

Precious metals' place in a portfolio

Even though precious metals are one of the oldest financial instruments, they largely remain an underutilized and overlooked investment option. This may present an opportunity for many investors to further diversify their portfolios and potentially benefit from the distinct investment characteristics precious metals have historically offered.

In our view, investors can best realize these potential benefits by regarding precious metals as a distinct asset class, separate from other commodities and alternative investments. Historically, a precious metals allocation increased efficiency in a diversified stock-bond portfolio. They can also act as core risk-management tools for investors by providing effective diversification against risk assets. This may help reduce performance drawdowns during equity market volatility. Precious metals can also serve as a hedge against extreme events and market turmoil.

The rise of precious metals in modern markets

Precious metals, including gold, silver, platinum and palladium, have grown in prominence in recent years as viable investment alternatives to include in asset allocations. Asset allocation seeks to increase risk-adjusted returns through diversification, based on the principle that different assets perform differently under varying market and economic conditions. For several decades, investors have achieved this through traditional asset classes, such as stocks, bonds and cash.

This changed after the first decade of the 2000s saw two financial crises — first in 2001, then again in 2008. Since then, more investors have looked to include nontraditional asset classes (or “alternative investments”) into their portfolio mix to help manage risk exposures in portfolios.

Like other commodities, precious metals are global assets partly driven by fundamentals (i.e., supply and demand) over the long run. Unlike commodities, however, they also tend to act like currencies. Macroeconomic and monetary factors, such as interest rates, exchange rates and inflation, act as key drivers.

Additionally, precious metals have diversified factors of demand that differentiate price movements during different parts of the market cycle. Consequently, precious metals historically have had low sensitivity to other markets, particularly equities and commodities, which tend to be highly cyclical. These unique factors can set precious metals apart as a “true alternative” with distinct diversification, risk management and investment qualities.

While palladium has been the strongest performer in recent years, no one metal has continuously led the pack over time (Chart 1). 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.

Chart 1: Individual precious metals’ performance varies over time



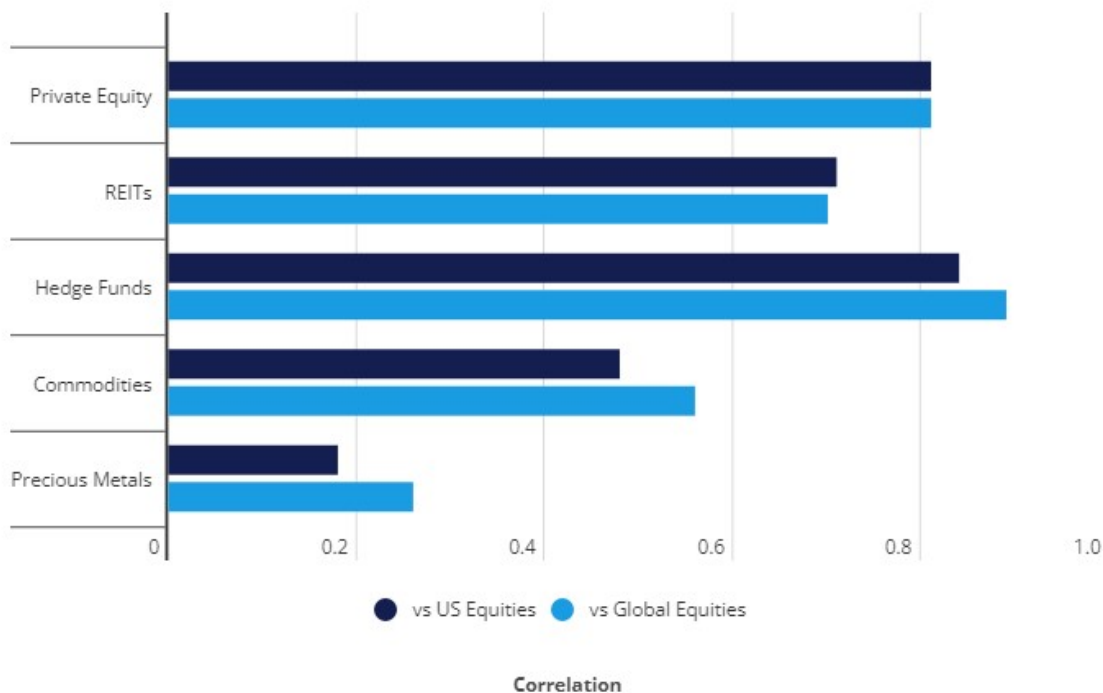
Source: Bloomberg, abrdn. Precious metals in the above table and subsequent calculations, tables and charts within this document are evaluated using the abrdn Physical Precious Metals Basket Index which reflects the daily performance of an investment in a precious metals basket with the following fixed components and ratios: gold (0.030oz), silver (1.100oz), platinum (0.004oz) and palladium (0.006oz). Table data from 12/31/2005 to 3/31/2021. See disclosures for further details. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. For illustrative purposes only.

Precious metals: a core risk-management tool?

An allocation to precious metals may be an attractive risk-management tool. Precious metals can be a dynamic and multi-faceted hedge against many forms of risk. They also have a track record of mitigating investor portfolios against severe market drawdowns (Chart 4). This is especially useful for long-term investors seeking to 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 two decades, precious metals have carried lower correlations to both U.S. and global equities than other alternative investments (Chart 2).

Chart 2: Precious metals historically have a low correlation relative to equity markets



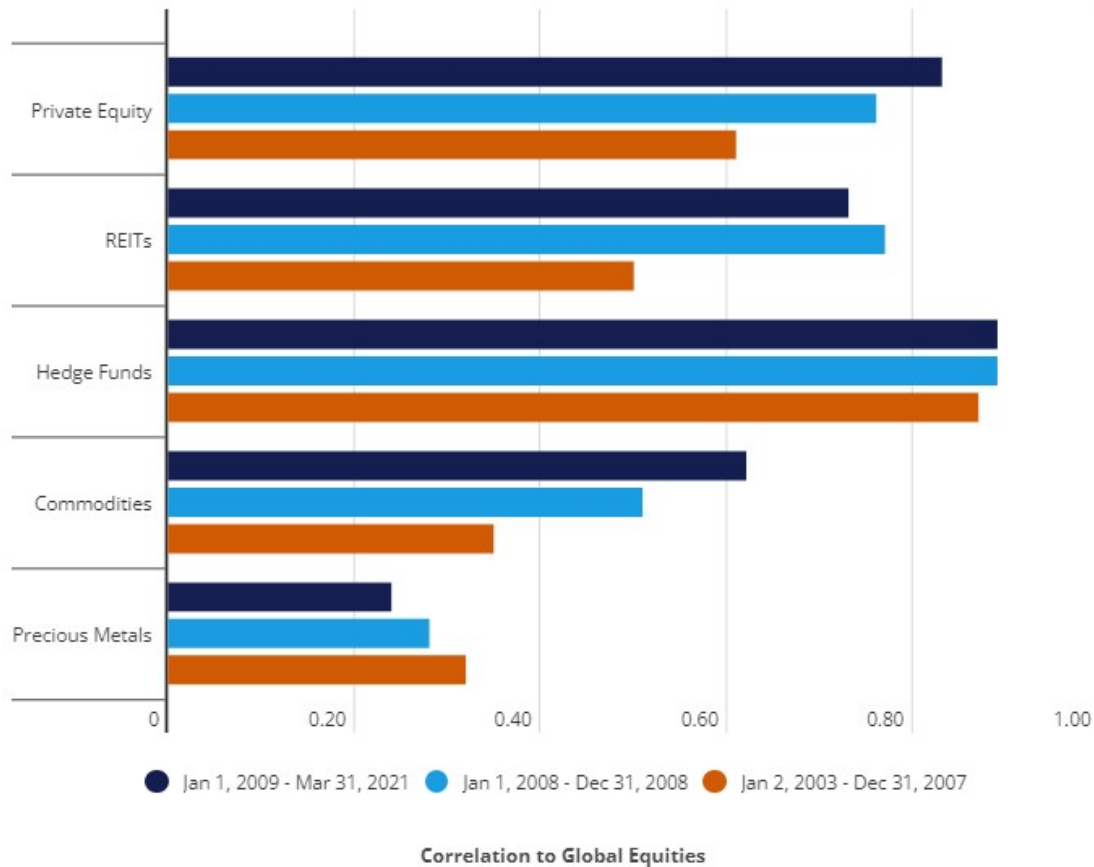
Source: Bloomberg, abrdn. Index proxies: global equities = MSCI World total return index, US equities = S&P 500 total return index, commodities = Bloomberg Commodity Index, hedge funds = HFRI Fund Weighted Composite Index, REITs (Real Estate Investment Trusts) = FTSE All Equity REIT Index, Private Equity = LPX50 total return index. Chart data from 12/31/1993 – 3/31/2021. See disclosures for further details. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. For illustrative purposes only.

This low correlation is a result of the diverse sources of demand across gold, silver, platinum and palladium. Pro-cyclical sources of demand (jewelry, consumer and industrial applications) increase as growth and incomes increase along with the economy.

Counter-cyclical sources of demand, primarily investment demand, pick up during economic slowdowns and market pullbacks. This is because, during these times, 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. Holding precious metals can help investors diversify against their equity exposure.

Precious metals' diversification benefits are critical today because effective diversification has become more difficult to achieve since the 2008 financial crisis. Correlations across alternative investments rose dramatically in 2008 compared to the preceding period from 2003 to 2007 (Chart 3). Following 2008, however, several alternative investments' correlations and exposure to global equities, particularly via commodities and real estate investment trusts (REITs), have remained elevated compared to their pre-crisis levels. Meanwhile, precious metals remain an exception — highlighting their effectiveness as a true alternative investment.

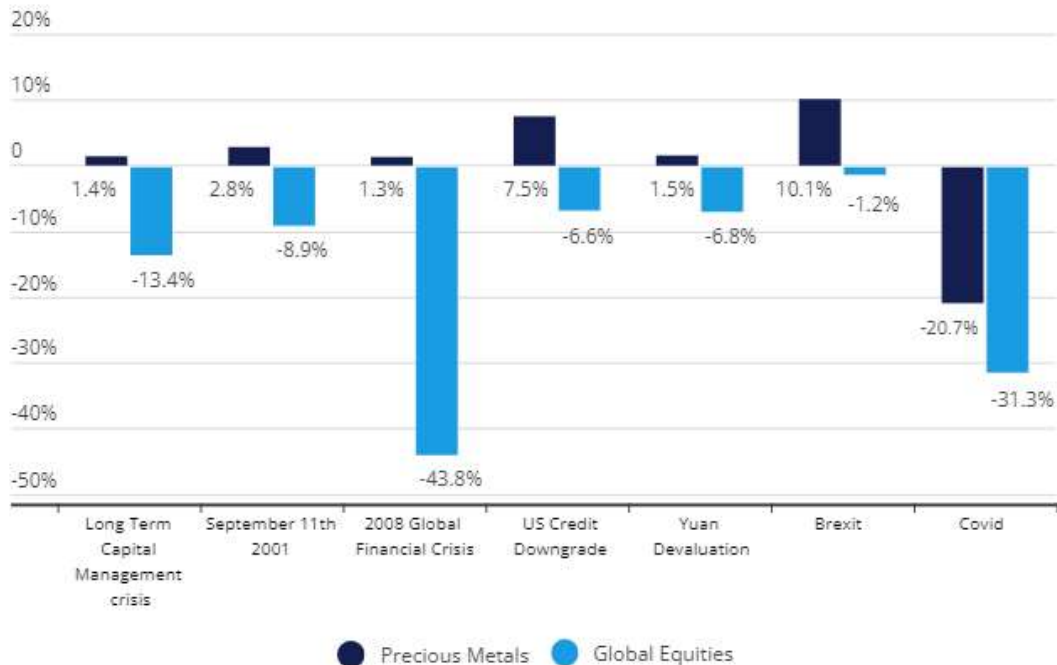
Chart 3: Diversification is becoming more difficult to attain following the 2008 financial crisis



Source: Bloomberg, abrdrn. Index proxies: global equities = MSCI World Index, US equities = S&P 500, commodities = Bloomberg Commodity Index, hedge funds = HFRI Fund Weighted Index, REITs (Real Estate Investment Trusts) = FTSE All Equity REIT Index, Private Equity = LPX50 Index. Chart data from 12/31/1993 – 3/31/2021. See disclosures for further details. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. For illustrative purposes only.

Precious metals have also historically remained resilient during extreme events and market turmoil. Chart 4 below highlights precious metals’ relative performance against global equities during key events of market uncertainty in recent decades. A precious metals basket has historically posted positive returns when volatility has spiked. This is a sharp contrast to global equities, which have shown negative returns and large drawdowns. In an environment of market fear, global equities tend to experience large sell-offs as investors try to reduce exposure to risk assets and seek more stable, defensive investments. Precious metals’ track record of performing well in the face of market uncertainty showcases their potential strength as a risk-management tool.

Chart 4: Precious metals have performed well during event risks and equity volatility



Source: Bloomberg, abrdn. Global Equities = MSCI World index. Event date ranges evaluated from: LTCM & Ruble crisis (7/1/1998 – 9/30/1998), September 11th, 2001 (9/1/2001 – 9/30/2001), 2008 Global Financial Crisis (9/1/2008 – 2/28/2009), US Credit Downgrade (8/1/2011 - 8/31/2011), Yuan Devaluation (8/1/2015 – 8/31/2015), Brexit (6/1/2016 - 6/30/2016), Covid (2/24/20-3/23/20). See disclosures for further details. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. For illustrative purposes only.

Precious metals: in a class of their own

The investment community often classifies precious metals as commodities, which informs how they're used in asset allocations. This has some merit. Precious metals are global assets with similar physical production and storage treatment to broader commodity sectors, such as energy, agriculture and base metals. However, we believe that precious metals' distinctive properties make them an asset class apart from commodities.

Broad commodities, like other alternative investments, have a higher equity correlation than precious metals. Commodities have experienced a 0.56 correlation to global equities, whereas precious metals' correlation 0.26 has been half as much during the same time period. This difference between precious metals and commodities becomes even more tangible when evaluating their performance.

Precious metals have returned 9.6% annualized, while commodities returned only -0.7% annualized, with a clear divergence beginning in 2008 as the global economy slowed (Chart 5). Since then, equities have recovered, but commodities have not and remain tied to their particular fundamental trials.

Chart 5: Precious metals have diverged from commodities since 2008



Source: Bloomberg, abrdn. Commodities = Bloomberg Commodity Index, Global Equities = MSCI World Index, Precious Metals = GLTRI Index. Exhibit data from 12/31/1992 – 3/31/2021. See disclosures for further details. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. For illustrative purposes only.

Upside and downside capture measures shine a light on perhaps the most attractive advantage precious metals hold over broad commodities (Table 1). These measures show how an investment relates to the movements of the stock market when it rises and falls. Historically, when global equities have experienced positive returns, precious metals have captured 53% of this upside and commodities have captured 47%. Conversely, when global equities have experienced negative returns, precious

metals have captured only 17% of the downside. Commodities, on the other hand, have historically captured more than four times the equity downside (75%) than precious metals have.

This means that precious metals may be more efficient. Historically, they capture desired equity movements with roughly half of positive equity returns and less than one-fifth of the downside returns. The opposite is true for commodities, which capture more of the undesirable downside equity movements than is offset by the positive equity moves it captures.

Table 1: Precious metals capture more upside and less downside of equity markets compared to commodities

	GLTRI Index	BCOMTR Index	NDDUWI Index
Risk/Return Measures (Jan 2003 - Mar 2021)	Precious Metals Basket	Bloomberg Commodity Index	MSCI World Index
Return (Cumulative)	374.1%	-11.7%	422.8%
Return (Annualized)	9.6%	-0.7%	10.3%
Volatility (Annualized)	20.7%	16.2%	15.0%
Correlation to MSCI World	0.26	0.56	1
Upside Capture	53.07%	47.10%	1
Downside Capture	17.29%	75.54%	1

Source: Bloomberg, abrdrn. Table data calculated from 1/1/2003 to 3/31/2021. See disclosures for further details. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. Index History (as of 03/31/2021)

MTD QTD 1YR 3YR* 5YR* 10YR* Since index inception**

	MTD	QTD	1YR	3YR*	5YR*	10YR*	Since index inception**
Precious metals index	-3.00%	-6.04%	21.49%	13.22%	10.04%	0.11%	9.26%
Bloomberg Commodity Index	-2.15%	7.54%	34.90%	-1.56%	1.37%	-6.84%	-1.65%
MSCI World Index	3.11%	4.68%	51.76%	10.80%	11.38%	7.73%	7.05%

7.05%

*Annualized returns **The inception date for the Precious metals index is 01/02/2003.

**The inception date for the Bloomberg Commodity Index is 01/04/1960.

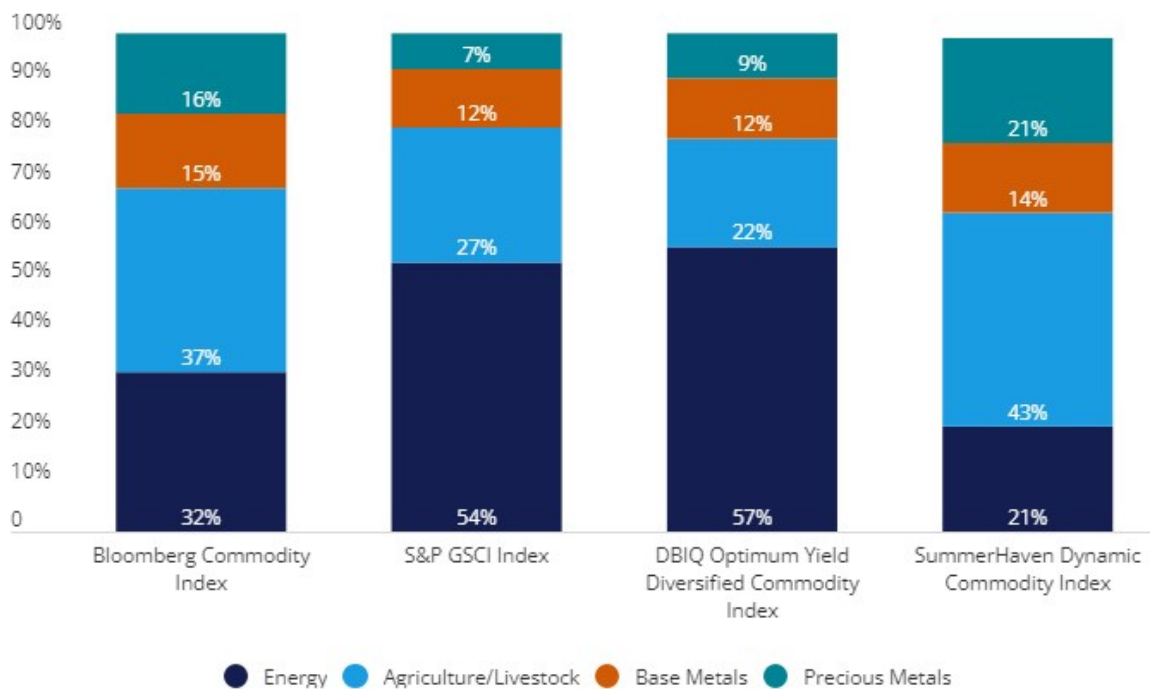
**The inception date for the MSCI World Index is 12/31/1969.

Past performance is not an indication of future results. Indexes are unmanaged and have been provided for comparison purposes only. No fees or expenses are reflected. You cannot invest directly in an index.

Another reason why it is important for investors to consider precious metals as a distinct asset class versus commodities is their current weightings within broad commodity indices. The highest contributors to commodity index performance stems from energy and agriculture sectors (ranging from 65% to 85%, see Chart 6), which tend to have higher equity sensitivities and exposures to equity risk than most realize.

Investors may not realize that a broad commodities allocation may not provide sufficient exposure to precious metals. Most of the major commodity indices have precious metals as the smallest sector in their composition. When evaluating four major commodity indices, the sector weights for precious metals range from 4% to 18%. This means that a 5% portfolio holding in commodities translates to only a 0.25% to 0.8% portfolio exposure to precious metals. This type of less than 1% contribution to precious metals at the portfolio level investors will prevent investors from receiving the unique potential portfolio benefits of precious metals.

Chart 6: Investing in broad commodity indices results in underexposure to precious metals



Source: Bloomberg, Standard & Poor's, DBIQ, SummerHaven, abrdn. Benchmark weights reflect most readily available target weights as of exhibit date 3/31/2021. See disclosures for further details. Data calculated from 1/1/2003 to 3/31/2021. Past performance is not indicative of future results. Indexes are unmanaged and it is not possible to invest directly in an index. For illustrative purposes only.

Precious metals may offer diversification benefits in both equity and fixed-income portions of a portfolio because they have a low correlation to both of these asset classes. These benefits can occur across risk profiles and funding scenarios, including among more complex asset allocations. Regardless of whether precious metals are added by reducing only stocks or both stocks and bonds, the result is a more efficient asset allocation. The risk and return levels of portfolios can be managed better by having an active allocation to precious metals. While the proper weighting will vary depending on investors' different risk profiles and investment objects, we believe a 0% allocation to precious metals remains less than optimal.

Precious metals are not the only asset class that can increase portfolio efficiency. Bonds and cash historically have provided similar properties and remain attractive from a diversification standpoint. However, precious metals are potentially less interest-rate-sensitive than bonds and can offer greater growth opportunity than cash. Overall, precious metals may offer an additional option to incorporate with other asset classes to effectively manage asset allocations and portfolio exposures.

IMPORTANT INFORMATION

Commodity definitions: Precious Metals evaluated using Aberdeen Standard Precious Metals Basket Index which reflects the daily performance of an investment in a precious metals basket with the following fixed components and ratios: gold (0.030oz), silver (1.100oz), platinum (0.004oz) and palladium (0.006oz). The Bloomberg Commodity Total Return index is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13 week (3 Month) U.S. Treasury Bills. S&P GSCI Spot Index: The S&P GSCI® is widely recognized as a leading measure of general price movements and inflation in the world economy. It provides investors with a reliable and publicly available benchmark for investment performance in the commodity markets. The DQIB Optimum Yield Diversified Commodity Index is intended to reflect the performance of certain commodities; the commodities comprising the Index are WTI Crude, Brent Crude, Heating Oil, RBOB Gasoline, Natural Gas, Gold, Silver, Aluminum, Zinc, Copper.

The SummerHaven Dynamic Commodity Index tracks the performance of a fully collateralized portfolio of 14 commodity futures, selected each month from a universe of 27 eligible commodities based on observable price signals, subject to a diversification requirement across major commodity sectors.

Index definitions: The MSCI World Index is a free-float weighted equity index developed to track developed world markets, and does not include emerging markets. The S&P 500 Index is a capitalization-weighted index of 500 stocks selected by the Standard & Poor's Index Committee designed to represent the performance of the leading industries in the U.S. economy. The MSCI Emerging Markets (EM) Index is an equity index that captures large and midcap representation across Emerging Markets countries. The Barclays US Aggregate Bond Index (Barclays Agg) is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds in the Hedge Fund Research Database. The FTSE NAREIT All Equity REITS Total Return Index is a market capitalization weighted index that includes all tax qualified REITs in the US. The LPX50 is designed and calculated by LPX Group, and contains the largest private equity companies listed on global stock exchanges and is well diversified across listed private equity categories, styles, regions, vintage years.

Statistic definitions: Correlation is a measure of fluctuation between two variables, cumulative return is the aggregate amount an investment has gained or lost over time, annualized return is amount of money earned by an investment each year over a given time period, volatility is a measure of dispersion of returns, upside/downside capture shows how an investment relates to the movements of an index, Sharpe ratio indicates the average return minus the risk-free return divided by the standard deviation of return on an investment.

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Trading in commodities entails a substantial risk of loss and is not suitable for all investors.

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