Edith Southammakosane

Director – Multi-Asset Strategist

Maxwell Gold

Director –Investment Strategist

research@etfsecurities.com

2nd August 2016

ETF Securities Investment Insights:

Potential benefits of a precious metals allocation

Summary

- Adding a precious metals allocation to a diversified stock-bond portfolio has historically increased portfolio efficiency – lowering risk while increasing return.
- Precious metals act as core risk management tools for investors by providing effective diversification against risk assets, helping reduce performance drawdowns during equity market volatility and serving as a hedge against market turmoil.

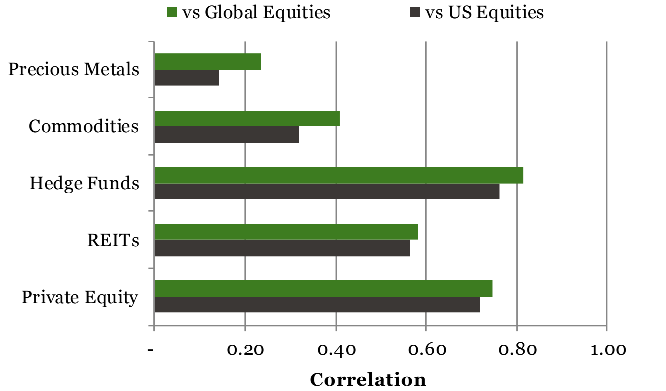
Precious metals such as gold, silver, platinum, and palladium have grown in prominence in recent years as viable investment alternatives to include in asset allocations. Despite being one of the oldest financial instruments, however, precious metals largely remain an underutilised and overlooked investment option for many investors' portfolios. This may present an opportunity for many to further diversify and benefit from the distinct investment characteristics precious metals have historically offered within an asset allocation.

Furthermore, the performance of individual precious metals varies over time with no one metal continuously leading the others. A diversified basket of precious metals tends to perform more consistently versus any single metal and creates an exposure to both the cyclical and non-cyclical drivers of gold, silver, platinum, and palladium as a whole. A basket offers further opportunities to benefit from diversification advantages of an asset class while maintaining the unique qualities inherent to the individual precious metals.

A key benefit from investing in precious metals lies within its distinct role as a risk management tool. Precious metals wear many hats on the risk management front and thereby serve as a dynamic and multi-faceted hedge against many forms of risk. They also have a track record of protecting investor portfolios against severe market drawdowns. This role as a risk management tool is especially useful for long term investors seeking to continually hedge against a broad spectrum of both known and unknown risks.

Precious metals have historically shown low correlations with most asset classes, particularly equities. Over the past 20 years, precious metals have carried lower correlations to both US and global equities than other alternative investments (see Exhibit 1). The source of this low correlation lies within the diverse sources of demand across gold, silver, platinum, and palladium. Pro-cyclical sources of demand (jewellery, consumer, and industrial applications) increase as growth and incomes increase along with the economy.

Exhibit 1: Precious metals historically have a low correlation relative to equity markets



Source: Bloomberg, ETF Securities. Index proxies: global equities = MSCI World total return index, US equities = S&P 500 total return index, commodities = Bloomberg Commodity Index, hedge funds = HFRI Fund Weighted Composite Index, REITs (Real Estate Investment Trusts) = FTSE All Equity REIT Index, Private Equity = LPX50 total return index. Exhibit data from 30/06/96 – 30/06/16. See disclosures for further details.

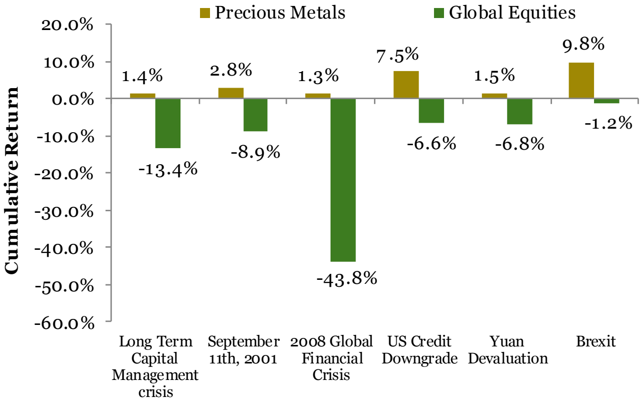
Counter-cyclical sources of demand, primarily investment demand, pick up during economic slowdowns and market pullbacks as interest in stores of value and defensive assets increases. These pro-cyclical and counter-cyclical sources occur at different times and result in low overall correlations to the broader market and economic cycle. As a result, precious metals can act as effective diversifiers against traditional risk assets, particularly equities. By holding precious metals, investors can help diversify against their equity exposure.

This attribute is even more critical because diversification has become more challenging to achieve following the 2008 financial crisis. Correlations across alternative investments rose dramatically in 2008 compared to the preceding period from 1996 to 2007. Following 2008, however, several alternative investments' correlations and equity exposure to global equities remain elevated compared to their pre-crisis levels, particularly commodities and REITs. Meanwhile, precious metals remain an exception - further highlighting their effectiveness as a true alternative investment.

Precious metals also remain resilient during extreme events and market turmoil. This can be seen in their relative performance against global equities during several key events of market uncertainty in recent decades (see Exhibit 2). A precious metals basket performs admirably (posting positive returns) during these periods of heightened turmoil and volatility where global equities have shown negative returns and large drawdowns.

During these events, global equities experience large sell offs in response to investors seeking to reduce exposure to risk assets and seek more stable, defensive investments in an environment of rising fear and uncertainty. This performance showcases precious metals' ability to help protect against downside risks and its chief role as a risk management tool for investors to manage their equity exposure within portfolios.

Exhibit 2: Precious metals have performed well during event risks and equity volatility



Source: Bloomberg, ETF Securities. Global Equities = MSCI World index. Event date ranges evaluated from: LTCM & Ruble crisis (01/07/98 – 30/09/98), September 11th, 2001 (01/09/01 – 30/09/01), 2008 Global Financial Crisis (01/09/08 – 28/02/09), US Credit Downgrade (01/08/11 – 31/08/11), Yuan Devaluation (01/08/15 – 31/08/15), Brexit (01/06/16 – 30/06/16). See disclosures for further details.

It is evident that precious metals are distinct and effective diversifiers, but the true benefit of a precious metal allocation emerges when they are added to a diversified portfolio allocation. By adding precious metals to a diversified stock-bond portfolio, the portfolio efficiency can increase – whereby the portfolio risk is lowered while the portfolio return remains the same or increases – compared to diversified portfolio without an allocation to precious metals.

This principle can be illustrated using a precious metals basket and a fixed 60% stock and 40% bond allocation (60/40), which is typically referenced as a default proxy for a diversified portfolio of a balanced or moderate risk profile. Starting with the example of a 60/40 allocation without any precious metals in the portfolio, it is observed that the total portfolio return since is 3.9% annualized and the total portfolio volatility is 9.5%. Subtracting the return on the 3 Month US Treasury Bill (a proxy for a "risk-free asset") from the portfolio return and dividing by volatility yields a risk-adjusted return metric (the Sharpe ratio) for the 60/40 portfolio of 0.22. This ratio can be increased by adding a precious metals basket allocation under different scenarios and weights. A 5% precious metals allocation funded by reducing the equity allocation from 60% to 55% yields a drop in portfolio volatility to 9.0%, the portfolio return increasing slightly to 4.2%, and the Sharpe ratio rising to 0.26 from 0.22 (see Table 1). Additionally, the annualized return and Sharpe ratio increased to 4.4% and 0.29 respectively, while the volatility dropped to 8.7% for a 10% precious metals allocation.

These results reflect the efficiency and effectiveness of precious metals as a diversifying asset against equity risk. As the allocation to stocks was lowered in the portfolio and replaced with precious metals, the portfolio became more efficient over the long run. The realized benefits of incorporating precious metals into an allocation, however, are not limited by only reducing stocks. This same principle can be applied by replacing both stocks and bonds in a portfolio to fund an addition of precious metals.

Turning to an example whereby the 60/40 portfolio is reduced proportionately ("pro-rated") between stocks and bonds (maintaining a 60/40 ratio between stocks and bonds) to allocate to precious metals, the portfolio still experiences an increase in efficiency. A 10% allocation to precious metals with 90% allocated to a 60/40 split of stocks and bonds, sees portfolio volatility fall to 9.3% compared to 9.5% for a portfolio holding no precious metals. Additionally, the Sharpe ratio increases to 0.26 as the portfolio return increased slightly and as the portfolio risk fell by adding precious metals to the mix.

Table 1: Precious metals help increase portfolio efficiency

Portfolio allocation	Zero allocation to PM	PM allocation funded from reducing stocks		PM allocation f. pro-rated 60/40 stock bond mix	
Stocks	60%	55%	50%	57%	54%
Bonds	40%	40%	40%	38%	36%
Precious Metals	0%	5%	10%	5%	10%
Portfolio Return	3.90%	4.20%	4.40%	4.10%	4.30%
Portfolio Volatility	9.50%	9.00%	8.70%	9.30%	9.30%
Sharpe Ratio	0.22	0.26	0.29	0.24	0.26

Source: Bloomberg, ETF Securities. MSCI World index used as a proxy for stocks, Barclays Capital Global Aggregate Bond index for bonds and a simulated precious metals basket for precious metals. Returns and volatilities calculated on annualized basis. Table data from 31/12/99 – 30/06/16. See disclosures for further details. For illustrative purposes only.

This highlights that regardless of whether precious metals are added by reducing only stocks or both stocks and bonds the result is a more efficient asset allocation. As this simple example illustrates portfolios can better manage risk and return levels by having an active allocation to precious metals. While the proper weighting will vary depending on investors' different risk profiles and investment objects, a zero percent allocation to precious metals remains sub-optimal.

Important Information

General

This communication has been issued and approved for the purpose of section 21 of the Financial Services and Markets Act 2000 by ETF Securities (UK) Limited ("**ETFS UK**") which is authorised and regulated by the United Kingdom Financial Conduct Authority (the "**FCA**").

The information contained in this communication is for your general information only and is neither an offer for sale nor a solicitation of an offer to buy securities. This communication should not be used as the basis for any investment decision. Historical performance is not an indication of future performance and any investments may go down in value.

This document is not, and under no circumstances is to be construed as, an advertisement or any other step in furtherance of a public offering of shares or securities in the United States or any province or territory thereof. Neither this document nor any copy hereof should be taken, transmitted or distributed (directly or indirectly) into the United States.

This communication may contain independent market commentary prepared by ETFS UK based on publicly available information. Although ETFS UK endeavours to ensure the accuracy of the content in this communication, ETFS UK does not warrant or guarantee its accuracy or correctness. Any third party data providers used to source the information in this communication make no warranties or representation of any kind relating to such data. Where ETFS UK has expressed its own opinions related to product or market activity, these views may change. Neither ETFS UK, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this publication or its contents.

ETFS UK is required by the FCA to clarify that it is not acting for you in any way in relation to the investment or investment activity to which this communication relates. In particular, ETFS UK will not provide any investment services to you and or advise you on the merits of, or make any recommendation to you in relation to, the terms of any transaction. No representative of ETFS UK is authorised to behave in any way which would lead you to believe otherwise. ETFS UK is not, therefore, responsible for providing you with the protections afforded to its clients and you should seek your own independent legal, investment and tax or other advice as you see fit. 628

The intelligent alternative

ETF Securities (UK) Limited
3 Lombard Street
London
EC3V 9AA
United Kingdom

t +44 (0)207 448 4330
f +44 (0)207 448 4366
e info@etfsecurities.com
w etfsecurities.com