TD Global Investment Solutions

Investor Knowledge 10 Minutes

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Why institutional investors should consider commodities in their asset allocation

At a glance:

- As commodities exhibit low correlation with equities and negative correlation with fixed income, their inclusion in portfolios serves to potentially improve risk-adjusted returns. Further, as most balanced portfolios have negative beta to inflation, the inclusion of commodities, which exhibit significant and material positive beta to inflation, might help to mitigate portfolio underperformance in inflationary environments.
- In an environment where inflation is likely to remain volatile – and possibly elevated – the benefit of a commodity allocation is potentially even more pronounced both because of the need to hedge inflation risk and because high inflation tends to result in positive equity and fixed income correlation.
- Commodity prices trend in long-term cycles driven largely by the inelasticity of commodity supply. The decade of challenged commodity returns from 2010 to 2020 has arguably sown the seeds of another investment cycle. That's why the coming decade is expected to bring above-average commodity returns, as tightening supply and demand balances will require higher prices to stimulate supply and limit demand.

Historically, commodities have been included in portfolios owing to the diversification benefits they provide, as they have low or negative correlation to equities and fixed income. They have also been sought for their inflation-hedging properties, as they exhibit a high and positive beta to inflation. These two characteristics can be particularly rewarding in most portfolios and particularly in stagflationary environments, when equities and fixed income tend to underperform.

In the decade and a half before the COVID-19 pandemic, commodity allocations were not sought-after for two main reasons. Commodity returns were below their historical long-term average, as commodity investments were bloated following the super cycle of the early 2000s that lifted capex. Diversification and inflation protection were not needed; inflation in the 15+ years before the pandemic averaged well below long-term averages. Low inflation helped keep equities and fixed income negatively correlated, diminishing the appetite for additional diversification in portfolios.

However, over the next decade, portfolios with commodities will likely outperform and exhibit lower risk than portfolios without them. This expected resurgence is because of where the commodity cycle is. Further, the need and reward for inflation protection will likely be greater than has been the case for much of the last 25 years as inflation reverts to more normal levels (above the atypically low levels observed after the global financial crisis).

What are commodities?

Commodities include goods like corn and sugar, copper and gold, oil and gasoline, diesel and power. They are produced and consumed, daily and globally, and most can be stored. Their supply is renewable (wind, solar, corn, wheat, sugar) and non-renewable (oil, natural gas, copper, gold, silver). While we may not think about commodities regularly, our lives depend on them, and demand for them increases with economic growth (GDP).

The structure of commodity markets, which are priced on futures curves, plays an important role in the low to negative correlation between commodities and both equities and fixed income. This low to negative correlation comes from the fact that with commodities, an investor purchases near-term contracts, which reflect near-term economic conditions, while traditional asset classes (such as equities and fixed income) are anticipatory - they try to anticipate and price the future value of the cash flows stream. The low to negative correlation that commodities exhibit with equities, and the negative correlation they exhibit with fixed income, have made them an accretive addition to portfolios through time.

Commodities' historic impact on a portfolio

Between 1976 and 2024, a portfolio with commodities had a higher Sharpe Ratio than a portfolio without commodities, as the addition of commodities lowered portfolio risk or standard deviation (**Figure 1**). The addition of commodities has also served to minimize portfolio drawdowns compared to a portfolio without commodities roughly 80% of the time (**Figure 2**).

Figure 1: Commodities have offered improved risk-adjusted returns over the last five decades

1977-1Q 2025	Diversified Portfolio with Commodities	Standard Diversified Portfolio
Annualized Return	7.97%	8.13%
Standard Deviation	8.91%	9.42%
Sharpe Ratio	0.36	0.35

Post-COVID era of benefits from having exposure to commodities

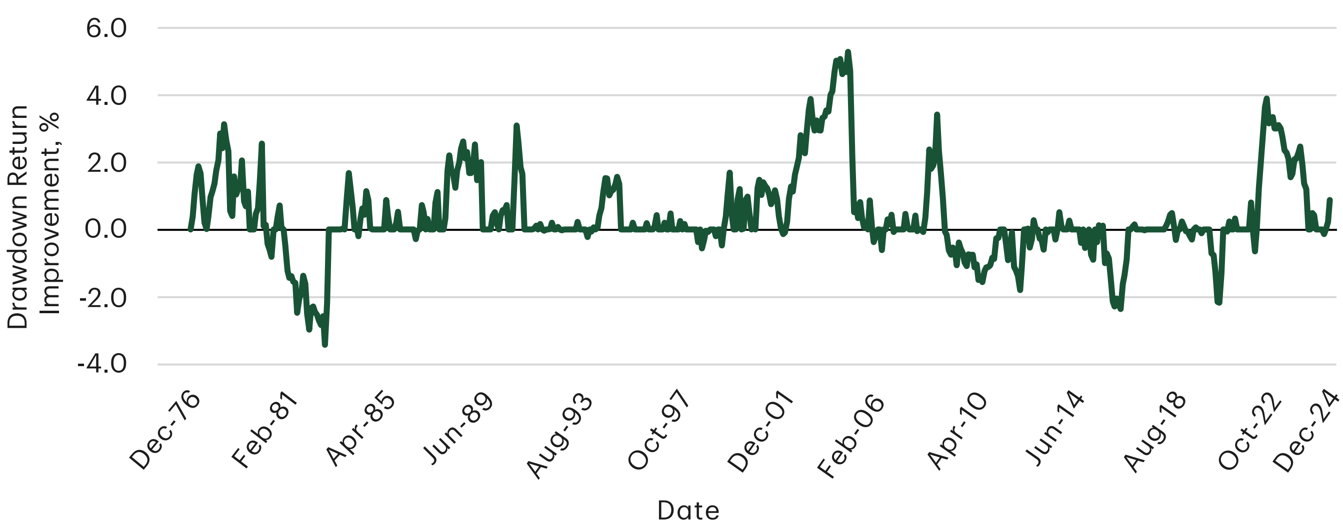
2020-1Q 2025	Diversified Portfolio with Commodities	Standard Diversified Portfolio
Annualized Return	9.77%	9.39%
Standard Deviation	10.61%	11.08%
Sharpe Ratio	0.69	0.63
Max Drawdown	-9.38%	-12.32%

Diversified Portfolio with Commodities: 54% MSCI USA Index, 36% Bloomberg U.S. Aggregate Bond Index, 10% Bloomberg Commodity Index (BCOM) Total Return.

Standard Diversified Portfolio: 60% MSCI USA Index, 40% Bloomberg US Aggregate Bond Index.

Source: Bloomberg Finance L.P., TDAM. As of March 31, 2025.

Figure 2: A portfolio with commodities exhibits shallower drawdowns 80% of the time (vs. a portfolio without commodities)



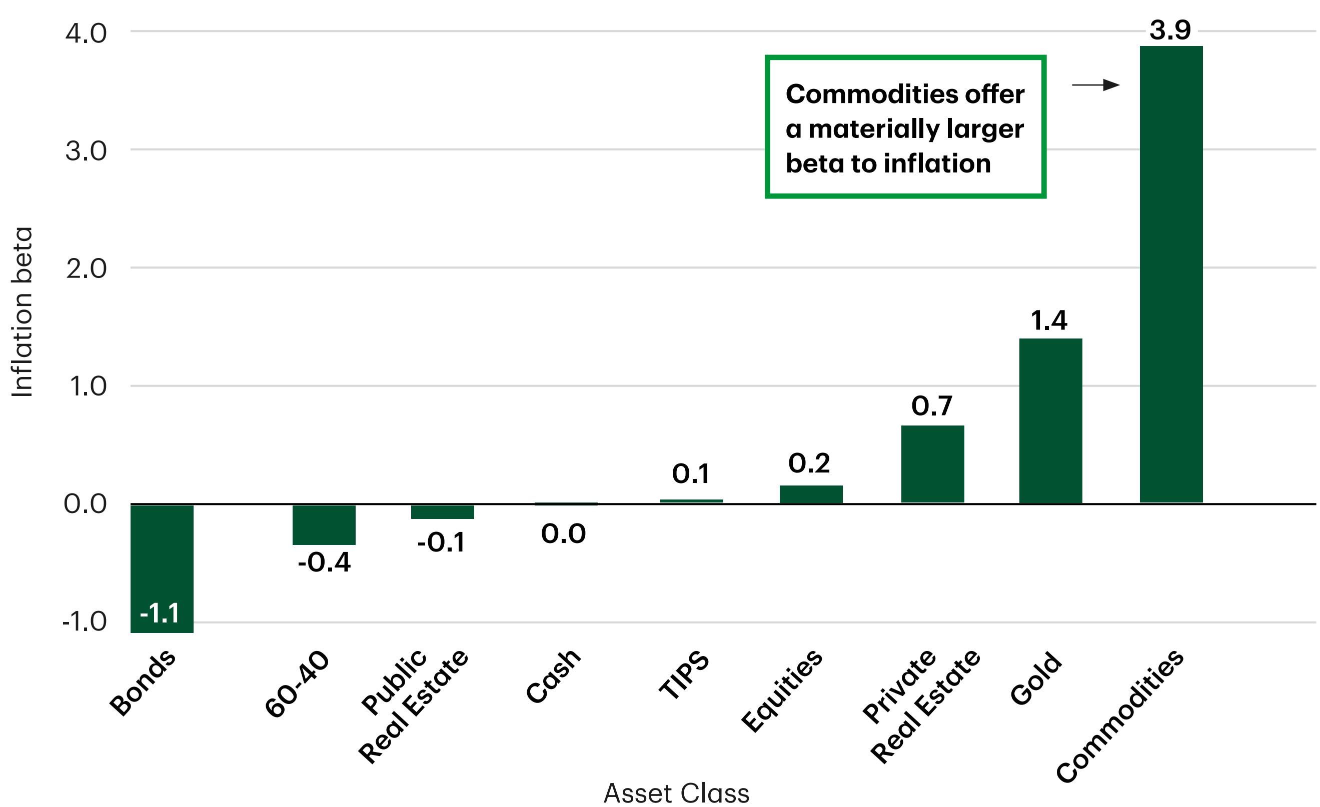
Source: Bloomberg Finance L.P., TDAM. As of March 31, 2025.

Correlation to inflation

While many assets provide diversification benefits and may warrant inclusion in a portfolio, commodities are different, in that they are positively correlated to inflation (**Figure 3**). Fixed income, no bulwark to inflation, exhibits a meaningful negative beta to inflation, which might be amplified by extended duration, and recent years have been a harsh reminder of how the asset class performs when inflation is elevated and volatile. Equities also tend to be under pressure in inflationary environments as we've seen over the last few years.

Commodities have positive beta to inflation, making them a valuable addition to portfolios, which tend to underperform in inflationary environments (because of their larger allocations to fixed income and equity). There certainly are other asset classes like private infrastructure and private real estate that offer positive beta to inflation through time. However, these assets are anticipatory and price the future value of the cash flows stream.

Figure 3: Beta to change in inflation across key asset classes

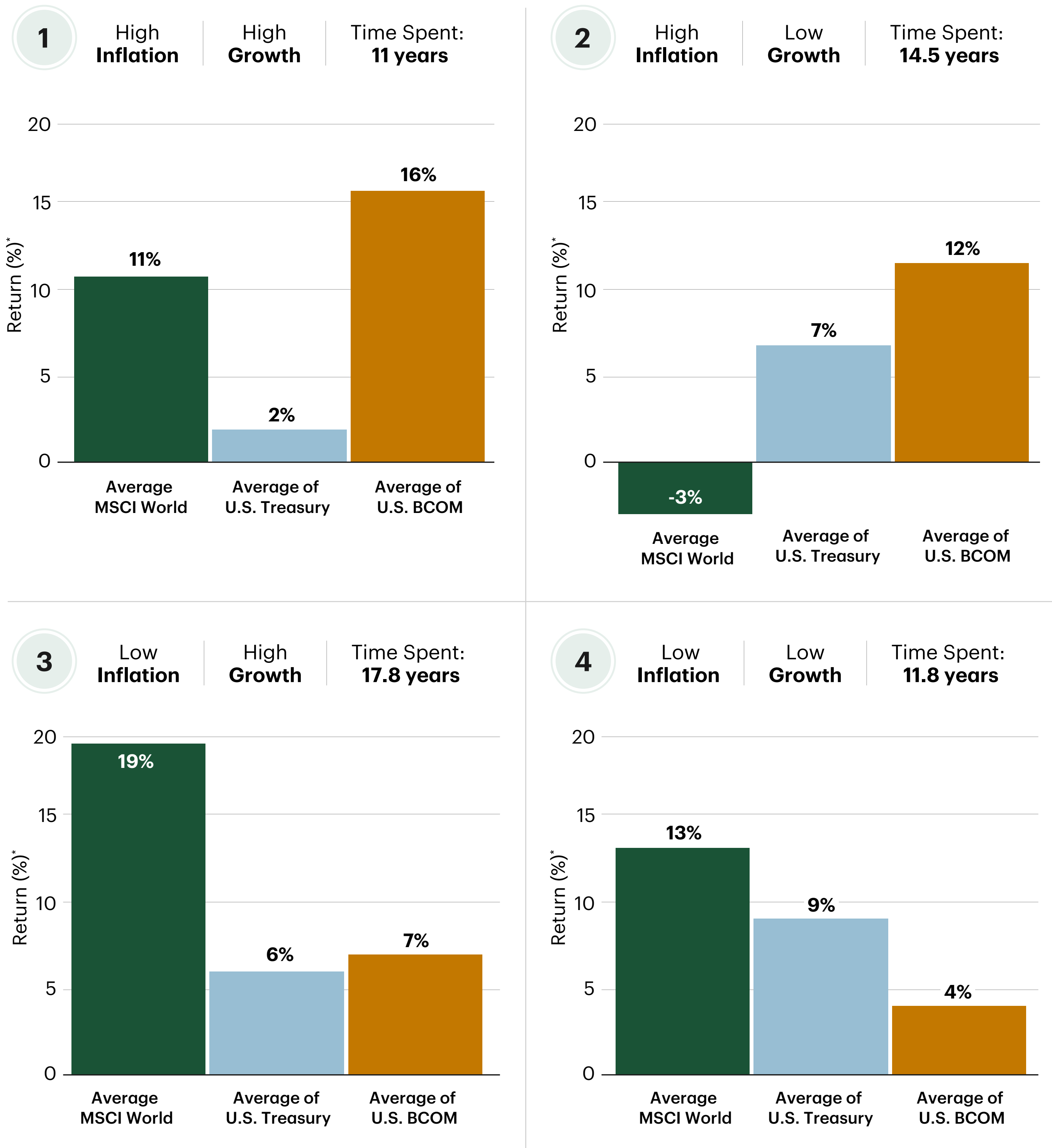


The valuations of these anticipatory assets would be pressured in the short term from rising discount rates or rising cap rates in the case of real estate – unless the negative impact is offset by the positive impact from rising asset cash flows, which is also usually not immediate due to the long-term revenue contracting of real assets.

Commodities also offer a materially larger beta to inflation, requiring, all else equal, a smaller notional allocation to immunize a portfolio against inflation. Commodities are also one of the few inflation-hedging assets where liquidity is no concern. This daily liquidity can be measured in the tens of billions of USD.

Source: Bloomberg Finance L.P., TD Asset Management Inc., Federal Reserve Economic Data., MSCI. Data from January 1970 to December 2024. Note: Equities, bonds, commodities, gold, public real estate, private real estate and cash are represented by the MSCI USA Index, the Bloomberg U.S. Aggregate Bond Index, the Bloomberg Commodity Index, the Bloomberg Gold Subindex, the FTSE NAREIT All REITs Index, the NCREIF Property Index and the ICE BofA 3-Month Treasury Bill Index, respectively. TIPS are represented by the Bloomberg U.S. Treasury Inflation Notes Index. The TIPS data series starts in June 1997. The 60/40 portfolio is comprised of 60% equities and 40% bonds and is rebalanced quarterly. Inflation beta is calculated by regressing quarterly asset returns on quarterly changes in seasonally-adjusted year-over-year inflation.

Figure 4: Commodities' performance across four economic quadrants



Source: Bloomberg Finance L.P., TDAM. Data from January 1970 to December 2024. Note: For illustrative purposes only.

*Return=three-month return, annualized. High Growth = Monthly GDP greater than trailing five-year GDP average. Low Growth = Monthly GDP lower than trailing five-year GDP average. High Inflation = Trailing three-month average CPI greater than trailing three-year average CPI. Low Inflation = Trailing three-month average CPI less than trailing three-year average CPI. MSCI World = NDDUWI Index. U.S. Treasury = LUATTRUU Index. U.S. BCOM = BCOMTR Index.

ALM context

Commodities can also be useful in an asset-liability management (ALM) context. Institutional investors whose liabilities are inflation-linked should be even more concerned about inflation, as inflation not only presents risk to the value of plan assets but also has the potential to increase plan liabilities. For more information, please refer to our paper **Assess Inflation's Impact on Your Portfolio with Two ALM Perspectives >**.

Real assets like infrastructure and real estate, as well as Real-Return Bonds (RRBs) and Treasury Inflation-Protected Securities, are asset classes that afford inflation protection through time and are often found in well-diversified portfolios. However, these assets' behaviour and responsiveness to inflation is different than the inflation protection commodities offer. Real assets tend to appreciate with higher inflation, albeit with a lag. RRBs have coupons and principal directly tied to the Consumer Price Index (CPI), but they provide muted immediate protection from an asset-only perspective when nominal rates rise because of their duration. Commodities, by their nature, offer returns that coincide with inflation.

With an ALM framework, institutional investors would benefit from two other key attributes of commodities.

Benefit 1

Daily liquidity

Daily liquidity of the asset class, allowing for the positions to be easily rebalanced or monetized in a matter of business days to fund pension benefit payments.

Benefit 2

Diversification

Diversification benefits, from an asset-only perspective, in a world where traditional parts of the portfolio, such as equities and fixed income, are highly correlated between each other.

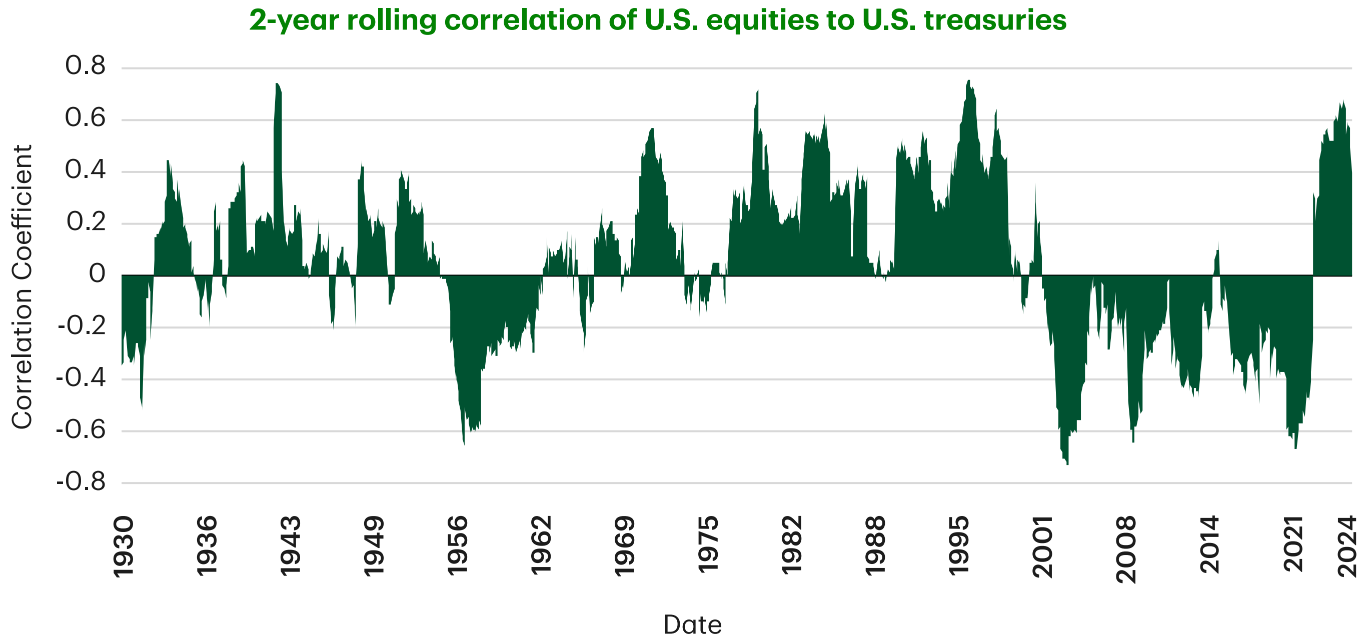
Optimal allocation in institutional portfolios

Commodities help to build a better portfolio by fulfilling the classic premise of portfolio construction – find an asset that has negative correlation and positive expected returns. Commodities are that asset, but they have the added benefit of hedging against inflation, which is even more important when liabilities are inflation-linked.

A modest allocation to commodities can be beneficial from an ALM perspective. As an illustration for a typical indexed pension plan, in the long run, the optimal commodity allocation to most portfolios is in the 4-7% range, based on TDAM's ALM models and estimates. However, given that we are just embarking on the investment phase of the commodity cycle, where returns are materially higher than the long-term average, allocations in the high single digits are warranted for consideration.

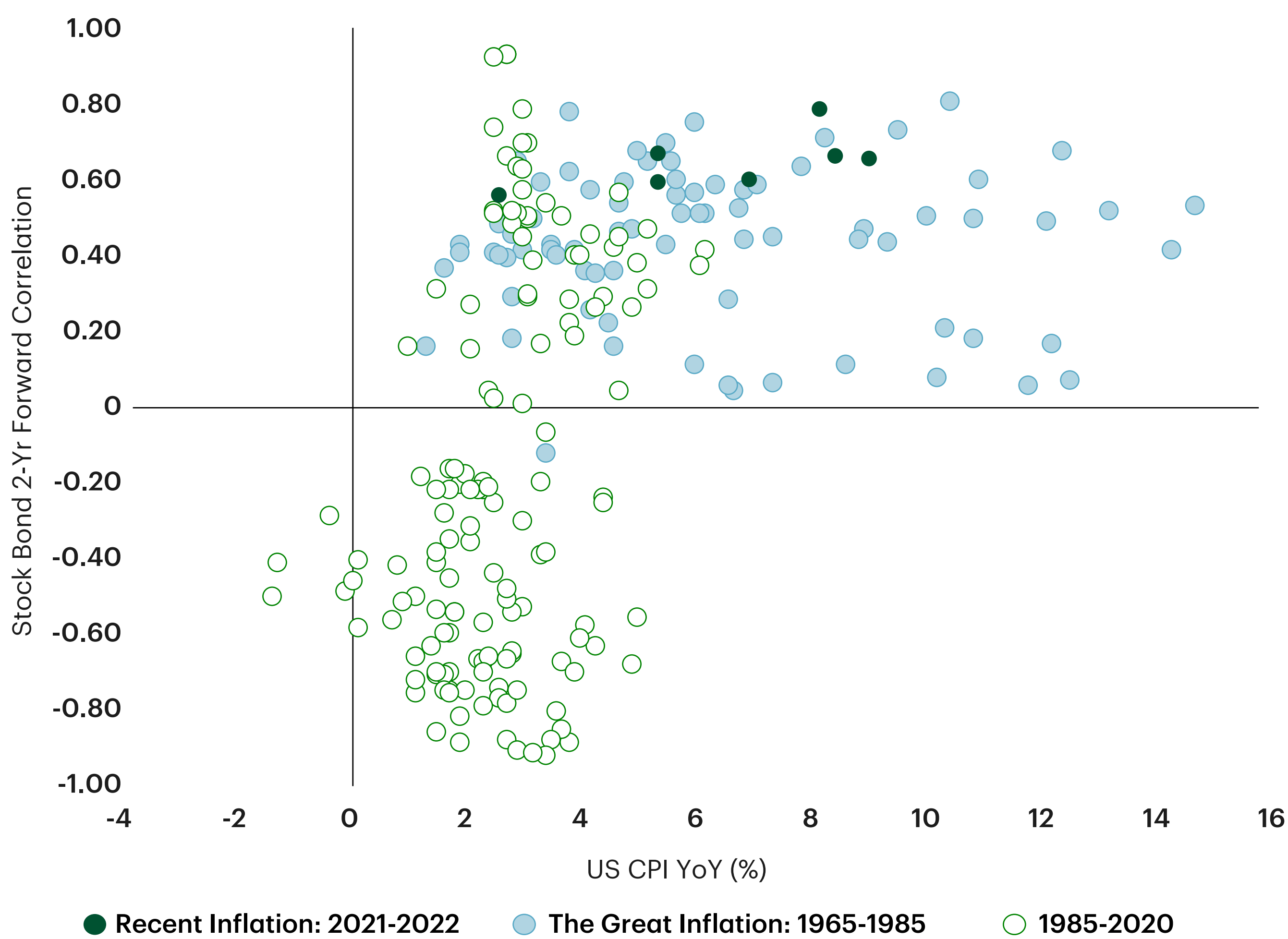
Benefits

Figure 5: Current fixed income and equities positive correlation



Source: Bloomberg Finance L.P., CFA Institute. As of March 31, 2025.

Figure 6: Fixed income and equities correlation within various inflationary environments



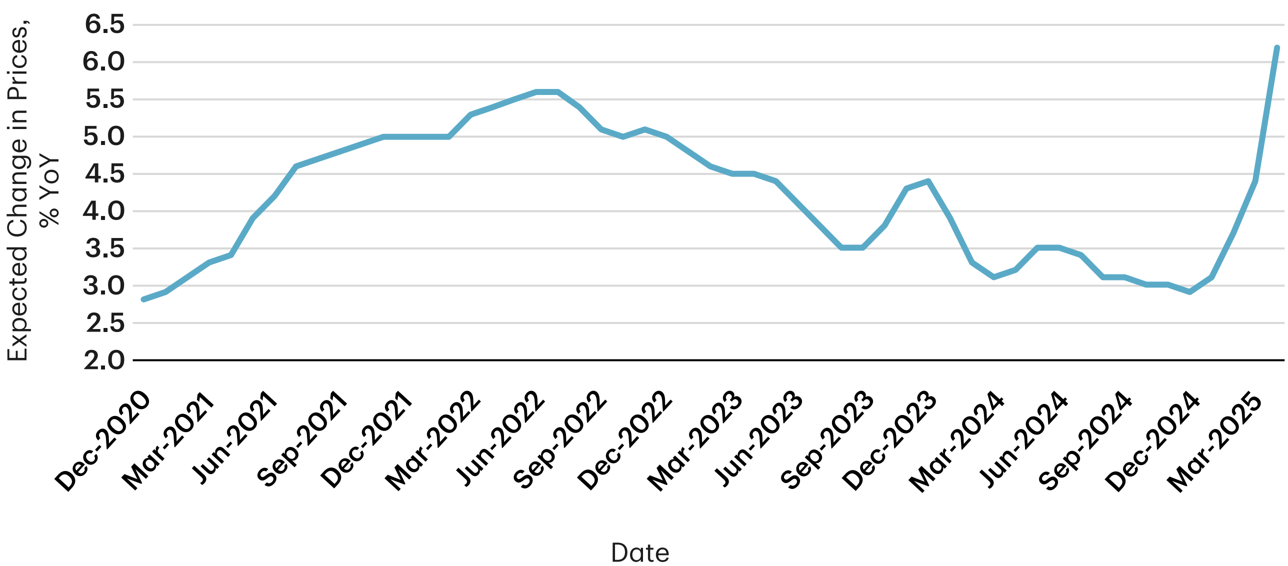
Source: Bloomberg Finance L.P., Federal Reserve Economic Data. As of June 30, 2023.

Current phase of a super cycle and long-term tailwinds

The deep-rooted themes of deglobalization, decarbonization and digitization are likely to dominate the global economy for years to come. Supply chain disruptions, geopolitics and changes in international trade to stimulate reshoring and near-shoring bring a significant increase in commodity demand. Producing energy transition technologies (such as electric vehicles, solar photovoltaic systems and wind turbines) and building green infrastructure (such as power grids and energy storage facilities) requires substantial amounts of raw material and more commodities than conventional high-emission technologies. In addition, the ongoing digitization and integration of AI is built on massive amounts of newly installed hardware and computational power driven by electricity, which will elevate demand for industrial metals and minerals.

These three trends are also likely to cause inflationary pressure well into the future. Inflation is likely to average below the high levels experienced in the period following COVID-19. However, increased fiscal spend and the associated rise in government deficits and debt will likely cause inflation to average higher than it did in the 15 years before the pandemic.

Figure 7: One-year forward-looking inflation expectations in the U.S., %



Source: University of Michigan Survey of Consumers, April 2025 ; Bloomberg Finance L.P., as of April 30, 2025.

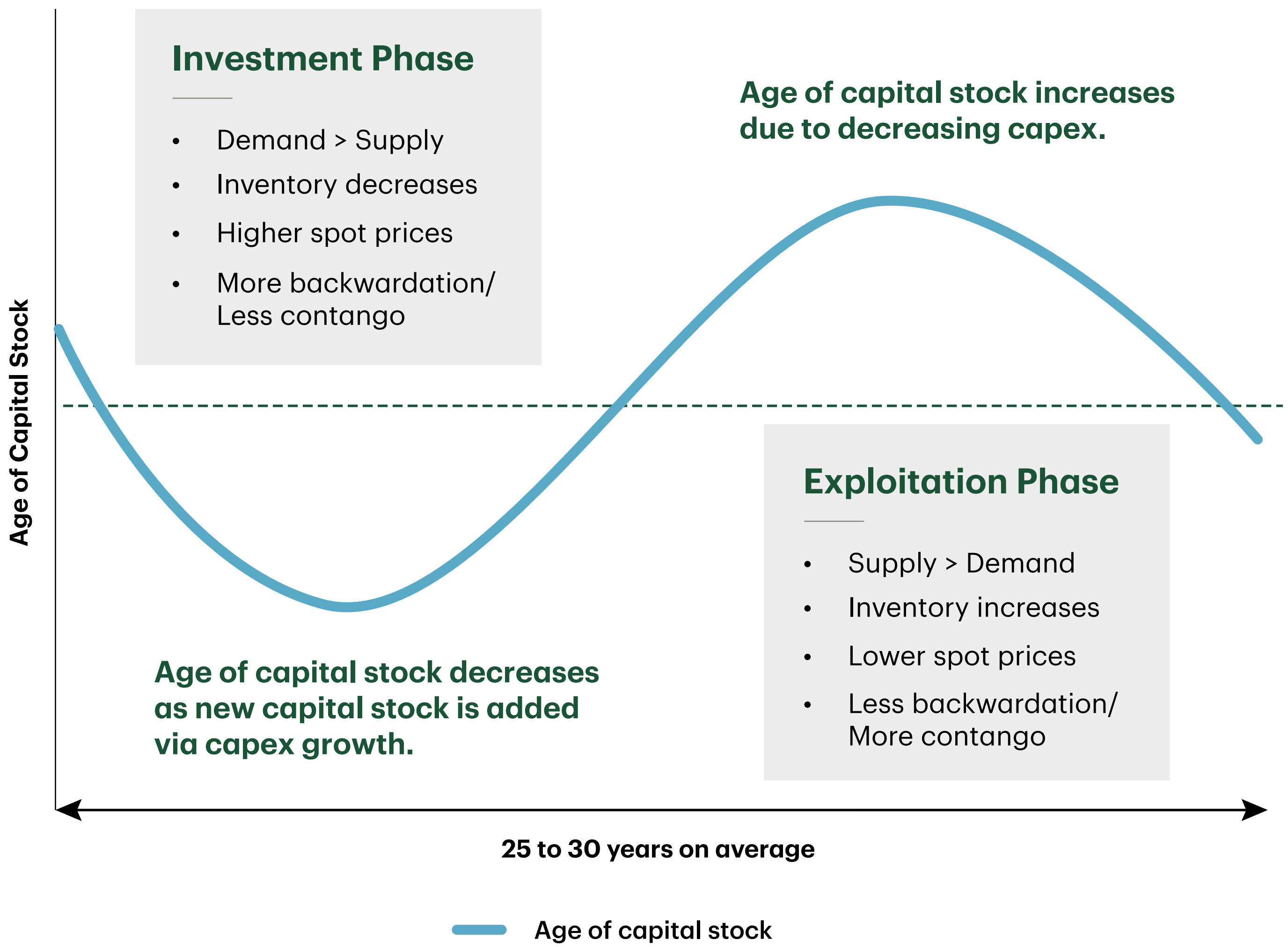
Note: The University of Michigan's consumer surveys poll a nationally representative sample of Americans across the political spectrum, but the data used here represents Independents only. Despite large partisan differences in consumer sentiment, Independents are considered to be consistently in the middle and to hold views that reflect national averages.

[1] https://data.sca.isr.umich.edu/

A phase in a super cycle

We anticipate higher average commodity returns through the next decade as the commodity market enters a much-needed investment phase of a cycle, rewarding portfolios that have a commodity allocation.

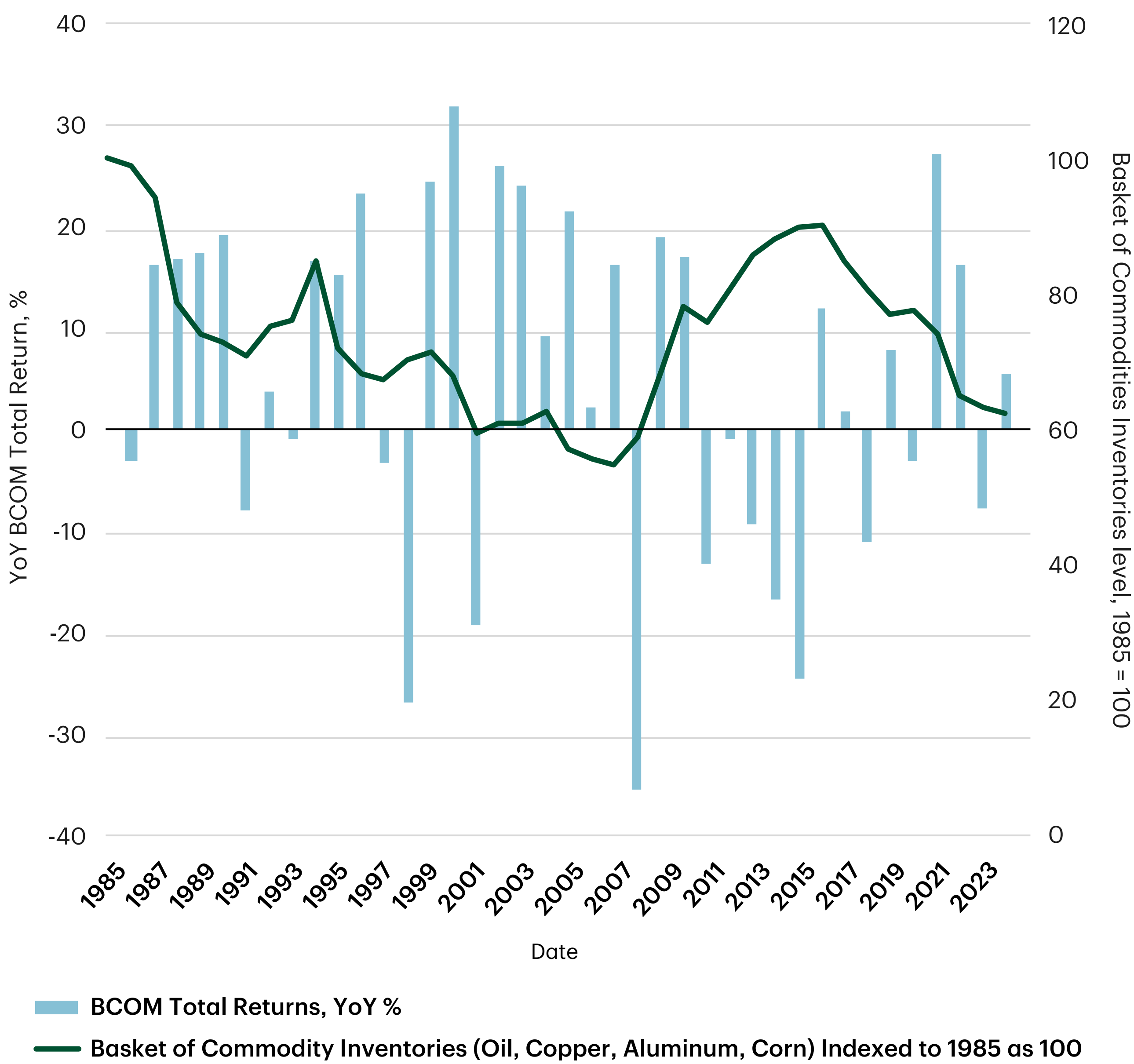
Figure 8: Investment and exploitation phases of commodities cycle



Although commodity total returns as measured by the Bloomberg Commodity Index (BCOM) have averaged 10% annually from 1960 to the present, their return profile is volatile (**Figure 9**). Commodity returns are suppressed when inventories are rising and elevated as supply growth is not needed, but they outperform when inventories are being drawn and supply is needed.

In the last commodity investment phase (sometimes referred to as a super cycle) - which started in 2000, after China's accession to the World Trade Organization, and culminated in 2012 - commodity returns increased by 59%, despite the 21% decline in 2008 around the global financial crisis (**Figure 9**). Declining inventories, with demand exceeding supply, propelled commodity returns via both spot price and roll yields. In that super cycle, commodity prices rose to limit demand and preserve inventory. Elevated prices encouraged massive capital expenditure. After 10-12 years of elevated commodity prices, the commodity market entered a period of exploitation, as inelastic supply started to increase, while demand softened under the weight of higher prices. Both supply and demand respond to price, albeit with different lags.

Figure 9: Inventory levels and BCOM returns through time



Source: Bloomberg Finance L.P., TDAM. As of March 31, 2025.

The suppressed commodity prices observed since 2010 – through the exploitation phase of the commodity cycle – have discouraged capex and supply growth, all while supporting demand.

Figure 10: Cyclicality of fixed asset age and commodity prices

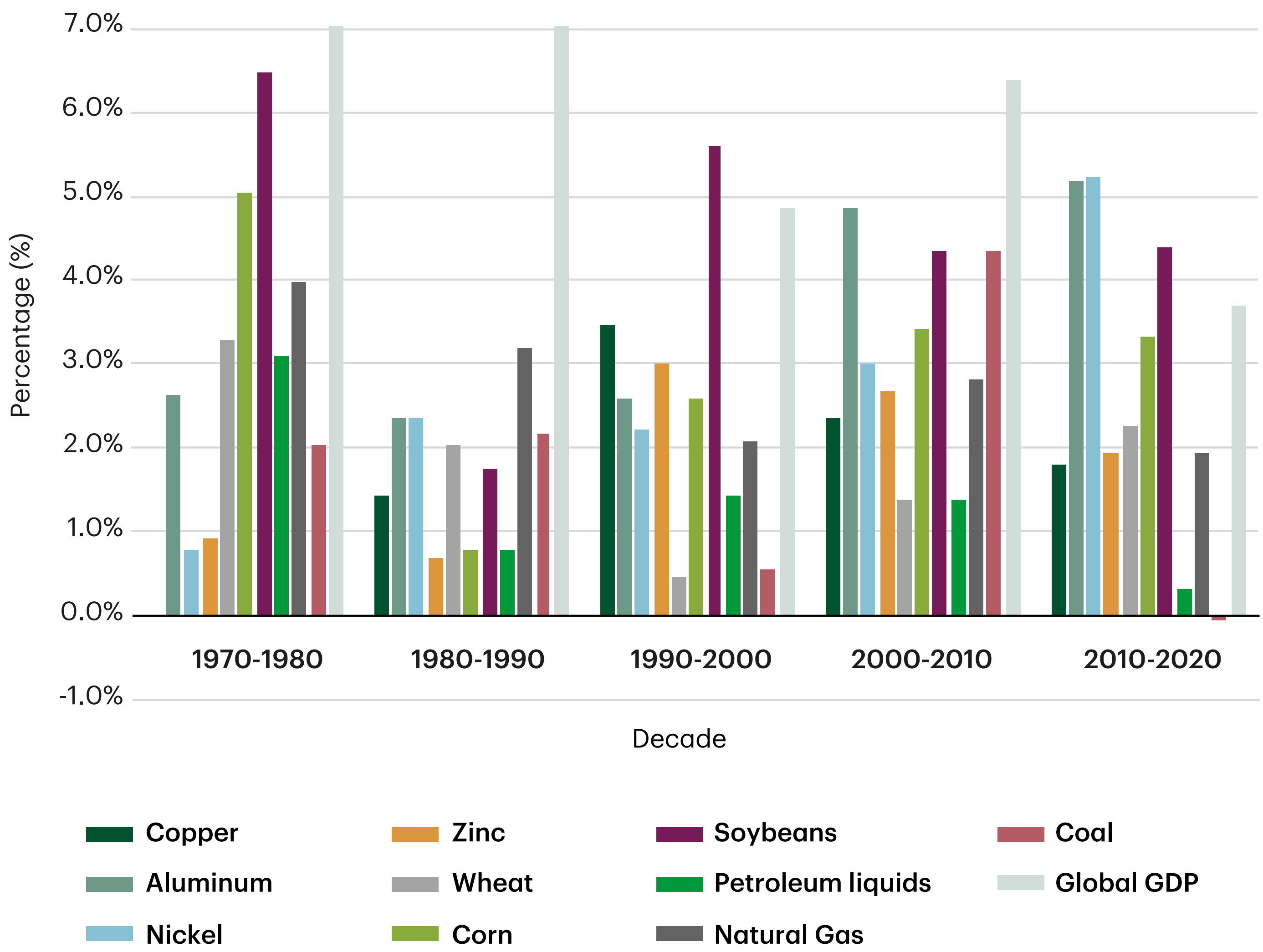
Source: Bloomberg Finance L.P., Bureau of Economic Analysis. As of August 30, 2024.

Currently, a look at inventories across commodity markets illustrates the tightness in supply and demand balances, underscoring the need for increased investment to boost supply and quench the still growing commodity demand.

In addition to the tight inventory balances, we observe aging petroleum and natural gas fixed assets. During periods of aging capital stock, producers exploit capacity instead of investing in it, which leads to undersupply and starts the next phase of the cycle. This in turn pushes commodity prices much higher, making it attractive to invest in the capital stock or in commodity extraction or production.

In the medium and long term, commercial demand from commodity users is underpinned by steady global GDP expansion. Despite the recent U.S. introduction of tariffs, the International Monetary Fund (IMF) remains constructive on global growth for the next five years and expects global real GDP growth rates to hover around 2.5% to 3% annually, with global inflation trending at around 4% per year.

Figures 11: Continued demand growth driven by global GDP expansion, %

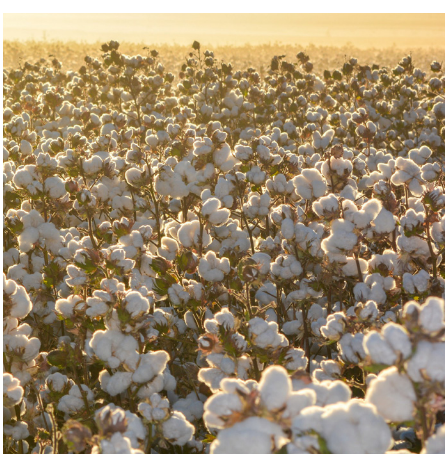


Source: BP Statistical Review of World Energy 2021; US Department of Agriculture and Bloomberg Finance L.P., as of December 31, 2023; IMF, as of April 2025.

Conclusion

Through time, commodities warrant a strategic allocation in institutional portfolios of between 4% and 7%. However, in the current market environment, allocations in the high single or low double digits are potentially desirable, owing to both macro (higher inflation) and micro (commodity cycle) factors. Commodities play an important role in portfolio construction because of their high beta and responsiveness to inflation, low correlation to traditional parts of the portfolio, daily liquidity, and the supportive long-term trends of deglobalization, decarbonization and digitization.

An integrated set of tools which brings together the analysis, implementation, monitoring and reporting of investment strategies is crucial for successful portfolio management outcomes. At TD Asset Management Inc., we have a team of investment, actuarial and software development professionals dedicated to creating and evolving tools and solutions to meet the demands of our clients. If you'd like to explore your options and learn how an allocation to commodities can potentially work for your plan, please reach out to your Relationship Manager to schedule a meeting. ■



Allocation

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