Energy Infrastructure: pipeline capex has risen in response to the LNG and AI "megatrends" we wrote about last month. This month, we investigate whether increased spending will put midstream balance sheets at risk. We wrote extensively from 2017 to 2021 about how the midstream recovery would be driven by debt reduction and balance sheet improvement. This view has been borne out – lower leverage has contributed to lower trading volatility, lower correlations to oil price, and strong total returns. Could increased capex put balance sheets at risk? The short answer is no. Midstream EBITDA is expected to grow 6% in 2025. This growth is funded overwhelmingly with free cash flow (FCF). The result is EBITDA growth and flat debt loads – implying decreases in leverage ratios. Below, we review how the midstream deleveraging trend is poised to continue.

Click here for our new midstream white paper, which explores midstream's excess (and growing) yield vs. fixed income

Natural Resources: Although Shale emerged as a unique source of oil and gas supply only 20 years ago, it is hard to remember a time when Shale was not part of the energy landscape. While the impact of shale on energy markets has been profound – to include the shape of energy cycles, as we outlined in our first white paper at Recurrent – the impact on the global industrial complex has been equally profound. Even in 2025, Shale continues to actively shape the global economy and drive differentiated economic performance in North America and Europe's industrial sectors.

Click here for our 2022 white paper on Shale's increased strategic importance in a time of ESG

January 2025 Performance Summary and Market Commentaries

Please find below performance and commentary for our strategies – MLP & Infrastructure and Natural Resources. See performance tables at the bottom of the commentary. For additional information, please contact us at (832) 241-6400 or info@recurrentadvisors.com.

MLP & Infrastructure

Performance review

During the month of January 2025, the Recurrent MLP & Infrastructure Strategy generated net returns of +3.44%, lagging the Alerian MLP Index's (AMZ) +8.79% return by -5.35%. Since the strategy's July 2017 inception, Recurrent's MLP & Infrastructure Strategy has outperformed the AMZ by +30.84% (+2.13% annualized), net of fees. On a gross basis, the Strategy has outperformed by +54.35% and +3.59% respectively. See performance section at bottom for more detail, plus performance detail on the Recurrent Energy Infrastructure Strategy, which seeks to track the MLP & Infrastructure Strategy while excluding MLPs.

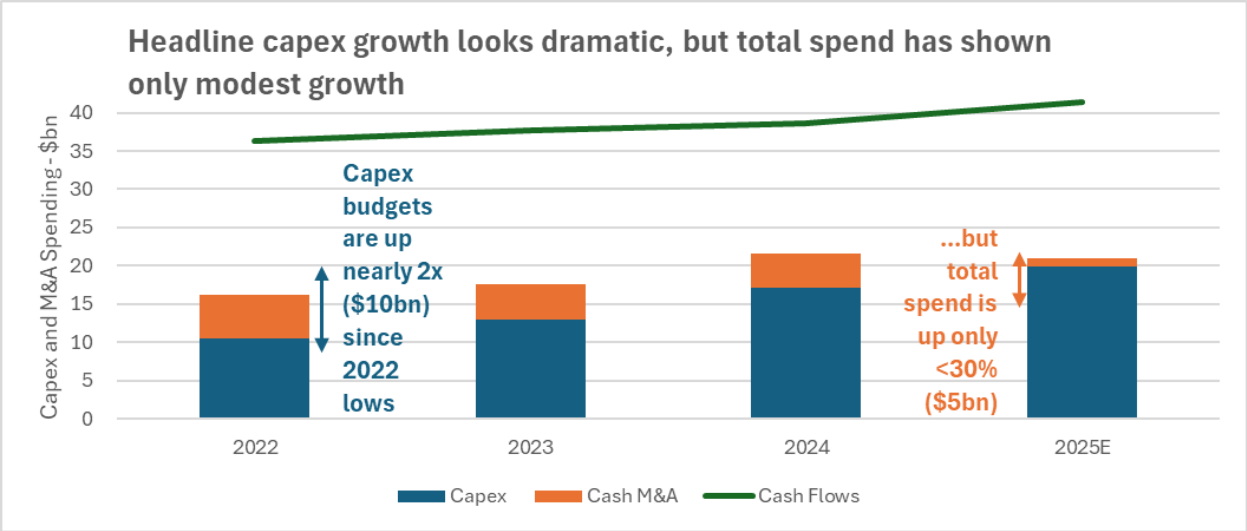
Midstream capex budgets are rising – will this end the "debt reduction" phase of the midstream recovery?

Energy Transfer and Enterprise Products recently made headlines with 2025 forecasted capex budgets that are roughly double 2022 levels. Midstream capex has grown meaningfully in the

past 2-3 years, but capex as a percentage of cash flow remains well below pre-COVID levels. Still, investors are wondering: will capex spending kill the midstream "golden goose"? After all, the low-capex, debt reduction strategy pursued by midstream companies in the 2018-2024 period undeniably worked: midstream total returns have been stellar, volatility has steadily declined, and trading correlations to crude oil have fallen.

First, let's provide some context: capex headlines belie a more nuanced total spending picture. During the post-COVID 2021-24 period, in the absence of organic growth opportunities, US midstream companies invested significant cash into M&A, buying existing assets instead of building new capacity. 2025 budgets may be 2x 2022 levels, but the increase is only +29% when including M&A in total capital spend.

Importantly, as shown below, capex+M&A remains well below cash flow from operations, leaving significantly flexibility for dividend increases or opportunistic future M&A or buybacks.



Source: Recurrent research, SEC filings, Bloomberg.
Notes: includes KMI, WMB, ET, EPD, MPLX – large-cap US midstream companies with published 2025E guidance as of writing.

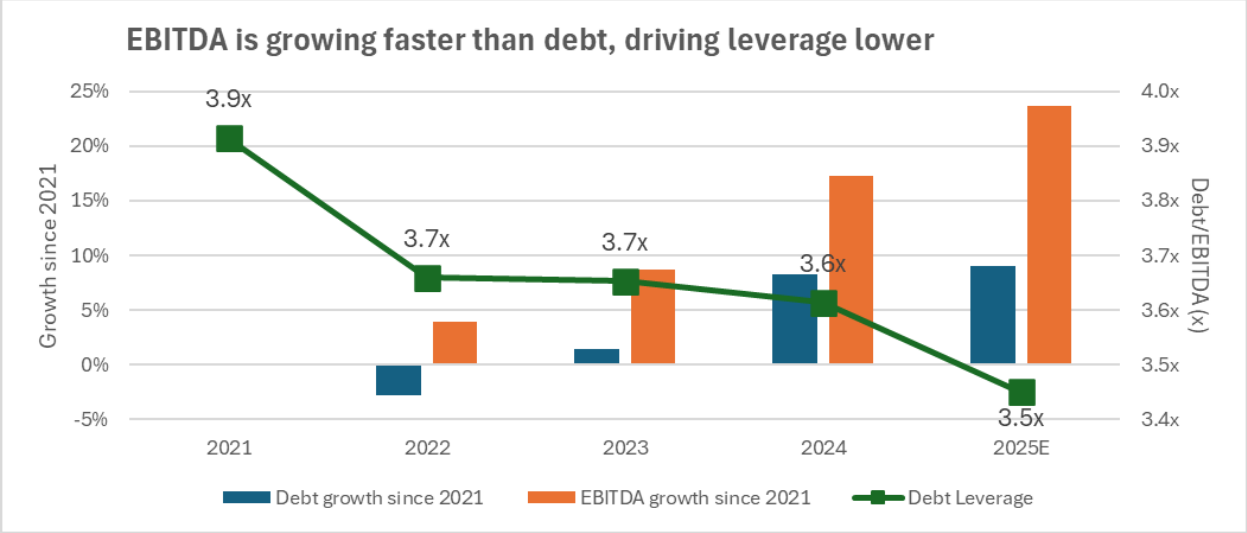
Contrary to energy transition fears, cash flows have grown - and continue to grow - faster than debt

During COVID and the immediate post-COVID period, midstream investors were fixated on the "ESG" risks posed by renewable power and electric vehicles. Growth capital was viewed negatively, based on concerns that assets built today might become prematurely obsolete – "stranded assets." Midstream valuations were low - in many cases below book asset value, and dramatically lower than replacement value. With such low valuations, the clearest route to value creation was generating free cash flow (FCF) and reducing debt to unlock equity value. This strategy paid enormous dividends (figuratively and literally) for midstream investors. Today, valuations are normalizing (but below historical averages), and returns on capital are near all-time highs (as we wrote here).

Today, the benefits of absolute debt reduction are marginal, as the midstream sector is already the most creditworthy it has been in 30 years and midstream borrowing costs are low. Most

management teams have opted for gradual dividend growth, instead of moving to a full payout model, as the dividend cuts of 2015-2020 are still relatively fresh in investors' memories.

With debt reduction largely over, and demands for AI- and LNG-oriented infrastructure increasing, we return to our original question: can midstream capex increase meaningfully without putting midstream balance sheets at risk? The answer, for now, is yes.

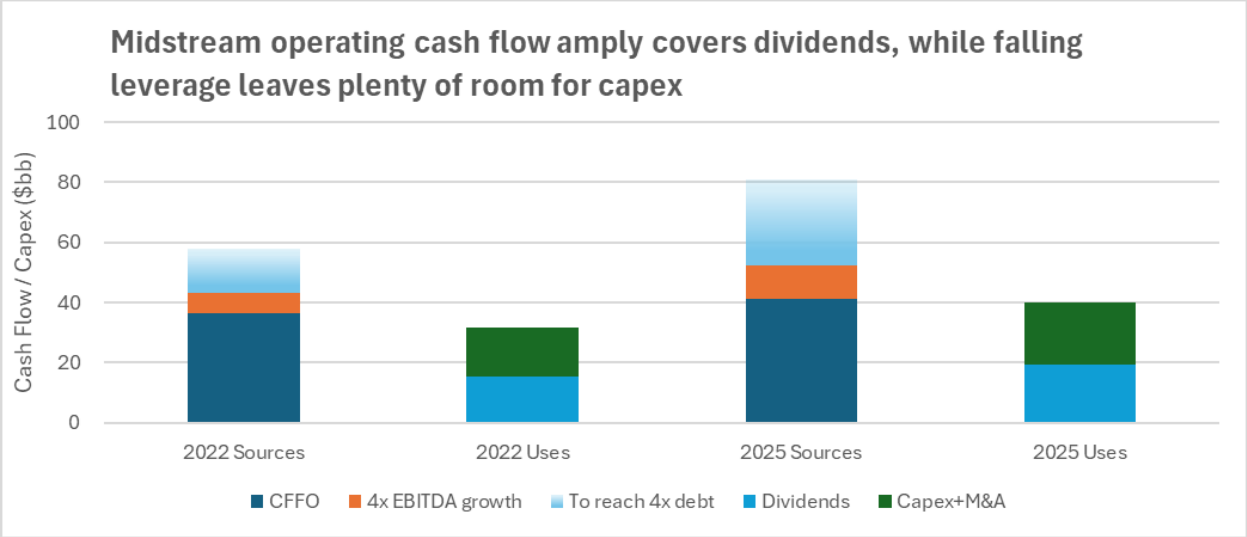


Source: Recurrent research, SEC filings, Bloomberg.
Notes: includes KMI, WMB, ET, EPD, MPLX, PAA – large-cap US midstream companies with published 2025E guidance as of writing.

When should we begin to worry about midstream capex levels?

It is important to note, as we have written here, that the current valuation of the midstream sector remains relatively low compared to other "real asset" sectors, and very low when compared to the replacement value of midstream assets. With little external enthusiasm for midstream growth, capex must be funded by internally-generated cash flows. Midstream managements are not relying on public equity capital markets, or public debt capital markets for funding massive multi-year capex projects.

Below, we examine the cash flow sources for select large-cap US midstream companies (those who have provided 2025 guidance as of Feb 19, 2025) vs. expected outlays on dividends and capex.

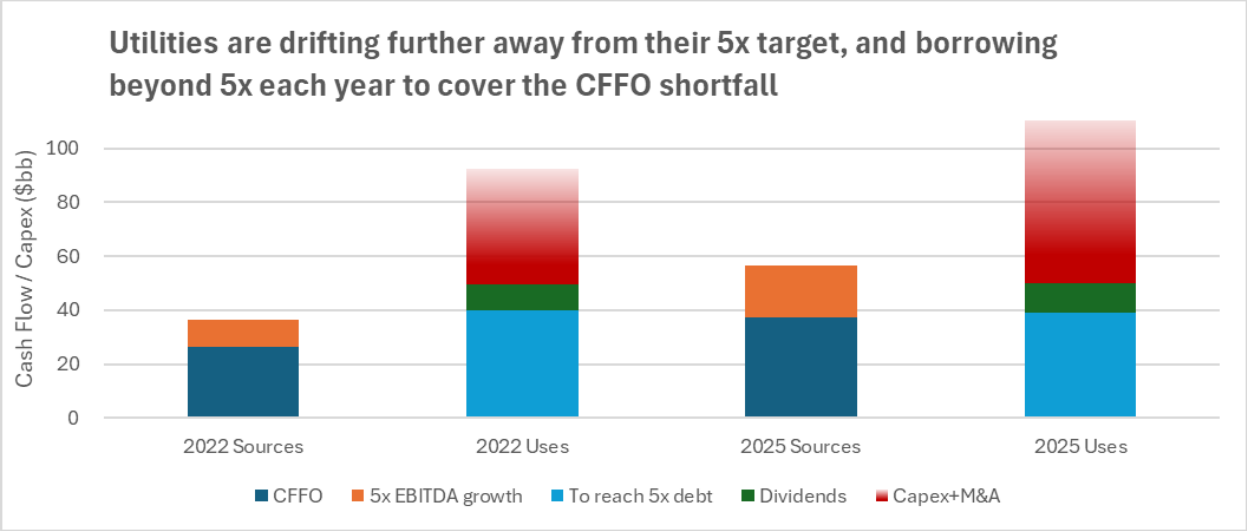


Source: Recurrent research, SEC filings, Bloomberg.
Notes: includes KMI, WMB, ET, EPD, MPLX, PAA – large-cap US midstream companies with published 2025E guidance as of writing.

Midstream financial capacity has grown faster than dividends+capex since 2022; guidance forecasts suggest this trend will continue in 2025. We define "financial capacity" as cash flows from operations (CFFO) plus the financial capacity resulting from applying a 4x leverage ratio on EBITDA growth. We then illustrate how much could hypothetically be borrowed financed before reaching 4x debt/EBITDA across the entire group. The massive financial capacity shown above suggests that solid dividend growth (and additional M&A) are likely outcomes in 2025.

Utilities' valuations would suggest that we are far away from market concerns on midstream overspend

Midstream capex could rise another 50% while effectively self-funding, maintaining dividend growth, and maintaining a sub-4x leverage ratio. In fact, investors tolerate much higher capex in other "real asset" sectors, as long as growth is evident. Take several large-cap US utilities for example. Like the midstream cohort above, the below Utilities have already provided 2025 guidance, and are also generating ~$40bn in CFFO. These utilities' EBITDA growth is higher than midstream - 9% instead of 6% - but the cost of this growth is staggering.



Source: Recurrent research, SEC filings, Bloomberg.
Notes: includes DUK, D, ETR, NEE – large-cap US electric utility companies with published 2025E guidance as of writing.

These Utilities will spend **over $60bn in capex** this year vs. the $21bn of capex being spent by comparably-large US midstream companies above. **Due to low capital efficiency of utilities, using 5x debt financing only covers $19bn of the $62bn**. Utilities' slightly lower dividend payout comes nowhere close to covering the outsized capex budget. Additionally, utility leverage is now significantly higher than the sector's ~5x debt/EBITDA target, meaning that credit rating agencies' intervention would require nearly $40bn – in excess of an entire year's CFFO – to get back to 5x debt/EBITDA.

This comparison is laid out in stark contrast in the table below.

2025 Financial Capacity	Lg US Midst.	Lg US Utils.
CFFO	41	37
Leverage on Growth	11	19
Dividends	(19)	(11)
Capex+M&A	(21)	(62)
2025 Financing Needed	12	(17)
To reach debt target	29	(39)
Total Financial Capacity	41	(56)

Source: Recurrent research, SEC filings, Bloomberg.
Notes: includes NEE, D, DUK, ETR – large-cap US midstream companies with published 2025E guidance as of writing.

As a final consideration for investors concerned about the potential for midstream capex overspend, the utilities names shown above – generating slightly less CFFO than the comparable group of midstream companies listed above, unable to reduce debt as they spend 3x as much on capex – are trading at a slightly higher aggregate enterprise value than the above midstream companies.

Natural Resources

Performance Review

In January 2025, the Recurrent Global Natural Resources strategy increased +3.77%, net of fees, underperforming the S&P Global Natural Resources Index' +5.59% return. During the month, the portfolio's overweight in Canadian companies detracted from relative performance as US tariff policy developments increased uncertainty.

The pre-2008 global industrial complex

If we think back to the pre-shale era, the US was increasingly deemed as an economy based on technology and services. The discussion of these "higher value" industries insinuated that "lower value" industries, primarily industrial in nature, would increasingly move to international locations with lower labor costs. Countless industries offshored production to China, with the expectation that increased scale along with inexpensive transportation would reduce overall cost structures.

US Shale production changed the calculus for many industries

Compared to the pre-shale era, US shale provided native, cost competitive supplies of oil, natural gas and natural gas liquids. For decades, energy intensive industries had been migrating to low labor cost areas. In the 1990s and early 2000s, Chinese economic growth accelerated as the "default" low-cost production center. However, the competitive advantage was based on ample low-cost labor supplies and improving production capability.

As US oil and natural gas production increased, low cost and geopolitically secure energy supplies changed perceptions of global cost structures in energy intensive industries. As we have discussed in several monthly investment letters, in industries like refining, chemicals, fertilizers, aluminum, steel and paper, relatively inexpensive domestic oil and natural gas completely upended longstanding cost structures, moving previously high-cost US producers to the low end of industry cost curves.

Since shale, how much have US oil and natural gas prices changed relative to global prices? The table below shows the evolution.

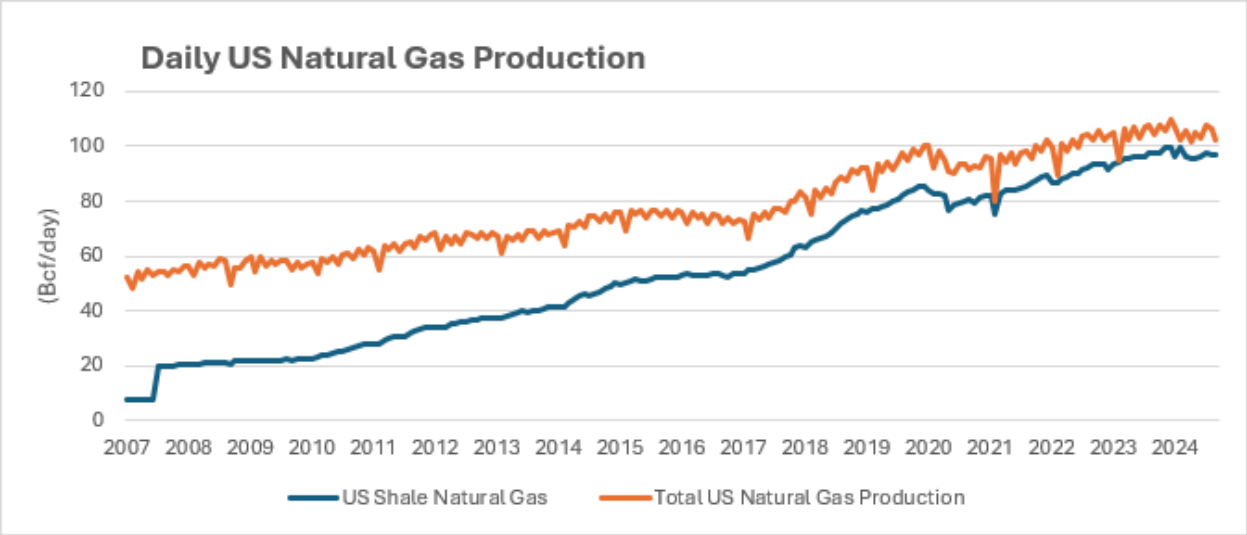
	Spot Price as of	
Oil ($/barrel)	12/31/2005	9/30/2024
US WTI – Cushing	61.04	68.17
Europe – Brent	58.87	72.09
Asia - Dubai Light	53.13	73.43
Natural Gas ($/mmbtu)		
US - Henry Hub	9.52	2.65
Europe - TTF	7.15	12.74
Asia - JKM	6.51	12.05

Source: Bloomberg, Recurrent research

Noteworthy in this table is the idea that US oil prices were the highest of the three main regions in 2005, but today are the lowest. More importantly, the evolution of regional natural gas prices is even more extreme. After experiencing the highest natural gas prices before shale, today the US natural gas price is approximately 20% that of Europe and Asia.

To further highlight the point, total US natural gas production has approximately doubled since 2007. From a limited base, natural gas production from shale today represents the vast majority of the total, as seen in the chart below.

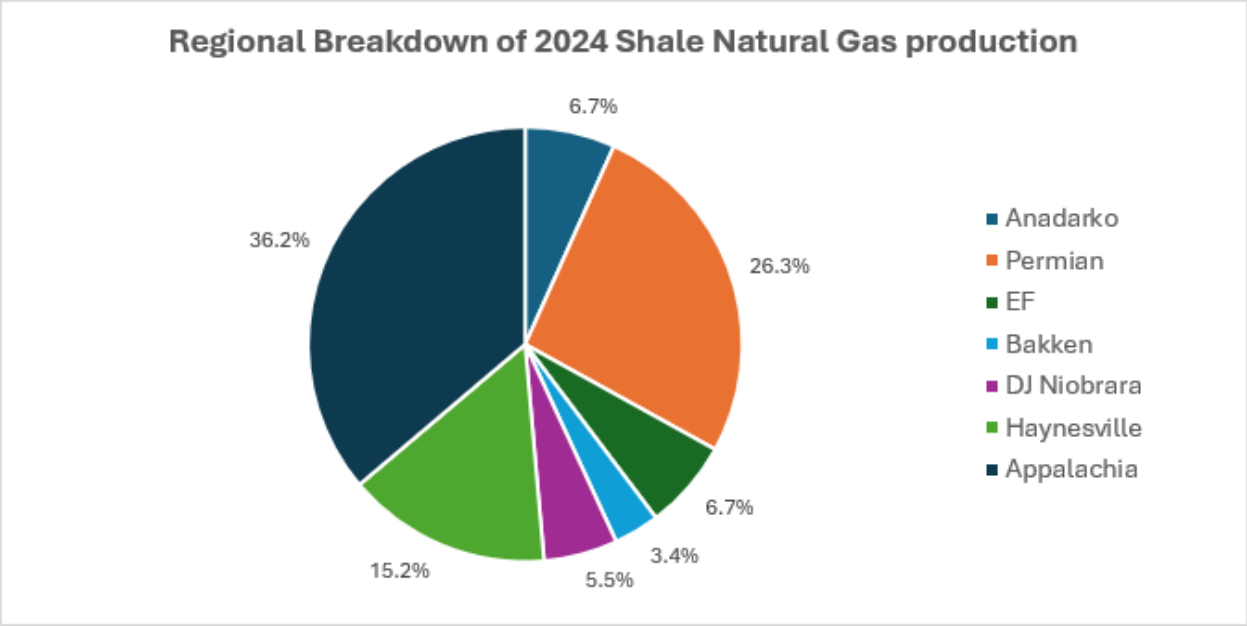
Exhibit 1



Source: EIA, Recurrent research

Within the total, new hydrocarbon producing areas have emerged, and others have rapidly grown. Appalachia, home of the Marcellus Shale, has grown to approximate 36% of total US production, and the broader Gulf Coast, represented by the Permian, Eagle Ford, and Haynesville Basins, is approximately 48%.

Exhibit 2



Source: EIA, Recurrent research

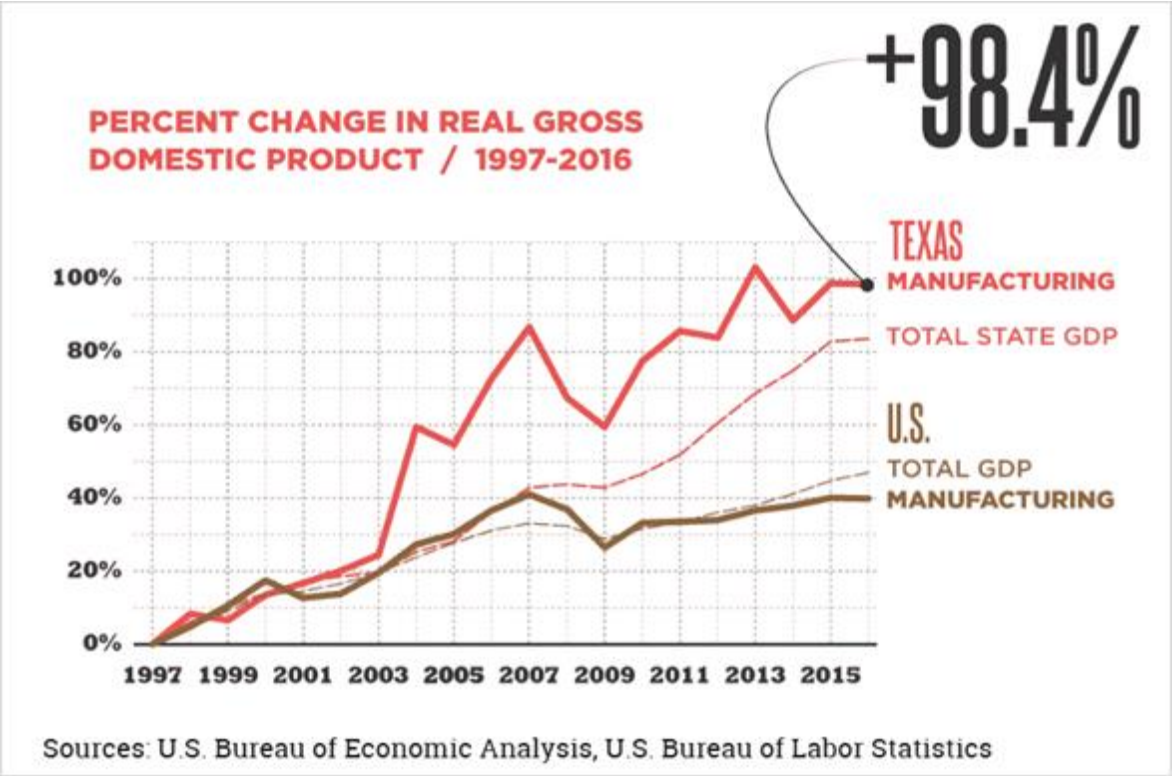
With available natural gas supply increasing in Appalachia and the Gulf Coast, prices within the United States varied, until demand outlets developed. On the other hand, localized demand sources could develop to locally utilize the ample and attractively priced commodity efficiently.

It's not just the price of the commodity for consumer use….it's the input cost into industry

When most investors consider the manufacturing base of the US, legacy industries such as the auto industry in the upper Midwest generally dominate mindshare. While a thriving network of complementary industries with generations of knowledge help the industry compete globally, the broader input costs are not uniquely competitive. Systematically higher labor costs have caused a steady threat of plant closings to move to lower labor cost locations, which appropriately dominate news headlines.

However, in contrast to widespread narratives, in the last 20 years, the US industrial base has actually grown at a faster pace than other global markets. More specifically, the Gulf Coast has seen dynamic growth in many manufacturing industries, driven largely by local, low cost natural gas which transformed global competitiveness.

A variety of data and charts from the Texas Comptroller's office tells the tale, but none as well as the below chart.



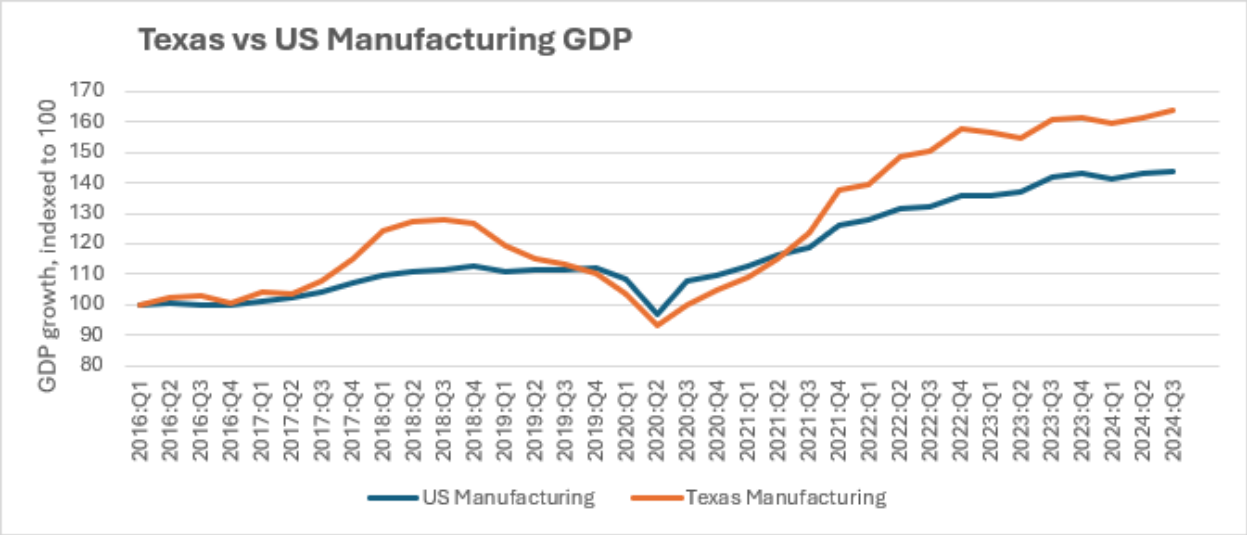
Source: Texas State Comptroller

The earliest years of this chart precede the introduction of natural gas shale production. As first natural gas shale production accelerated in DFW's Barnett Shale in 2004, Texas' manufacturing grew faster than the broader US. After the 2008-2009 financial crisis through the end of the data set in 2016, Texas's manufacturing GDP has grown approximately 60%, much more than the broader US's 10% increase over the same time period.

During the post-2009 period, as seen in Exhibit 1, US shale natural gas production really started to accelerate, and the price of US natural gas disconnected from global natural gas prices. After years of diminishing competitiveness due to higher inherent cost structures and relatively inexpensive transportation costs, American industries which use natural gas as a major input grew increasingly competitive on a global scale. American companies thrived, particularly on the Gulf Coast close to native and relatively inexpensive natural gas costs. Global firms shut/reduced production in Europe and Asia to add capacity and production in the US, primarily along the Gulf Coast.

In order to bring the data to the present, a different data set was utilized, this time from the Bureau of Economic Analysis. Since 2016 (the continuation of the above chart), Texas' manufacturing growth has continued to outpace the broader United States. From the beginning of 2016, Texas has grown manufacturing by a cumulative 20% more than the broader US, as seen in the chart below. Natural gas has been the bedrock of the manufacturing growth.

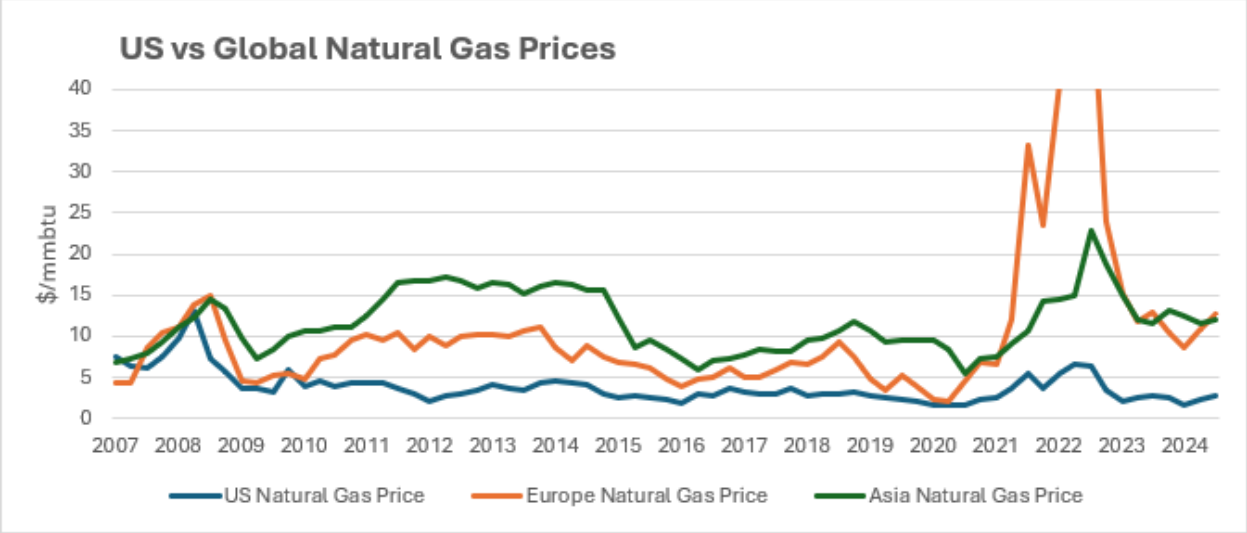
Exhibit 3



Source: US Bureau of Economic Analysis, Recurrent research

The story of cheap natural gas strengthening US Gulf Coast manufacturing is an important byproduct of US shale. However, since the US is not as competitive in other manufacturing inputs, the persistence of cheap natural gas is paramount. The last 15 years of benefitting from cheap US natural gas prices have certainly created an environment which lends confidence to the past continuing into the future.

Exhibit 4



Source: Bloomberg, Recurrent research

Global companies and politicians alike have prominently advertised their belief in the United States as a growing, global manufacturing and industrial hub. As we showed above, the reality is that this industrial renaissance is not a nationwide phenomenon and does not extend to all industrial subsectors – it is largely confined to geographies with sustained production of cheap and ample natural gas, such as the US Gulf Coast.

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