Major Trends

A macro context of tighter monetary policy creates headwinds for broad commodities on two fronts. First, higher rates reduce economic growth, which in turn decreases demand, particularly for cyclical commodities such as energy and base metals. Although our base scenario is that a 2023 recession will be avoided, commodity prices have on average declined c. -35% during the last five US recessions.[1] Secondly, higher rates increase financing and storage costs, which, all else equal, encourages the destocking of inventories, increasing market supply. This headwind to commodity gains may be fully or partially offset by several supporting factors listed below.

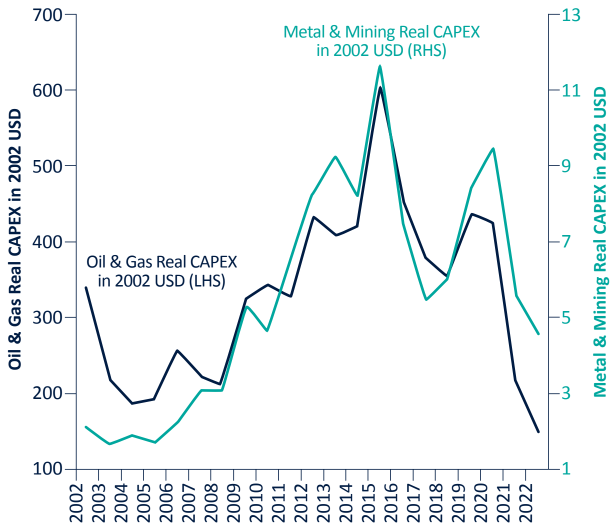
China's reopening will result in a substantial demand boost, potentially offsetting the drag from slower global growth. In recent decades, commodities have tended to be more sensitive to changes in China's economic growth rates than to those of the OECD given that over 50% of global base metal demand is linked to China.[2] For example, copper has had a correlation of 0.47 to Chinese GDP growth compared to just 0.30 to OECD GDP.[3] Some experts suggest that Chinese demand may be more subdued in this cycle, as policymakers will refrain from large-scale stimulus, particularly in the heavy infrastructure sectors of past cycles. However, analysis from Morgan Stanley suggests that a full reopening and replenishment of inventories could lead oil demand to rise by 2M – 3M barrels/day, or c. +3%. Demand for copper is forecast to rise by c. +0.5%.

Years of underinvestment limits supply elasticity. As illustrated in Exhibit 1, Capex for mining companies is roughly -60% below peak investment levels and Capex for the oil and gas sector is at the lowest levels in 20 years[4] in real USD terms. The combination of declining inventory levels (close to 20-year lows for both oil and copper) and a more lengthy permitting process for new greenfield projects (process has more than doubled over the last 15 years), creates a market that is vulnerable to upside surprises in demand.

1 Bloomberg
2 Morgan Stanley
3 Deutsche Bank

Exhibit 1

Capex across commodities continued to fall in real terms despite higher prices



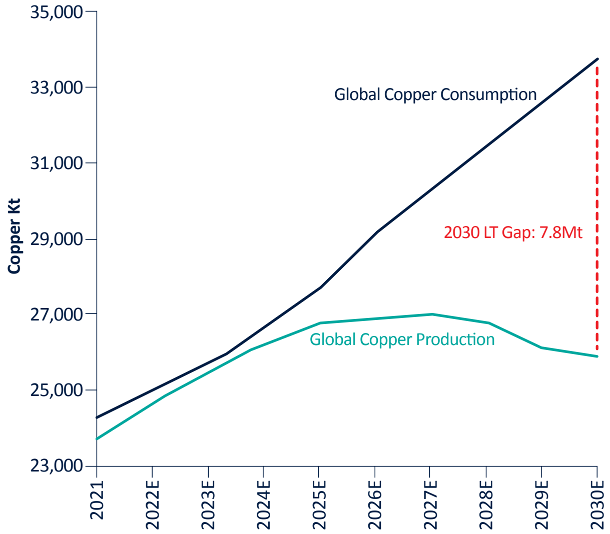
Source: *Baker Hughes, Goldman Sachs*

Rising renewable demand is expected to cause structural deficits for specific metals, most notably copper and aluminum, from 2024 onwards (Exhibit 2). The biggest sources of green copper demand will be electric vehicles (36%), solar panels (31%) and wind turbines (29%).[7] Data from Woodmac and Goldman Sachs suggests that overall copper demand will grow by +32% out to 2030. This will be primarily driven by green demand, which is expected to move from 4% of total demand in 2022 to over 16% of total demand by 2030. These forecasts have been further boosted by the passage of the Inflation Reduction Act (IRA) in the US. Experts suggest that the key risks to this green demand will be technological advancements that create substitution risk (particularly noteworthy for lithium, cobalt and nickel) and delays in consumer adoption of electric vehicles versus market forecasts.[8]

4 Baker Hughes
5 Woodmac
6 Deutsche Bank (2yrs – 5yrs)
7 Goldman Sachs
8 Bloomberg NEF
8 Bloomberg NEF

Exhibit 2

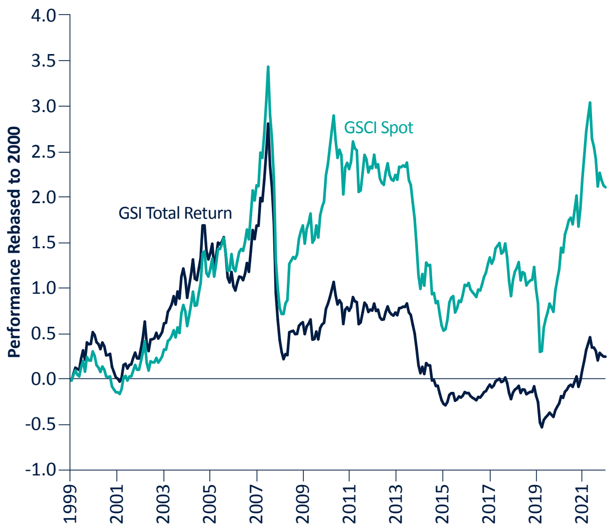
Forecasts of copper production and consumption



Source: *Goldman Sachs, Wood Mackenzie*

Exhibit 3

Total return from commodity investments is far lower than what is reflected by changes in spot prices (Jan 2000- Jan 2023)



Source: *Bloomberg*

Golden Rules

- Commodity markets are efficient. Profiting from commodity price movements requires a differentiated view from the broad market. As everyone knows that there is a green energy transition underway, it will already be reflected in futures prices to some degree. To profit further, one needs to believe the market has underestimated the scale or speed of the transition and resulting demand/supply imbalance. This is illustrated by the difference in the performance of the GSCI Commodity Spot Price Index and its Total Return Index. While spot prices have compounded by 5% p.a on average since 2000, the actual total return accrued by investors after storage, insurance and contract roll yield has averaged a dismal +1% p.a.
- Both supply and demand are prone to unpredictable exogenous shocks from politics, weather, natural disasters, technological disruption and substitution. This makes fundamental research particularly difficult.
- Commodities do not provide an income stream and thus there is no long-term risk premium to be harvested or fundamental anchor to valuation beyond demand and supply speculation.
- The above factors mean that it is exceptionally difficult to generate alpha from trading commodities. This is borne out by the lack of any persistent alpha from active commodities managers.
- Commodities do typically provide some portfolio diversification benefits and may provide some inflation protection in certain environments.

Commodities
continued

2023 Strategic Priorities

We continue to explore all means of investing in the global energy transition, including in commodities. The increase in green demand for metals such as copper and aluminium are likely to provide structural support. However, investors have already put a significant premium on "green" commodities, and as such we are currently reluctant to add passive long positions. Instead continue to search for active managers with low directional beta with a discernible and persistent ability to take advantage of favourable trends. On base commodities, while many managers profited in the boom periods (e.g., the first half of 2022 following the Russian invasion of Ukraine), few have demonstrated the ability to manage the subsequent declining periods.

Looking ahead, different commodities will have different response functions to our macro scenarios. On the whole, we are more optimistic on green commodities than on fossil fuels. In the downside scenario, cyclical commodities (e.g., energy, base metals) may provide some protection due to low inventories and structural underinvestment, but they will nevertheless be exposed to slowing growth. In our base scenario, commodities may have a small amount of upside, driven primarily by green energy commodities. In our upside (soft-landing scenario), peaking interest rates, a downturn in the USD and an increase in Chinese demand are likely to provide upside to commodities.

The key risks to the performance of cyclical commodities would include 1) an early resolution of the war in Ukraine which would likely increase the supply of energy and other commodities being brought to market; and, 2) a policy shift resulting in an increase in oil and gas Capex. Many experts believe that if copper were to decline to $8,500/ton this would present a relatively attractive investment opportunity across a suite of probability-weighted scenarios. Clearly, any allocation should be considered in the context of other relative opportunities and the evolving macroeconomic outlook.

Exhibit 4
Commodities scenario analysis

Scenario analysis	"Policy-Error Recession"	"Growth Dips"	"Soft Landing"	Expected Value
Probability	20%	60%	20%	–
GSCI TR	2800	3500	4000	**3460**
GSCI Return %	-19%	2%	16%	**0%**
Copper Price (USD/ton) - Assuming $8,800	7300	9600	10000	**9220**
Copper Return %	-17%	9%	14%	**5%**
Oil (WTI) Price (USD/Barrel) - Assuming $75	55	70	95	**72**
Oil (WTI) Return %	-27%	-7%	27%	**-4%**

Source: *Partners Capital estimates*

Long-Term Expected Return

Exhibit 5
Based on our 10 year forecasts, we target the following long-term expected returns for Commodities

	Commodities
Risk-free Rate	3.5%
Risk Premium	0.5%
Illiquidity Premium	—
Manager Alpha	—
Total Return	**4.0%**

Commodities expected return marginally outpaces inflation over the long term.

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Your capital is at risk and you may not get back the full amount invested.

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