Back to basics
Solving the capital conundrum of US midstream companies
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Back to basics | Solving the capital conundrum of US midstream companies

Executive summary

Most signs point toward an impressive growth story unfolding in the US midstream sector.* With more than $670 billion in enterprise value (as of mid-2018), midstream is already the largest pure-play US O&G sector—surpassing upstream, and reaching twice the size of oilfield services and three times the size of the refining sector. And with drilling and production in US shale plays still expanding, it would seem that midstream, a crucial player in shale’s success story, is poised for bigger wins.

Curiously though, this is not how the story is playing out. Investor returns from the sector are trailing behind the broader market, and midstream companies (barring distribution, which is also coming under pressure) have generated a negative price return of about 18 percent since 2017. While skimming the surface reveals some issues, it may be worthwhile to drill down deeper into the fundamentals—specifically in terms of how the industry is sourcing, investing, and distributing its capital.

A closer look suggests that the traditional capital model of externally funded growth, investment in assets that typically had a similar and predictable risk and return profile, and growing shareholder return primarily through high distributions is confronted by the shale-led infrastructure boom. What could be a way out of this capital conundrum?

In this paper, we set out to examine this challenge and suggest next steps across the capital value chain to help midstream companies restore investors’ confidence and position themselves strongly for profitable growth. Given how much of the upstream sector’s success tends to ride on the midstream sector, it is important that midstream companies focus on a multipronged strategy for success—both for themselves and their shareholders.

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*Companies involved in gathering, processing, transportation, storage, and wholesale marketing of crude oil, natural gas, natural gas liquids, and refined petroleum products.
A golden age for US midstream...

The US midstream sector has taken a mainstream role in the shale era as upstream growth is increasingly becoming dependent on infrastructure availability. Capacity additions are currently lagging in meeting producers’ takeaway needs by about 9–12 months or more. Shale producers in the Permian, for example, have 300,000 barrels per day to ship, but are unable to do so because of the lack of pipeline infrastructure (as of October 2018).

The lack of midstream infrastructure, or bottlenecks, is apparent from high price differentials in key basins and price hubs, which, in some cases, have gone up to 25 percent of oil and gas prices. The Midland-Cushing WTI spread, for instance, reached $18/bbl in August 2018 while the Henry Hub-Appalachian (Marcellus) natural gas price spread averaged $0.7/MMBtu YTD (October 30, 2018). What led to these high spreads? As in the past, the current high spreads are a result of negative midstream capital spending growth at a time of upstream volume growth—upstream volumes grew 6 percent annually while midstream capex fell 5 percent annually over 2014–2016 (figure 1).

Although midstream companies do not usually realize these windfall spreads, as a large part of their sales are contracted and fee-based, these high spreads confirm that the industry is in the midst of its best years of growth and profitability cycle. With the Energy Information Administration (EIA) projecting US upstream volume growth of 14 percent in 2018 and 8 percent in 2019, this infrastructure and price gap could take time to rebalance, especially when growing exports of crude oil, refined products, natural gas, and natural gas liquids (NGLs) create a need for new pipeline routes in the United States. Shouldn’t this be a golden age for US midstream companies and their investors?

Figure 1. Upstream volume growth, midstream capex growth, and price spreads

Source: Bloomberg, EIA, Deloitte analysis
...But marred by significant underperformance

Despite a promising growth story and volatile-yet-recovered oil prices from the lows of early 2016, the sector has surprisingly lagged the broader market in generating investor returns. The Alerian US Midstream Energy Index (total return, including distributions) fell throughout 2017 and has remained mixed in 2018 while the broader S&P 500 index has seen an upward rally since January 2017; in fact, excluding distributions, midstream companies have generated a negative price return of 18 percent until October 2018. The midstream sector’s underperformance is also apparent from its Enterprise Value/Adjusted EBITDA of 10.4 times, which is at a 10-year low (figure 2).

One can argue that the market is undervaluing midstream companies currently, and it is only a matter of time before investors recognize this promising growth story. But what about other fundamental indicators that also highlight this weakness? As against quarterly equity issuances of about $6 billion prior to the downturn, master limited partnerships (MLPs) issued less than $12 billion in the entire year of 2017. Similarly, M&A activity among nonrelated firms was only $19 billion in 2017 (as against $140 billion in 2016)—and that too largely driven by private equity players rather than midstream firms.

One factor could be the US Federal Energy Regulatory Commission’s (FERC) March 15, 2018 ruling to reverse a longstanding policy on tax allowances, disallowing the recovery of income tax allowance and refunding accumulated deferred income tax to shippers. While the decision rattled investors’ faith, the announcement impacted only regulated interstate pipeline tariffs and, moreover, it provided a strong impetus to MLPs to simplify their complex corporate structures and align the interest of general partners and limited partners. Further, the FERC clarified and softened its stance on July 18, 2018, which lifted the cloud of uncertainty weighing on investors.

Figure 2. Quarterly trend of Alerian indexes, S&P 500 Index, and valuation multiple (EV/EBITDA) of midstream companies

*On July 18, FERC modified its proposed policy in March and allowed MLPs to retain an income tax allowance (ITA) in a pipeline’s cost-of-service as long as it reflects the reduction of the corporate tax rate from 35 percent to 21 percent. Additionally, a natural gas MLP pipeline with a C-Corp parent was also made eligible to retain ITA, and pipelines owned by MLPs can also choose to eliminate accumulated deferred income tax (ADIT) from the pipeline’s cost of service if they take their tax allowance to zero. Source: US FERC.
So, this leaves the question of why midstream companies are underperforming and, also, why there is a high divergence in the performance of midstream companies that have a similar fee-based model (across the segments and the two dominant structures, MLPs and corps). To remain an MLP or not, or to convert an MLP into C-corp to offset the potential impact of FERC’s rule changes, is not the primary reason behind this underperformance—even C-corps that have positively benefited from lower corporate tax and FERC-exposed MLPs, have also underperformed and shown significant variability. Out of top 10 midstream C-corps by market capitalization, for example, six have generated negative shareholder returns in the range of -3 percent to -23 percent since 2017.\footnote{13}

We believe there are more fundamental issues than simply policy- or structure-related problems. Can midstream companies with returns on capital lower than their cost of capital and a high dividend yield of above 10 percent outperform the market (figure 3)? Are midstream companies following the basics of delivering value growth and maintaining capital discipline or, in simple terms, displaying greater stewardship of capital from sourcing, to investing, to distribution? In the following sections, we examine these questions in more detail.

**Figure 3. Proportion of companies by yield range**

<table>
<thead>
<tr>
<th>Yield Range</th>
<th>Proportion</th>
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<tbody>
<tr>
<td>&lt;5%</td>
<td>7%</td>
</tr>
<tr>
<td>5-8%</td>
<td>37%</td>
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<tr>
<td>8-10%</td>
<td>29%</td>
</tr>
<tr>
<td>10-25%</td>
<td>27%</td>
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</table>

Average yield of Alerian MLP (Aug-18) = 8.0%

56% of companies with a combined market cap of $121 billion (40% of total market cap of Alerian MLP constituents) had a high yield of over 8%. In fact, 27% of companies had yield in the range of 10-25%.

Source: Alerian MLP and Deloitte analysis
The capital conundrum in midstream

An analysis of 122 midstream companies highlights that the sector’s weighted average cost of capital (WACC) reached a seven-year high of 7.9 percent in 2017, while its return on capital (ROC) fell to 7 percent, below its WACC (figure 4). The trend of negative ROC-WACC spread is surprising, especially in a period when liquidity in capital markets and the industry’s processed and transported volumes have been among the strongest.

Figure 4. Yearly change in midstream companies’ WACC, ROC, and distributions

Source: Bloomberg, CapitalIQ, Deloitte analysis
The problem of negative spread cuts across midstream business segments, company sizes, and operating structures. Although the long-haul pipeline transportation segment (both crude oil and natural gas) in general has performed better than the gathering & processing (G&P) segment, the pipeline segment still has 11 companies (with a combined revenue of more than $10 billion) with a WACC of more than 10 percent. And, surprisingly, large-sized companies have significantly underperformed small-sized companies in managing capital—in 2017, the average ROC/WACC spread of companies with revenue of more than $5 billion was -3.5 percent as against +0.8 percent for companies with less than $1 billion in revenue (figure 5).

One of the biggest reasons for this negative spread is the sharp rise in the cost of equity of midstream companies, which rose to 12 percent in 2017 from 8.5 percent in 2012. Although the sector’s cost of debt has remained low, it has also started to move upward due to interest rate hikes and growing leverage of companies. The sector’s long-term debt-to-total-capital ratio has risen from 50 percent to 55 percent, with 35 percent of companies having a leverage ratio of more than 60 percent.

Put simply, the entire capital cycle of the sector, from sourcing and investing to distribution has come into question, leading to a large-scale exit of retail investors due to negative stock price returns. The share of retail investors (excluding promoters and insiders) in MLPs has fallen from more than 50 percent in 2012 to below 30 percent.

Figure 5. WACC and ROC spread by segments

| Negative returns across the segments, particularly for G&P and diversified companies. |

**Industry segment**
- Diversified
- Gathering & Processing
- Others
- Pipeline Transportations Gas
- Pipeline Transportations Oil
- Storage & Terminals

Source: CapitalIQ, Bloomberg, Deloitte analysis
Addressing this financial underperformance issue early is important, as 2019 may be a crucial year for midstream-dependent upstream growth, supported by the continuing recovery in crude oil and natural gas prices.

How can the sector reset itself for this favorable outlook? Below, we put forward a few considerations across the capital life cycle—sourcing, investing, and distribution—that could help companies improve investors’ confidence in today’s period of transition and position themselves strongly for profitable growth.

**Capital sourcing**

Direct equity issuance, the primary source for about half of the sector’s total funding needs, has fallen in recent years due to the rising cost of equity. Issuance by MLPs fell to a five-year low of $8.2 billion in 2017 (as against an average of $20 billion) with close to negligible activity in the first half of 2018. With debt also becoming more expensive, it has become important for the sector to broaden its pool of financing and explore new financing alternatives that are cheaper and balance-sheet-positive.

Preferred-equity issuance is becoming the top alternative for the sector—midstream MLPs raised almost $7.9 billion between April 2017 and February 2018. With typical yields of 6–7 percent, preferred securities are nondilutive (until exercised) and are 4–12 percent cheaper than common equity issuance, especially in instances where the partnership has burdensome incentive distribution rights (IDRs).

Joint ventures among midstream companies are emerging as a promising alternative for the sector. Apart from reducing capex for each, joint ventures could also help midstream companies reduce the risk of “corridor overcapacity” in select basins, in turn improving the investment economics for both the parties. For example, Sanchez Midstream Partners and Targa Resources have merged their interests in the entities that own the high-pressure Carnero gathering line and Raptor gas processing facility to form an expanded 50:50 joint venture in South Texas.

A new form of joint ventures between midstream companies and upstream producers, also referred to as equity option agreements, could be another low-cost, low-risk alternative for midstream companies. These joint ventures not only safeguard revenue and reduce recontracting risk, but also help midstream companies to recover or monetize their spending at a later stage.
Partnering with private equity (PE) firms could also bring benefits. Apart from providing new and innovative funding mechanisms, PE firms also often make for tactical partners because of their connections in energy companies, including those with producers and industrial consumers. Additionally, in the current muted M&A environment, PE firms can help midstream companies that are looking to divest assets to shore up their balance sheets, consolidate their footprints, or even raise cash for other purposes.22 Reducing financing cost and securing a broader pool of financing can also be achieved through several internal measures. By consolidating related entities through roll-ups at fair value, having a higher number of independent directors on the board, and safeguarding interests of common unit holders through the elimination of expensive IDRs, a midstream company can bring more transparency and make itself more palatable for new investors, especially institutional investors. As of late September 2018, about 40 percent of MLPs are still paying 30–40 percent of their distributions in the form of IDRs to their GP holders.23

**Figure 6. Strategic pathways to enhance capital sourcing for midstream companies**

<table>
<thead>
<tr>
<th>Broaden the pool of financing</th>
<th>Reduce credit risk</th>
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</table>
| Explore alternatives to expensive and dilutive equity offering:  
  • Preference shares  
  • Joint ventures with competitors  
  • Equity options with producers  
  • Partnerships with PE players | Align interest of stakeholders by improved corporate governance:  
  • Structure simplification  
  • IDR reductions/eliminations  
  • GP board accountable to common unitholders  
  • Higher independent board of directors |  

Source: Deloitte analysis

Reduction in investment risk, credit risk, and cost of capital
Capital investment

Fee-based earnings, long-duration contracts, and minimum volume commitment from customers have branded midstream as a “passive” investment vehicle. Although the broad contours of this stable and fee-based business model haven’t much changed, shale has brought more variability in the opportunities and risks for midstream companies. In 2017, for example, the number of pages highlighting “Risks Related to Our Business” in the annual filings of top-10 midstream companies averaged 22, as against 14 in 2005. Further, the nature of identified risks has also changed—for example, companies in the G&P segment are increasingly highlighting the risks to their assets and earnings from commodity price volatility and volume declines.

The increased variability is not limited to one segment of midstream; it seems to have affected the entire value chain from G&P to long-haul pipeline transportation to storage and terminals. A typical gathering infrastructure in the past, for example, was tied to a far lower number of wells with more stable and predictable production than today. Similarly, the storage of energy products mostly had a regional and seasonal angle in the past, but now this infrastructure has vertically integrated and extended to terminals and is more influenced by global drivers and competition.

Additionally, shale’s enhanced role in this volatile oil price environment has altered the profile of customers (financial and operational), disrupted the standing of one basin over the other (for instance, the lead of the Permian basin over Eagle Ford), and given rise to a new set of competitors for the industry (midstream arms of upstream companies, private equity firms, and even global players). So, what should the sector’s response be, apart from optimizing the risk-return equation (refer to sidebar, “Strategies for optimizing risk-return in the shale era”)?

Strategies for optimizing risk-return in the shale era

Shale is altering the risk-return equation between upstream and midstream companies. Given the short-cycled nature of shales, producers are seeing more value in entering into short- to medium-term contracts with midstream companies. Further, to safeguard operational gains, producers are pushing midstream companies to modify contracts and reduce transportation cost, which, in some cases, is as high as $5–6/boe.

Although long-term fee-based arrangements have safeguarded midstream companies’ revenues in the past, the trend of exiting/renegotiating contracts is altering that—over the past 12-18 months, six E&Ps used the bankruptcy route to terminate their long-term midstream contracts. Also, midstream companies are seeing higher rejection during renewal as competitors with stranded assets or planned expansions are bidding for lower rates and shorter contracts. According to American Midstream Partners, “Competition has increased in those geographic areas where our commercial contracts with customers are short term.”

In this context, a solution for midstream companies would be to gain basin dominance through inorganic expansion and limit the options for producers. However, a sustainable solution would be a commercial arrangement that optimizes risk-reward for both the parties—that is, upstream companies get the desired flexibility at lower rates, while midstream players get reasonable margins and assured commitment from E&Ps.

One such arrangement is where midstream players pay an upfront grant to upstream companies (as a percentage of revenue or profits that would come from the asset under the agreement) in exchange for exclusively dedicating acreage to them. Further, to ensure that upstream companies remain committed to the agreed acreage, some midstream companies have even linked these grants to some key upstream performance metrics (drilling or volumetric efficiencies).

Seeing an increase in ownership of US shales by PE players, some midstream companies are directly entering into an agreement with them to earn dedicated acreage that is not even leased to an upstream operator yet. PE players get upfront financial netbacks, while midstream companies get an assured as well as reasonable ROI for the contract lifetime. Further, since generally PE players move out of the projects when valuations are high, midstream companies are even adding futuristic clauses, such as a preferential right to match any offer by a third-party midstream provider to the new owner while renewing or renegotiating the commercial agreement.

Put simply, midstream companies can exercise many options to improve their return on investment without increasing risk.
A future-ready midstream company needs to frequently monitor and analyze new changes at the “customer,” “market,” and “competitor” level for all its “businesses” so that its infrastructure, management time, and capital are allocated to where they are most needed and where returns are most favorable. But, rather than using traditional indicators such as the simple count of rigs that were more suitable for conventional oil and gas fields, midstream companies should update their assessment with new shale indicators that give a complete picture at a well, basin, and customer level. EIA’s new drilling productivity data, for example, could help companies to gain basin-specific insights into rig efficiency, new well productivity, decline rates at existing wells, etc.—a data set that was not consistently available three to five years back. Like this, many such new data sets are waiting to be tapped.

Table 1 (Appendix) provides an indicative list of key metrics to help a midstream company get started, and the below analysis highlights a few of these metrics across the three segments to show their importance.

• For companies in the G&P segment, for example, tracking of “productivity & breakeven trends,” “drilling obligations to retain leases,” and even “changes in borrowing base of producers” could give an early view into their customers’ drilling and production plans. Similarly, by consistently tracking “new-well production mix” and the “inventory of drilled-but-uncompleted wells” by basins, a diversified G&P company can prioritize its spending in promising shale plays. Many of these metrics, in fact, did highlight the shift in drilling and production trends between oil shales in early 2014, especially from Eagle Ford to the Permian.

• For companies in long-haul transportation of natural gas and liquids, it is paramount to track and analyze both short-term (seasonal) and long-term “fuel switching trends” and programs of their customers, especially that of gas-consuming utilities. Consolidated Edison, for example, invited proposals from vendors to provide innovative “non-pipeline” solutions to reduce the company’s need to contract for the construction of new natural gas pipeline capacity. Similarly, for companies transporting natural gas liquids (NGLs)—a new and sizeable growth product for midstream companies—it can be key to explore “incremental ethane opportunity by basins” regularly; generally, basins closer to market hubs are the first to recover ethane.

• Companies in the storage, terminal, and marine business, on the other hand, should track both domestic and international markets due to rising exports of products. From the “size and structure of waterfront access” to “trade duties between key importing and exporting nations,” these companies should analyze many more additional metrics than a conventional midstream company serving the domestic market.

Assimilating the above data from wellhead to end-user is just a start: Leveraging technologies and analytics to analyze them is the end goal. Significant competition-beating opportunities can open up when a company integrates operational and economical aspects across its network for running scenarios on designing and testing pipeline networks, absorbing new products and assets into the existing network, finding optimal tradeoffs, and even assessing the real cost of entering into a joint venture.

*Non-pipeline solutions: A demand-side or supply-side solution (whether a singular project or a portfolio of multiple projects) that allows Con Edison to reduce the amount of interstate natural gas pipeline capacity or delivered services to the Con Edison city gate to meet peak day and peak period natural gas supply requirements.
A few LNG operators with the help of a solution provider, for example, are integrating data across “customer” and “market”—for example, upstream gas supply, terminal operations data, demand patterns and contractual obligations of all potential customers, and key market data such as spot prices, vessels, potential delivery port, weather—and deploying proprietary supply chain optimization algorithms so as to find the most profitable action in any unplanned scenario and outdo the competition. Further, analytics are also enabling them to turn idle asset time into opportunity, seize opportunities in the spot market, and ascertain the risk-reward of each decision.32

**Capital distribution**

If dividend payouts of above 10 percent with 4–5 percent yearly growth aren’t getting rewarded and are increasing the industry’s cost of equity because the unit price is falling (higher yield), there may be a big problem.33 Why is a distribution strategy that worked in the past yielding opposite results now? The answer could lie in the investor base and business cycle of the industry, which is undergoing a fundamental change.

Retail investors—who place significant value on yield and distribution growth and have high acceptance for externally funded growth—have constituted about 50 percent of the industry’s investor base. In a steady capex cycle, this investor base is fine to have. But in a high capex period like today, where the yearly capex has risen by three times and the gestation period for investments is longer, this yield-sensitive investor base can create an imbalance in the industry’s capital value chain.34

A cut in distributions to fund high capex on the one hand typically leads to a fall in unit prices or exit of yield-sensitive retail investors, while on the other hand, external capital providers demand a significant premium if both high capex and high distributions need to coexist. The latter option is not economical and not available anymore.

Against this backdrop, companies focused on balance sheets should accept the fact that a cut in distributions (especially expensive IDRs) would disappoint their investors. This acceptance would not only reduce their dependence on external funds but also attract institutional investors who have been shying away due to unsustainable yields and high valuations in the past. A broader investor base, particularly of institutional investors, is also positive as they focus more on total return than annual yield, have a long-term view on the business (unlike retail investors), and demand stronger corporate governance.35 In 2017, in fact, institutions became a bigger force relative to retail investors, with their share rising to 70 percent.36
By managing this transition period, midstream companies can position themselves strongly for future profitable growth. With lower capex requirements and new projects coming online post 2020 (INGAA's forecast), midstream companies with stronger balance sheets and aligned interest of all stakeholders could not only give a boost to their distributions but also bring back some retail investors that they lost over the past few years.\(^{37}\)

Actions of midstream management on distributions will likely be watched closely by market participants and investors, as it directly influences capital sourcing needs and indirectly impacts the investment economics of projects. The best case would be if companies are able to delink their distribution from sourcing and change the return philosophy from yield to total return.\(^{38}\) In the long term, it would be all about asset and management quality and a healthy and sustainable capital cycle (figure 7).

Figure 7. Road map to optimize investor mix and distributions based on the capex cycle

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<td>Current</td>
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<td>Medium-term</td>
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<td>High yield, low returns</td>
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<td>Low yield, high returns</td>
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<td>Positive yield and returns</td>
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<td>High yield, moderate returns</td>
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<td>Outcomes</td>
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<td>Acceptance for external distribution model</td>
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<td>Push for a self-funding, strongly governed model</td>
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<td>Preference for asset quality over corporate structures</td>
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<td>Attainment of a balanced, sustainable capital cycle</td>
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<td>Financial and structural engineering</td>
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<td>Structure simplification, interest alignment, IDR eliminations</td>
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<td>Company-specific changes, evolution, and differentiation</td>
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<td>Broader investor base</td>
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Source: Deloitte analysis
Filling the pipes

The US midstream industry is in a phase of transition, whether in its growth and investment cycle, the mode and cost of raising capital, variability and competition in the business, or the investor base itself. In this period of uncertainty, it is essential for midstream companies to:

• **Reorganize to improve transparency and lower capital costs, as against a widespread conversion into corporation:** Simplify structures to align the interest of all stakeholders and make reforms structure-agnostic, as a conversion (MLP into corporation) would not change the underlying asset or business prospects of a company.

• **Display greater stewardship of capital, with higher priority to cash generation over cash distributions:** Return to the basics of creating value by limiting dependence on external funds and investing in profitable midstream projects as against capital decisions guided by distribution growth headlines.

• **Strengthen and defend the core in light of shifting dynamics:** Stay ahead of evolving customer, market, and competitor dynamics so that infrastructure, management time, and capital are allocated to where they are most needed and where returns are most favorable.

• **Broaden the investor base and change the return philosophy from yield to total returns:** Leverage the change in investor base from retail to institutions to drive reforms and change the narrative from yield to total return in the long term.

If these catalysts play out as expected, a combination of a positive energy market and sturdier industry fundamentals could provide stronger legs to shale growth and create sustainable returns for midstream shareholders/unit holders.
## Table 1: Key midstream metrics to gain deeper understanding of changing business environment

<table>
<thead>
<tr>
<th>Customer</th>
<th>Markets</th>
<th>Competition</th>
</tr>
</thead>
</table>
| Gathering & Processing | • Well productivity trend & breakeven price  
• Transportation cost as a % of production cost of producers  
• Dedicated acreage split by tier quality (top, middle, bottom) and number of rigs on dedicated acreage  
• Changes in producers’ borrowing base limits  
| • Rig count trend and inventory of drilled but uncompleted wells  
• Basin level new-well production per rig  
• Changes in fuel mix such as gas-to-oil ratio, NGLs in natural gas, rejections, flaring, etc.  
• Recovery of ethane and NGLs by basins  
| • Duration, negotiations, extensions or replacements of contracts  
• Investments in high pressure gathering facilities outside FERC jurisdiction  
• Firm capacity reservation fees and usage fees trend under interruptible contracts  
• Average bundled fee rates of peers  
| Pipeline Transportation | • Fuel switching trends especially in power, chemicals, and other energy intensive industries  
• Concentration, spread, and contracted capacity of end-users  
• Proprietary network of customers  
| • Extent of tiebacks with gathering lines and interconnect with interstate lines  
• Price spreads and fuel-mix ratios in key markets and major price hubs  
• Demand-supply balance (seasonal, short-term, and long-term)  
• Number and capacity of potential third-party connections  
| • Duration mix of contracts and remaining contractual term of pipelines  
• Non-integrated vs integrated infrastructure mix of competitors  
• Turnback of firm capacity and redeployment of existing assets  
• Throughput trends and capacity expansions of interstate pipelines  
| Storage Terminals | • Concentration and spread of end-users  
• Investment & consumption trends of end-users  
• Visibility on customers’ processing capability of various grades and production composition data  
| • Seasonal price-sensitivity of commodities, including deviation of natural gas market spreads  
• Price spreads between key price hubs and delivery points (both domestic and international)  
• Trade duties between key importing and exporting nations  
| • Capacity reservation and utilization trends of competitors  
• Number, capacity, and contract mix of new import/export projects globally  
• Baltic dry index and expansions of marine transportation companies  
| Source: Deloitte analysis
References

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Let’s talk

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