Inflation and commodities: Medium-term outlook and portfolio implications

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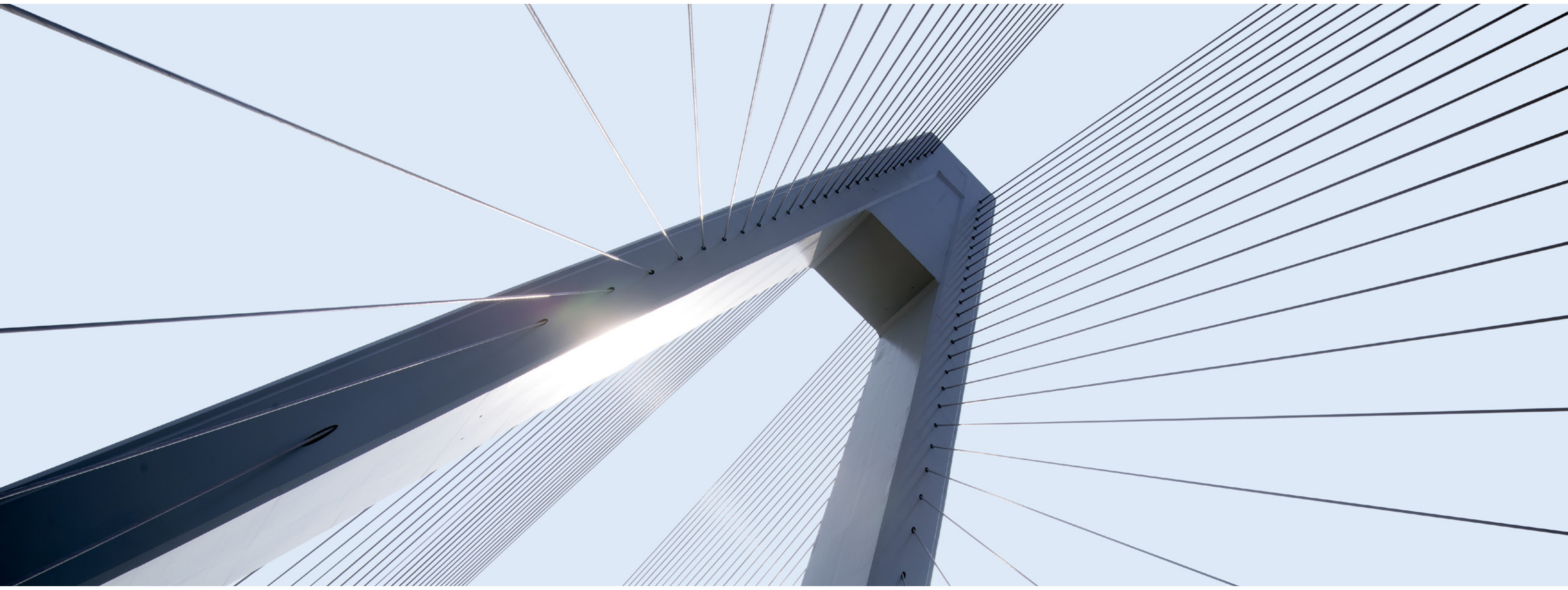


In this paper, we revisit the outlook for inflation and commodities focusing on the next 5 years. Our key conclusions are:

- **Elevated inflation is expected to remain a source of risk for investors over the long run.** The balance of risks is skewed to the upside relative to central bank policy targets due to heightened geopolitical risk and strong investment demand.
- **We expect commodities to make a positive contribution to sticky inflation.** Agriculture, copper and gold are expected to be the strongest components of the Bloomberg Commodity Index, and deliver attractive returns over the next several years. The outlook for crude oil is less ebullient, reflecting a low cost structure and headwinds from a gradual global transition to Electric Vehicles (EVs). Even so, we expect positive returns to a long oil position.
- **An allocation to commodities can make an important contribution to a well-diversified portfolio.** Commodities can provide protection against inflation, enhance expected returns, and increase diversification, including hedging tail risks related to geopolitics and climate change.
- **India matters for commodities.** It will likely soon overtake China as the world economy's growth engine. With low energy efficiency, India is expected to contribute nearly 1/3 of incremental energy demand in the next 10 years. Much of this demand will focus on coal, as well as oil. Strong oil demand should mitigate some of the global demand headwinds facing crude oil. India's rise should also boost demand for several other commodities, including gold and copper.
- **Tariffs:** the most important downside risk for inflation and commodities is any significant escalation of the trade war between the US and China, which would impact economic growth significantly.

Secular inflation outlook

1. Trend inflation generally above central bank targets, with risks skewed to the upside

Every year, CIBC Asset Management (CIBC AM) develops long-term (10-year) expectations for a range of asset classes to guide investors with their strategic asset allocations. The Multi-Asset and Currency team prepares the projections, with inputs from colleagues in our fixed income and equity teams.

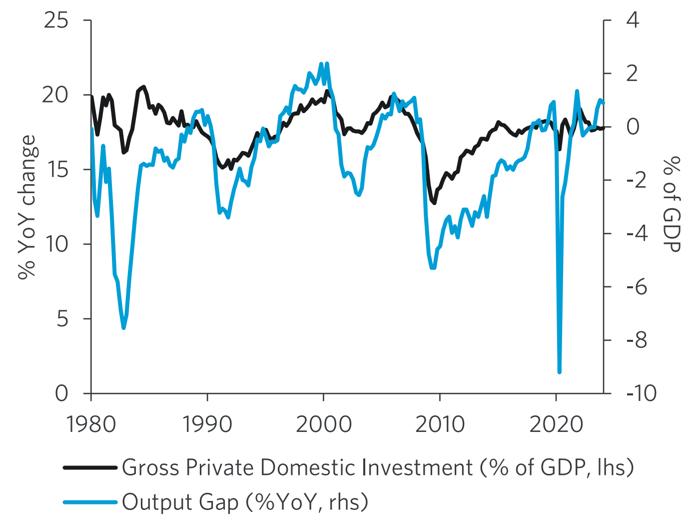
A core conclusion of this analysis is that the global economy will likely not revert to the low-inflation regime that persisted for more than a decade following the 2008 global financial crisis (GFC). This episode was a historical outlier, caused by persistent and large negative output gaps.

Instead, our 10-year outlook has inflation remaining moderately above central bank targets in most Developed (DM) and Emerging Market (EM) countries. In the US, we expect annual inflation to average 2.3%, as measured by the Federal Reserve's (Fed) preferred core Personal Consumption Expenditures (PCE) price deflator. This equates to an annual average 2.7% rate for the core Consumer Price Index (CPI), further above the Fed's 2.0% target.

Upside inflation risks reflect a combination of demand and supply-side factors. On the demand side, geopolitical risks, an ongoing housing shortage, a need for significant infrastructure investment, and renewable energy investment will increase the share of investment in GDP and sustain GDP growth above trend on average, keeping the output gap in positive territory. For the US, we expect the share of investment in GDP to rise above its historical average, after an extended period of under-investment. Much of the impact of demand tailwinds is likely to be frontloaded, suggesting that the highest risks to inflation exist in the next 5 years.

On the supply side, population ageing in many DMs and China should increase the scarcity of labor and result in higher services inflation. Given demographic projections, upside pressures from this channel should increase over time.

Chart 1: Strong investment demand suggests persistent excess demand and upside inflation pressure



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third-party service provider: Bloomberg. Data as at June 30, 2024.

Reflecting similar factors, average inflation is also likely to run above target in several other DM economies, including the UK, Australia and Canada. In contrast, average inflation in the euro zone will likely remain close to target, reflecting weaker investment tailwinds and less appealing fundamentals. For Japan, despite important investment tailwinds, unanchored inflation expectations and an expected continued inability to foster sufficient consumption demand to achieve escape velocity likely means that average inflation, despite moving higher, will remain below the central bank's 2.0% target.

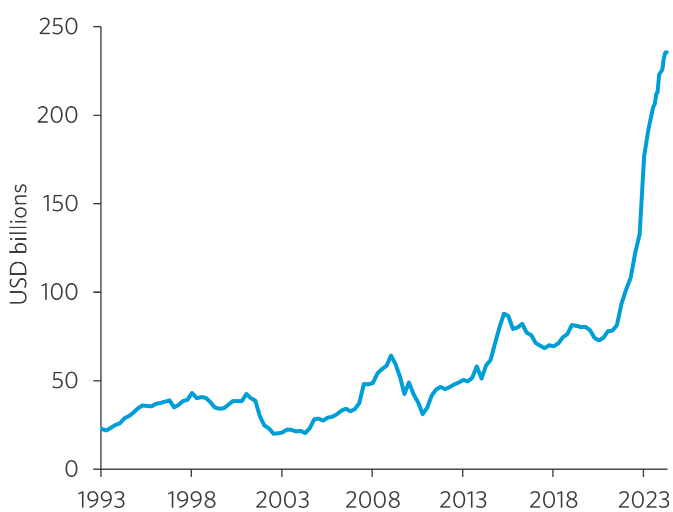
As part of this inflation assessment, the outlook for a broad basket of commodities appears particularly attractive. Copper demand could surprise to the upside due to strong demand related to energy transition, as well as outdated and inadequate power grids. Agriculture prices are facing important upside risks in the context of global warming. Geopolitical risks could bring sizeable upside to oil and gold prices that will likely more than offset potential downward pressures from a faster than expected global EV transition and a potential increase in US oil supply.

2. Factors driving upside pressure on DM inflation

Geopolitical risks

A bipartisan consensus exists in Washington that China will present national security risks for the foreseeable future. This has encouraged an effort to reduce economic reliance on Chinese supply chains, to restore military deterrence in the Asia-Pacific, and to provide state support to critical industries—such as chips production—in order to retain technological and military dominance in response to state-sponsored subsidies in China. Technology and manufacturing investment is expected to remain strong in this environment, and binding US supply-side constraints should bring additional upside pressure on inflation. US supply constraints will likely also represent a boon for several EMs, which should benefit from friendshoring investment spending.

Chart 2: US manufacturing construction is booming



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third-party service providers: Bloomberg; LSEG Datastream. Data as at June 30, 2024.

Public infrastructure gaps

We expect infrastructure demand to increase in most economies, providing strong tailwinds for copper and several other metals. According to the American Society of Civil Engineers, a substantial proportion of US surface transportation and water infrastructure is reaching the end of its lifespan. This will require government investment of around 14% of US GDP in the next 10 years.[1] Similar needs exist in other DM economies, including Canada. For example, the city of Toronto is facing a $26 billion CAD infrastructure gap over the next decade, representing about 5% of GDP.[2]

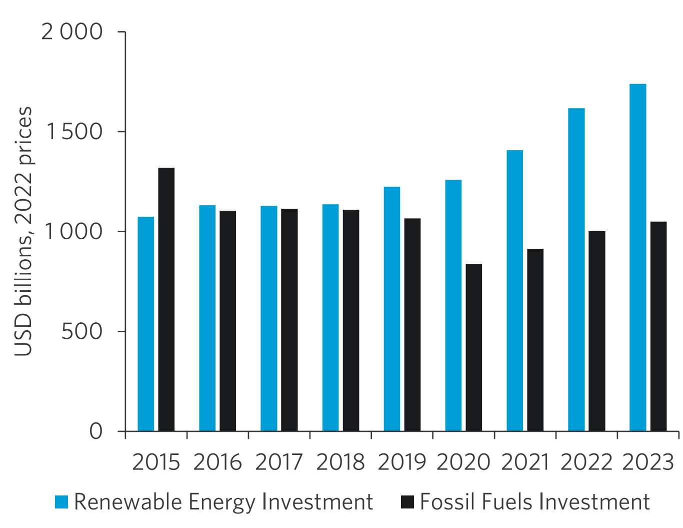
Power grids are increasingly under pressure in several countries, including the US, India, China, and Japan, and represent a significant impediment to the energy transition.[3] Global electricity use is expected to grow 20% faster in the next decade than the previous one, reflecting stronger aggregate demand in EMs, strong cooling demand, the gradual global EV transition, and surging demand from data centers. Upgrading and increasing grid supply globally to meet future demand could require investment spending equivalent to $3.1 trillion USD in the next 5 years, equivalent to 2.5% of global GDP.[4] The infrastructure gap also applies to inefficient food supply chains in a context of combating global warming. About one third of all food produced globally by weight is lost or wasted between farm and the table, costing the global economy more than $1 trillion USD annually, and representing about 8%-10% of global greenhouse gas emissions.[5]

Renewable energy transition

The transition to renewable energy is another investment-intensive theme. Total global annual investment in green energy has already surpassed fossil fuels and could become an increasingly important driver of GDP growth. Joint work by the International Energy Agency (IEA) and the International Monetary Fund (IMF) estimates that capital investment in renewable energy will double by 2030. As a result, annual capital investment in energy is projected to increase by an annual amount equivalent to about 1.6% of global GDP.

Copper, as well as lead, nickel, and lithium, are all major inputs to energy transition. Putting all use cases together, the IEA expects demand for these metals to increase by a factor of 10 by 2040.[6]

Chart 3: Global investment in renewable energy infrastructure is rising strongly



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: International Energy Agency (IEA). Data as at June 30, 2024.

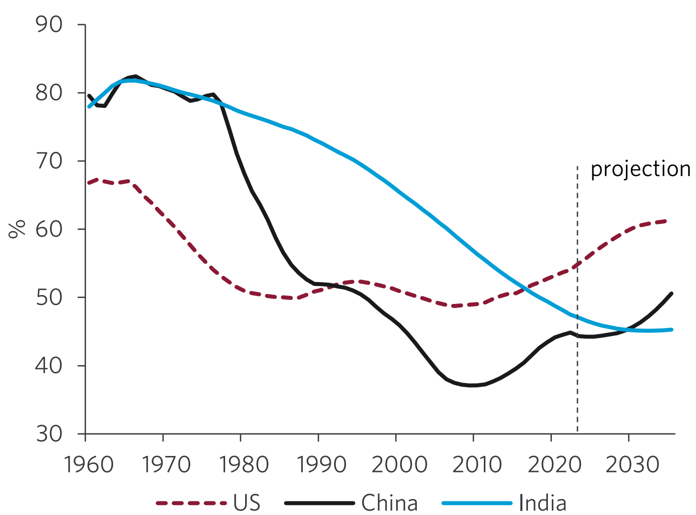
Housing shortages

Housing shortages have been an important source of elevated inflation in several countries, including the US and Canada. Insufficient housing suggests investment in this sector should grow, on average, at a higher pace than GDP in the next several years. Furthermore, after several years of tight monetary policy, lower mortgage interest rates in coming quarters could unleash pent-up housing demand, accentuating the structural shortage. We estimate it will take around 3-5 years of new investment to restore balance in the US housing market. This estimate is longer in Canada, owing to a more sizeable shortage.

Ageing and labour shortages

Ageing populations, most prevalent in DM countries, also suggests trend inflation remaining above central bank targets. Projections by the United Nations suggest the US dependency ratio will reach levels in the next decade last seen in the 1960s, pointing to increasing shortages of workers. Artificial Intelligence (AI) adoption is likely to mitigate the inflationary effects of tighter DM labour markets, reflecting a partial automation of low value-add tasks, but the impact on inflation is likely to remain limited in upcoming years. On net, we expect ageing to increase trend inflation by about 0.2% across DM countries. In contrast, for most EMs, excluding China, dependency ratios are projected to remain low and stable.

Chart 4: Ageing to result in rising dependent populations and increasing labour shortages



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third-party service providers: LSEG Datastream; United Nations. Data as at June 30, 2024. The economically dependent population is the sum of under 15 and over 65 years cohorts.

Central banks to tolerate above-target inflation

We expect an implicit policy choice in favour of high inflation and growth by many central banks, including the Fed. In the context of strong and inelastic investment demand, we expect central banks to face relatively high sacrifice ratios, defined as the output cost of reducing inflation. Bringing inflation back to target in the face of demand and supply shocks would require central banks to impose a more substantial constraint on growth. This would likely be accompanied by important risks to financial stability, fiscal deficits and debt, and political stability in the context of rising populism. We think central banks will choose to minimize these risks by tolerating inflation moderately above target in coming years.

Box 1: India's rise — why it matters for commodities

India has substantial untapped economic potential. It should overtake China as the world's growth engine in the next few years, and soon contribute nearly 25% of global economic growth. This suggests India will be an increasingly strong source of commodity demand in coming years.

India's population now exceeds China. It is also much younger. According to the latest IMF Article IV report, India needs to create about 240 million jobs by 2031.[7] In addition, since approximately one third of the urban population lived in slums as recently as 2020, economic tailwinds driven by infrastructure spending will also be important to India's economic development.[8] According to the World Bank, by 2036 India will need to invest $840 billion USD in infrastructure—an average of 1.2% of GDP per annum.[9]

India's low urbanization rate represents an additional investment tailwind. At 36%, Indian urbanization is well below China (64%), and approximately equal to where that country was prior to its membership of the World Trade Organization in 2001. According to the IMF, every 5% shift of workers from agriculture to urban employment is expected to increase economic growth by about 1% during the transition phase. We expect strategic competition and friendshoring triggered by persistent China-US economic and political tensions to boost foreign investment in India, resulting in an acceleration of urbanization and potential GDP growth.

India's contribution to global energy demand growth should exceed its expected GDP growth rate. This reflects a low energy-efficiency given India's stage of economic development, a higher investment-intensity of economic growth, and an acceleration of urbanization. In its baseline scenario, the IEA projects that India's energy demand will account for nearly 35% of new global energy demand by 2030.[10] Given the country's heavy reliance on coal and its inadequate power grids, we don't expect a significant market penetration of EVs into India in the foreseeable future. Also, as the majority of goods transported in India move by road, we expect urbanization and economic growth to boost diesel demand for road freight. In this context, we project a sizeable increase in oil demand—equivalent to a cumulative increase of 2-3 mb/d by 2030.

India's rise should also boost demand for several other commodities involved in the construction of basic infrastructures such as buildings, highways, power grids, and sanitary structures. For copper, for example, recent data report India as the 7th largest importer. We expect it to make the top 3 by 2030. We also expect India's gold demand to accelerate in tandem with economic development, including as a result of its central role in Indian culture; gold is considered both a store of value and a symbol of status.

3. Commodity price forecasting: a bottom-up approach

Commodities are reinforcing our sticky long-term inflation outlook. Focusing on the Bloomberg Commodities Index (BCOM), we project aggregate commodity prices to increase by an annualized average of 8.2% in US dollar (USD) terms in the next 5 years, with some moderation in the pace of increase thereafter. The balance of risks is skewed to the upside, reflecting heightened geopolitical risks and global warming. This outlook is similar to the long-term average about 8.0% that prevailed before the GFC, but contrasts with the secular stagnation of the 2010s—during which the average increase in the BCOM was around 3%—and the downward trend since 2022.

Table 1: Commodity prices outlook[11]

Commodity	2023	2029	%YoY Average Growth 2023-2029	2010-2020	2000-2010	1990-2000	1980-1990
Brent Price (US$/BBL)	77.8	131.1	6.4	0.6	20.3	10.7	0.1
LME Copper Price (US$/MT)	8463.9	17036.7	10.8	2.5	25.2	-2.2	3.4
Gold (US$/oz)	2065.5	3523.6	10.0	6.3	16.2	-1.9	-3.2
BBG Agr. Commodity Index	365.7	812.5	10.0	2.9	15.6	1.3	NA
BBG Commodity Index	476.6	912.5	8.2	1.8	16.1	5.7	NA
Real Brent Price (2023 US$/BBL)	77.8	113.8	3.8	-1.3	17.1	7.4	-4.4

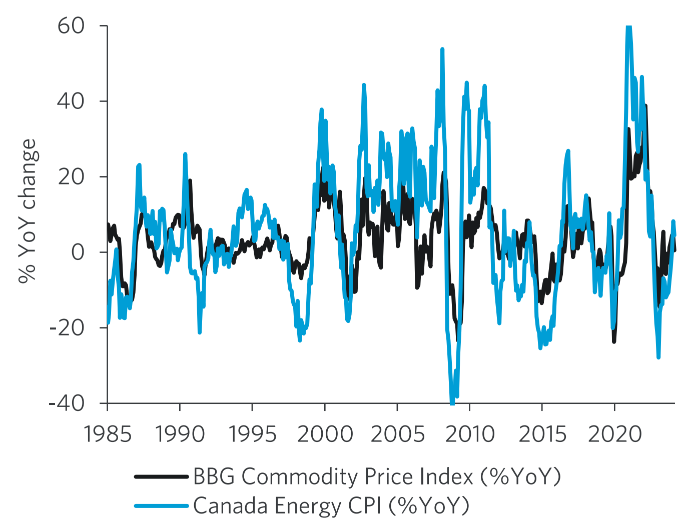
Source: The information was prepared by CIBC Asset Management Inc. using data from the following third-party service provider: Bloomberg. Data as at June 30, 2024.

The BCOM index is positively correlated with energy inflation. Our BCOM outlook should contribute to keep US PCE inflation between 0.1 and 0.2 percentage point(s) (p.p.) above the Fed's 2% target over the next 5 years.

We project BCOM returns using a bottom-up forecast for crude oil, agricultural prices, copper, and gold—which combined represent about two thirds of the BCOM index—and constant weights for these various subcomponents. Price forecasts for copper and agricultural prices are projected by making assumptions on where their relative price versus oil should trend towards in equilibrium.

Prices of agricultural goods, gold and copper are expected to increase at a relatively strong pace. This reflects heightened geopolitical risks, global warming, and the global energy transition. Our constructive global investment outlook is another tailwind for copper prices. By contrast, our outlook for the price of crude oil is relatively weaker, despite a demand boost from India, reflecting the gradual global transition to EVs and more abundant supply.

Chart 5: BCOM is correlated with Canadian energy inflation



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at June 30, 2024.

Brent crude oil

Crude oil accounts for about 30% of the BCOM index and its quarterly growth rate has a correlation of about 40% with US inflation, the highest among BCOM components. Our oil price outlook is driven by key historical properties of oil prices.

Global spending on oil as a share of GDP, a measure of energy efficiency, has displayed mean-reverting behaviour around a long-term level since the early 1970s. We can use this property, as well as an assessment of oil demand growth relative to the global economy, to back out an implied oil price forecast.

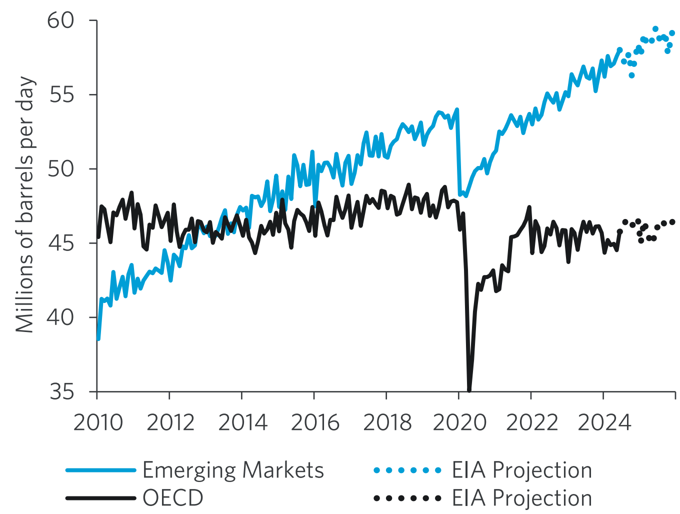
Chart 6: Global spending on oil is mean-reverting (shaded for US recessions)

Source: The information was prepared by CIBC Asset Management Inc. using data from the following third-party service providers: Bloomberg; LSEG Datastream. Data as at June 30, 2024.

Mean-reversion forces appear to have strengthened over the last decade, despite a quasi-global recession in 2015-16, a pandemic shock followed by strong inflation, and military conflicts since 2022. More rapid mean-reversion seems to reflect technological improvements that have made it easier for non-OPEC producers to bring supply to market.

Disaggregating EM and DM crude oil demand, we observe constant energy efficiency in emerging markets. This has translated into a steady increase in oil demand for this region. By contrast, DM oil demand has remained flat for more than a decade, reflecting rising energy efficiency. Putting these various features together, our upbeat economic outlook for EM, and particularly India, should remain the key pillar for global oil demand. Assuming mean-reversion of energy efficiency towards its long-term average over the next five years, we project oil demand will grow at 3% per annum.

Chart 7: Global oil demand is driven by EM



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party providers: Organisation for Economic Co-operation and Development (OECD); Energy Information Administration (EIA). Data as at June 30, 2024.

Given assumptions for oil demand and energy efficiency, we project the price of Brent crude oil to reach $131 USD by the end of 2029, with implies an average increase of 6.4% per year.

Risks around our oil price outlook appear roughly balanced. On the downside, the global commitment to fight climate change and the rise in popularity of EVs may justify weaker oil demand, and therefore a lower oil price. Additionally, a potential Republican sweep in November US elections could open the door for more US oil supply. But we see two mitigating factors. First, global underinvestment in fossil energy is pointing to less supply ahead, meaning upward pressures on prices. Second, the speed of EV transition will most likely be contained for several years by insufficient charging capacity and inadequate power grid capacity in EMs, both of which are limiting factors presently.[12]

In addition, heightened geopolitical risks in the Middle East and in the South China Sea will likely remain supports to oil.

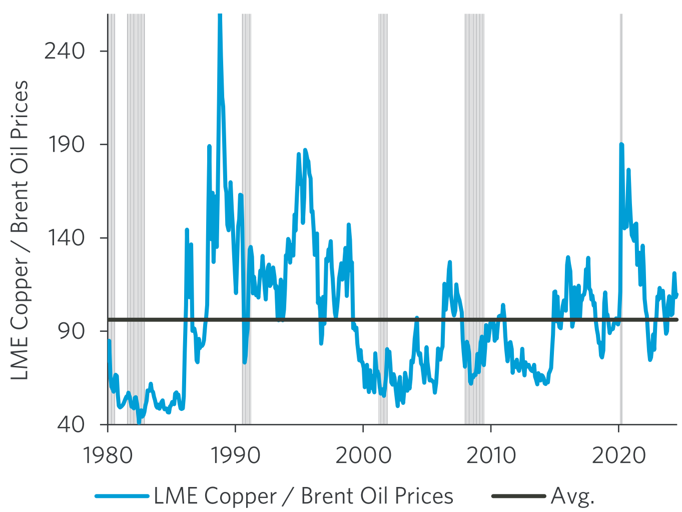
Copper

We view the push to decarbonize the global economy as a key tailwind to the price of copper. EVs will contribute, but the bulk of global copper demand growth will come from several sources, including a need to upgrade electricity infrastructure and rising global demand for air conditioners (ACs), equipment and machinery (tech and military), and infrastructure. Data centers (DCs), which could consume 9% of US electricity by 2030, are also a likely significant source of copper demand.[13] According to the International Copper Association, large and hyperscale DCs are projected to account for 67% of copper demand in the building sector by 2030, up from 37% in 2018.

As with oil, we begin with an historical assessment of the copper price, particularly in terms of its relationship to oil. This approach makes sense given that copper production is energy intensive and still heavily reliant on carbon-based energy, whether for mining, smelting, refining, or transportation.

That said, as alternative energy sources and infrastructure become increasingly important factors in copper's production, it does not make sense to assume a copper-to-oil price ratio which is consistent with historical norms. Instead, we expect this ratio to rise over time, a phenomenon which has only occurred during the post World War II reconstruction era. We assume the London Metal Exchange (LME) copper / Brent oil price ratio rises gradually (linearly) to 130 by 2029, from 108.7 at the end of 2023. This implies a doubling in the LME copper price, to reach approximately $17,037 USD per metric tonne. This equates to an annual average growth rate of 10.8%.

Chart 8: Copper-to-oil ratio should rise over time (shaded for US recessions)



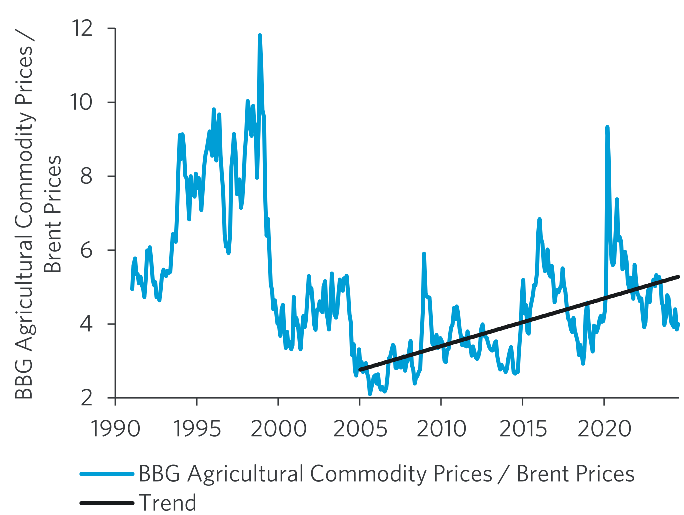
Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at July 31, 2024.

We consider the balance of risks around our copper price forecast to be skewed to the upside. This reflects expected strong demand from the likes of DCs, power grids, battery storage, solar photovoltaic cells, wind turbines and military rearmament. It will also likely reflect significant supply constraints.

Agricultural commodities

The price ratio of Bloomberg Agricultural Commodities Index and Brent crude oil has been in a steady uptrend since 2005. We expect this trend to continue, supported by two factors. First, rising incomes and living standards in EMs should continue to support increasing demand for meat and dairy products, requiring more agricultural commodities such as corn and soybeans as production inputs. Second, global warming (which will likely reduce crop yields) suggests this trend should continue to rise—perhaps at a faster pace.

Chart 9: Food will become more expensive to produce



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Overall, we expect an average price increase of 10% in USD terms per year for agricultural commodities over the next 5 years.

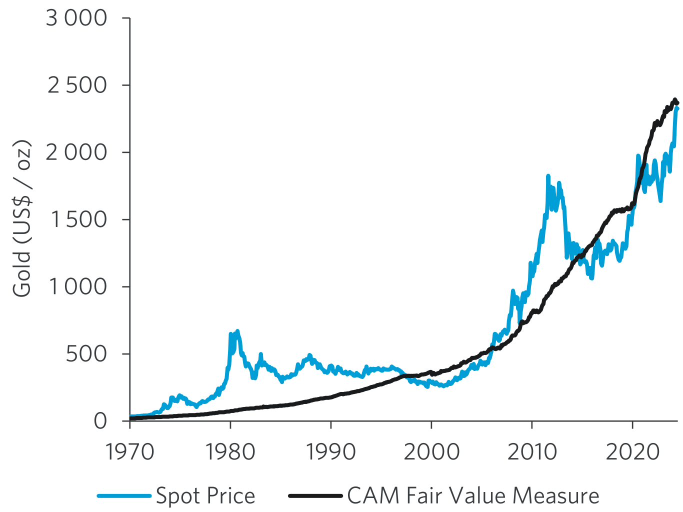
We consider risks surrounding our projection to be skewed to the upside due to global warming. A recent analysis by the European Central Bank (ECB) suggests this factor could raise headline inflation by 0.3-0.5 percentage points over the long-run, with a much greater impact under a more adverse global warming scenario.[14]

Gold

Unlike other commodities, gold is predominantly a store of value asset that often acts as a hedge against inflation and geopolitical risks. For that reason, gold prices have exhibited a positive correlation to inflation and money supply. We model gold prices as a function of both variables. This implies gold will reach $3,524/oz USD at the end of our 5-year sample period, an average annual growth rate of 10% in USD terms.

We consider the balance of risks around our gold price projection to be skewed to the upside, reflecting heightened geopolitical risks, a potential marked deterioration in the quality of US institutions, and strong Indian demand.

Chart 10: Gold to remain supported by inflation and money supply



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at June 30, 2024.

4. The role of commodities in investor portfolios

A strategic allocation to commodities can be beneficial to the achievement of long-term investor performance objectives. Commodities can act as a hedge against inflation, geopolitical and climate tail risk. This characteristic improves expected portfolio diversification, particularly during stress periods when traditional portfolios often exhibit an unwanted increase in asset class correlations. An allocation to commodities may also enhance expected portfolio returns.

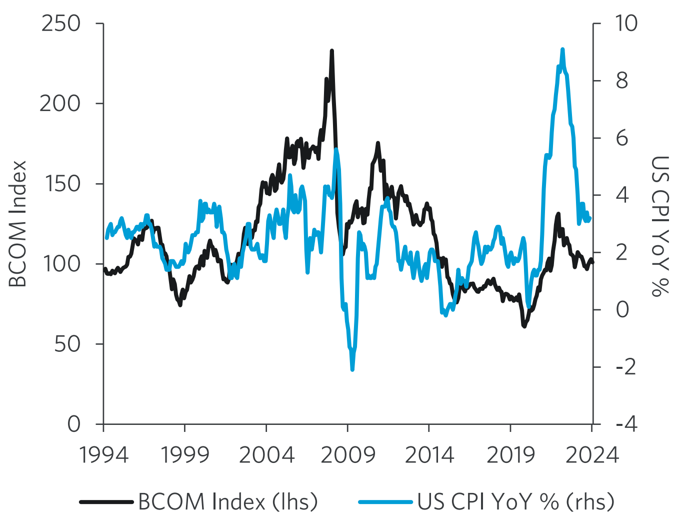
Table 2: An allocation to commodities can improve the expected performance of investor portfolios

Purpose for Portfolio Allocation

Alternative Asset Class	Enhance Return	Enhance Income	Enhance Diversification	Hedge Inflation	Hedge Tail Risk
Private Equity	✓		✓		
Private Credit	✓	✓	✓	✓	✓
Real Estate Debt	✓	✓	✓	✓	
Real Estate Equity	✓	✓	✓	✓	
Infrastructure Debt		✓	✓	✓	
Infrastructure Equity	✓		✓	✓	
Hedge Funds	✓		✓	✓	✓
Commodity Futures	✓		✓	✓	✓

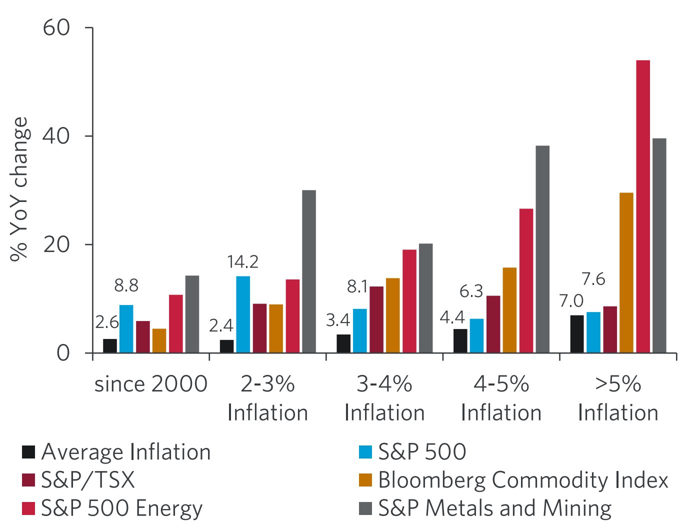
Commodities and inflation are positively correlated, for intuitive reasons. As prices of raw materials rise, commodity investments tend to appreciate in value, offsetting the erosion of purchasing power experienced by several asset classes. This means that an allocation to commodities—and financial assets exposed to commodities—can enhance expected portfolio returns as they tend to do well in regimes when inflation is above central bank 2% policy targets, and particularly in periods of marked inflation overshoots.

Chart 11: Commodities can provide investors with a hedge against inflation risk



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third-party service provider: Bloomberg. Data as at June 30, 2024.

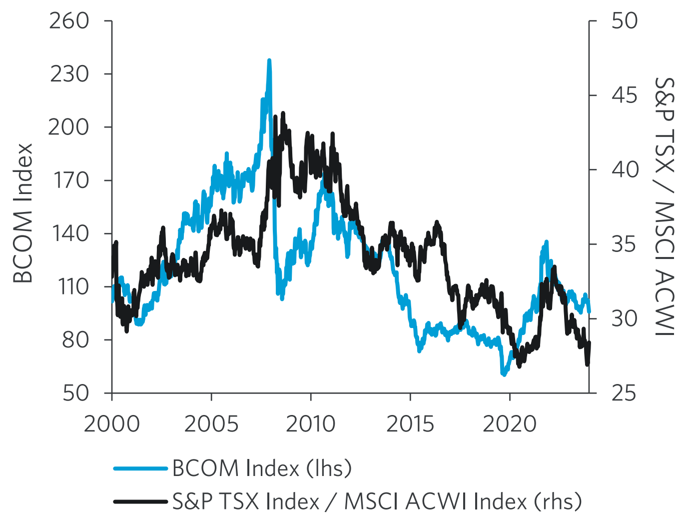
Chart 12: Commodity returns tend to be attractive during periods of higher inflation



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at June 30, 2024.

Commodities also exhibit a positive correlation with broader equity indexes exposed to commodities companies. As a result, indexes such as the S&P/TSX in Canada or the Ibovespa in Brazil should perform relatively well on average in the next 5 years under our baseline inflation scenario. However, if inflation proves to be materially higher than our forecast, perhaps because of tail risks related to geopolitics or global warming, indirect exposure to commodities using equities may prove to be an inadequate hedge. To the extent investors attach a material risk to this outcome, the case for a strategic allocation to commodities is reinforced.

Chart 13: Equity indexes exposed to commodities are correlated with BCOM – they can also outperform during periods of elevated inflation



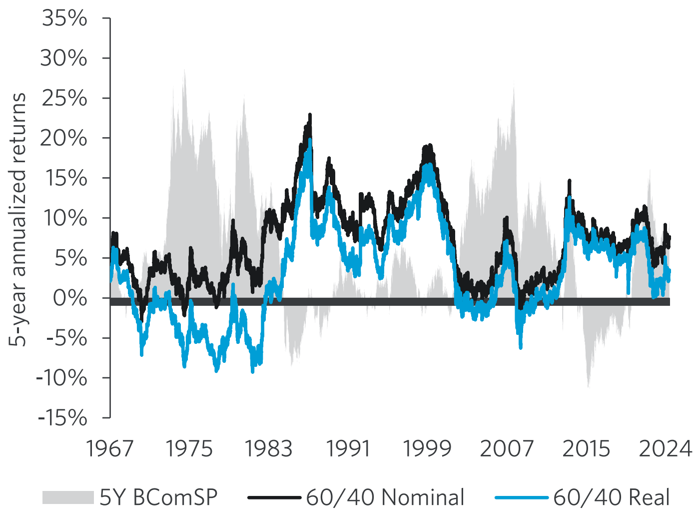
Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. MXWD Index refers to the MSCI All Country World Index. Index Data as at July 31, 2024.

Commodities can improve portfolio diversification. Over the past decade, commodities have exhibited a low average positive correlation to equity returns—commodities have tended to move independently of non-energy equities. As discussed above, commodities encompass a broad range of raw materials. The prices of these tangible assets are determined by fundamental supply and demand dynamics, which often diverge from the factors influencing financial markets; for instance, high financial market volatility in early August 2024 was driven by sentiment and positioning much more than any substantive change in fundamental economic outlook.

Historical return data demonstrate the diversification benefit of including an allocation to commodities into a traditional balanced 60/40 public equity / fixed income portfolio. Using a data sample beginning in 1967, there have been several 5-year periods during which the traditional balanced portfolio excluding commodities realizes a negative real return.

Concurrently, the 5-year returns of commodities were positive, allowing commodities to enhance expected portfolio returns, mitigate the risk of capital drawdowns, as well as hedge against inflation and geopolitical risks.

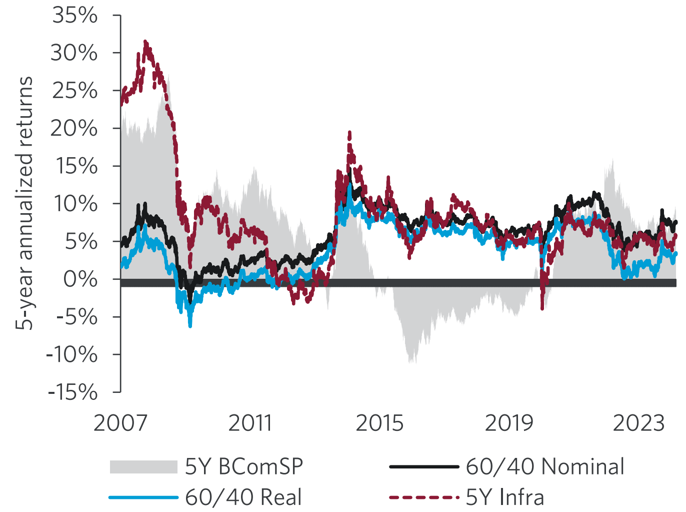
Chart 14: Commodities have often delivered strong returns in periods of weak balanced portfolio performance



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at June 30, 2024 60/40 balanced portfolio includes 60% BofA 10yr Total Return series and S&P 500 index.

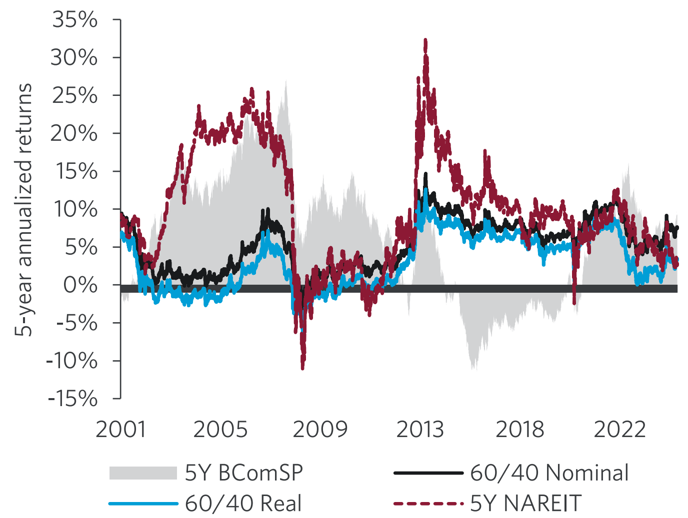
Commodities are not the only asset class with these characteristics. Real estate and infrastructure have similar features, albeit with one important caveat: they are negatively exposed to higher interest rates. Although we certainly see the benefit of including allocations to both these asset classes in investor portfolios—depending upon targeted outcomes—the lack of the same bias in the behaviour of commodities suggests an ability to be a more consistent hedge than either of these two asset classes.

Chart 15: Infrastructure equities are also correlated with BCOM—they can outperform during periods of elevated inflation



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at June 30, 2024. Infrastructure represented by S&P Global Infrastructure Total Return Index.

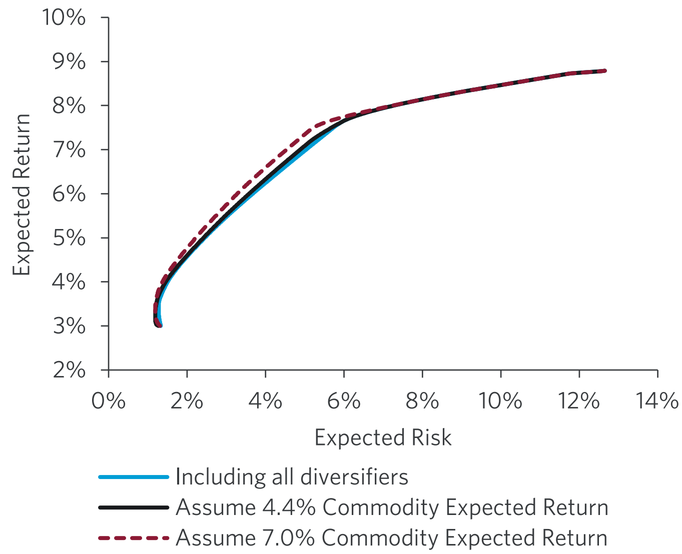
Chart 16: REITs are also correlated with BCOM—they can outperform during periods of elevated inflation



Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party provider: Bloomberg. Data as at June 30, 2024. REITs index illustrated using FTSE NAREIT Index.

An analysis of portfolio efficient frontiers illustrates the potential diversification benefit for a Canadian-based investor of a strategic allocation to a basket of commodities. For illustrative purposes, we assume a 10% strategic allocation to commodities, proxied by the BCOM Enhanced Roll Strategy and funded by primarily reducing portfolio exposure to equity risk.[15] We use two expected return assumptions for the commodity allocation: a conservative 4.4% annualized expected return and a more aggressive 7.0% annualized expected return, which is consistent with our expected 5-year annualized CAD return to the BCOM index (8.2% return in USD minus a projected 1.2% average USD depreciation). The conservative estimate is consistent with our longer, 10-year forecast horizon published in the 2024 edition of the CIBC AM Long-Term Annualized Capital Market Expected Returns Paper. The projected currency impact is from the same source. Using either return assumption, portfolio efficiency is improved: the efficient frontier of potential return/risk combinations moves up and left, which is consistent with investors realizing a little more expected return per unit of risk (defined as standard deviation of monthly returns). This is a positive outcome. But the main benefit of a strategic commodity allocation is its ability to mitigate various risks, including drawdown risk; using data since 1993, the length and depth of the largest and longest drawdown to a traditional 60/40 portfolio (experienced in 2008) is meaningfully reduced.

Chart 17: Commodities have important diversification properties



Source: The information was prepared by CIBC Asset Management Inc. using third-party service providers: Bloomberg; PitchBook. Forecasts obtained from the CIBC Asset Management 2024 Long-Term Capital Market Asset Class Returns paper, and our 5-yr return forecasts for commodities. Correlations and volatilities are calculated using a data sample July 2014 to July 2024. Data as at July 31, 2024. Methodology: using classical mean-variance optimization we maximize expected return for given levels of expected risk, constraining alternative assets and commodities each to a maximum allocation of 10%.

Table 3: A strategic allocation to commodities would have mitigated capital drawdown risk for a Canadian Balanced portfolio investor

(Since Jan 1 1993)	Portfolio Expected Return	Portfolio Historical Return	Historical Volatility	Historical Sharpe	Max Historical Drawdown	Length of Longest Drawdown
60/40*	5.11%	7.24%	7.89%	0.55	-28.50%	657 trading days
50/40/10**	5.19%	7.09%	7.80%	0.54	-24.48%	493 trading days

* The 60/40 Portfolio is MSCI World and FTSE Bond Universe

** The 50/40/10 Portfolio is MSCI World, FTSE Bond Universe, and BCOM Spot Index

Source: The information was prepared by CIBC Asset Management Inc. using data from the following third party providers: Bloomberg. MSCI, FTSE, JPMorgan. Data sample 1992 - 2004. Data as at July 31, 2024. All data are gross of fees.

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At CIBC Asset Management, we believe that every customized investment solution begins with research and rigour. We specialize in a variety of investment solutions such as equities, fixed income, currency management, liability-driven investments, asset allocation, and responsible investments.

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Contact us anytime

To learn more about CIBC Asset Management and our investment solutions, please contact your CIBC representative. For more insights, connect with us on LinkedIn.

[1] American Society of Civil Engineers, May 2024. Bridging the Gap: Economic Impacts of National Infrastructure Investment, 2024-2043. Accessed June 30, 2024.

[2] Jeffords, May 2024. Toronto Faces $26B Infrastructure Gap Over Next Decade. The CBC. Accessed June 30, 2024.

[3] IEA, July 2023. Keeping Cool in a Hotter World is Using More Energy, Making Efficiency More Important than Ever. Accessed June 30, 2024.

[4] Christoffersen, February 2024. Enable or Inhibit: Power Grids, Key to the Energy Transition, Require $3.1 Trillion in Investments by 2030. Rystad Energy . Accessed June 30, 2024.

[5] Goodwin, April 2023. The Global Benefits of Reducing Food Loss and Waste, and How to Do It. World Resources Institute. Accessed. June 30, 2024.

[6] IEA, March 2022. The Role of Critical Minerals in Clean Energy Transitions. Accessed June 30, 2024.

[7] IMF, December 2023. Staff Report and Statement by the Executive Director for India. Accessed June 30, 2024.

[8] World Bank, Feb 2024. Urbanization. The World Population is Moving to Cities. Why is Urbanization Happening and What Are the Consequences? Accessed June 30, 2024.

[9] Kouamé, January 2024. Gearing up for India's Rapid Urban Transformation. World Bank. Accessed June 30, 2024.

[10] IEA, March 2023. International Energy Outlook 2023. Accessed June 30, 2024.

[11] Total returns presented in Table 1 reflect growth rates from year end 2023.

[12] Tankou et al, January 2023. Charging Infrastructure Deployment in Emerging Markets and Developing Economies. International Council on Clean Transportation. Accessed June 30, 2024.

[13] Reuters, May 2024. Data Centers Could Use 9% of US Electricity by 2030, Research Institute Says. Accessed June 30, 2024.

[14] Kotz et al, June 2024. Working Paper Series - The Impact of Global Warming on Inflation: Averages, Seasonality and Extremes. European Central Bank. Accessed June 30, 2024.

[15] The BCOM Enhanced Roll Strategy is designed to minimize the impact of negative futures carry by selecting contracts based on liquidity, degree of backwardation, curve diversification, as well as trading to mitigate impact of roll congestion. This approach can help an investor achieve returns similar to the BCOM Spot index, albeit with some basis risk. Eliminating negative roll impact is not guaranteed. Bloomberg, July 2024. Bloomberg Commodity Indices – Bloomberg Enhanced Roll Yield Index. Accessed June 30, 2024.