In focus

Emerging forces driving the price of gold and their implications for your portfolio

August 2024

The apparent breakdown in the negative relationship between real yields and gold prices warrants closer examination. What are the new forces driving gold prices, and will gold have a role to play in portfolios?

Section 1 – Past, present and future: what are the drivers for gold?

Gold has played a part in portfolios over the past 15–20 years, and one major trend has been its negative relationship with real yields. This connection has notably developed due to the financialisation of gold, with asset allocators like us becoming the principal investors engaged in daily trading of gold. The widespread use of gold exchange-traded funds (ETFs) and increased trading volumes in futures markets (Figure 1) have reinforced gold's market behaviour to reflect the opportunity cost of other assets. Markets started to engage with gold derivatives and ETFs on a larger scale around 2004. This also marks the point when gold changed from being a physical instrument (e.g. jewellery) and store of wealth for central banks and ultra-wealthy, to becoming a speculative investment asset.



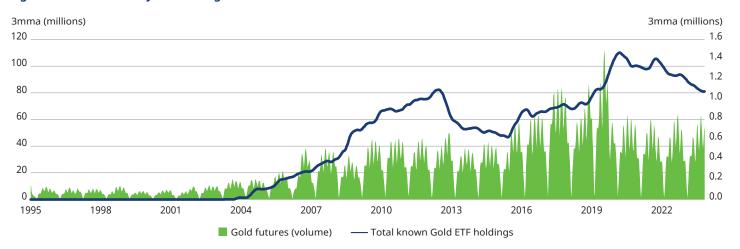
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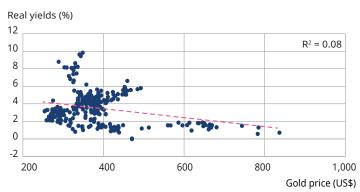
Figure 1: Investors widely embraced gold futures and ETFs from 2004



Source: Schroders, Bloomberg, 17 July 2024.

Prior to the uptake in speculative demand from investors, there was no observable relationship between the real yields and gold prices (Figure 2), and the negative relationship was particularly established only after the Global Financial Crisis (GFC) (Figure 3).

Figure 2: No relationship between real yields and gold before Global Financial Crisis (Pre-2008)



Source: Schroders. Schroders, Refinitiv Datastream, 16 July 2024. Data used is from July 1984 to December 2007. Real yields refer to US 10-year yields minus 1-year forward expected inflation.

Why did the inverse relationship between real yields and gold prices emerge?

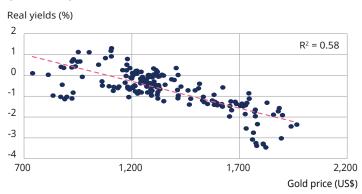
The GFC led to unprecedented monetary easing and quantitative easing (QE) policies by central banks, driving real yields into negative territory. All the while, growing speculative investor demand established a relationship between gold and other asset classes, as the demand for gold came as an opportunity cost of holding other assets. This backdrop made non-interest-bearing assets like gold more attractive, thereby cementing the inverse correlation between real yields and gold prices.

Additionally, the heightened economic uncertainty and inflation fears post-crisis further reinforced gold's role as a safe-haven asset, amplifying its sensitivity to changes in real yields. The financial repression during the 2010s, characterised by lower interest rates and increased money supply, further contributed to this trend, making gold an essential component of diversified investment portfolios.

The inverse relationship during 2008-2022 can be summarised as follows:

- (i) Monetary policy: Central banks implemented unprecedented aggressive monetary policies in response to the financial crisis, which included multiple rounds of QE. This included large-scale purchases of government securities, suppressing nominal yields. With nominal yields low and inflation expectations relatively stable or rising, real yields became low or even negative, making non-interest-bearing assets like gold more attractive.
- (ii) Coordinated global economic policy: The GFC led to coordinated monetary policy by central banks globally, a phenomenon that economists still argue remains present today. A widespread reduction in real yields across major economies amplified the attractiveness of gold.
- (iii) Investor behaviour: There was a notable shift in investment strategies post-crisis where institutional investors and central banks started increasing their gold holdings as part of their risk management strategies. The rise of gold ETFs also made it easier for investors to gain exposure to gold, driving demand and hence reinforcing the negative relationship with real yields.

Figure 3: Stronger inverse relationship post-GFC (2008–2022)



Source: Schroders, Refinitiv Datastream, 16 July 2024. Data used is from January 2008 to December 2021. Real yields refer to US 10-year yields minus 1-year forward expected inflation.

Breakdown in relationship with real yields post-2022

The global division created by the Russia-Ukraine war was one of the tipping points for the relationship between real yields and gold prices (Figure 4). The sanctions on Russian assets by the US government also pushed many other economies to see the risk of holding reserves in US dollars (USD). This incentivised an acceleration in central bank gold purchases. Although it is very difficult to attribute the performance in gold towards one particular factor (i.e. central bank gold purchases), many investors point to the increase in pace of central bank buying as the driver of the gap between gold and real yields.



Figure 4: Negative relationship broke down post-2022



Source: Schroders, Refinitiv Datastream, 16 July 2024.

Below, we briefly talk about several additional factors that we believe will influence the price of gold in the near future.



US real yields

As inflation abates, we believe that the negative relationship with real yields and gold will re-assert itself. When central banks start cutting rates, real yields should fall and the relative attractiveness of gold will lead to demand picking up again.



US dollar

Gold is typically priced in USD on international markets, and when the value of USD rises, gold becomes more expensive in other currencies. This will lead to reduced demand. If global central banks start to decouple their decision-making from the US Federal Reserve, it could create relative interest rate differentials. These differentials can lead to significant currency movements, as investors seek the best returns across different markets. Such currency movements can, in turn, influence the price of gold.



Western demand

The gold rally over the past two years cannot be attributed to Western demand, which has significantly declined. Western investors have historically shifted towards bonds to capitalise on real rate gains, avoiding the high opportunity costs associated with holding gold. This trend explains the gold liquidation observed in ETF markets (Figure 5).

Instead, the Eastern domestic and central bank demand has been the primary driver of gold prices recently. This shift highlights that current gold performance is largely influenced by factors beyond typical market (real yield) dynamics.

Historically, gold investment and dis-investment follow major central bank policy inflections therefore with a shift to an oncoming rate cutting cycle we may see a reversion.

Figure 5: Gold ETF liquidations driven primarily in North America and Europe



Source: Schroders, World Gold Council, data as of 30 June 2024.



2012

Eastern household demand (China, Japan)

The shift towards gold buying from Chinese households coincides with the end of the property bull market and has taken gold from being the least preferred Chinese household investment asset to being the most preferred asset (Figure 6). This could continue to be a driver for gold prices, at least from the East. General malaise

across China's onshore markets have left domestic investors with no better alternative than buying gold. Accordingly, Chinese gold ETF demand has seen a meaningful growth in assets under management, implying strong growth in the physical market.

Figure 6: Chinese household preference mirroring the end of the real estate bull market



2018

2019

2017

Source: CLSA, Schroders, February 2024.

2013

The sharp rise in gold prices has reduced demand in some markets, but positive economic growth can mitigate this impact. Furthermore, the potential stabilisation of gold prices may attract consumers who are more sensitive to price volatility than to the

2015

China Middle Class Investment Preference: Property

2016

actual price level. This is especially relevant for India (Figure 7), where economic growth expectations are high, and gold is firmly established as a store of value.

China Middle Class Investment Preference: Gold

2021

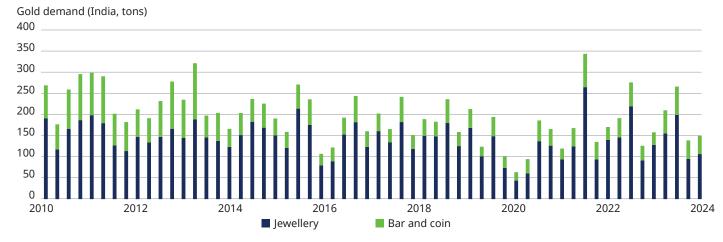
2022

2023

2020

Figure 7: High consumer demand for gold in India

2014



Source: Schroders, World Gold Council, data as of 30 June 2024.

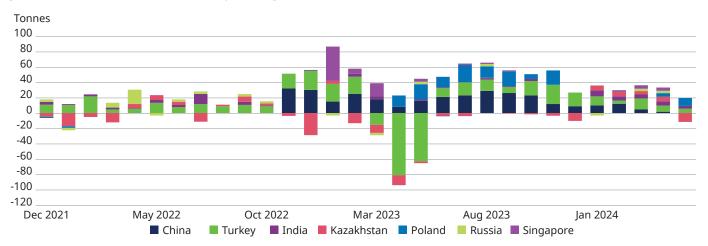


Central bank demand

As we alluded to earlier, central bank purchases have taken the spotlight since late 2022 as central banks diversify their foreign exchange reserves holdings. China was a huge proponent of central bank gold buying since Q4 2022 up until May 2024 (Figure 8). Looking across all major regions, the change of central bank gold reserves in 2023 is significantly higher than 2021 and 2022 combined. The halting of purchases by the Chinese central bank

should not majorly disrupt the broad trend, as other major players such as Turkey and Middle Eastern countries could continue to drive demand. At times, political factors can overshadow economic considerations, making the incentive to buy gold more influenced by geopolitical events rather than real yields or the economic condition of individual countries.

Figure 8: Central banks have substantially added gold to their reserves in recent months



Source: Schroders, World Gold Council, 16 July 2024.

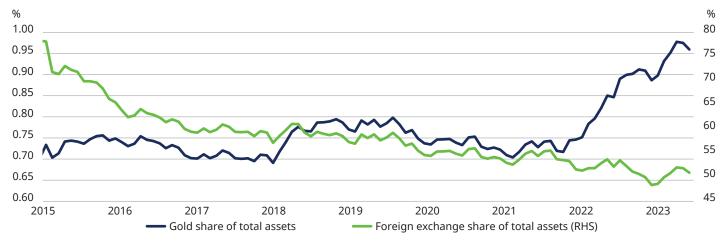


Geopolitical risk

In times of uncertainty, investors tend to seek out perceived safe haven assets to hedge geopolitical risks: the Russia-Ukraine war and tensions in the Middle East are no exceptions. However, a preference for gold over the USD appears to be developing. The invasion of Ukraine and the subsequent freezing of US\$300 billion in Russian assets have prompted a shift towards investing

in gold, challenging the dominance of the dollar, which we can see happen in China (Figure 9). De-dollarisation, or reducing reliance on hard currency, is particularly appealing to economies seeking to reduce their vulnerability to sanctions. However, the fact that gold reserves have increased at a similar rate to USD reserves suggests that this transition away from the USD will be gradual.

Figure 9: China's central bank slowly shifting reserves away from foreign currency



Source: Schroders, Macrobond, People's Bank of China Central Bank Survey, 30 June 2024.



Risk of currency debasement

This is similar to the previous point where economies seek to reduce reliance on hard currency, but for different reasons. These economies may have reduced faith in the long-term creditworthiness of the reserve currency, which leads them to seek gold as a structural diversifier. In today's economic climate, one could argue that the US government is in a huge deficit and concerns about more expansionary fiscal policy whilst already running significant debt to GDP ratios could worsen things. An emerging economy that has historically relied on the USD could look for alternatives.

Although for different reasons, China has actively sought to reduce their reliance on the USD by pushing for the renminbi (RMB) to become a global currency. Towards this aim it is entering into currency swap agreements with numerous countries and developed domestic financial markets to attract foreign investment into RMB-denominated assets. Nevertheless, it must be noted that whilst gold reserves have increased, the impact as a percentage of total reserves is much smaller and therefore still has a long way to go.

Section 2 – The role of gold in a Multi-Asset portfolio context

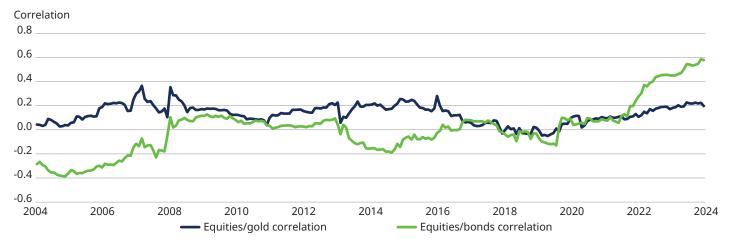
With the factors presented in Section 1, we think that there are qualitative reasons for investors to include gold in their portfolios. In this section we take a greater look at how the inclusion of gold will impact a 60/40 equity-bond portfolio.

Which is the preferred diversifier: Gold or bonds?

Investment assets frequently exhibit complex interactions, and diversification is one of the most frequently cited benefits for including a particular instrument in a portfolio. Historically, gold has exhibited low correlation to equities but how does that fare

against what is widely seen as a traditional risk hedge: bonds? Looking at correlation, equities and gold have had a rather stable relationship over the past 20 years, while equities and bonds have had a tumultuous one (Figure 10).

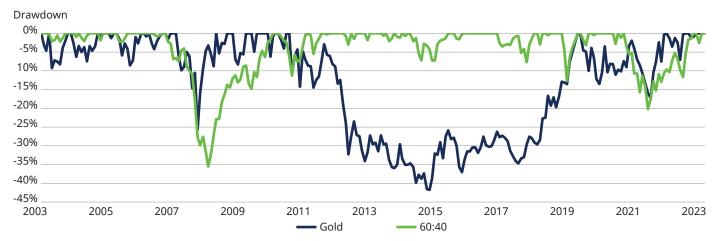
Figure 10: Gold appears to be a reliable diversifier against equities...



Source: Schroders, Refinitiv Datastream, 30 June 2024. Correlations refer to 5-year monthly rolling correlation.

That said, in the specific events where a 60/40 multi-asset portfolio has struggled such as 2008 or 2022 (Figure 11), gold has not protected the portfolio. As a result, we cannot look to gold as a reliable hedge against a future market downturn.

Figure 11: ... but it doesn't reliably hedge the portfolio in a downturn



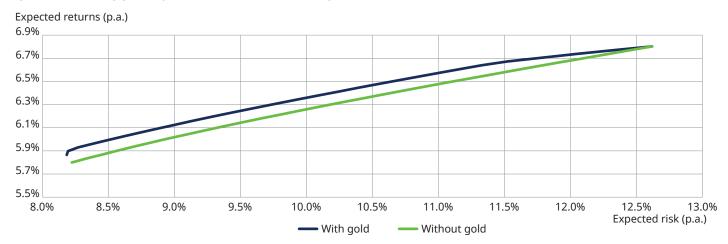
 $Source: Schroders, Bloomberg, Refinitiv \ Datastream, 30 \ June \ 2024. \ 60:40 \ portfolio \ includes \ global \ equities \ and \ global \ aggregate \ bonds.$

In an environment where we're potentially expecting central bank neutral rates to be higher, and rates to be at levels higher than the past decade, there is a high likelihood that the equity-bond correlation will not revert to pre-2022 levels. This means that gold could become the better diversifier for equity-related risks in the coming decade. Of course, we're not advocating for the complete eradication of bonds from your portfolios, but instead we highlight the case for a modest allocation to gold. Which brings us to the next section...

Including gold into a Multi-Asset portfolio

Since the advent of modern portfolio theory, portfolio constructors have consistently focused on maximising expected returns while maintaining an acceptable level of risk. Using our in-house modelling tool, we can observe how gold helps achieve that outcome: portfolios generally benefit from having gold in their portfolios as expected returns receive a slight boon (Figure 12). This effect ends as portfolios move up the risk spectrum as the tool begins to favour having more equities.

Figure 12: Including gold in portfolios shifts the frontier upwards

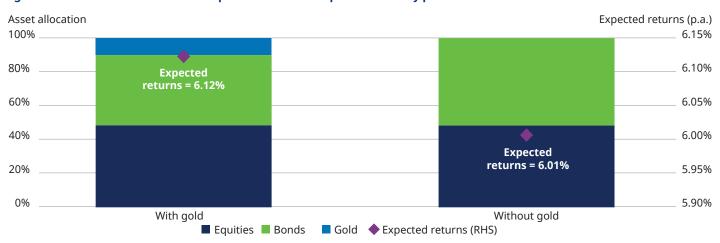


Source: Schroders, 17 July 2024. Base portfolio includes global equities and global aggregate bonds. Expected returns references Schroders 10-year return forecasts except for gold, which uses a long-term premium over inflation. Correlation uses a 20-year lookback.

The output of any model is inherently determined by the underlying assumptions. Our returns expectation for gold is based on a long-term premium over inflation. Looking at the very long-run, since 1971 when the gold standard ended, gold has outpaced inflation by 3.6% per annum. Using this long-term premium over inflation, we added it back to market inflation expectations (current 10-year breakeven yields of 2.3% as of writing), to reach an assumed 5.9% annualised expected return for gold. Volatility is assumed to match that of the past 10 years. Correlations uses a 20-year lookback for reasons we've mentioned above.

We further implemented constraints onto the model, where equities will remain rangebound between 40–80% and bonds between 20–60%. Finally, the portfolio with gold will have a maximum threshold of 10% allocation. We can see that for portfolios with an expected risk of 9%, there is a pick-up of 11 basis points in expected returns by including gold (Figure 13). In other words, investors are able to maintain the same level of risk in a portfolio while improving returns.

Figure 13: Allocation for a constrained portfolio with 9% expected volatility p.a.



Source: Schroders, 17 July 2024. Base portfolio includes global equities and global aggregate bonds. Expected returns references Schroders 10-year return forecasts except for gold, which uses a long-term premium over inflation. Correlation uses a 20-year lookback.

Conclusion

Over the past twenty years, the gold market has evolved substantially as speculative investors have become the dominant force driving market dynamics. This has created an opportunity to allocate to gold as long-term returns appear compelling.

That said, gold has become more complicated over the past two years. Numerous factors based around the geopolitical fallout over the Russia/Ukraine war have increased demand for gold, additionally economic weakness in China has also pushed investors into gold. To date these factors have by-inlarge driven gold prices higher, but in the future they may drive prices down rather than just up, for example should geopolitical tensions thaw or economic activity in China turn around.

Nevertheless, the case for owning gold as a diversified source of returns in a multi-asset portfolio remains highly persuasive. Whilst we cannot reliably see gold as a hedge to other asset classes, it has proven to produce strong returns which are somewhat uncorrelated to other markets. That in itself produces a strong case for allocating to gold within a multi-asset framework.

With special thanks to Lorena Gutierrez Campoverde.

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