

Commodities: An Overview of the Asset Class

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INTRODUCTION

Commodities represent a unique asset class within global financial markets. Like equities and bonds, commodity prices are influenced by the macroeconomic environment, geopolitical events, and technological developments. However, because commodities are tangible assets, their prices are also directly affected by physical supply-and-demand dynamics, weather patterns, and other factors unique to underlying resource markets. Recent structural trends, including rising demand for metals within the technology and renewable energy sectors, have created secular tailwinds for certain commodities that potentially complement the asset class's traditionally cyclical characteristics. Additionally, evolving energy market dynamics may provide further structural support. Years of underinvestment in conventional energy production coupled with recent geopolitical conflicts and damage to critical infrastructure in the Middle East have increased concerns about the long-term resilience of global energy supply chains, potentially supporting elevated energy prices relative to historical norms. Simultaneously, global inflationary pressures and conflicts across the world have renewed interest in commodity allocations as a hedge against macroeconomic uncertainty and geopolitical strife. This paper examines the viability of commodities in institutional portfolios by exploring the dynamics of commodity cycles and demand drivers, analyzing the historical performance of the asset class, and outlining risk management considerations. By reviewing both opportunities and challenges, the paper aims to provide a balanced and educational assessment for institutional investors seeking to understand the role of commodities in modern portfolios.

HISTORY AND RECENT DEVELOPMENTS

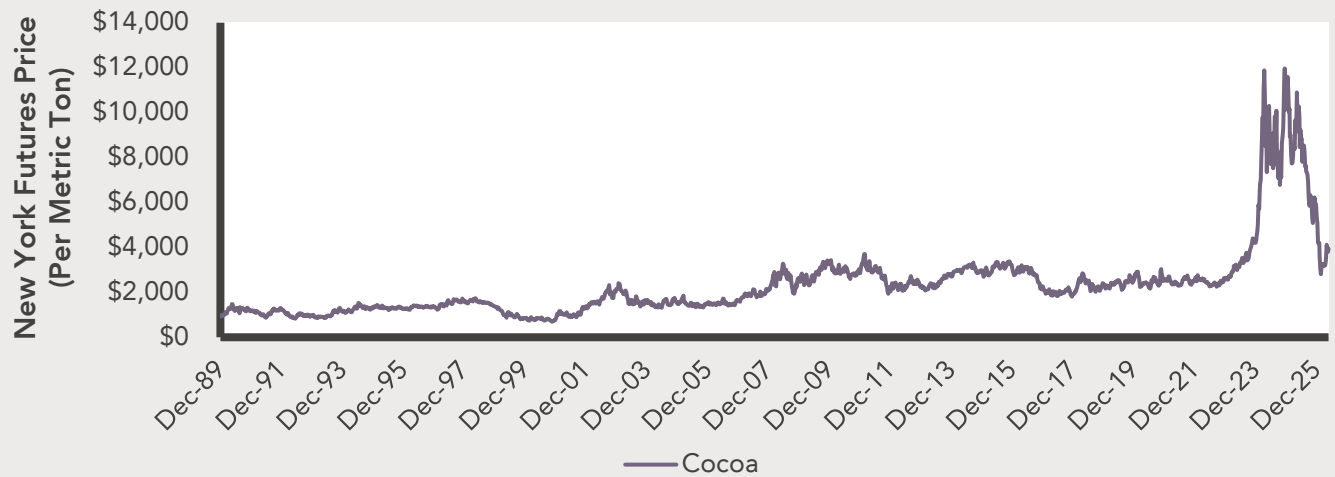
Commodity markets are inherently cyclical, with prices oscillating through periods of pronounced strength and weakness. Unlike equity market performance, which is typically driven by changes in company fundamentals, performance of commodities is directly influenced by global supply-demand imbalances. When demand for a given commodity exceeds supply, prices spike, leading to increased production and speculative activity. Conversely,

overproduction or weaker demand for a commodity triggers steep declines in its price. This cyclical behavior is often amplified by delayed supply responses, as commodity manufacturing and production cannot always adjust quickly to changes in demand, leading to oversupply or shortages that drive price volatility. Several periods over the last few decades illustrate this idea:

- **1970s Oil Crisis:** Geopolitical tensions, including the 1973 oil embargo, caused crude oil prices to quadruple, sparking inflation and a global economic shock.
- **2000s Commodity Supercycle:** Rapid industrialization in China and emerging markets drove elevated demand for metals like copper, nickel, and aluminum, causing significant price increases.
- **2014–2016 Oil Collapse:** Oversupply from U.S. shale production and OPEC disagreements led to a dramatic drop in oil prices from over \$100 per barrel to under \$30 per barrel.

Recent quarters have illustrated the volatility and sensitivity of commodity markets to geopolitical events, supply disruptions, and shifting macroeconomic conditions. Cocoa prices, for instance, exhibited a surge in 2024 when extreme weather, crop disease, and structural issues in major producing countries such as Côte d'Ivoire and Ghana sharply reduced supply. Spot prices rose from roughly \$2,000 per metric ton in early 2023 to more than \$12,000 by early 2024, representing an increase of more than 500% at the peak of the rally. Although cocoa has since moderated as harvest conditions improved and demand softened, this price spike highlights how agricultural commodities remain highly exposed to climate risk and production constraints.

Exhibit 1: Cocoa prices went parabolic in 2024 due to supply constraints and financial challenges faced by producers



Source: Bloomberg as of May 31, 2026

Precious metals have also experienced notable movements in recent time, with the prices of gold and silver rising in tandem with geopolitical tensions and economic uncertainty. Specifically, gold moved from \$1,898/ounce at the beginning of 2021 to \$5,375/ounce at the end of January 2026, which represents a gain of 181%. During that same time, silver exhibited a more volatile but highly correlated return pattern, moving from \$26/ounce to \$116/ounce for a gain of 338%. Gold and silver are often viewed as safe-haven assets, though gold has historically served this role more consistently. Unlike silver, gold derives relatively little demand from industrial applications and is held extensively by central banks

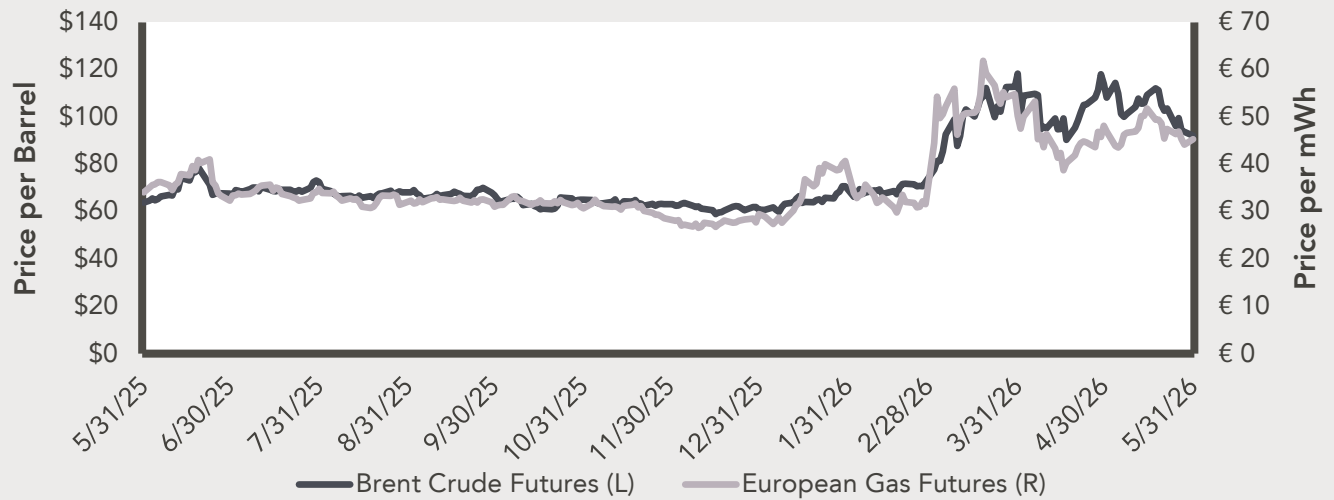
as a reserve asset, reinforcing its status as a store of value during periods of economic uncertainty, inflation, or geopolitical stress. Silver, by contrast, tends to exhibit greater volatility due to its smaller market size, significant industrial demand profile, and historically larger participation from short-term traders and speculators. While both metals have benefited from heightened uncertainty in recent years, gold’s role as a reserve asset and central bank holding has made it a more traditional safe haven. Although both gold and silver have retrenched in recent months, longer-term performance of these metals remains relatively strong.

Exhibit 2: Global inflation and geopolitical instability have led to a surge in gold and silver prices



Source: Bloomberg as of May 31, 2026

Exhibit 3: Energy prices spiked after U.S. strikes on Iran constrained supply and impaired transportation



Source: Bloomberg as of May 31, 2026

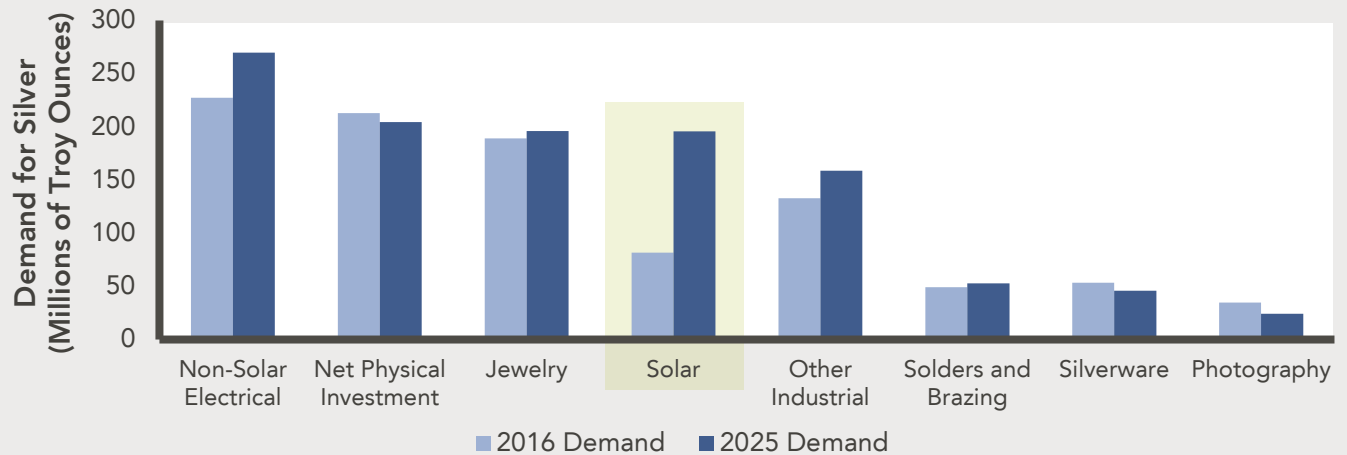
Energy markets have seen similarly significant fluctuations this year, with crude oil and natural gas prices rising in response to U.S. strikes on Iran that have disrupted global shipping routes. Oil prices climbed above \$100 per barrel in March for the first time since 2022, while European gas futures nearly doubled from late February levels as a result of the conflict. These price movements can be observed in Exhibit 3 above. While energy prices have retrenched in recent months amid negotiations between the two nations, they remain above long-term average levels.

THE IMPACT OF TECHNOLOGY

The examples cited above emphasize how commodity prices can move rapidly and unpredictably in response to geopolitical events, supply constraints, and macroeconomic uncertainty. Beyond geopolitical shocks and supply-side constraints, another emerging driver of commodity demand is technological innovation, as several metals have become critical inputs for electronics, renewable energy infrastructure, and battery production. Silver, for example, plays a key role in solar panel technology due to its exceptional electrical conductivity, which allows it to efficiently transport current within solar cells. Despite some substitution efforts, the metal remains an important industrial input. Indeed, industrial silver fabrication is expected to total roughly 650 million ounces in 2026, while the

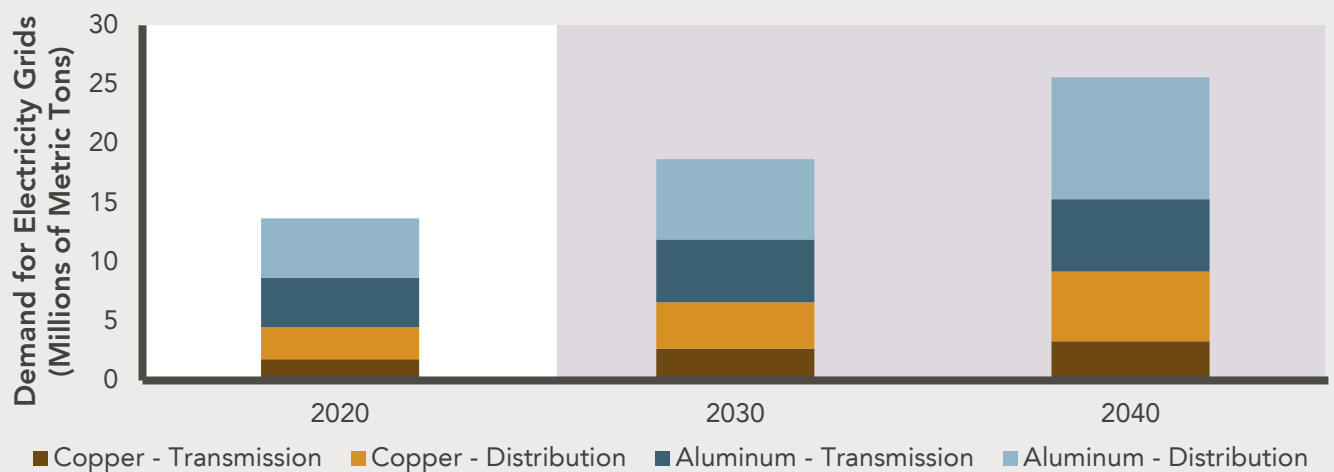
overall silver market is expected to remain in a structural supply deficit of approximately 67 million ounces according to the Silver Institute industry association. This would mark the sixth consecutive year in which demand exceeds supply. At the same time, electrification trends are accelerating demand for metals tied to electric vehicle (EV) production and energy infrastructure. Global EV manufacturing is projected to reach approximately 15 million vehicles in 2026, which could generate roughly 75 million ounces of silver demand from automotive applications alone through its use in electronics, power systems, and advanced vehicle components according to the International Energy Agency (IEA). Lithium demand is also expected to expand significantly based on IEA estimates, with global lithium consumption projected to exceed 1.5 million metric tons by 2030, largely driven by its use in EV battery cathodes and large-scale energy storage systems. In addition to silver and lithium, EVs and renewable energy systems require large quantities of conductive base metals such as copper and aluminum for battery systems, motors, charging networks, and electricity transmission infrastructure. These materials are also critical to the expansion of electrical grids needed to integrate renewable generation capacity.

Exhibit 4: Solar has dominated the growth in silver demand over the past decade



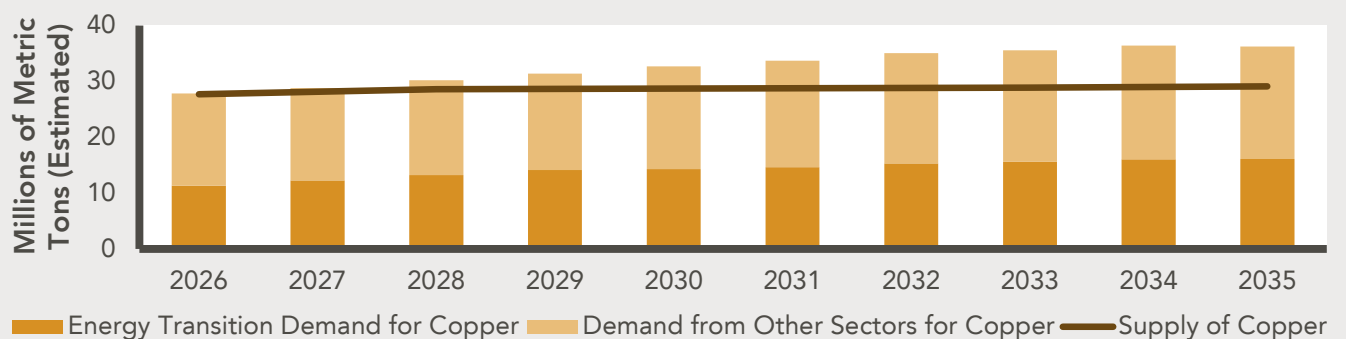
Source: Bloomberg as of December 31, 2025

Exhibit 5: Demand for copper and aluminum is expected to grow in the coming years amid a renewed focus on electrification



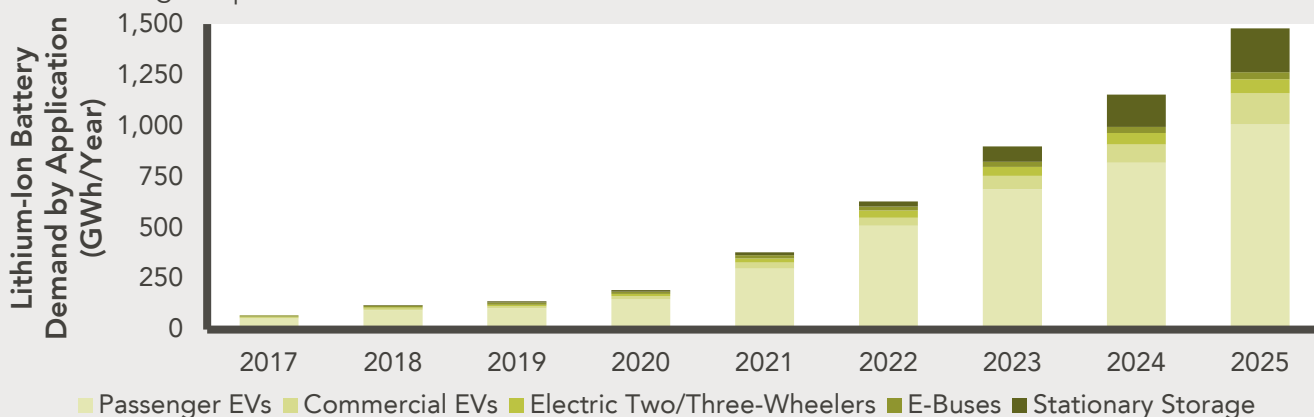
Source: International Energy Agency as of December 31, 2025. Purple shading indicates forecasts. Forecasts assume the adoption of the organization's sustainable development scenario.

Exhibit 6: In the absence of new mines, the copper market is anticipated to enter a supply deficit over the next decade



Source: BloombergNEF as of December 31, 2025. Demand reflects BNEF's Economic Transition Scenario, which is based on the cost-competitiveness of technologies. Supply is risk-adjusted capacity.

Exhibit 7: Lithium-ion battery demand has increased rapidly since 2017, driven primarily by the accelerating adoption of electric vehicles



Source: BloombergNEF as of December 31, 2025. Excludes consumer electronics.

Looking ahead, these structural forces suggest that commodity demand may increasingly be influenced not only by traditional cyclical drivers such as industrial production or construction activity, but also by longer-term technological, geopolitical, and energy-related trends. As electrification, renewable energy deployment, and digital infrastructure continue to expand, metals such as silver, copper, and lithium may experience sustained demand growth tied to the global transition toward cleaner energy systems. At the same time, ongoing geopolitical tensions and damage to critical energy infrastructure in key producing regions may contribute to a more structurally constrained energy market. Together, these dynamics could create a baseline level of commodity demand and pricing support that may be less sensitive to short-term economic fluctuations, allowing investors to gain exposure to secular growth trends associated with the evolving technology, energy, and geopolitical landscape.

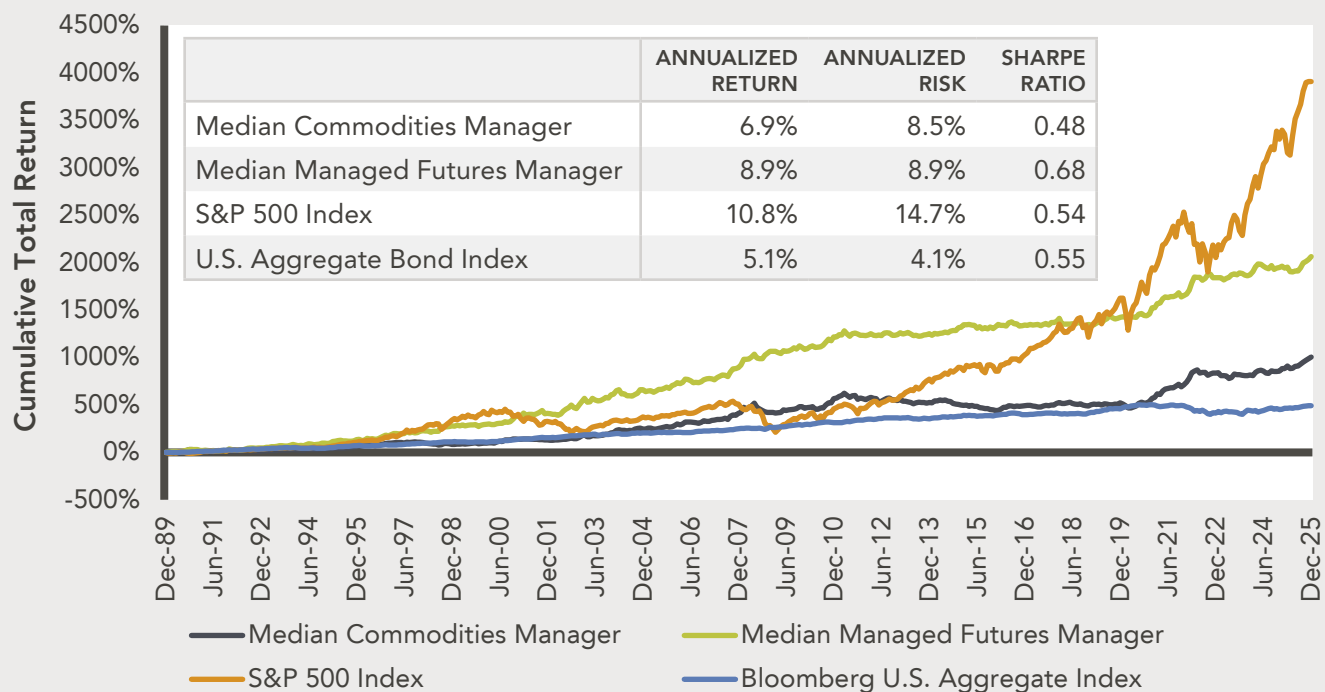
PERFORMANCE AND PORTFOLIO ROLE

To assess the performance that an investor might expect to experience from an allocation to the asset class, it is helpful to focus less on commodity benchmarks like the S&P GSCI Index, which are largely uninvestable and tend to hold long positions in commodity futures only and therefore profit mainly

when commodity prices rise. Additionally, commodity indices exhibit roll yield drag in contango markets¹ because they must systematically sell expiring futures contracts and buy more expensive longer-dated contracts to maintain continuous exposure. This process generates a negative return independent of spot price movements, which is why indices tend to exhibit substandard long-term returns along with higher levels of volatility. Instead, investors should focus on the performance of actively managed strategies like managed futures and commodities funds, which can maintain both long and short exposure to contracts across sectors such as energy, industrial and precious metals. This flexibility allows futures strategies to profit in falling commodity markets as well as rising ones. While commodity funds provide dedicated exposure to the asset class by replicating or actively managing positions around a commodity index, managed futures funds use futures contracts across multiple asset classes (e.g., commodities, equities, bonds, and currencies), meaning commodity exposure is dynamic and not the primary objective of such strategies. Nonetheless, managed futures strategies can be an effective way for investors to access the commodities space. Since 1990, the median fund in the eVestment Managed Futures peer group has delivered an annualized return of roughly 8.9%, which is below that of public

¹ Contango is a market condition in which futures prices are higher than the current spot price, resulting in an upward-sloping futures curve. Roll yield drag is the performance headwind that occurs when a futures investor repeatedly rolls expiring contracts into more expensive longer-dated contracts, causing returns to lag the underlying asset's price performance.

Exhibit 8: The median managed futures fund has exhibited a favorable risk-adjusted return profile over the last few decades



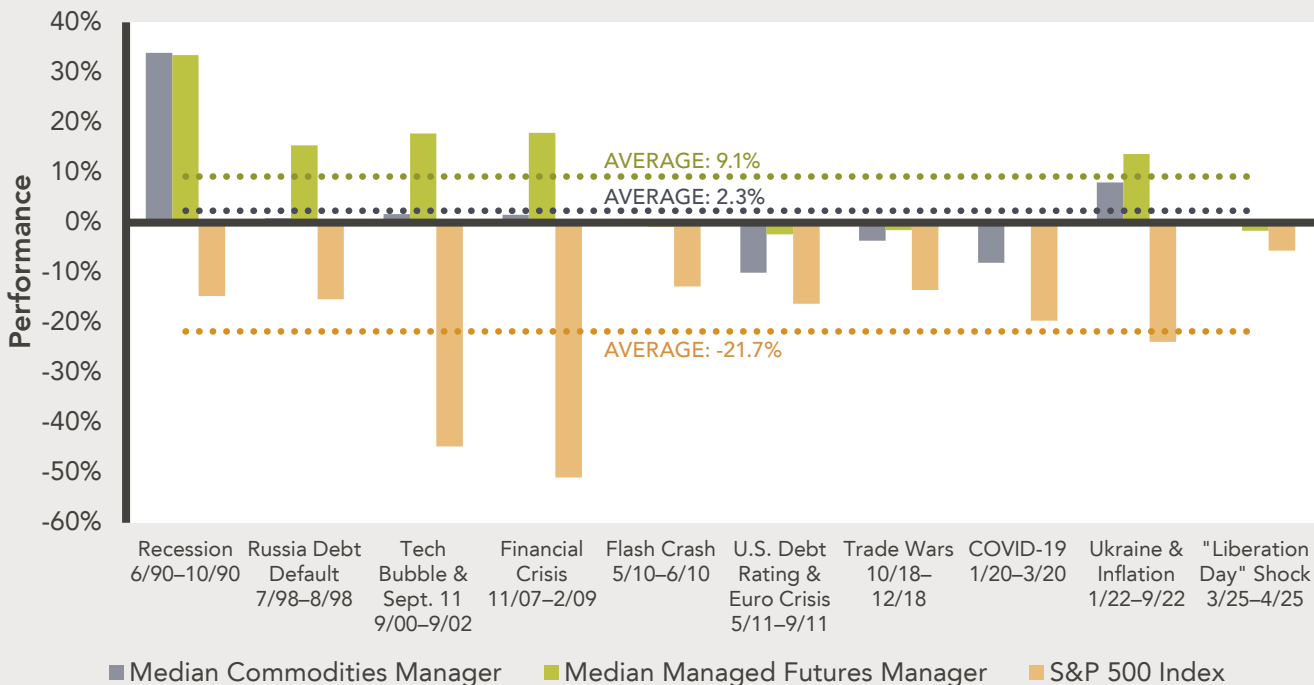
Source: Bloomberg, eVestment as of December 31, 2025

equity markets but above the return of core bonds. The median managed futures manager has also outpaced the median commodities fund during that time with a similar volatility profile. Exhibit 8 above highlights these dynamics.

One of the key benefits of the commodities space lies in its historically low correlation with traditional asset classes. Because commodity prices are often driven by more esoteric factors such as geopolitical developments and weather patterns, their return drivers frequently differ from those influencing financial markets. As a result, commodities can behave differently from stocks and bonds across market cycles, helping to reduce overall portfolio volatility when incorporated alongside traditional assets. To that point, the median managed futures manager has exhibited a negative correlation to fixed income benchmarks including the Bloomberg U.S. Corporate High Yield and S&P UBS Leveraged Loan indices, as well as the S&P 500 index, over the last 35 years. This diversification benefit can be particularly valuable during periods of macroeconomic stress, when correlations among financial assets often rise

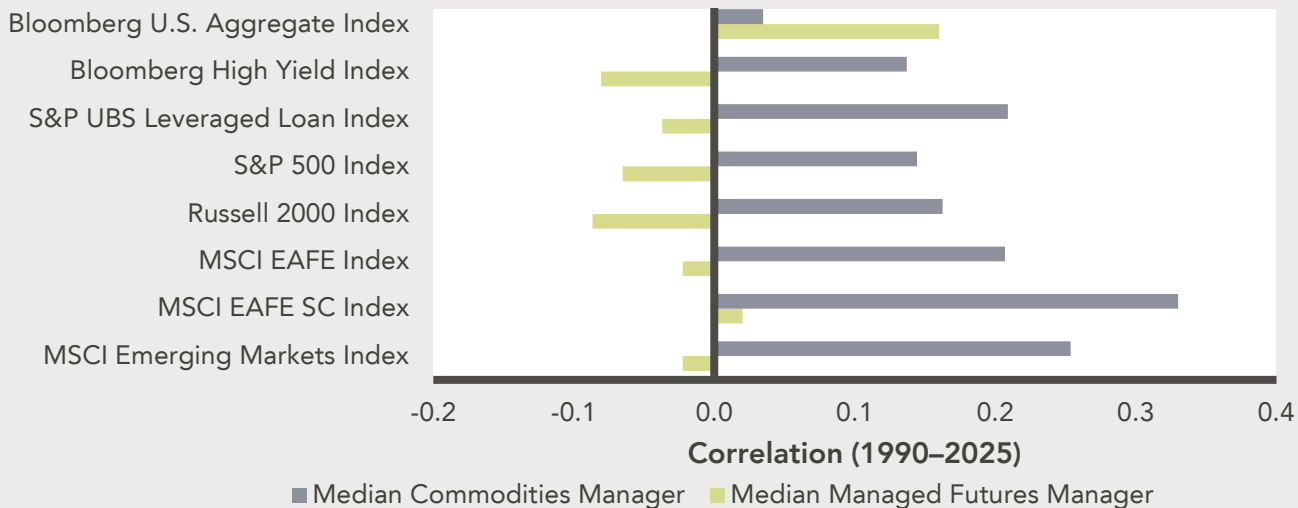
and portfolios become more vulnerable to broad market drawdowns. In such environments, commodities have historically demonstrated a degree of downside protection. Indeed, both the median commodity and managed futures funds have, on average, notched positive performance during the most significant equity market drawdowns since 1990, with the median managed futures fund notching an average return of more than 9% during those periods. Exhibits 9 and 10 on the following page outline these dynamics.

Exhibit 9: Equity market drawdowns have not materially impacted the median commodities and managed futures funds



Source: Bloomberg, eVestment as of December 31, 2025

Exhibit 10: The median managed futures fund has exhibited minimal correlations to traditional asset classes



Source: Bloomberg, eVestment as of December 31, 2025

Despite the potential for diversification benefits, commodities investing also carries several unique risks and possible drawbacks that are worth highlighting. First, commodity prices are often highly volatile and subject to tail events, as sudden supply disruptions, natural disasters, or geopolitical shocks

can trigger large and rapid price swings. Returns are also closely tied to broader macroeconomic conditions, meaning that changes in interest rates, inflation expectations, and currency movements can significantly influence performance. In addition, commodities markets are particularly exposed to

political and regulatory developments, including trade restrictions, tariffs, export controls, and sanctions that can alter global supply and demand dynamics. Another important consideration is implementation since, unlike many traditional asset classes, investors tend to rely on actively managed strategies to access commodities effectively (particularly when trading futures markets and managing issues such as roll yield). As a result, investors often bear the additional cost of both management and performance fees and face dispersion in manager skill. Taken together, these factors mean that while commodities can play a valuable role in a diversified portfolio, accessing the asset class requires careful consideration of both structural risks and implementation challenges.

CONCLUSION

With an understanding of commodity cycles, structural demand dynamics, and performance characteristics, the role that commodities can play in institutional portfolios becomes clearer. Specifically, the asset class can offer investors diversification benefits, inflation protection, and exposure to both cyclical and structural growth trends. As technological innovation and energy transitions continue to drive demand for metals such as silver, copper, and lithium, and as geopolitical developments reshape global energy markets, commodities may play an increasingly important strategic role within investor portfolios. That said, commodities remain inherently volatile and largely cyclical, requiring disciplined allocation frameworks, active monitoring, and careful risk management. While commodities represent one avenue for gaining exposure to inflation-sensitive and diversifying return streams, they are not the only option available to institutional investors. Infrastructure investments, for example, can also provide inflation protection and diversification benefits while generally exhibiting lower volatility and greater contractual cash flow visibility than commodity markets. From Marquette's perspective, maintaining exposure to assets with differentiated return drivers, inflation-hedging characteristics, and low correlations to traditional stocks and bonds remains an important component of portfolio construction. Commodities can serve that

role, particularly during periods of inflationary pressure or geopolitical disruption, but a space like infrastructure may offer a complementary and potentially less volatile means of achieving similar portfolio objectives. Effective portfolio design, informed by both cyclical and structural considerations, is essential to capturing the benefits of these diversifying assets while managing associated risks. ▀

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