Gold and the Federal Funds Rate

December 17, 2015 | Author *Pater Tenebrarum*

Wrong Assumptions

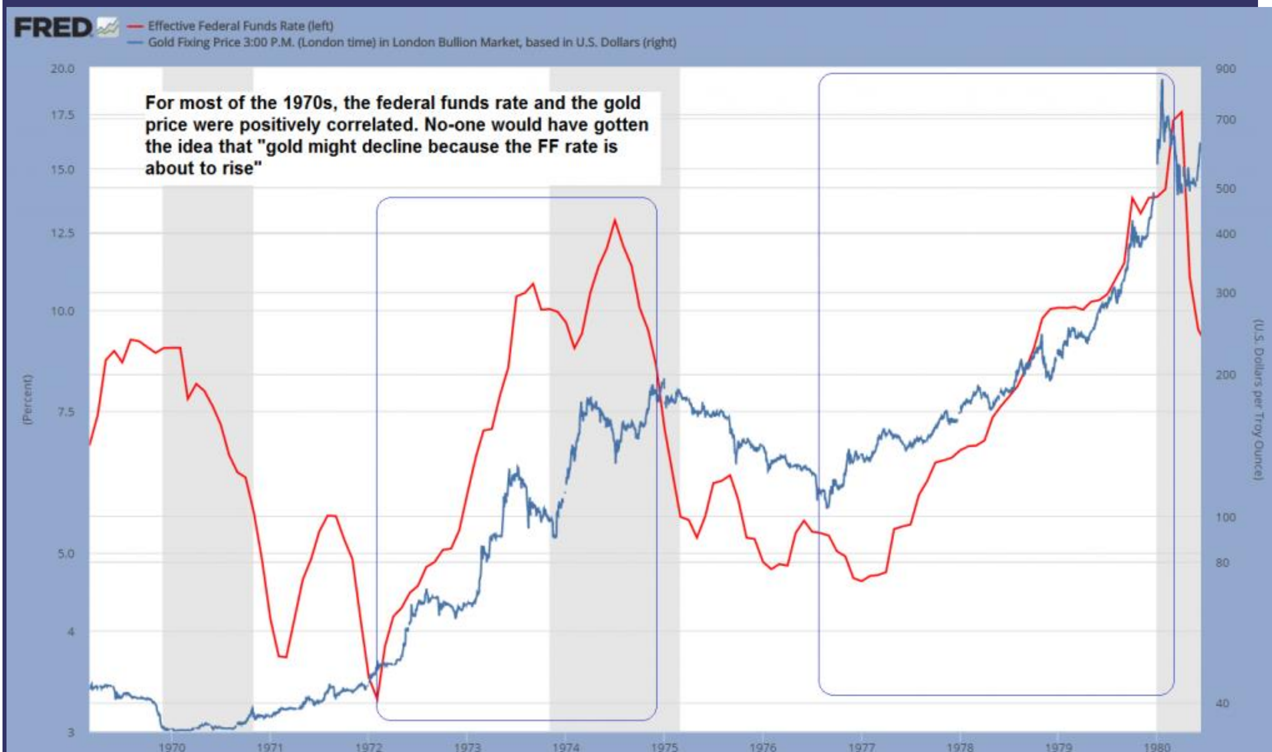
It is widely assumed that the gold price must decline when the Federal Reserve is hiking interest rates. An example is given by ~~this recent article on Bloomberg~~, which informs us that SocGen believes “gold will be a casualty of Federal Reserve policy”. Never mind that the assumption that the Fed will now be able to simply embark on a “normal” rate hike cycle is in our opinion utterly absurd. It will only do that if the inflation genie unexpectedly gets out of the bottle, and is guaranteed to remain “behind the curve” if that happens (more on this further below).

Image via *gainesvillecoins.com*

It seems logical enough: gold has no yield, so if competing investment assets such as bonds or savings deposits do offer a yield, gold will presumably be exchanged for those. There is only a slight problem with this idea. The simple assumption “Fed rate hikes equal a falling

gold price” is not supported by even a shred of empirical evidence. On the contrary, all that is revealed by the empirical record in this context is that there seems to be *absolutely no discernible correlation between gold and FF rate*. If anything, gold and the FF rate exhibit a positive correlation rather more frequently than a negative one!

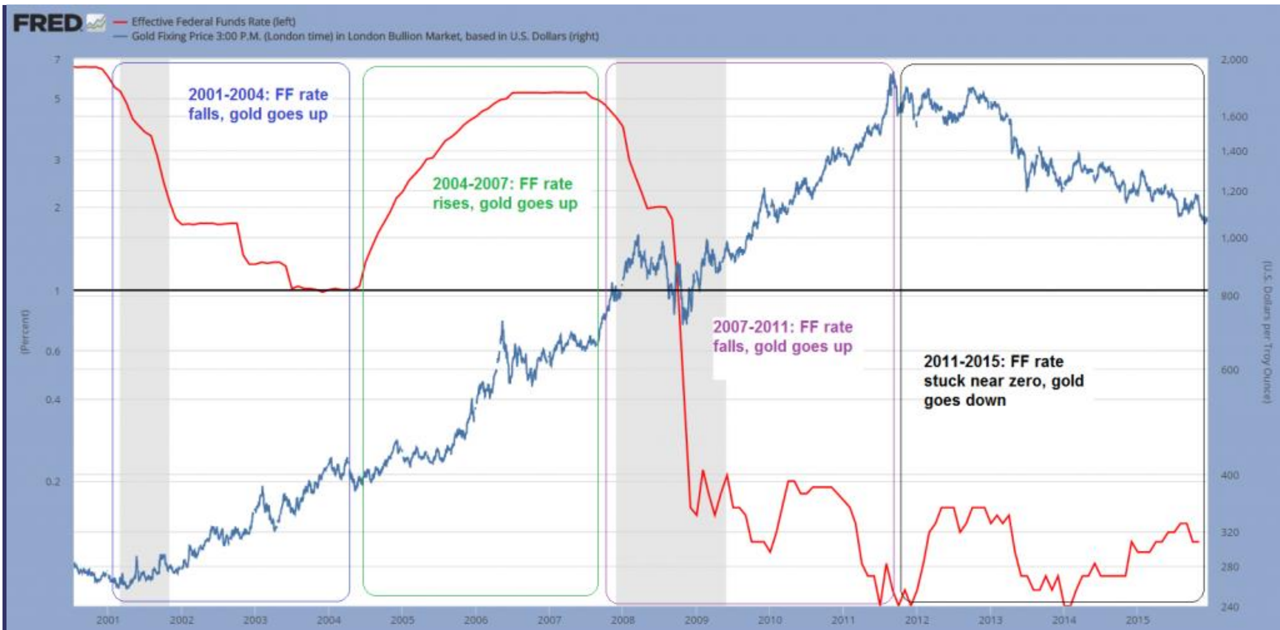
Let us look at exhibit one – the 1970s:



So the gold price is falling when the Fed hikes rates? Not in the 10 years depicted above, when it did the exact opposite. It rose by 2,350% over the decade, and the vast bulk of the increase happened while the FF rate rose sharply. Gold did however plunge by almost 50% in a mid cycle correction from late 1974 to mid 1976 – while the FF rate actually went *down* – click to enlarge.

So the guessers at SocGen might actually have improved their statistical odds a bit if they had said “now that the Fed is hiking rates, gold prices should rise”. The reality is though that even if they knew perfectly well what the Fed was going to do next year – which they don’t, as not even the Fed itself knows – they could not *possibly* make a correct gold price forecast based on that information.

Let us look at a few more historical data – here is the gold price and the FF rate from 2001 to 2015. The best interpretation one can come up with on the basis of the raw data is that there simply exists no fixed correlation:



Gold and the FF rate since 2001: What the gold price ends up doing seems to have very little to do with the federal funds rate – click to enlarge.

It Simply Isn't That Simple

Now, if you have taken the time to read the article at Bloomberg we linked to above in its entirety, you will have noticed that it actually offers no *analysis* whatsoever. The SocGen analyst quoted by Bloomberg is simply parroting the current consensus.

In August of 2011, the same guy would probably have told us why gold was certain to go higher over the next year (this is beside the fact that Wall Street loves to hate gold – after all, a rising gold price most of the time coincides with bad business for WS).

The way markets – and the economy for that matter – appear to be analyzed most of the time is as follows: a ruler is applied to the most recent tred in the data, so as to be able to extrapolate a target. Then stuff is made up to provide "reasons" for the forecast. This is quite an easy exercise, because at any given time, statistical data can be used to support just about *any* forecast.

This is why one first needs a correct theory – theory will help to *constrain* one's forecasts (certain things are simply not possible) and can be used to properly *interpret* historical data. The data are practically useless by themselves. Naturally even a reasonably good grasp of theory will by no means ensure that one will be able to make a *correct*forecast – especially not in terms of timing. Considerable uncertainties will attend *any* attempt at prediction.

However, we can be absolutely certain that 99% of mainstream financial and economic analysts will fail to correctly forecast turning points in prevailing trends. The analysts quoted by Bloomberg will *never* tell us when the trend is going to change.

Once the trend *has* changed, they will however begin to "explain" the new trend to us at some point and forecast its continuation – after it has been underway for about three years. In the case of gold it may take a bit longer – last time they realized it was in an uptrend, the trend was about to celebrate its 10th birthday :)

Obviously, things are not as simple as these analysts are making them out to be.

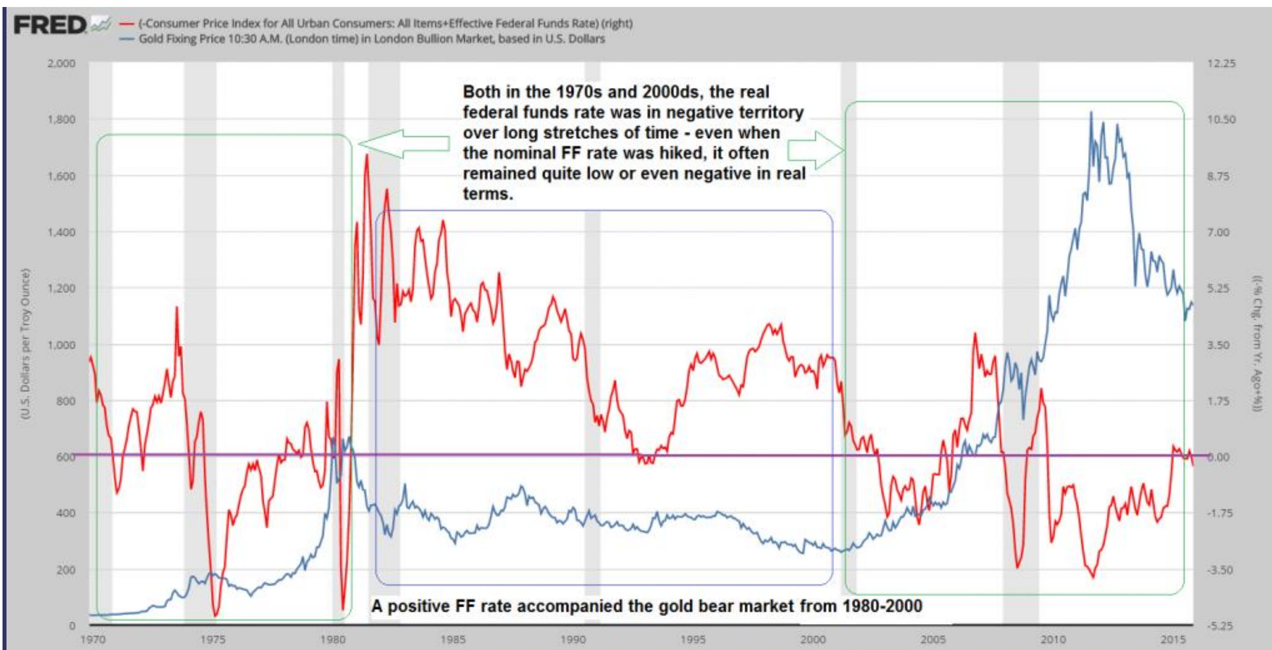
The Fundamental Drivers of Gold

We have recently made an updated list of the most important fundamental drivers of the gold price – not necessarily in order of their importance. Moreover, many of these drivers are obviously not independent of each other. Here is the list:

1. real interest rates, as determined by the difference in market-derived inflation expectations and nominal interest rates
2. the trend in credit spreads
3. the steepness of the yield curve
4. the trend of the US dollar
5. faith in the banking system's solvency
6. faith in the monetary authority
7. faith in government more generally (with a special focus on fiscal policy)
8. the trend in risk asset prices
9. the relative performance of financial stocks vs. the broad market
10. the rate of change in money supply growth
11. the demand for money and the desire to increase precautionary savings
12. the trend in economic confidence in general
13. the trend in commodity prices

Below we show a simple chart that serves as a quick explanation why the trend in the federal funds rate *as such* is not relevant to the gold price. It is "simple" in the sense that while it is connected with point one of the above list of fundamental gold price drivers, it doesn't employ a proper calculation of real interest rates (which would involve deducting *expected* price inflation rates from nominal interest rates).

Instead we have merely calculated the real federal funds rate by deducting the annualized rate of change of CPI from the nominal FF rate. This has not only saved us a bit of time (since the proper calculation mentioned above involves more steps), but it also keeps the focus on the one interest rate the Fed controls.

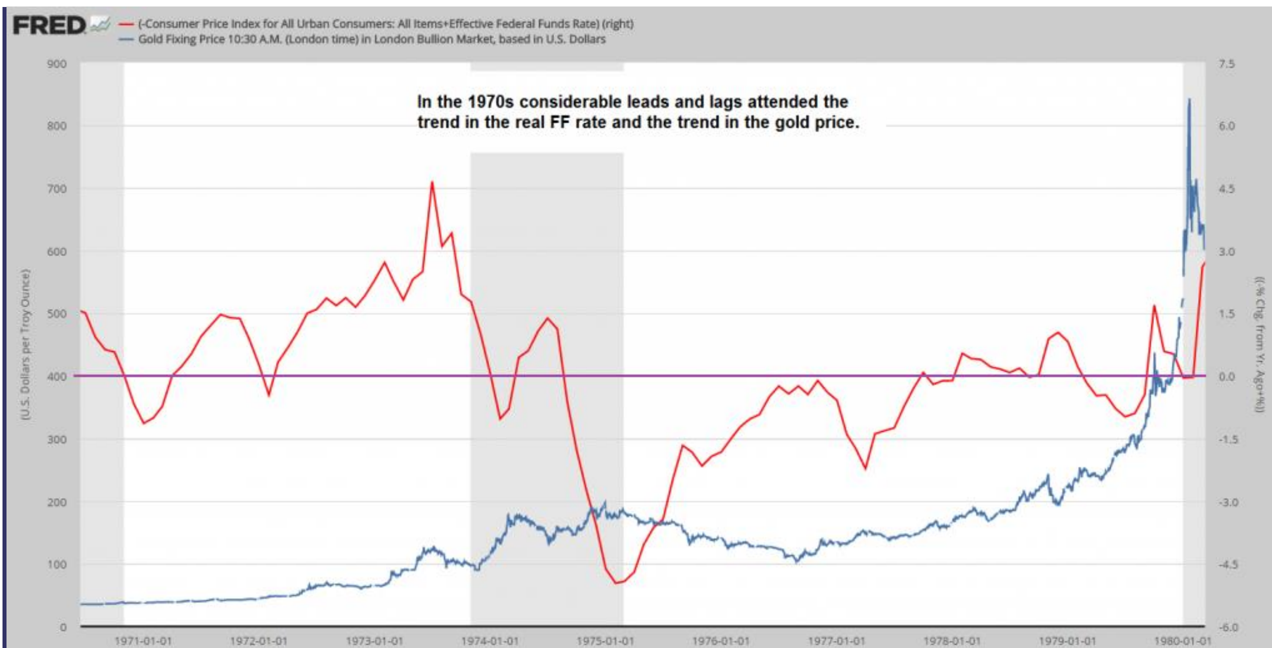


The "real" federal funds rate vs. the gold price. This obviously provides a much better explanation than the simple (and completely wrong) formula "FF rate up/gold down, FF rate down/gold up" – click to enlarge.

If one looks at the above chart more closely – readers can easily zoom in and out of it by constructing their own version at the Fed's FRED database (in order to illustrate the point, we will show a close-up of the 1970s period below though) – one can see that even the real FF rate is only part of the explanation, or rather, insufficient as an explanation of the gold price trend.

In particular once can see that there are considerable leads and lags involved. These partly reflect market expectations of future trends in the fundamental backdrop and partly the influence of the other gold price drivers listed above. In short, it is the *totality of contingent circumstances* that needs to be considered when attempting to forecast the future trend of the gold price.

One has to adopt a holistic view of the economy and try to make an educated guess of the future evolution of the fundamental backdrop – always keeping in mind that there is a limit with respect to what can be known about the future. After all, new information constantly emerges – the only true "constant" in the market economy is the fact that is is subject to unceasing change.



A close-up of the real FF rate in the 1970s and the gold price reveals significant leads and lags in the negative correlation between these data series. These are based on market expectations as well as the other drivers of the gold price – click to enlarge.

Central Planning Quandary

We can conclude that it is simply incorrect that a rising federal funds rate "guarantees" further declines in the gold price. On the contrary, one could well argue that the decline in the gold price since 2011/12 very likely already more than fully discounts a period of rising rates.

One also needs to keep in mind that the Fed finds itself in quite a quandary. It has just begun to hike rates based on the trend in a lagging indicator of the economy (i.e., employment). At the same time, leading economic indicators are already indicating that a recession is probably fairly imminent. How likely is it that a true "rate hike cycle" will even happen?

If the Fed is correct that CPI statistics will soon show rising price inflation (which they may well, mainly due to base effects), it will be in an even bigger quandary. Any attempt to stay "ahead of the curve" will immediately lead to a dramatic implosion of the asset bubbles it has fostered with its ultra-loose monetary policy in recent years. The economy will be taken right down with them (actually, we believe it is even more likely that the economy will tank *before* the stock market does).

What one really needs to consider when thinking about the gold price is whether the idea that the economy is back to "business as usual" has any merit. The answer to this question is a clear and unequivocal *no*. Globally, the level of debt in the economy has increased by around 60% since the "great financial crisis" of 2008. In the US alone, the broad true money supply has grown by almost 115% since then (as of November 2015).

In spite, or rather *because* of these bubble-blowing efforts, the economy has produced the by far weakest recovery of the entire post WW2 period. *Nota bene* that this applies to the

US economy, which has actually stood out as the best performing developed market economy in recent years. Meanwhile, all indications are that this weak recovery will soon succumb to another cyclical recession.

A recession could easily turn into a truly catastrophic bust if market confidence in the monetary authorities and the sustainability of the huge global debtberg evaporates – which will inevitably happen one of these days. What encore can the authorities offer when (not if) that happens?

Obviously, gold bulls have been wrong for the past four years and they may well be wrong for a while longer – we don't think it is very likely, but obviously we cannot rule it out. Then again, prior to that the bears were wrong for 11 years running and *gold is still up more than four-fold since late 1999/2000*. How much has the S&P 500 gained since 2000? There is a good reason for this discrepancy, and that reason hasn't disappeared – on the contrary.

Conclusion

Our assessment is that one simply cannot afford to ignore the fact that gold provides insurance against a potential blow-up of the global fiat money and debt bubble – regardless of its near to medium term price performance. Its performance is in any case only negative in USD terms – in no other currency can gold be deemed to be in a significant bear market. In fact, as we have recently pointed out, it is *already* making new all time highs in some fiat currencies.
Gold's characteristic as a hedge/insurance against the consequences of policymaker machinations has recently gained additional importance in light of the fact that the echo bubble is clearly fraying at the edges already. Sooner or later there will be another full-blown crisis, at which point gold ownership will definitely be of great advantage. It is often said that the only certainties in life are death and taxes, but that is not quite true. There is another apodictic certainty: all booms driven by credit expansion will eventually blow up.

Charts by St. Louis Federal Reserve Research