a rapid increase in wealth in Asia were able to offset a steep rise in gold prices.
- Other regions, despite larger share of world wealth, do not have a big impact on overall gold demand for jewelry.

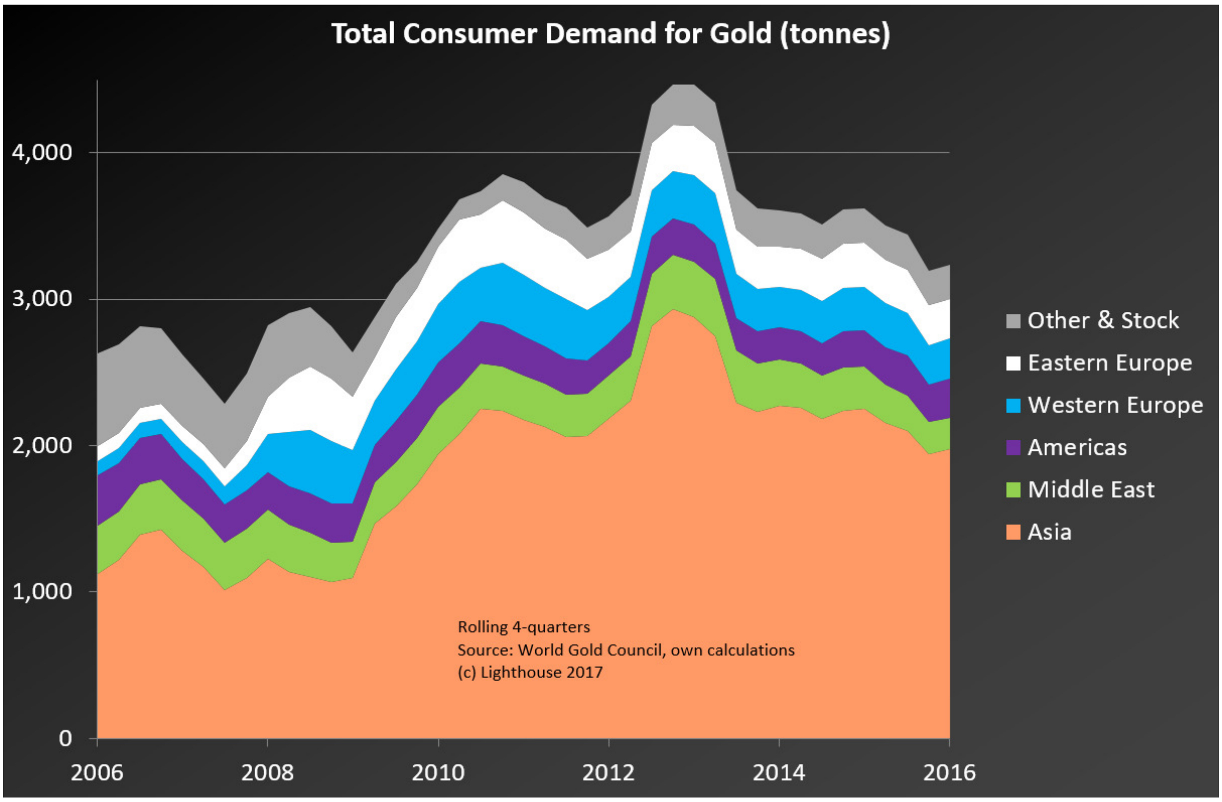
[3] Greater China includes Hong Kong and Taiwan

Consumer Demand: Coins & Bars



- Similar picture in gold demand for coins and bars: Asia dominates the picture
- Greater China leads with 200 – 400 tonnes per year, followed by India (150 – 400)
- Western Europe is showing a very consistent demand of 200 – 250 tonnes per year, with Germany (100 – 140) and Switzerland (50 tonnes) being dominant
- Compare the UK (10 tonnes) to Vietnam (40 – 90) and the USA (50 – 90) to Thailand (70 – 150 tonnes).
- Japan is a complete outlier within Asia; it has shown *selling* of coins and bars in seven out of the past 10 years. Given record-high debt-to-GDP levels and a very aggressive monetary policy by the Bank of Japan one wonders why Japanese would not want to own gold.
- Consumers in most regions except Asia seem to have "woken up" only during the "Great Financial Crisis" of 2008/9 when the global financial system came very close to collapsing and many banks required taxpayer bailouts.
- On the surface, the financial system has been stabilized, but consumer demand for gold has remained strong. Once trust in banks and monetary system has been tainted it is hard to gain back.

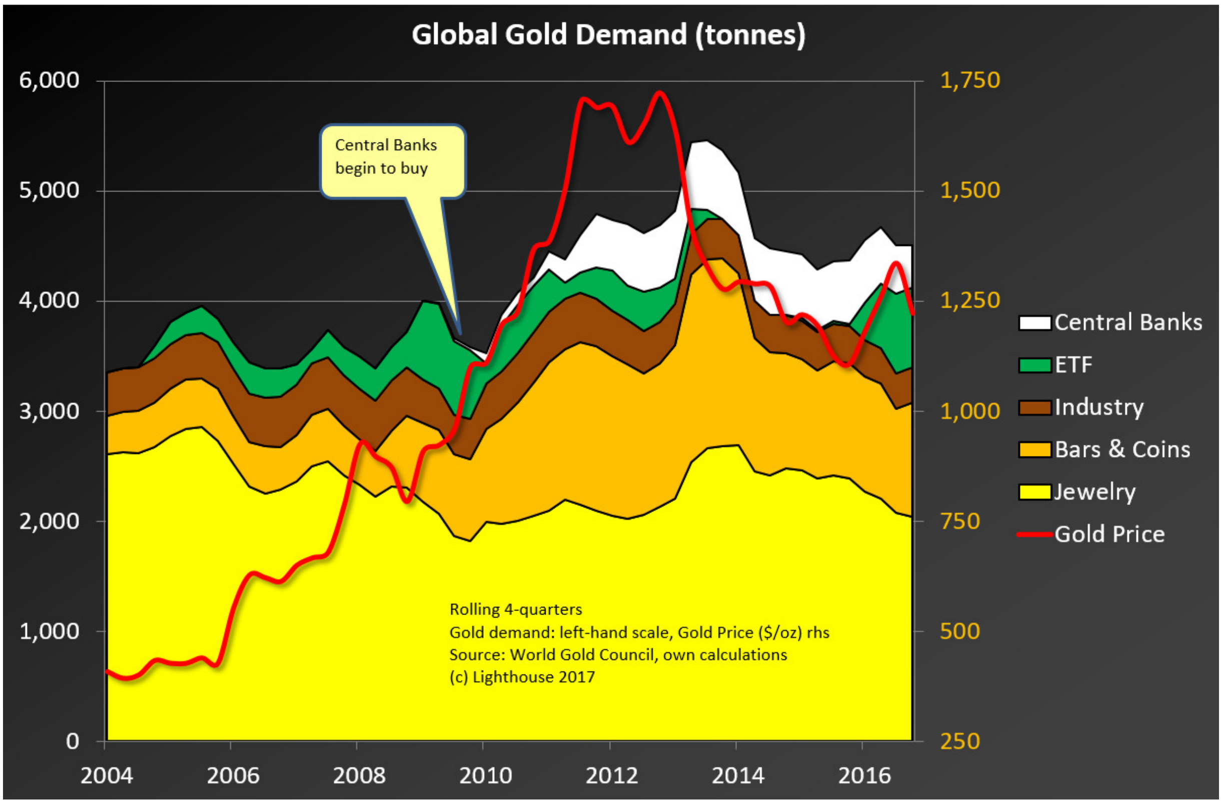
Consumer Demand: Total



- By adding demand for jewelry and coins / bars together we obtain total global consumer demand
- Not surprisingly Asia dominates here, too

CONCLUSION: earnings estimates are pretty much useless.

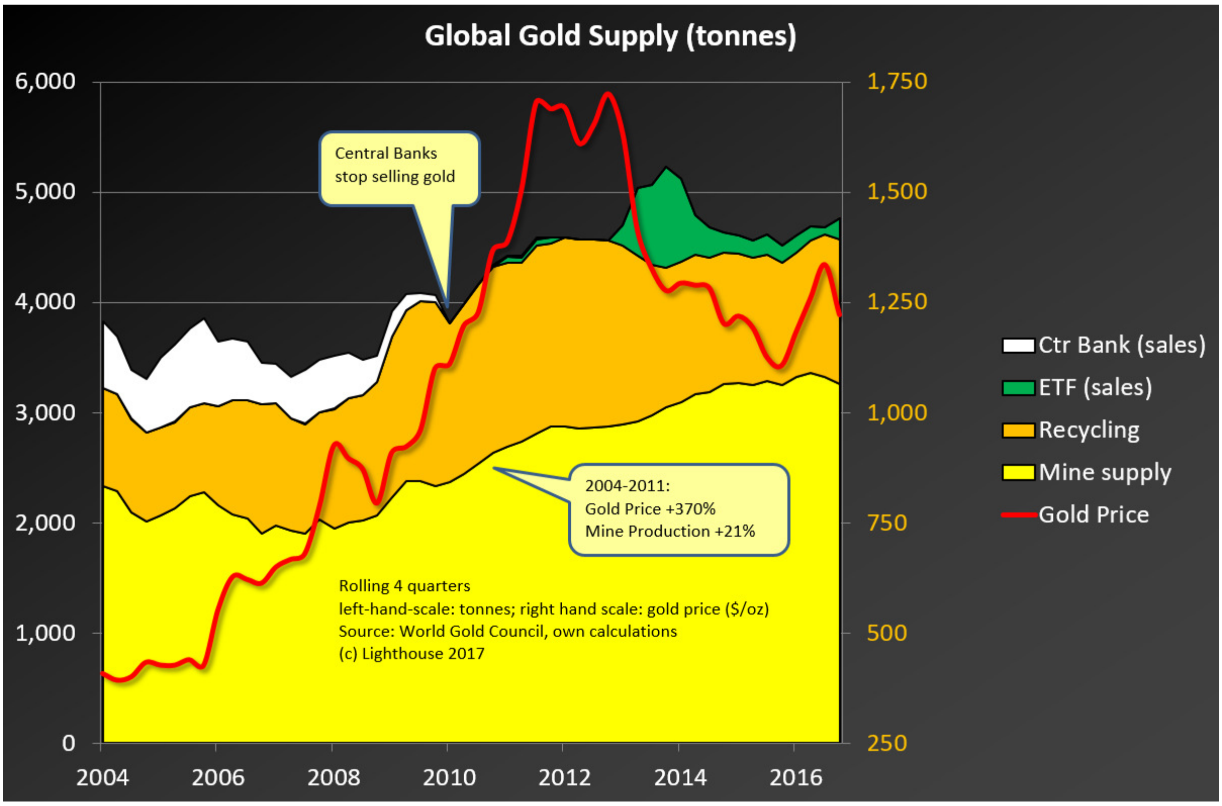
Global Gold Demand by Volume



- Other important buyers of gold include industrial (75% electronics), Exchange Traded Funds (ETF) and Central Banks.
- Central Banks had been substantial sellers of gold at very low prices, most famously the Bank of England[4]. But in 2009 they stopped selling and turned buyers, adding fuel to the fire of a rapidly rising gold price (Central Bank behavior in the gold market will be subject of a future report).
- SPDR Gold Shares ETF (ticker "GLD"), at one point the world's second largest ETF by assets, was a child of desperation. In 2002, gold mining companies considered withdrawing funding from the World Gold Council, a marketing organization whose objective was to promote private ownership of gold. Gold prices had been falling for two decades. In a last attempt, the Chairman of the World Gold Council helped launch a gold ETF in November 2004. The idea was to make it as easy as possible for private investors to buy and sell gold, just like they did with shares. The ETF attracted $1bn in assets within the first week and ballooned to $77.5bn in August of 2011.
- Ironically, gold ETFs can lead to a reduction in demand for physical gold as investors purchase paper claims rather than the actual metal.

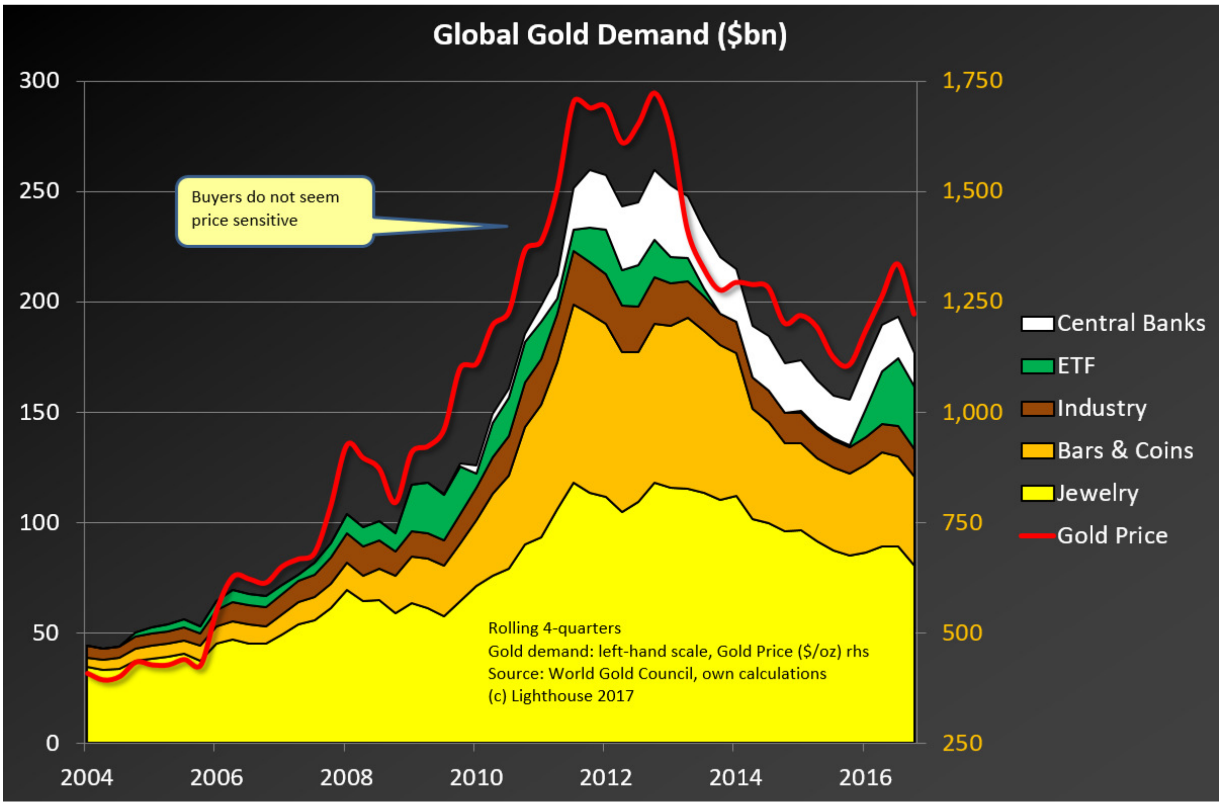
[4] From 1999 to 2002 the BoE sold 395 tonnes of gold for an average price of $275 per ounce

Global Gold Supply by Volume



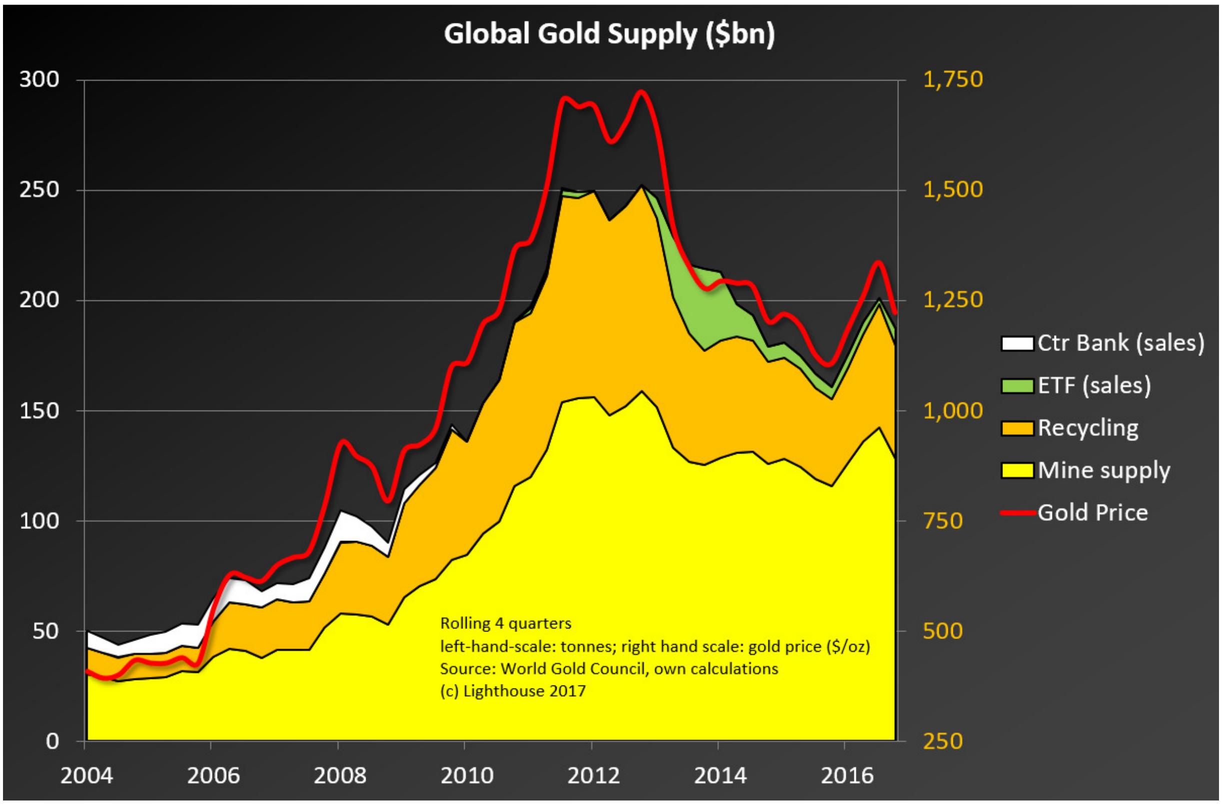
- Recycling recovers 1,100 – 1,700 tonnes of gold per year; compared to 3,000 tonnes mined this is quite substantial. Of course recycling has been helped by the rise in gold price, as it makes extraction from used electronics more attractive.
- ETFs have been sellers of gold particularly in 2013 (916 tonnes). Selling stopped during the first three quarters of 2016, but resumed in the fourth (193 tonnes). ETF selling exacerbates any price pressure in the underlying gold market. It can be considered "hot" money that can leave as quickly as it came (due to easy of transaction). Bars, coins and jewelry are very "sticky" types of investment, as they are usually never sold but rather passed on from one generation to the next.
- Look at how slowly mining supply reacted to the rise in the gold price; from 2004 to 2011 gold prices rose by 370% while mine supply initially fell for a couple of quarters and then rose by only 21%. This has to do with the long-term nature of gold mining (prospecting, verifying, getting permits takes years). Furthermore, gold mining companies had sold a lot of production yet to be mined at fixed prices in the futures markets (hedging; usually makes sense to lock in profits and to benefit from higher prices). As gold prices rose sharply, mining companies tried to close out those hedges by buying back their forward sales, reducing the amount of gold available to the market.

Global Gold Demand by Value



- The previous two pages showed demand and supply on a volume (tonnes) basis. But since the gold price more than quadrupled from 2004 to 2011, both demand and supply increased much more when looking at them on a value (volume multiplied by price) basis.
- Normally, rising prices, at some point, lead to a reduction in demand (substitution, buyer fatigue, more owners motivated to sell). But with gold this does not seem to be the case. On the contrary – the higher the price, the higher the demand. Apart from dowry for Indian weddings and a bit of industrial demand there is no reason why buyers needed to purchase gold from the standpoint of utility.
- The rise in gold prices is even more surprising given that it happened in a period of low inflation. And the rise began far ahead of the "Great Financial Crisis" in 2008/9, hence long before Central Banks let loose in terms of monetary policy. Negative interest rates (making gold with 0% interest a better investment relatively speaking) have only been introduced in recent years.
- Valuing gold is not easy (it has no dividend, no earnings). We will look at ways to determine fair value in a future report.

Global Gold Supply by Value



- Gold supply by value (volume x price) rose mostly because of rising prices.
- As seen on previous pages, neither gold demand nor supply (in volume terms) seem to be sensitive to price.
- Central Banks are political and hence not price sensitive (they sold gold at low prices and started buying at higher prices)
- Gold supply from mining can only react to price changes after a couple of years.
- However, most of gold ever mined (estimated 150,000 – 185,000 tonnes) still exists and is therefore available as potential supply. Even subtracting Central Banks' holdings of around 31,000 tonnes leaves a lot of potential supply. But it does not seem to come to market.

CONCLUSION:

Goods where demand and supply are price-inelastic usually experience large swings in prices (as seen with crude oil). For many years gold prices had been held back by selling from Central Banks. This 'cap' on prices is now gone (which also brings price volatility). Mining supply is slow to react, recycling limited to what has been used in electronics. Demand from Asia should remain strong. Europe and the Americas could see spikes in demand in case of another financial crisis. Japan, with its large amount of private savings, remains a wild card.

Any questions or feedback welcome.

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