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September 27, 2021

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Why Commodities?

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Why Commodities?

A Constructive Case for Commodities

July 2021

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Two Main Factors Influencing Commodities:

Why Commodities?

1) Inflation
Why this time *could* be different

2) Supply AND Demand
Why we could see a long-term <u>STRONG</u> cycle

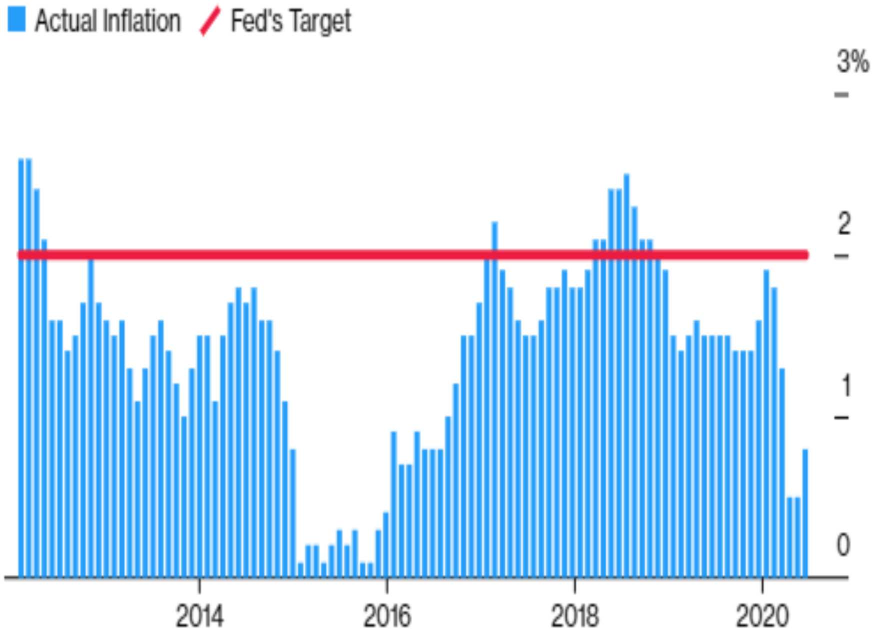
Inflation: What's Different This Time?

1) Change in Fed policy on inflation (cap vs average target)

Chair Powell's Change to US Inflation Policy in Aug 2020:

Instead of a specific inflation target of 2%, the Fed will allow **greater inflation** over the course of the economic cycle to get to an **average** of 2% (let inflation come, for a while)

Source: Bloomberg, L.P. as of April 2021
Fed = Federal Reserve



Source: Fed's preferred inflation gauge from Bureau of Economic Analysis

Inflation: What's Different This Time?

2) Extremely Loose Monetary and Fiscal Policies

The global monetary and fiscal policy response to the Covid-19 pandemic is unprecedented in scale

The International Monetary Fund (IMF) reported the Debt-to-GDP ratio[1] in advanced economies was 123% (comparable to post-WW II levels)

Governments might allow increasing inflation rates as deflation is dangerous when debt levels are high. One of the most efficient ways for a government to reduce its debt is to allow increasing inflation[2]

Figure 1.3. Public Debt and Bond Yields in Advanced Economies, 1880–2020

(Percent of GDP, left scale; percent, right scale)

Government debt has reached unprecedented levels, whereas interest rates are at historical lows.

Sources: IMF, Historical Public Debt Database; IMF, World Economic Outlook database; JST Macro-History database; Maddison Database Project; Thomson Reuters Datastream, Global Financial Data; and IMF staff calculations.
Note: The public-debt-to-GDP and long-term interest rate series for advanced economies are based on a constant sample of 20 countries, weighted by GDP in purchasing-power-parity terms. WWI = World War I; WWII = World War II.

[1] **Debt-to-GDP Ratio** is the ratio between a country's government debt and its total economic output, measured by the gross domestic product (GDP). This ratio is used to gauge the economic strength of a country and its ability to pay off debt

[2] Inflation lets debtors pay back lenders with money that is worth less than it was when they originally borrowed it, as cash now is worth more than cash in the future

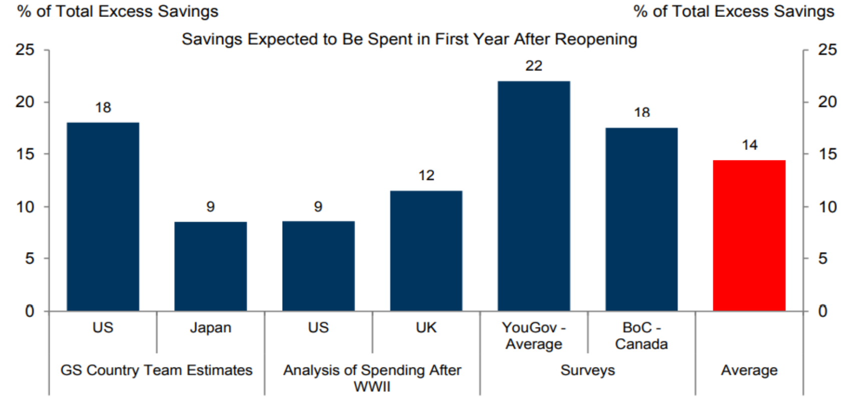
Source: IMF as of April 2021
Past performance is not a guarantee of future results.

Inflation: What's Different This Time?

3) Money To Spend: Pent-Up Demand / Expansionary Economic Policies

Households have accumulated $5trn in excess savings globally. Spending of this excess could in principle sustain rapid growth. GS estimates 18% of excess savings will be spent in the first year after re-opening in the US[1]

Exhibit 8: We Estimate That 14% Of Excess Savings Will Be Spent Within a Year

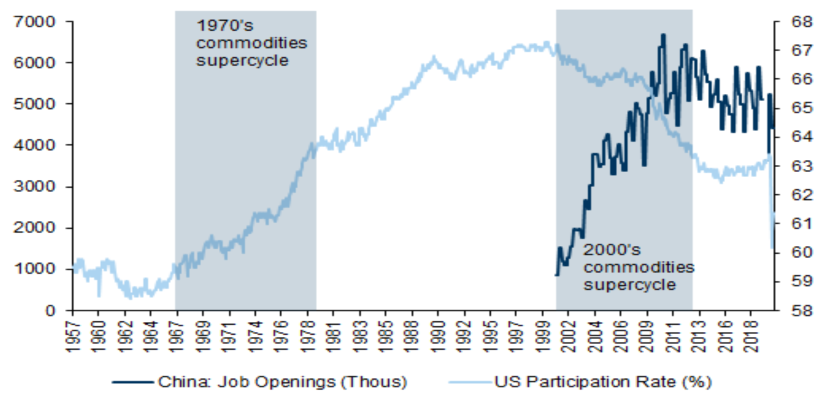


Source: Bureau of Economic Analysis, ONS, YouGov, Bank of Canada, Goldman Sachs Global Investment Research

Expansionary policies aiding moderate income families could cause a boost to commodity demand, like the US War on Poverty in the 1960s and China's expansion in the 2000s. Both events caused long-term commodity bull markets[2]

Exhibit 11 : Total labor supply rose sharply during past commodity bull markets

Thousands (lhs), % (rhs)



Source: Goldman Sachs Global Investment Research, Haver Analytics

Source:
[1]Goldman Sachs Global Macro Research, The Boost From Pent-Up Savings, July 15, 2021
[2]Goldman Sachs Global Macro Research, Top of Mind, Relation Risk, Issue 97, April 1, 2021

Inflation / Commodities Relationship – The Basics

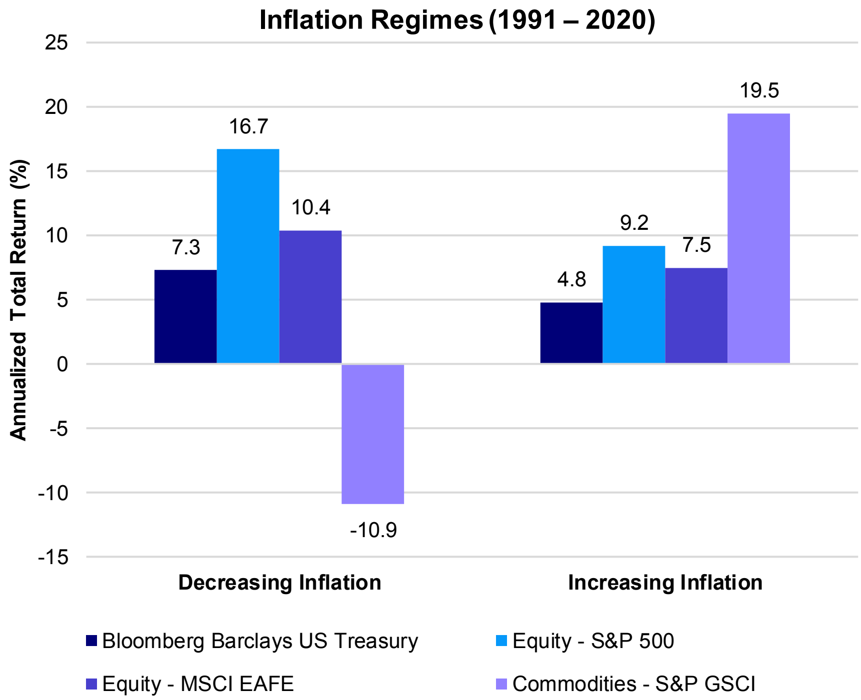
Inflation is the loss of purchasing power and is expressed as a change in the Consumer Price Index (CPI)[1]

The CPI tracks the average price level of a basket of goods. Commodities are an important driver of the costs of these goods (Housing, Transportation, Food & Beverage, etc.)

Investors are concerned with *unexpected* changes in inflation. Commodities can act as leading indicators of unexpected inflation from *economic* shocks (i.e., decreasing demand for energy due to the pandemic) and *systematic* shocks (i.e., weather events)

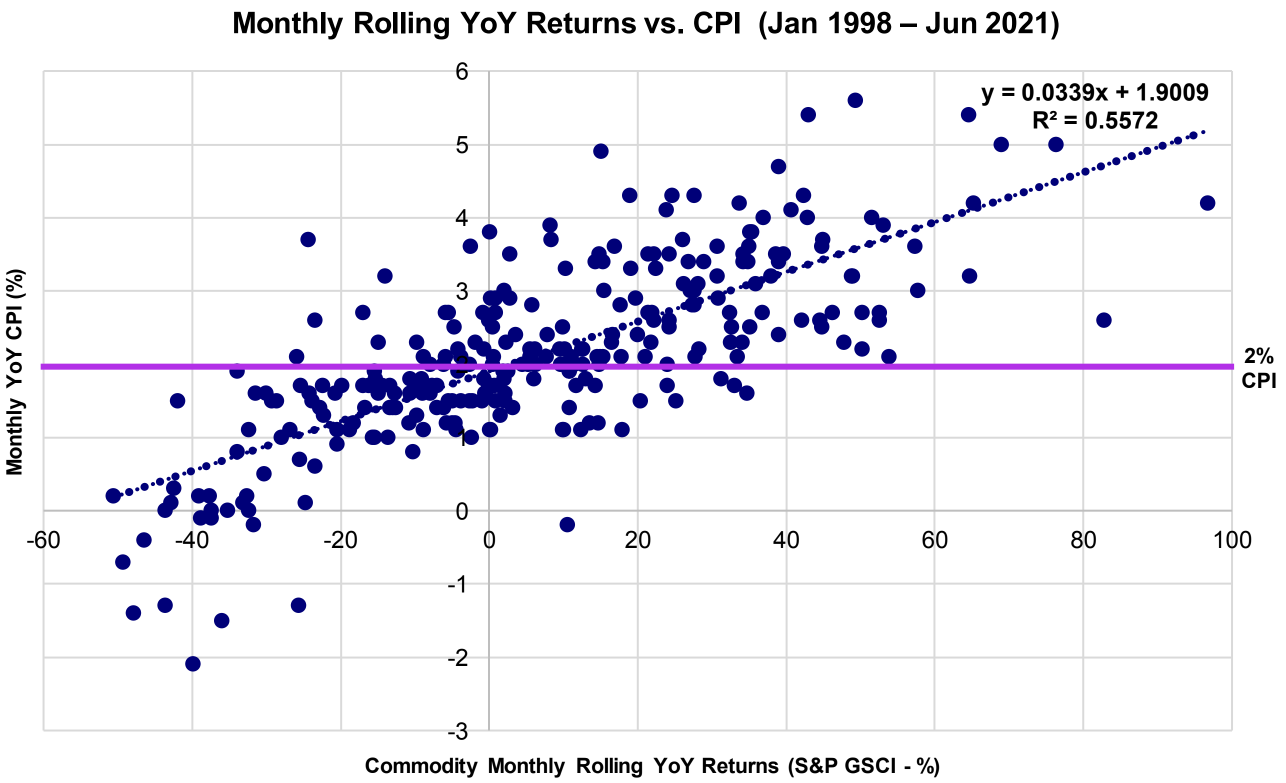
Equities and bonds tend to perform poorly when inflation is increasing, while investors may consider real assets such as commodities in this environment

[1]**Consumer Price Index (CPI)** is a measure of the average change over time in the price of a market basket of consumer goods & services (transportation, food, medical care etc.) to assess changes in cost of living and identify periods of inflation/deflation



Source: Bloomberg LP, US Bureau of Labor Statistics, as of December 2020
Past performance is not a guarantee of future results. An investment cannot be made into an index. See page 13 for index definitions.

Commodity Returns vs CPI - Regression Line



Percentage of Time CPI was	
Above or Equal 2%	**Below 2%**
55%	45%

When CPI was greater than 2%:

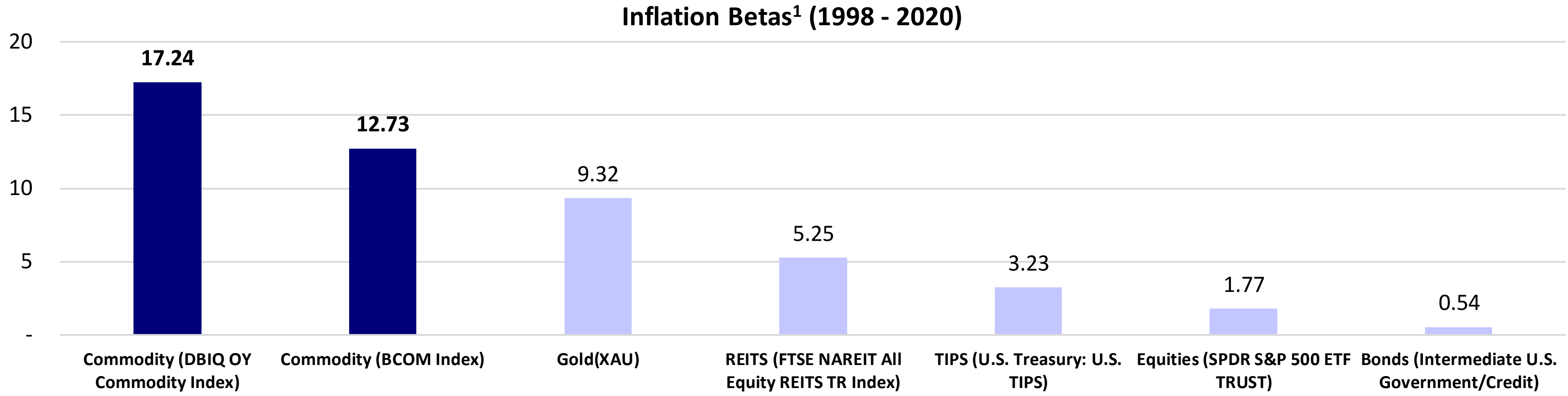
Positive Returns	86%
Negative Returns	14%

When CPI was less than 2%:

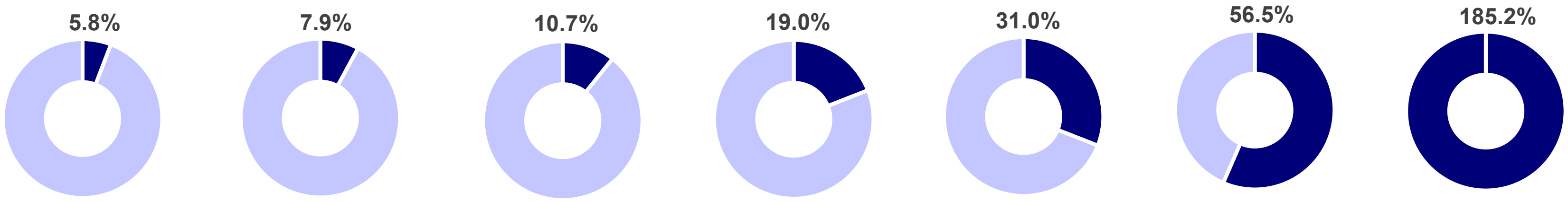
Positive Returns	26%
Negative Returns	74%

Source: Bloomberg L.P. as of June 2021
Past performance is not a guarantee of future results. An investment cannot be made into an index.

Inflation Sensitivity to Different Asset Classes



Implied Portfolio Allocation Based on Inflation Betas



[1]**Inflation Beta** is a metric used to evaluate an asset class' ability to hedge inflation. It measures the change in inflation against the return of the asset class over a specific time period (1998 – 2020 in the chart above)

Inflation Beta = slope of the regression line between the asset's yearly returns and YoY CPI on the last day of each year (Ex: For 2020, use YoY CPI on Dec 31, 2020)

Source: Bloomberg LP, US Bureau of Labor Statistics, as of December 2020

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Strong Commodity Fundamentals

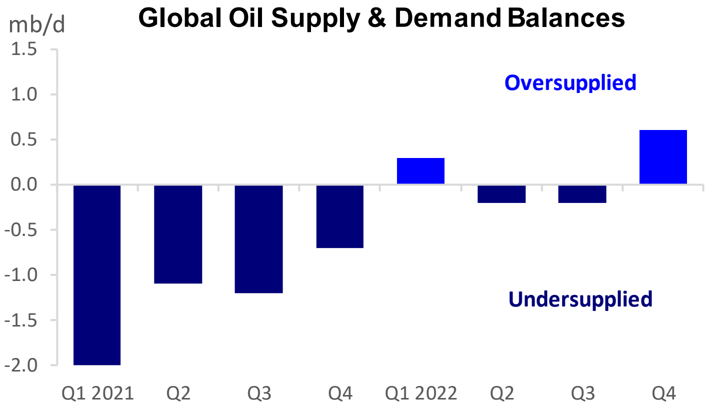
1) Oil: a "**strong** cycle" with rising demand AND tight supply

For the past 20 years the oil market was driven by either demand OR supply. Now, we are seeing the rare occurrence of strong demand **AND** tight supply, which **hasn't existed for over a decade[1].**

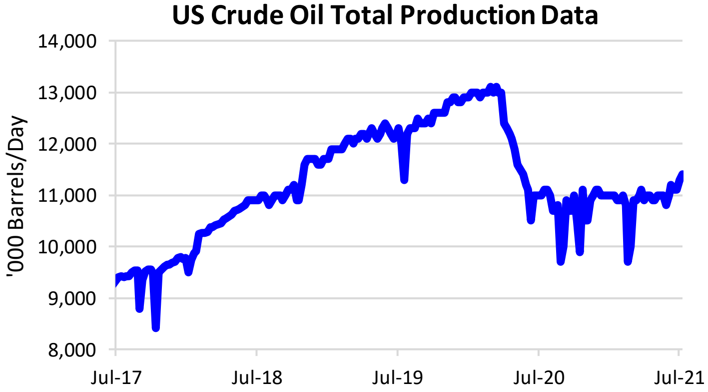
The Biden administration may have greater tolerance for elevated oil prices than the Trump administration, especially if this helps drive the widespread adoption of renewables. Higher gasoline prices could incentivize more drivers to switch to electrical vehicles.

The market will accept more OPEC barrels to prevent balances from overheating. OPEC is currently showing discipline in tapering its supply cuts.

Even with higher crude oil prices, US shale producers are keeping their pledges to hold the line on spending and keep output flat, a departure from previous boom cycles[2]



Source: RBC Capital Markets Estimates, Petro-Logistics SA, IEA, JODI, company and government sources, as of July 2021[1]



Source: U.S. Energy Information Administration (EIA), as of July 2021[1]

Source:
[1] RBC Capital Markets, LLC; Bloomberg, US Department of Energy
[2] Reuters, June 28, 2021, "U.S. shale industry tempers output even as oil price jumps"

Strong Commodity Fundamentals

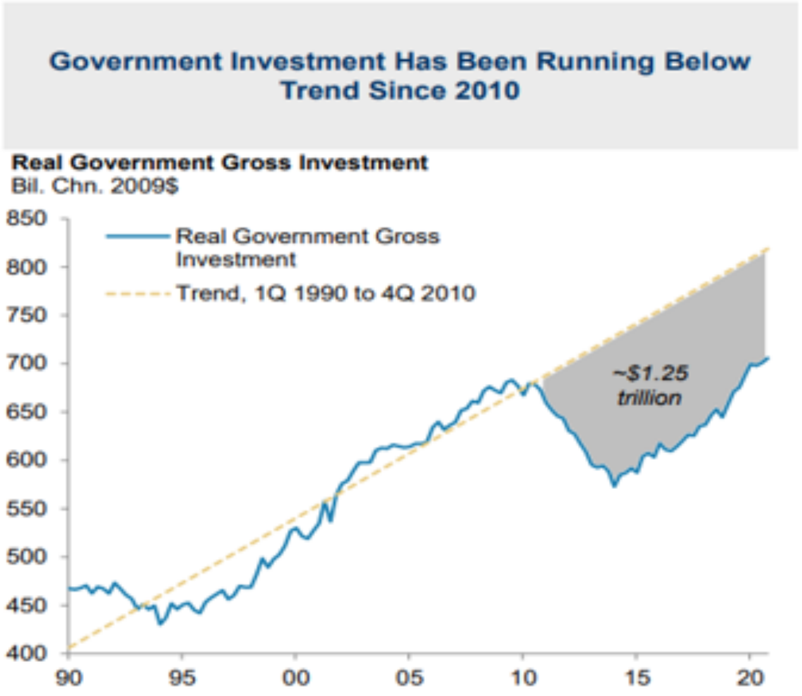
2) Industrial Metals: Infrastructure & Electric Vehicle Buildout

Infrastructure has seen an extreme shortfall in spending for the past 10+ years

Despite the fiscal cost of the pandemic, global governments are focused on **infrastructure buildouts** in two areas: *climate change* and *digital investment*

The new Bipartisan Infrastructure Deal could put $1.2trn into infrastructure spending over an eight-year period. This should be **supportive of industrial metals demand** – construction, transport infrastructure, power infrastructure and electric vehicles

The Shortfall in Infrastructure Spending



Source: Bureau of Economic Analysis; Morgan Stanley Research as of April 12, 2021

Strong Commodity Fundamentals

2) Industrial Metals: Electric Vehicle Demand

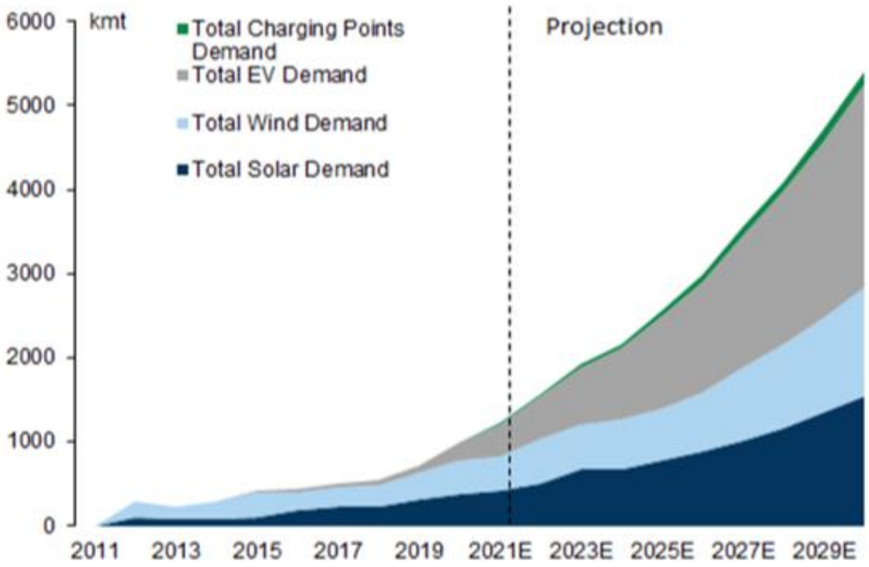
Acceleration in green electrification trends is set to drive the strongest decade in copper demand growth post-2000

Copper's physical properties of conductivity, durability and ductility make it key for electrification and the world's path to net zero emissions

Electric vehicles use about four times as much copper as traditional internal combustion vehicles, and renewable energy in general uses four to five times as much copper as traditional fossil fuel power generation

Copper supplies are already tight, and mines take time to come online. In addition, environmental compliance costs are higher today than in the past

Copper Demand, per year, from green sectors



Source: Goldman Sachs Research – Marquee as of April 13, 2021

Thesis Risk Cases

Production & Prices

Commodity prices rally too far too fast and incentivize new production

Capacity

OPEC spare capacity in oil, means there won't be any shortages this year

Consumption & Behavior

Changing social/professional dynamics change commodity consumption behavior

Infrastructure

Funding not approved or reduced substantially so little is invested in infrastructure

Inflation

Inflation becomes transitory

COVID-19

New strains/variants are immune to vaccines

About risk and other important information

<u>**Index Definitions**</u>

Bloomberg Barclays US Treasury – measures US Dollar-denominated, fixed-rate, nominal debt issued by the US Treasury.

MSCI EAFE – measures the equity market performance of developed markets outside of US and Canada, specifically Europe, Australia, Israel and the Far East.

S&P GSCI – diversified benchmark commodities index tracking the performance of the global commodities market.

DBIQ OY Commodity Index – The DBIQ Optimum Yield Diversified Commodity Index is a rule-based index composed of futures contracts of the 14 most heavily-traded and important global commodities

BCOM Index – The Bloomberg Commodity Index (BCOM) tracks the performance of a diversified basket of global commodities

TIPS – Treasury Inflation-Protected Securities are Treasury bonds indexed to inflation to protect investors against a decline in purchasing power

REITs – Real Estate Investment Trusts are companies that own and/or operate income-producing real estate

SPDR S&P 500 ETF Trust – Exchange-traded fund tracking the S&P 500 Index

XAU – Gold spot price quoted in US Dollars

Forward-looking statements are not guarantees of future results. They involve risks, uncertainties and assumptions, there can be no assurance that actual results will not differ materially from expectations.

Commodities may subject an investor to greater volatility than traditional securities such as stocks and bonds and can fluctuate significantly based on weather, political, tax, and other regulatory and market developments.

In general, stock values fluctuate, sometimes widely, in response to activities specific to the company as well as general market, economic and political conditions.

Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and visa versa. An issuer may be unable to meet interest and/or principal payments, thereby causing its instruments to decrease in value and lowering the issuer's credit rating.

This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions.

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WCNCCC-PPT-1