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Investment Overview

- We recommend long-term investors avoid gold and other precious metals and limit broad-based natural-resource investments to no more than 5% of their portfolios.
- We attribute gold's strong performance since 2002 to an extended period of accommodative monetary policy, global financial instability, central-bank-buying activity, increased investor participation, and the perception that at some point inflation will start picking up.
- Year-to-date in 2020, gold has rallied sharply on elevated fears about the economic disruption of the COVID-19 outbreak, which has driven unprecedented levels of stimulus from central banks, along with concerns that stimulus may eventually drive higher inflation.
- One of our key concerns is related to understanding the true economic value of the commodity itself. The lack of cash flows, dividends and industrial uses make gold a very hard asset to value with any level of precision or confidence. As a result, prices are significantly influenced by changes in investor sentiment, which can result in higher levels of volatility.
- Since the financial crisis, gold has become much more of an investor-driven market. Investment demand (ETFs, gold bars, coins) made up roughly 30% of the market in 2019, up from 15% in 2005. Investment demand fell substantially in 2015 to only 20% of the market, putting downward pressure on gold prices. We believe changes in investment demand will continue to be a source of increased volatility.
- Over time gold and other precious metals have had periods of outperformance, but in our view are not good long-term investments given their volatility, lack of any income stream, and the unpredictability of returns.
- While a small allocation of gold in a broadly diversified portfolio has historically provided a slightly higher return, this excess return was driven by two extended gold up-cycles and thus is very time dependent. A similar allocation to a broad-based commodities index (i.e., the GSCI Index) has provided an even better return and lower standard deviation without taking on the risk of owning a single commodity.

Gold Has Seen Some Exceptional Performance

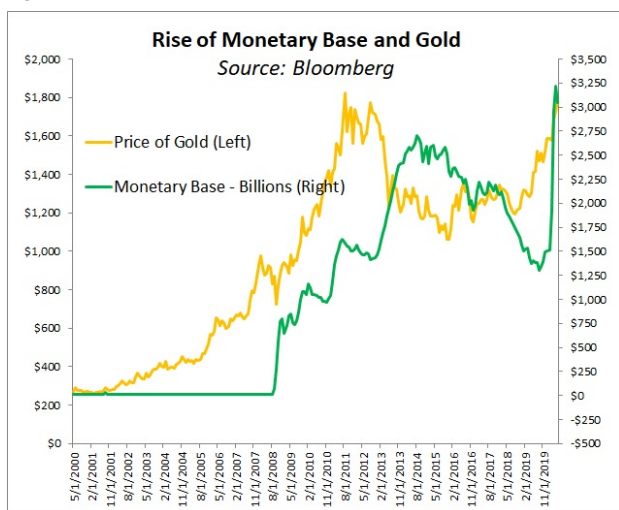
After reaching a 20-year low of \$252.80/oz. in 1999, gold prices have rallied to \$1,950/oz. today. We attribute much of this long ascent to an extended period of accommodative monetary policy, global financial instability, central-bank-buying activity, and increased investor participation. Year-to-date in 2020, gold has rallied sharply on elevated fears about the economic disruption of the COVID-19 outbreak, which has driven unprecedented levels of stimulus from central banks, along with concerns that stimulus may eventually drive higher inflation.

How Did We Get Here?

Dovish Monetary Policy Put Upward Pressure on Gold Prices

We believe the start of the gold rally can largely be traced back to dovish (accommodative) monetary policy decisions made in the mid-2000s. Global liquidity (which we define as foreign-exchange reserves plus the U.S. monetary base) started to increase very rapidly in the early 2000s. In response to the financial crisis of 2008, central banks around the world took unprecedented actions (at the time) to further increase the money supply in order to keep interest rates low and encourage capital investment (See Figure 1). Gold prices moderated as central banks began unwinding their accommodative policies, but have since roared back toward their highs as the COVID-19 outbreak prompted a fresh round of stimulus that was even more significant than the financial-crisis response.

Figure 1

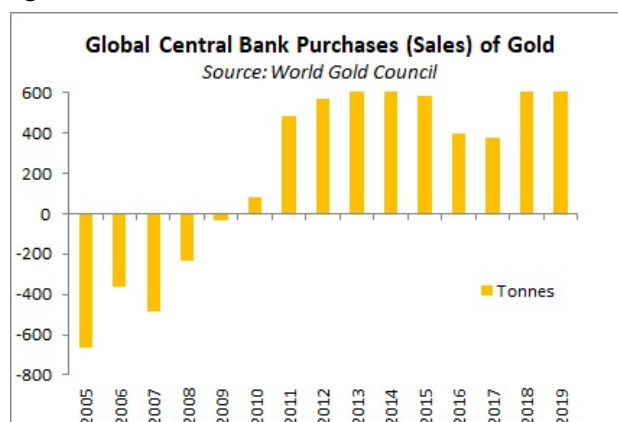


Past performance is no guarantee of future results.

Central Banks Have Become Net Buyers of Gold

Central banks across the world hold gold as a reserve asset along with other foreign currencies, most notably the dollar and euro. We believe the way central banks look at reserve management has changed considerably over the past couple of years. Prior to 2008/2009, central banks across the world were net sellers of gold, which effectively increased the supply base of gold. However, as the global financial crisis began to take hold in 2008, central banks reversed course and became net buyers of gold in order to reduce exposure to foreign currencies and diversify their holdings (See Figure 2). Traditional reserve currencies (U.S. dollar) have become less attractive due to the rapidly expanding money supply and large government budget deficits, both of which devalue the dollar. This fundamental shift in central-bank buying patterns has served as a positive catalyst for gold prices.

Figure 2



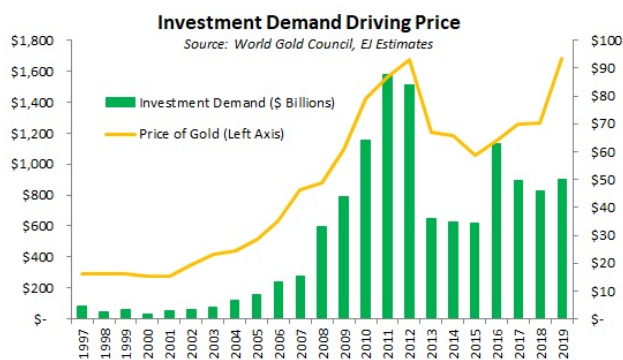
Central-bank purchases can be lumpy and are very difficult to forecast, but we believe central banks will continue to diversify their reserve bases, although not at the same level we have seen over the past couple of years.

Investment Demand Driving Prices Higher

Traditionally, the primary source of demand for gold came from consumer purchases of gold jewelry, which represented roughly 80%-90% of demand, while investment and industrial uses made up the rest. Jewelry demand has been falling for the past two years due to weak economic growth, higher taxes in India, and elevated prices, while investment demand has increased significantly. Since the financial crisis, gold has become much more of

an investor-driven market. Investment demand (exchange-traded funds [ETFs], gold bars, coins) made up roughly 30% of the market in 2019, which was up from just 15% in 2005 (**See Figure 3** on the next page). The popularity of gold ETFs, such as the GLD, pushed prices higher. However, investment demand fell substantially in 2015 to only 20% of the market, causing gold prices to fall. We believe the role of investment demand opens the door for increased volatility should gold fundamentals turn less positive and should flows into gold continue to subside.

Figure 3



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Where Are We Today?

The "Fear Trade" Has Gold Elevated

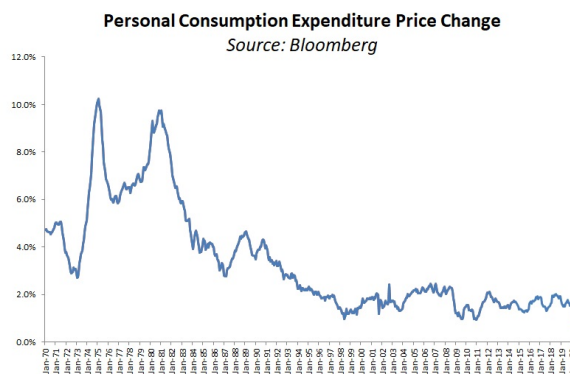
In general, gold is a good barometer for fear and, more broadly, global economic and political uncertainty. Fear is currently abundant, and gold has rallied sharply this year in response to the economic disruption of the COVID-19 outbreak, which has driven unprecedented levels of stimulus from central banks, along with concerns that stimulus may eventually drive higher inflation. While the environment for gold prices is currently favorable, we see more pro-growth assets, such as equities, as better long-term investments against future uncertainty.

Inflation Still Contained

Even with economic growth running above trend and labor conditions tight in recent years, inflation has been running well within the Federal Reserve's comfort zone for some time. If we look at the Personal Consumption Expenditures Index (the Fed's preferred measure of inflation - **Figure 4**), inflation has been in a period of range-bound movement

over the past couple years. In light of sharply higher unemployment following the COVID-19 outbreak and economic growth that is now far from overheated, the near-term outlook for inflation is likely very moderate. While investors are concerned that inflation could eventually heat up as a result of the stimulus, central banks are quite aware of this risk and will likely have time to respond and unwind their accommodative policies as the economy regains its footing and employment trends improve.

Figure 4



Past performance is no guarantee of future results.

Gold's performance as an inflation hedge has generally been mixed over the years. If we look historically, gold has done well during periods when inflation increases considerably and is unexpected. Modest or expected inflation has a muted impact on the price of gold. For those concerned about potentially higher rates of inflation, we recommend a high-quality diversified portfolio of companies with pricing power and the ability to raise dividends over time, such as those on the Edward Jones Equity Income Buy List. Over the long term, we see more value creation in owning productive assets as opposed to gold.

What's It Worth?

One of our key concerns is related to understanding the true economic or fundamental value of the commodity itself. Gold doesn't produce cash flow or pay dividends, which makes it very difficult to value. Furthermore, unlike other commodities, gold is driven largely by currency movements, changes in interest rates, and central-bank activity, all of which are very difficult to forecast. Other commodities such as oil, copper and coal are driven off of general levels of

supply and demand as well as end-market demand. For example, after oil is discovered and extracted, it is consumed, while all of the gold ever mined remains in circulation today. Gold is accumulated and stored as opposed to being consumed.

At a very fundamental level, an enterprise or asset's value is equal to the discounted value of all future cash flows. Companies like Coca-Cola produce a product, sell it and recognize cash flow or profits related to that sale. They expand operations, acquire new businesses, and create new products, all of which, over time, are done with the goal of increasing shareholder value (i.e., a higher stock valuation). The company's theoretical value is the present value of all of those future cash flows. The lack of cash flows and industrial uses make gold a very hard asset to value with any level of precision or confidence. Without fundamental indicators to rely on, gold prices ebb and flow based on currency movements, inflation expectations, and events that cause panic and uncertainty, all of which are difficult to forecast.

Does Gold Add Value to a Portfolio?

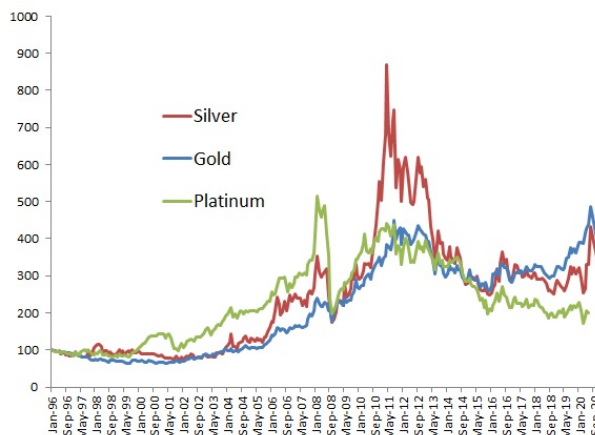
In an effort to answer this question, we created hypothetical portfolios and looked at performance over the past 40 years to better understand the role (if any) gold plays in the context of a diversified portfolio. We examined three main portfolios, one with an allocation of simply stocks and bonds, one with a 5% allocation to gold, and one with a 10% allocation to gold. Over the 40-year time period from 1980 – 2020, we found the portfolios with either a 5% or 10% allocation to gold had slightly lower returns as compared with the stock and bond portfolio, but they also had a lower standard deviation (a measure of volatility). So, looking historically, a small ownership position in gold has provided slightly less volatility in portfolio returns as compared with a portfolio of simply stocks and bonds, but with slightly lower returns.

Other Precious Metals

While gold is certainly the most familiar of the precious metals, we also took the opportunity to look at silver, platinum and palladium (the other main precious metals). If we look historically, all of the precious metals tend to be fairly correlated with one another (**Figure 5**). However, we found silver, platinum and palladium prices were significantly more volatile compared with gold prices. In the case of silver and palladium, they were roughly twice as volatile (as measured by standard deviation) as gold going back to 1996. We don't view any of the

precious metals as good long-term investments, and we recommend long-term investors avoid gold and precious metals and limit broad-based natural-resource investments to no more than 5% of their portfolios.

Figure 5



Source: Bloomberg. Past performance is no guarantee of future results.

A Better Alternative

In performing the same exercise as described above, we found that a similar allocation to a basket of broad-based commodities, such as those present in the S&P GSCI (Standard & Poor's Goldman Sachs Commodities Index), yielded a better return than the addition of gold to a portfolio while also lowering the standard deviation of returns, without taking on the risk of owning a single volatile commodity (i.e., gold). The GSCI serves as one of the best benchmarks for investments in commodity markets and as a measure of overall commodity performance. The GSCI is a diversified index with positions in many commodities including energy (oil & gas); agriculture (wheat, corn, soybeans, coffee, sugar, cocoa and cotton); livestock (hogs, cattle); industrial metals (aluminum, copper, lead, nickel, zinc); and precious metals (gold and silver). Commodity and stock market cycles rarely overlap, which allows for additional diversification and the potential for better long-term returns. Diversification is one of the best ways to help reduce risk in a portfolio and protect against large portfolio swings in the event of weakening economic fundamentals. Given the low correlation with the broader markets and competitive returns, a small allocation to commodities has proven over time to improve portfolio returns and lower standard deviation, especially during inflationary periods.

Conclusion

We don't believe gold or other precious metals are good long-term investments, and we recommend investors avoid them. Over time gold has periods of outperformance, but in our view it is not a good long-term investment vehicle given the high volatility, lack of any income stream (gold does not pay a dividend), and unpredictability of returns. We think choosing the right time to buy and sell is very difficult, and unless you choose correctly, gold's long-term returns have been poor.

Furthermore, we believe many of the tailwinds gold has enjoyed over the past decade will likely turn into headwinds over the next couple of years, pressuring prices and limiting any potential diversification benefits. As an alternative, we believe owning a diversified basket of commodities has the potential to improve returns and lowers portfolio risk. However, we would limit broad-based natural-resource investments to no more than 5% of your portfolio.

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