NXG INVESTMENT MANAGEMENT
The Next Generation of Investment Management

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Is Energy's Outperformance Sustainable? Part 2

February 2023

Investors have been questioning whether the two-year trend of outperformance in the energy sector is nearing its end. Despite the highest average commodity price environment in a decade, capital investment remains at decade lows as the typical response to the supply 'price signal' breaks down.

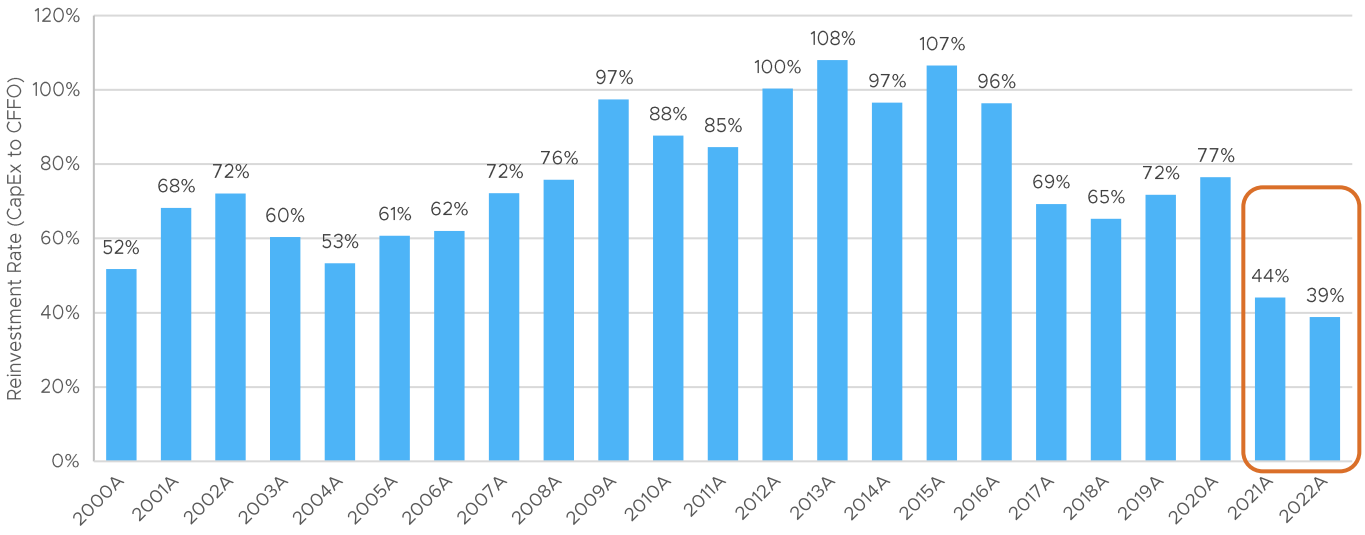
A variety of factors are inhibiting the sector's ability and/or willingness to respond to commodity price strength with higher levels of capital investment – a decade of low returns, lack of capital availability, low company valuations and correspondingly restructured management incentives.

NXG Investment Management is dedicated to providing Next Generation investment strategies to investors seeking long-term growth in companies focused on a clean and sustainable future, as well as traditional and transformational infrastructure companies.

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In a continuation of our three-part series, we will explain why **we believe this underinvestment could lead to a more structural shortage of commodity supply growth, potentially providing for a prolonged period of commodity price strength.**

Capital Expenditures as a Percent of Cash Flow from Operations



Source: Bloomberg. Represents total capital expenditures of the Bloomberg energy universe of global integrated oils and independent E&Ps.

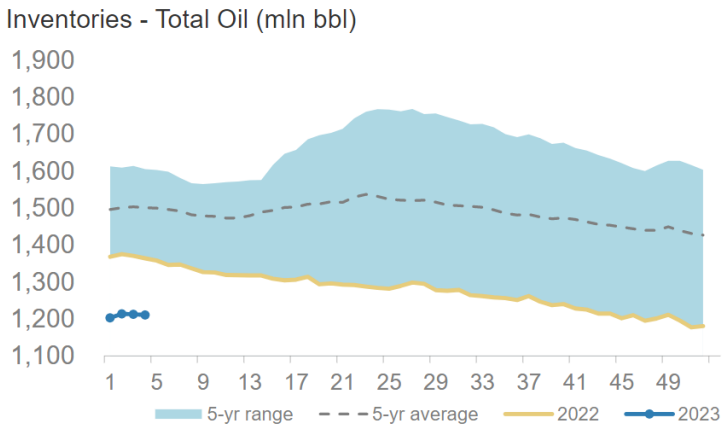
Part 2: Supply Pressures Increasing

For the reasons detailed in "Part 1: Reduced Incentives to Invest" and despite the rise in oil prices, there has been little response in capital investment necessary to increase production. Absolute upstream oil and gas investment remains at the lowest levels in a decade; factoring in inflation, real investment is even lower. **Capital expenditures as a percent of cash flow from operations have fallen to 30-year lows (see chart above).**

Excluding OPEC (most notably Saudi Arabia and United Arab Emirates), we believe the only two real sources of crude oil production growth are US shale and Russia. For obvious reasons, we do not expect Russian supply to be a certainty moving forward. We do expect US shale production to increase, albeit at a lower growth rate than experienced over the prior decade. The US upstream sector continues to be capital constrained and is also beginning to show signs of reduced productivity (e.g. the exhaustion of tier 1 resources, etc.).

We predict that the world may be heading into a more structural supply shortage as demand continues to grow in addition to Russian production at risk, the US no longer a reliable source of production growth, and an increased call on OPEC production capacity.

Global Observable Inventories



Source: Morgan Stanley. Weekly Oil Stock Summary. February 2, 2023.

We expect that a combination of sales from the strategic petroleum reserves (SPR) and the Zero Covid policy in China, the world's largest commodity consumer, have disguised underlying supply / demand imbalances.

This could change soon. China appears to be committed to reopening, potentially adding over 1 million barrels per day in incremental demand for 2023. With inventory levels at 40-year lows, we also expect releases from the US SPR to conclude as well, ending an estimated 1 million barrels per day of supply to the market. Additionally, at least some of the US SPR barrels will need to be replaced.

We also expect energy demand to continue to grow globally as less developed countries continue to increase per capita energy consumption. **While we expect a large portion of this demand to be fulfilled by renewable growth, we also recognize that additional hydrocarbons will be required.** Often those less developed countries are the ones with the higher populations striving for a better standard of living that hydrocarbons afford.

With continued demand growth, low inventories and limited spare production capacity, we expect a multi-year elevated commodity price cycle could occur as the underinvestment becomes more pronounced.

In part 3, we will discuss how returns are poised to increase, potentially starting a beneficial cycle of more investment allocation, higher index weightings and an increase in valuation multiples.

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