Midstream: after several years of debt reduction, midstream stocks have spent the last 12 months massively outperforming the oil price. This is noteworthy because during the 2014-2020 downturn, midstream stocks fell out of favor with investors as they began to exhibit a high correlation to oil. In our 2017-19 white papers exploring the role of debt in the downturn, we argued that midstream's increased oil correlation was caused by declining credit quality reflective of overextended debt leverage. As recently as Feb 2023, we found that debt reduction continues to drive single-stock outperformance. We continue to believe that debt reduction, free cash flow (FCF), and self-financing business models will support midstream's resilience in the face of volatile commodity prices and macro shocks.

Natural Resources: Investors have come to appreciate in the last 12 months that Tech and Global Natural Resources have frequently experienced inverse daily returns, (one sector up, the other down). This month, we note that this inverse relationship is not new. In fact, our 12-year study shows that it is a regular occurrence over the period. What is different, however, is the fact that global natural resources stocks have more regularly risen while tech stocks fell, for only the second time in 12 years. As investors approach equity markets with caution, it is worth noting that Global Natural Resources has provided a truly unique hedge to many investors' overweight technology portfolios.

Click here for the latest white paper on the long-term relationship between inflation and capex
Click here for our 2022 white paper on Shale's increased strategic importance in a time of ESG (noteworthy in light of a potential XOM-PXD deal)

## MLP & Infrastructure

### Performance review

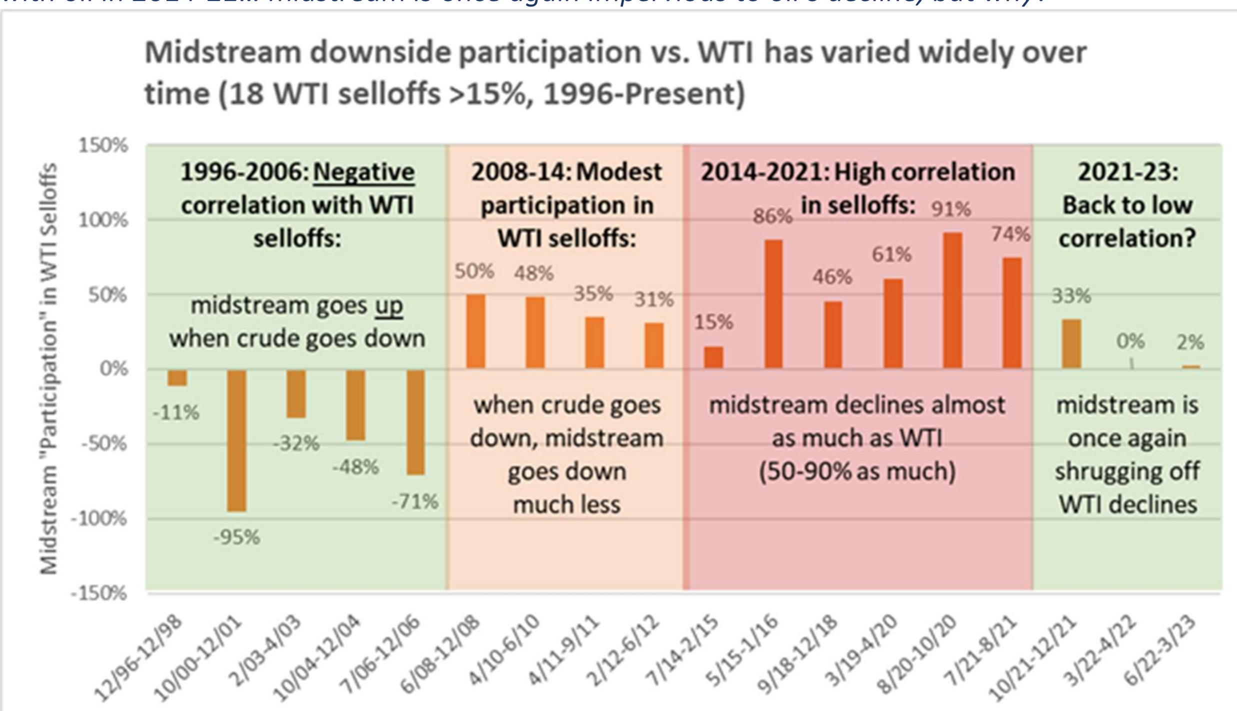
During the month of March 2023, the Recurrent MLP & Infrastructure Strategy generated net returns of -0.54%, outpacing the Alerian MLP Index's (AMZ) -1.18% return by +0.64%. Since the strategy's July 2017 inception, Recurrent's MLP & Infrastructure Strategy has outperformed the AMZ by +3.74% (annualized, net of fees). Please see the performance section at bottom for more detail.

## Remember when Midstream was described as a sector with "low correlation to oil price" – until it exhibited a higher correlation to WTI oil prices from 2015-2020?

We've written extensively on the multi-year outflows out of midstream and MLP funds and ETFs. One of the major causes of this investor exodus, in our view, was the commonly held belief that midstream investments were "uncorrelated to oil price." As we see below in Exhibit 1, it is true that prior to 2012, midstream performance was largely uncorrelated to oil price. In fact, prior to 2006, during 5 separate oil price declines of 15% or greater, midstream performance was positive every time. From 2008-2014, midstream declined with oil, but typically declined at less than half the rate of WTI. During 2015-2020, as debt levels peaked, midstream began to capture larger percentages of crude oil price downside, a trend which contributed to the large-scale exit from the midstream sector.

The good news is that today, midstream performance has been extremely resilient in the face of declining crude prices since Q2 2022. But why is midstream once again so resilient? And can we expect this defensive performance to continue?

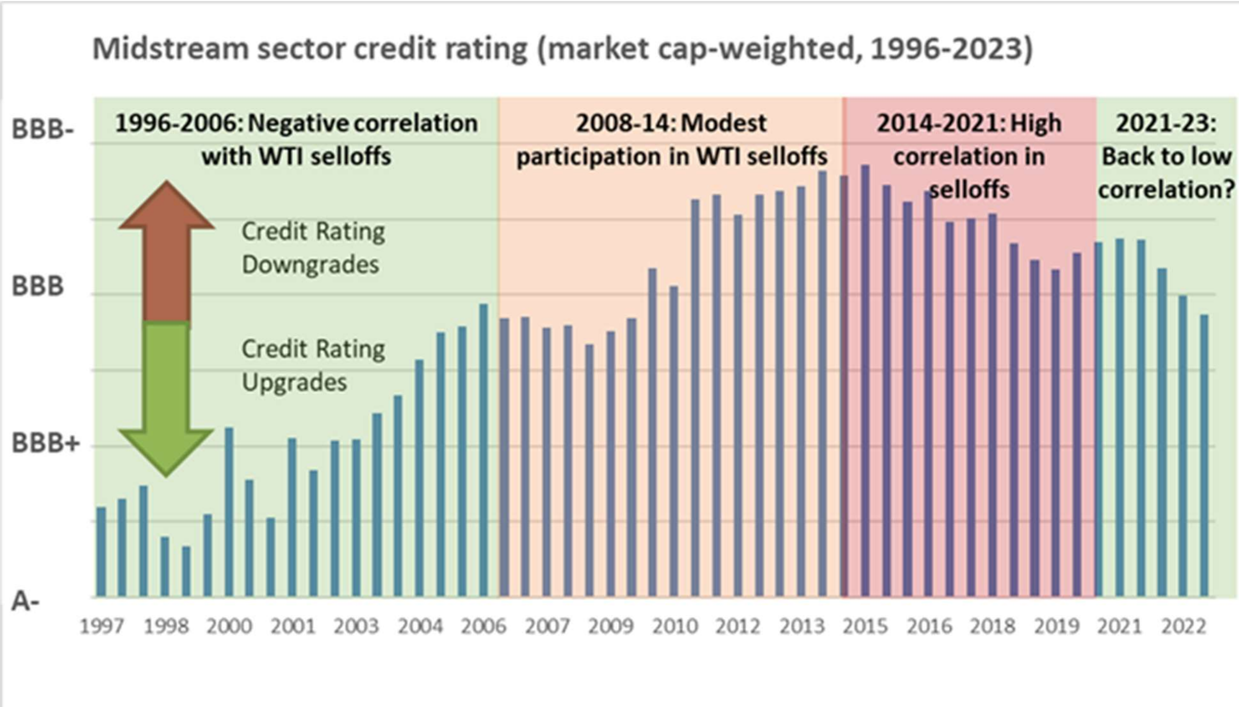
*Exhibit 1: midstream was resilient during oil price declines in the 1990s and 2000s, but fell hard with oil in 2014-21… midstream is once again impervious to oil's decline, but why?*




*Source: Bloomberg, Recurrent research*
*Note: "WTI selloffs" include all episodes where WTI declined by more than 15%. The percentage bars represent how much the Alerian MLP Index (AMZ) declined with WTI (e.g. WTI falls by 50%, AMZ declines 5% = 10% downside participation)*

In exhibit 2, we see that the average midstream company credit rating has returned, after a flirtation with "junk status" in 2014-2017, to slightly better than BBB, with expectations of further improvement going forward.

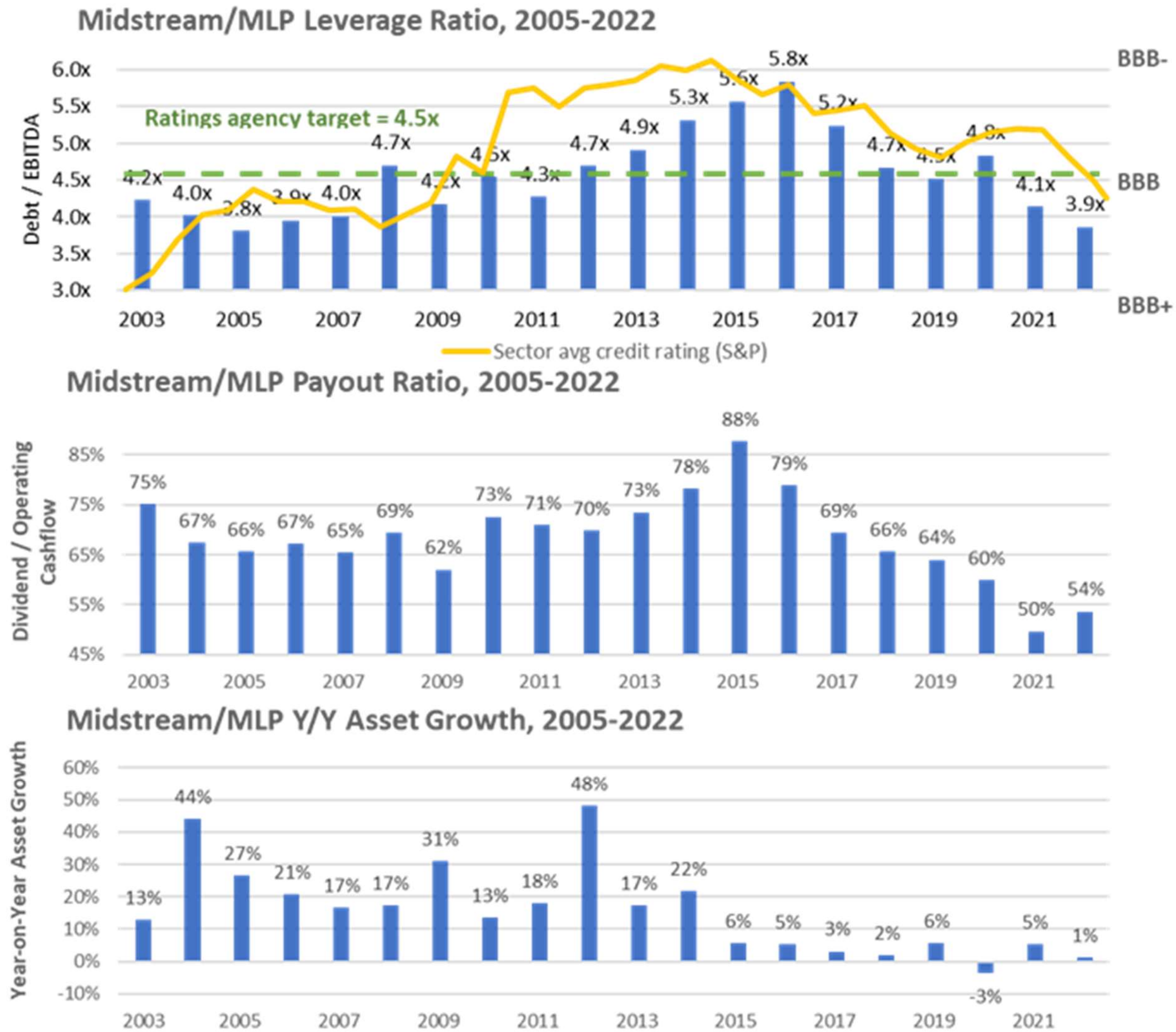
*Exhibit 2: We see a strong long-term relationship between midstream's "downside participation" in crude oil selloffs, and the creditworthiness of the sector*




*Source: Bloomberg, Recurrent research*
*Note: Average midstream credit ratings reflect all publicly-traded North American midstream companies, weighted by historical market cap.*

With creditworthiness broadly returning to the levels of 2004-2010, perhaps it's less surprising to see that today's low correlation to crude oil price declines reflects similar behavior to the 2004-2010 period. It certainly stands to reason that with all key credit indicators – Debt/EBITDA, dividend payouts, and externally financed asset growth – all dramatically improved in the last several years, midstream companies face substantially less risk than they did in 2015, when debt loads were high and dividend payouts were strained, and external financing needs remained unmet.

*Exhibit 3: Credit rating has a strong relationship to the 3 key indicators we've historically used to evaluate midstream creditworthiness – indicators that continue to improve*




*Source: Bloomberg, Recurrent research*
*Note: Includes present and past constituents of Alerian MLP Index (AMZ) and Alerian Midstream Energy Index (AMEI)*

It stands to reason, that when midstream companies' debt obligations are not burdensome, and dividends are well-covered by cash flow, that midstream companies' cash flows and equity valuations are largely unaffected by short-term moves in the oil price. The nearly 50% decline in oil price from the post-Russian invasion high to the collapse of Silicon Valley Bank in mid-March saw the midstream sector slightly <u>up</u> over the same timeframe. This kind of resilient performance has not been seen since at least late 2014, but absolute positive returns for midstream during an oil price rout are something we haven't seen since closer to 2006. The good news for midstream investors is twofold – the fundamentals of a more creditworthy sector are much less dependent on the spot commodity price; but the resilient trading action also is more likely to entice incremental capital back to the sector as investors look for a less volatile sector during a time of macro upheaval.

# Natural Resources

## Performance Review

In the month of March 2023, the Recurrent Global Natural Resources fell -2.04% net of fees, more than the S&P Global Natural Resources Index's -1.16% return. During the month, portfolio holdings Alcoa and Halliburton each fell by nearly 13%, detracting from performance. The portfolio's refining stocks rose nearly 5%, adding to performance. Since its June 2018 inception, the Recurrent Global Natural Resources strategy has outperformed the benchmark by 2.95% per year on an annualized basis, net of fees.

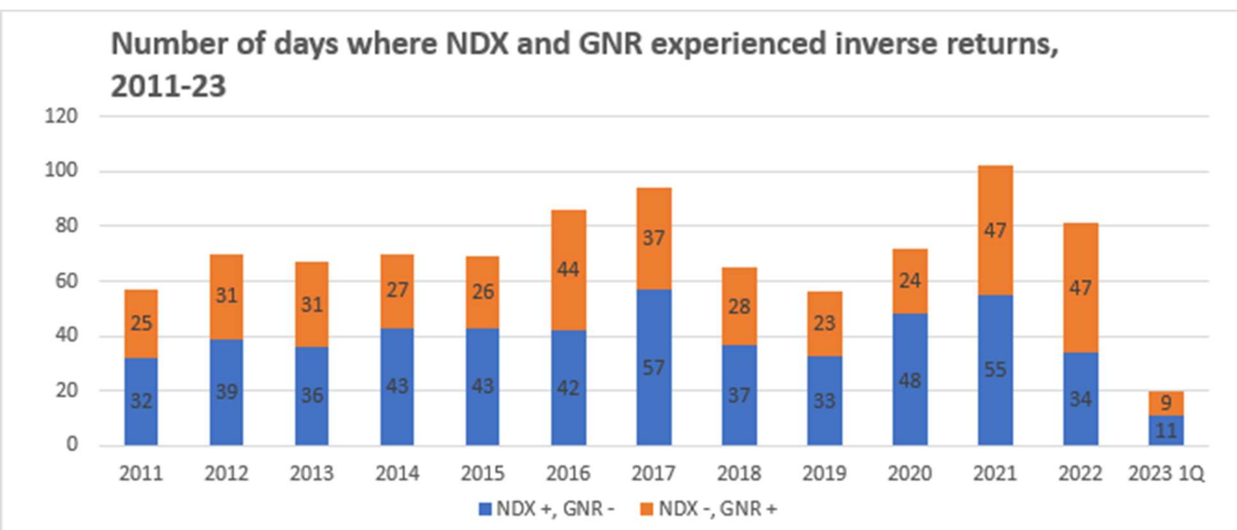
## Investment Discussion

From the depths of COVID, the tech and global natural resources sectors performed similarly, rising approximately 100% through the end of 2021. However, since the beginning of 2022, the Federal Reserve started increasing interest rates in March 2022, and the performance of the tech sector and global natural resources sector have diverged greatly. Through the end of 1Q 2023, the global natural resources sector has risen slightly, while the tech-heavy Nasdaq index has fallen about 10%.

Commentary regarding the divergent performance has been increasingly prevalent, with many investors noting an inverse relationship between the two sectors. While the current environment feels "unique", we wanted to understand historical precedents to better prepare for potential future outcomes. To further investigate, we analyzed daily return histories of the two sectors since 4Q 2010, and focused on the correlation between the return profiles and the days where the NDX and GNR experienced opposing positive and negative returns.

## Learning #1

The Nasdaq 100 (NDX) and Global Natural Resources Index (GNR) have a long history of inverse daily returns, where one index is positive while the other is negative. In the first quarter of 2023, there were 20 such instances, for an annualized total of 80. In the 12 calendar year periods from 2011- 2022, the average number of instances was 74, with 4 years above 80.

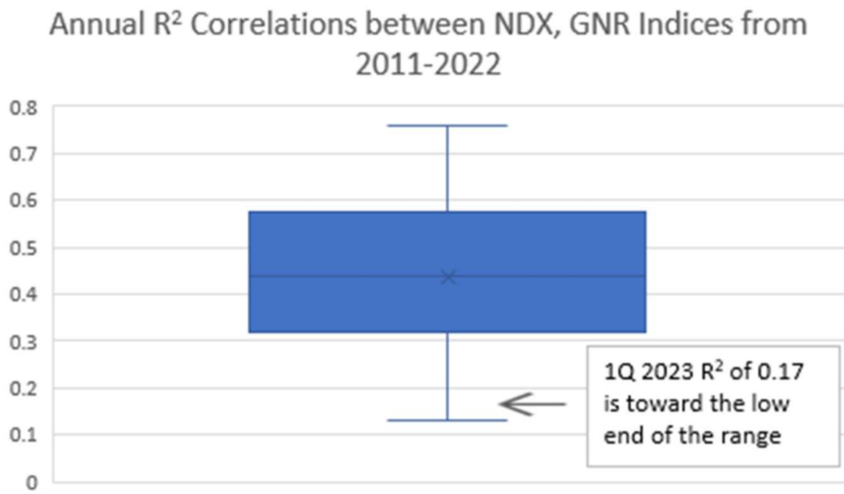



*Source: Bloomberg, Recurrent research*

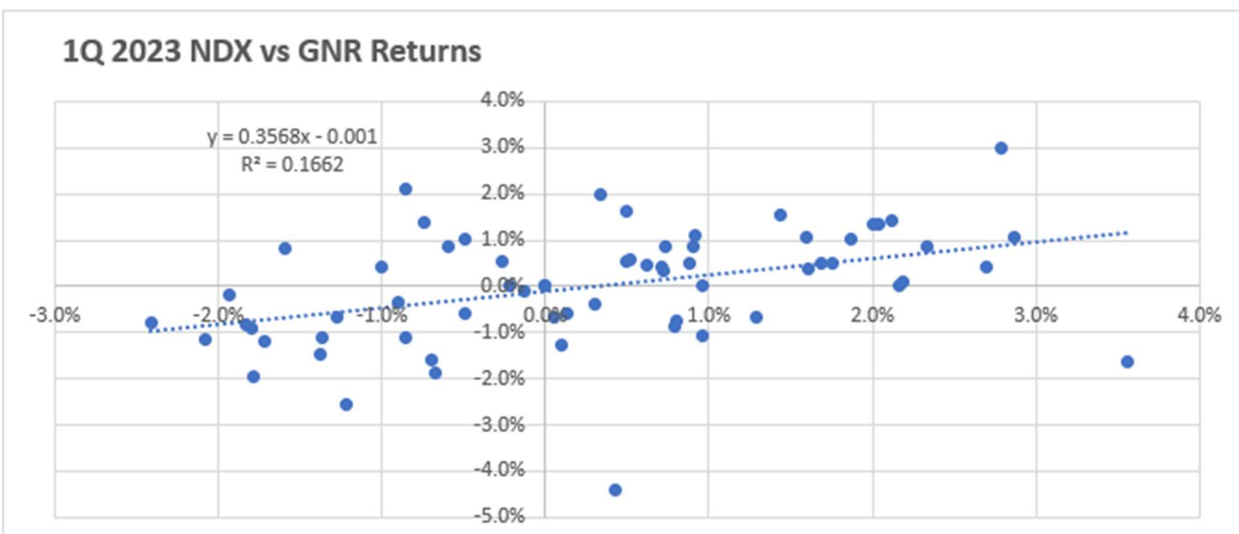
Despite increased commentary from the financial press, the 2023 experience is generally in line with historical precedents. In fact, of the most recent 7 calendar years, 4 have experienced higher frequency of inverse daily returns than the 2023 YTD experience.

## Learning #2

The correlations between the indices' daily returns have varied between 0.13 – 0.76 over annual periods from 2011- 2022. In 1Q 2023, the $R^2$ of returns was 0.17, toward the low end of the range, but similar to the results in 2017 and 2021.




*Source: Bloomberg, Recurrent research*




*Source: Bloomberg, Recurrent research*

In summary, many investors perceive the relationship between the 2023 NDX and GNR return profiles to be uniquely inversely correlated and occurring at a higher frequency. Historical experience shows that YTD 2023 returns are not irregular in their correlation or frequency. Instead, the perceived uniqueness emanates from the fact that during the period from 2011-2022, 2022 was only the ***second year*** that the combination of GNR positive/NDX negative exceeded the instances of NDX positive/GNR negative.

Recurrent Investment Advisors LLC
3801 Kirby Dr, Ste 654
Houston, Texas 77098
d: 832.241.6400