28 /The Silver-To-Gold Ratio waits in the wings, as supply constraints, looser Fed policy and rising global growth could trigger a significant move in H2 2017

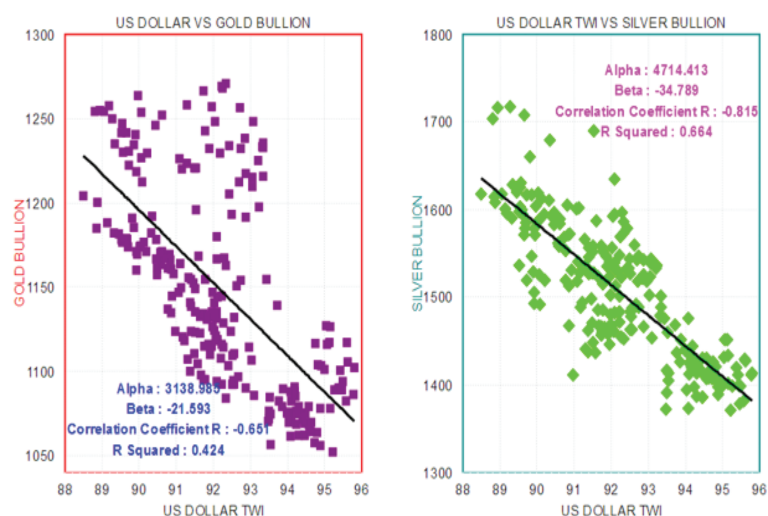
Silver is still severely underperforming Gold, but we note that the relationship between silver and gold (SGR) could adjust to historically normal levels -- that opportunity may come in H2 2017 Indications and our analysis show that the US dollar, could start turning up and move higher over the summer, but should embark on a sideways to lower regime later in the year. That period may provide a time-window for a positive environment for a long-silver, short-gold trade.

Growing industrial demand, sharply diminished supply, a shallower Fed policy trajectory, and better environment for cyclicals in H2 should all play their part in supporting higher silver/gold prices over the rest of the year at least.

We noted in earlier articles that Silver has been seriously underperforming Gold, but that it could be just a matter of time before an opportunity arises as the relationship between silver and gold adjusts to historically normal levels. We believe that this opportunity is upon us -- silver could start outperforming gold soon, and adjustments in their relative value via the Silver-to-Gold ratio present a good investment opportunity for investors.

Since the April 17 precious metals peak, the price of silver has fallen by 9.23%, and gold fell by 2.10%, increasing silver`s valuation gap versus gold. Precious metals found a trough on May 9, and the common trough in these two metals may mark what could be the cyclical trough for the SGR. From a ratio of 1.323 SGR closed at 1.329 on Friday, last week. We believe that this so-called «test of the low» will be over soon, and the SGR should continue to rise over the second half of the year, as cyclical assets again outperform defensive assets. **If our thinking proves correct, the SGR could rise to a ratio of circa 1.75 – 1.80 over the next 3 quarters** ***(see graph above)*****.**

SGR measures the amount of silver required to purchase an ounce of gold and it is an important metric of the value of silver relative to gold. **Basically, it indicates whether gold or silver is undervalued or overvalued relative to each other.** When the ratio is high («high» being above the historic mean) it indicates that silver is overvalued relative to gold, and the opposite is true when the ratio is «low». The SGR had fluctuated widely during and after the Great Financial Recession of 2008, as investors bought Gold (and dumped Silver) during the height of the GFR in 2008, and did the opposite (bought Silver and dumped Gold) in the sharp reflation of risk assets from early 2009 to the 2011 top of the SGR. **The outperformance of silver over gold is one important feature (and indeed a harbinger of asset price reflation) when the cyclical sectors outperform defensives or "safe havens."**



Source: Thomson Reuters Datastream / DCC & Robert P. Balan Models (c)

US Dollar changes impact the SGR in a big way: There are indications that the US dollar may move higher in the short-term after having been generally lower since the beginning of 2017. **But in the longer-run, the US currency is probably due for further declines, and this will help support further rises in the value of silver and the SGR, as silver outperforms gold, during the general uptake of all major commodity sectors. In other words, that is when cyclical assets dominate defensive assets.**

As the US dollar is negatively correlated with Global growth, then it follows that the Silver is highly sensitive to the inverse changes in the USD TWI valuation -- even more so than Gold *(see that relationship in the 2nd graph on previous page)*:

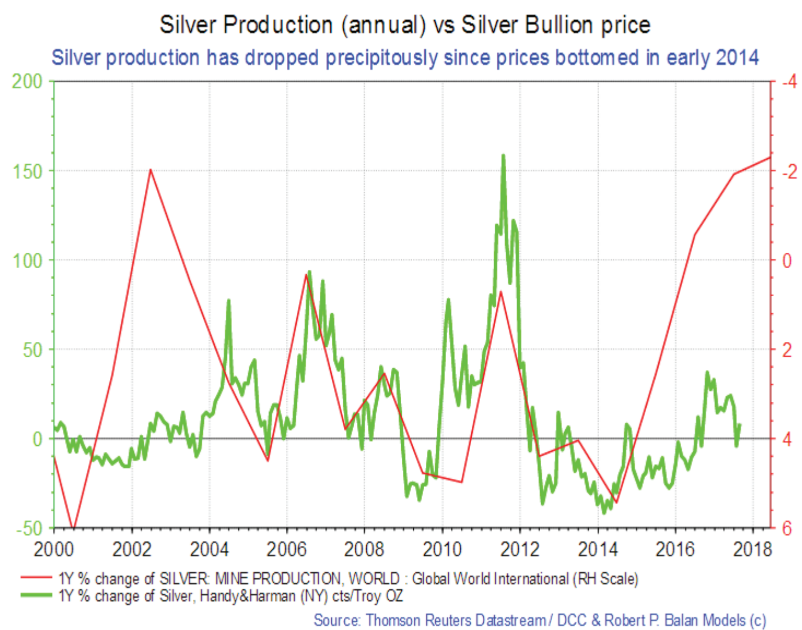
There are issues that are preventing a quicker recovery of silver over gold. There is still a tremendous volume of paper silver, a glut in silver futures contracts, still in place. Some analysts estimated that there is about one ounce of physical silver to over 250 ounces of paper silver. These paper contracts have effectively created a virtual silver supply without putting pressure on the physical silver market. There have been unsubstantiated charges of price manipulation. This has helped depressed the price of silver, and is also creating considerable volatility in the silver price – as the large volume of futures contracts is creating a considerable disconnect between paper and physical silver.

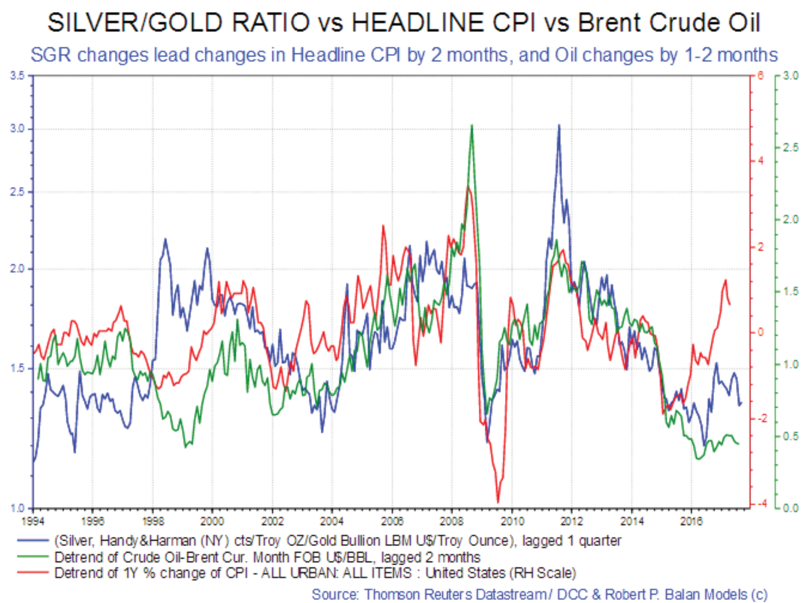
Physical silver supply is severely constrained. Nonetheless, even as silver industrial demand grows, there is an increasingly constrained supply situation with miners in recent years investing substantially less in exploration and development. The situation in fact has been worse than 2011, when silver prices rallied sharply. Most silver stock comes as a by-product of base metals mining, and so the depressed prices of copper and nickel have recently moved miners to slash capital expenditures as they seek to shore up balance sheets and protect their cash flows.

Moreover, of the world's largest producers of silver, global miner BHP Billiton had previously slashed capital expenditures – the impact is now becoming due. Primary silver miners, on top of slashing capital expenditures, had also shuttered uneconomic production over the past two years. This has severely degraded the output profile for silver, laying the groundwork for future up move in prices *(see 1st graph below).*

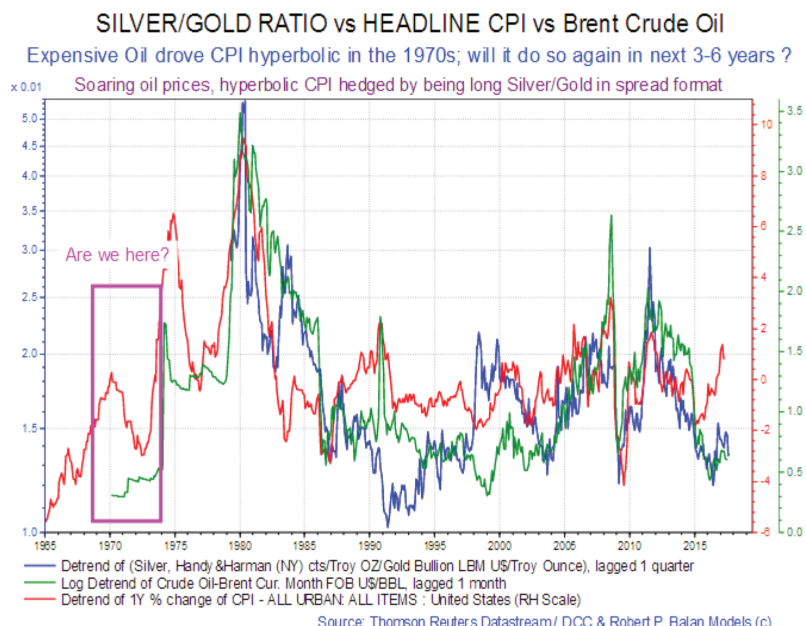
As a virtual cyclical asset, the SGR is sensitive in a positive sense to the impact of Headline CPI inflation. And here lies the link of the SGR with Crude Oil, as oil leads the Headline CPI by a month (see 2nd graph below).

If an investor thinks that oil prices, given the same capex cuts seen in silver (in much more severe degree) will be higher down the road, then it is worthwhile investigating the utility of the SGR. It could be the right vehicle for a trade that takes both the Oil and CPI elements without any direct nominal market exposure. It is true that the sil-

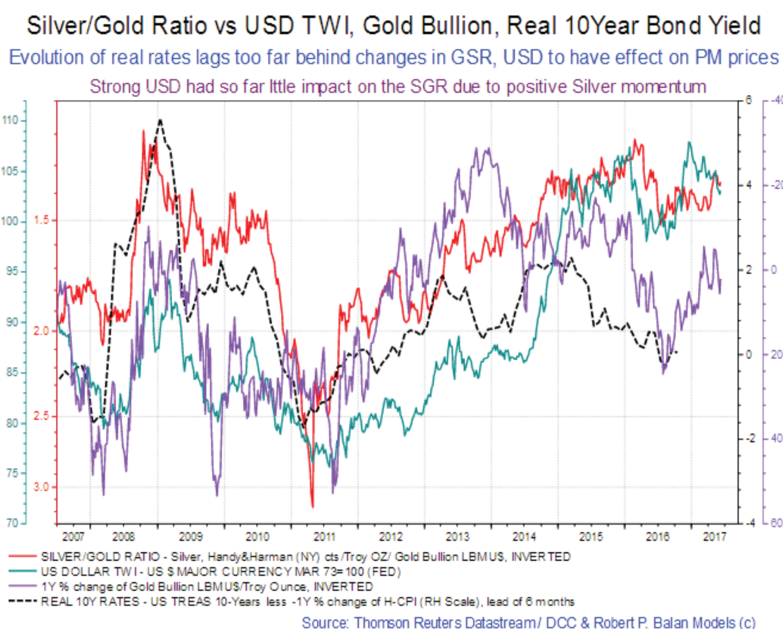




ver-gold ratio does not totally remove the market beta risk, but the spread may minimize it, and yet it does not curtail the upside potential which is linked to potentially higher oil prices over the next few years. Here is how it would look like, if everything goes according to plan -- a move back to circa 5.0 in the SGR in 4-6 years *(see 1st graph on this page)*. The pink rectangle is where we believe the market is, in the context of the 1970s environment.



On a final note, one frequently reads articles underlining the primacy of real interest rates as movers of precious metals (gold, silver) prices. That is not exactly right. It is better to look at the US Dollar as the main key driver in SGR and in precious metals price discovery. **Real rates lag too far behind the evolution of the Dollar and PM prices (by up to 6 months), so they are useless as forecasting variables for future PM prices.** The determination of real rates require CPI inflation as the modifier of interest rates (as subtrahend in the mathematical operation). **Since changes in the CPI can easily be proven to lag behind the changes in the USD, or even PM prices, there is no need to resort to real rates in forecasting the likely trajectory of the SGR and PM prices** *(see those correlations in the 2nd graph on this page)* **-- understanding what the US dollar will do is sufficient.**



There are still niggling issues, like the large volume of paper silver contracts still extant, which distorts silver's price discovery process and promotes unwanted volatility. But the market should balance out over the longer term, and those issues should be resolved over time, making now the appropriate time to start acquiring exposure to silver. And if the factors that make this trade very attractive align well as we expect, the upside potential of the SGR could be significant.