



Global Matters

The changing face of US midstream assets:
Investment opportunity created

June 2019

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Introduction

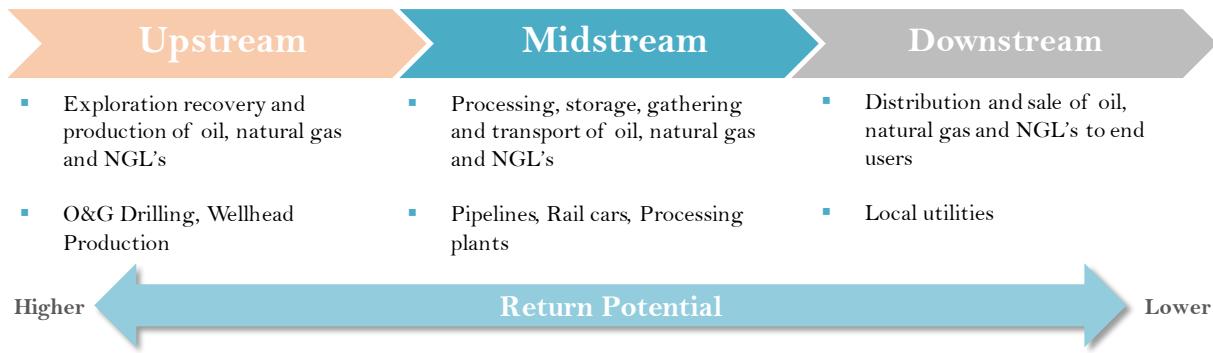
Assets, and asset sectors, can and do change and evolve over time. Individual asset characteristics can change quite markedly, often driven by external forces (eg. a market sell-off, or a changing operational environment) and those changes are then facilitated by management action. This evolutionary process can create opportunities for investors to deliver strong returns provided they understand the asset and the sector, can identify early-on the underlying trends, the state of the reform process and hence the opportunities available. We believe such an evolutionary/reform process is currently underway in the United States midstream sector creating real investment opportunities. This article by 4D Infrastructure's Peter Aquilina (Senior US Investment Analyst) and Greg Goodsell (Global Equity Strategist) reviews the US midstream sector and identifies a number of critical changes underway which, we believe, will see the creation of real shareholder value over the medium term.

What is US midstream?

We at 4D Infrastructure define the 'midstream' sector as the infrastructure used in the transportation, storage, extraction and refining of natural gas, Natural Gas Liquids (NGLs) and crude oil. Midstream is the 'glue' between upstream E&P and downstream distribution.

The graphic below shows that there can be an extensive infrastructure value chain to transport commodities from the site of extraction via gathering lattice networks to processing plants, and to downstream markets via large volume transportation pipelines. At downstream terminals the commodities can be transported to the end customer via pipeline, rail or ship; refined at fractionation facilities; and stored or further manufactured.

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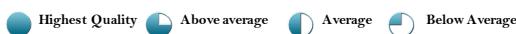
Source: 4D Infrastructure

Midstream assets are therefore heterogeneous by nature. For 4D, the investability of these stocks is determined by the quality of their assets, the contractual basis on which they are remunerated, and whether the asset characteristics meet our infrastructure definition. Historically, a number of these companies were ‘fringe’ under our definition. However, this has changed a lot over the last few years.

As shown in the table below, assets under the midstream umbrella perform a number of functions and have differing business risks and characteristics.

Asset	Description	Long contract length	High barriers to entry	Counterparty/contract risk	Commodity price exposure risk	Volume risk exposure	Example companies
Transportation pipelines	Large volume transportation pipelines						Williams Co (Transco), Enbridge (Line 3)
Export terminals	Other gas and liquid export shipping facilities						Cheniere (LNG export); Kiera (Propylene export)
Fractionation	Splits NGLs into contributing gases (eg. propane, butanes, ethane, and natural gas)						Targa (Houston Gulf)
Storage	Gas and liquid storage facilities at terminals						Gibson (Hardesty); Kinder Morgan Canada (Edmonton)
Gathering & Processing	Lattice pipeline network to extract commodity and initial processing facilities						Targa (Permian basin); Pembina (Redwater, Alberta)

- There can be variances in risk exposure between asset types based on contract structures

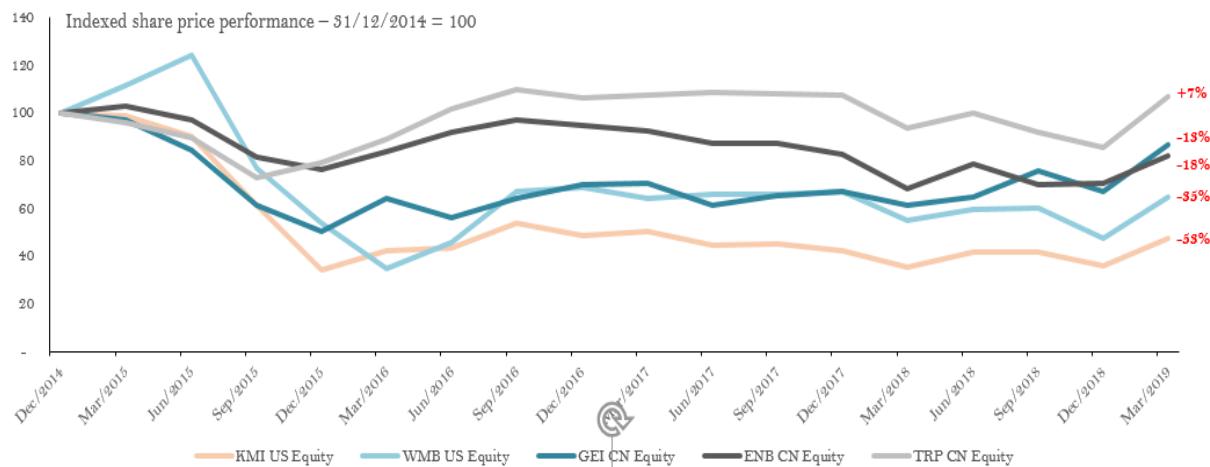


Source: 4D Infrastructure

So what went wrong for the midstream companies?

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As shown in the chart below, from around 2015 midstream stocks experienced significant share price reductions, wiping substantial value from investor portfolios. Retail and generalist investors fled the sector due to concerns regarding the credit of companies, earnings disappointments from commodity exposure, and dividend cuts undertaken by management.



Source: Bloomberg

These credit issues affecting companies were themselves driven by the following management sins:

- **weakness in commodity prices**, specifically crude and NGLs. In 2015, contract structures exposing companies to commodity price movements were commonplace – as a result the fall in oil prices in 2015 drove down earnings;
- **management distributed cash proceeds** to shareholders while financing capital investment and M&A with debt issues, significantly increasing company and sector indebtedness;
- a major component of **earnings was from the marketing and trading businesses which dried up** when commodity prices fell;
- **management invested in non-core businesses** that underperformed;
- **management undertook 'mega projects'** with high regulatory risk associated – regulation and permitting of assets has become more difficult; and
- **structural changes in the sector** resulted in some assets becoming less utilised and sometimes stranded.

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Management response and reforms enacted

Recognising that the earnings volatility and poor performance of the sector needed to be addressed, management undertook a number of reforms as summarised in the table below:

Issue	Explanation	Examples
Dividend cuts	Companies initially cut dividends heavily in response to the oil price fall, and credit concerns. Companies have now given guidance of significant dividend increases out to 2021.	KMI - 72% dividend cut; WMB - 69% dividend cut.
Contract restructurings	Companies have restructured contracts with oil and gas shippers to remove commodity exposure, implement minimum volume commitments and extend maturities.	GEI has negotiated new contracts on terminals to extend their maturities
Debt reductions	Most companies have significantly de-gassed their balance sheets improving their balance sheet strength. A higher proportion of investment is financed from internal cashflow rather than external debt.	KMI, WMB and Enbridge Debt/EBITDA multiples targeting 4.5x from c.6.0x in 2015
Non core asset sales	Companies have looked to exit assets that are not core to their strategy, they do not have complementary assets attached to, or expose them to commodity price movements. This has provided a source of liquidity to pay down debt.	ENB divested all its Gathering & Portfolio assets in May – July 2018
Capital discipline	Companies are portraying greater investment discipline in requiring contractual commitments prior to Final Investment Decisions (FID) and rejecting investment proposals that don't fit into their core strategy	TRGP exit the Whistler gas pipeline project; and KMI exit TransMountain expansion

Source: 4D Infrastructure

Significantly, management looked to re-negotiate contracts to reduce commodity exposures and sell assets that had less predictable earnings streams. They also became noticeably more cash conservative by selling non-core assets, reducing dividends and de-gearing balance sheets. These actions were welcomed, given where the sector had deteriorated to by 2015.

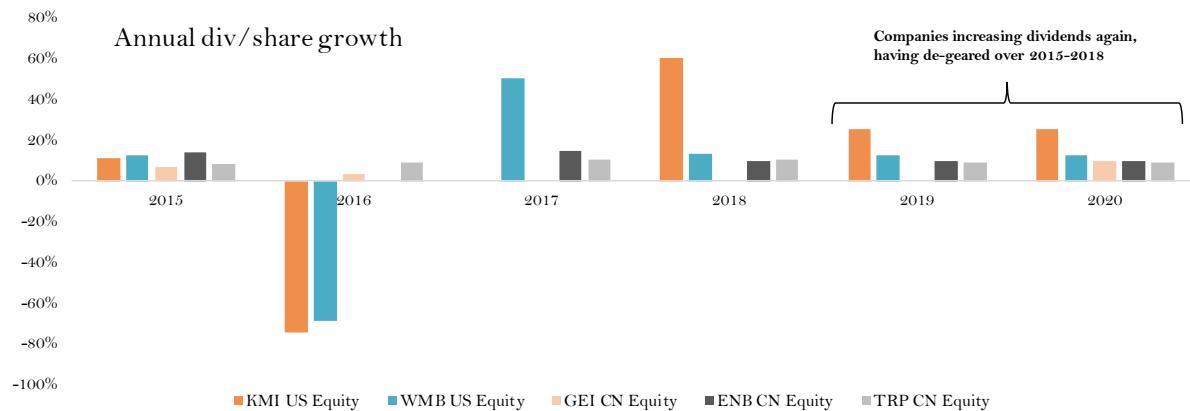
As a result, the midstream companies are now in far better shape as illustrated in the table below.

Company	Debt/EBITDA	Interest cover	Credit rating	Yield %	EV/EBITDA	12M TSR %
KINDER MORGAN	4.3x	2.8x	BBB	5.3%	9.3x	39.8%
Williams	4.8x	2.8x	BBB	5.4%	10.1x	24.2%
GIBSON ENERGY	2.6x	4.0x	BBB - DBRS	4.7%	8.0x	56.3%
ENBRIDGE	4.6x	4.1x	BBB+	5.4%	11.7x	32.4%
TransCanada	5.6x	2.9x	BBB+	4.6%	10.7x	23.5%

Source: 4D Infrastructure & Bloomberg

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Management teams have also announced plans to significantly increase dividends and repurchase shares over the course of 2019 and 2020 as cashflow generation increases (outlined in the graph below).



Source: 4D Infrastructure & Bloomberg

Structural changes should attract the interest of other investors

All of the above are very positive initiatives, and should have the effect of attracting infrastructure investors such as 4D. These restructured midstream assets now exhibit many, if not all, of the characteristics we look for in infrastructure assets.

4D defines 'infrastructure' as the owners and operators of regulated and/or user pay assets with the following attributes:

- monopolistic market position or one with high barriers to entry;
- inflation hedge within the business;
- visible and resilient earnings stream;
- strong cash generation;
- strong regulatory regimes or contracts;
- long dated assets;
- acceptable levels of gearing; and
- ESG considerations.

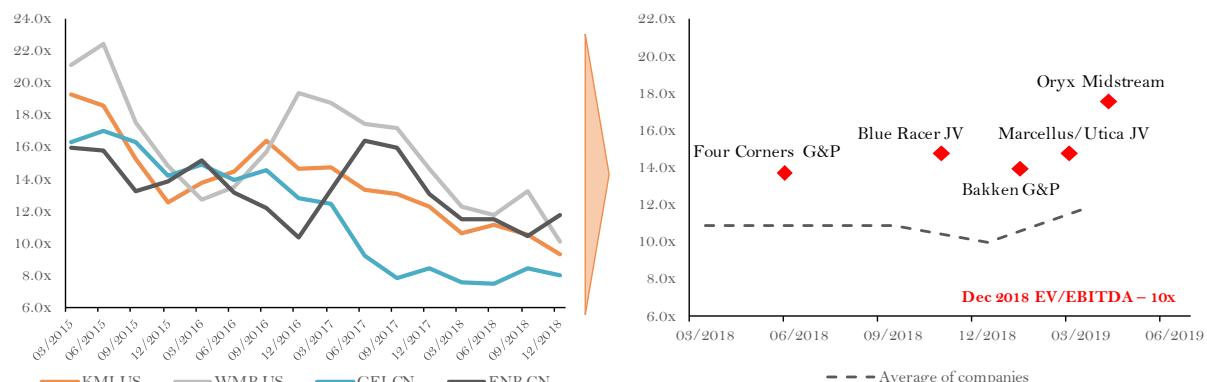
It is clear that the 'new' midstream asset profile has many of these characteristics, such as monopolistic market position, visible and resilient earnings, strong cash generation, long dated assets and acceptable levels of gearing.

This is the opportunity for investors!

So far, the listed market has not fully recognised the changes that have occurred in the structure of the midstream sector. For example, as shown in the charts below, a basket of listed midstream shares is valued significantly below that of recent private market transactions in the sector based on EV/EBITDA multiples. It looks as if private equity has been quicker to react to the fundamental changes to the sector that we describe above. Accordingly we believe there is still investment value available in the US midstream sector.

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EV / EBITDA multiples of listed shares vs private transactions:



Source: 4D Infrastructure & Bloomberg

More detail on the identified private market transactions is outlined below. This shows that many of the transactions are occurring in non-core gathering and processing assets being harvested off by listed players. The transactions are occurring at multiples of Enterprise Value ('EV') upwards of 13x EBITDA:

- June 2018: Williams divestment of **Four Corners G&P** assets for \$1.125 billion to Harvest Midstream – implied EV/EBITDA multiple of **13.7x**
- November 2018: Dominion Energy sells its 50% stake in the **Blue Racer JV** including G&P assets in the Utica basin to First Reserve for \$1.5 billion – implied EV/EBITDA multiple of **14-16x**
- February 2019: Blackstone and GSO Partners acquires 45% stake in crude **Bakken basin G&P** assets from Targa Resources for \$1.6 billion – implied EV/EBITDA multiple of **13-15x**
- March 2019: CPPIB invests \$1.34 billion for a 35% interest in a JV with Williams Co to own and operate G&P assets in the **Marcellus/Utica** basins – implied EV/EBITDA of the transaction is **14-16x** EV/EBITDA
- April 2019: Stonepeak Infrastructure acquires **Oryx Midstream** representing crude gathering & storage assets in the Permian basin for \$3.6 billion from Concho Resources, WPX Energy and private investors – potentially as high EV/EBITDA multiple as **17x**.

4D positioning: start slowly and build up

We were concerned with the historic structure of the midstream model and had very little exposure throughout 2016. We have been observing the reforms to the sector and building our portfolio positions in a calibrated manner, consistent with the speed and execution of the reforms.

In selecting our holdings, we at 4D have based our portfolio positions on companies with lower volume and commodity exposure that represent good value, such as Cheniere and Kinder Morgan (see case study in the appendix). We have also opportunistically taken smaller holdings in midstream companies with strong growth profiles or those undergoing restructurings, such as Targa Resources and Gibson Energy respectively.

Our initial holding in the sector was Cheniere Energy, in which we established a position in May 2016. Cheniere has first mover advantage as the US's first LNG exporter. Its output is underpinned by long-term contracts with investment grade counterparties around the globe. We believe it is one of the more defensive of the midstream players and continues to offer resilient earning and attractive value.

Cheniere Energy – Strong Buy

Investment Thesis

- ✓ Natural gas (often delivered via LNG) is playing an increasing role in the global energy solution and replacing coal as an energy source (eg. in China)
- ✓ Cheniere is the first of the US LNG export projects to come on-line and therefore has first-mover advantage
- ✓ Cheniere's output is underpinned by long-term, take-or-pay contracts, with high quality counterparties paying fixed fees
- ✓ The company's execution to-date has been flawless in delivering the project on-time and on budget
- ✓ The business has a number of expansion options at its existing facilities

Negatives/Risks

- Global trade wars include LNG exports
- Possible cost overruns on remaining, incomplete LNG plants



Cheniere is the leading producer of liquefied natural gas in the United States



Highly contracted business model with substantial expansion opportunities – overall a quality business with an excellent management team

Source: 4D Infrastructure

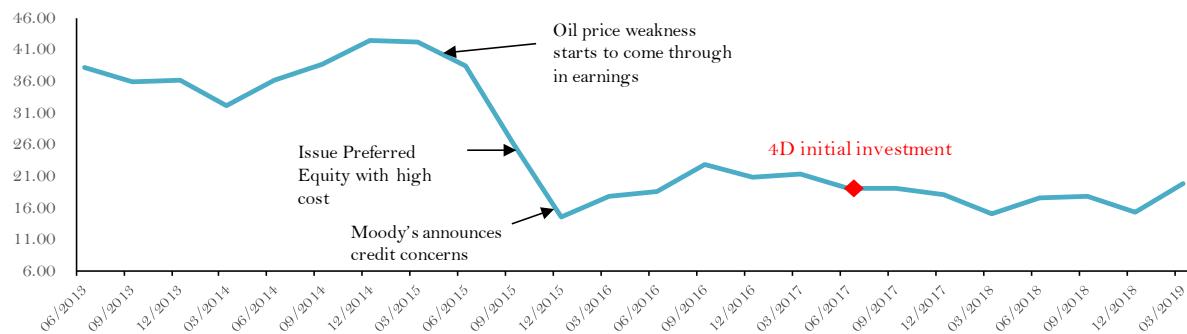
Conclusion

Assets, and asset sectors, can and do change and evolve over time. Individual asset characteristics can change quite markedly, often driven by external forces (eg. a market sell-off, or a changing operational environment) and changes are then facilitated by management action. It is critical that investors are aware of when fundamental changes are occurring in a sector. This is when significant investment gains (or losses) are potentially available. The US midstream sector has gone through just such a change. However, in our view that change has not yet been fully reflected in the share prices in the sector, offering real investment opportunity.

Appendix: Kinder Morgan case study

A company that has reformed and restructured

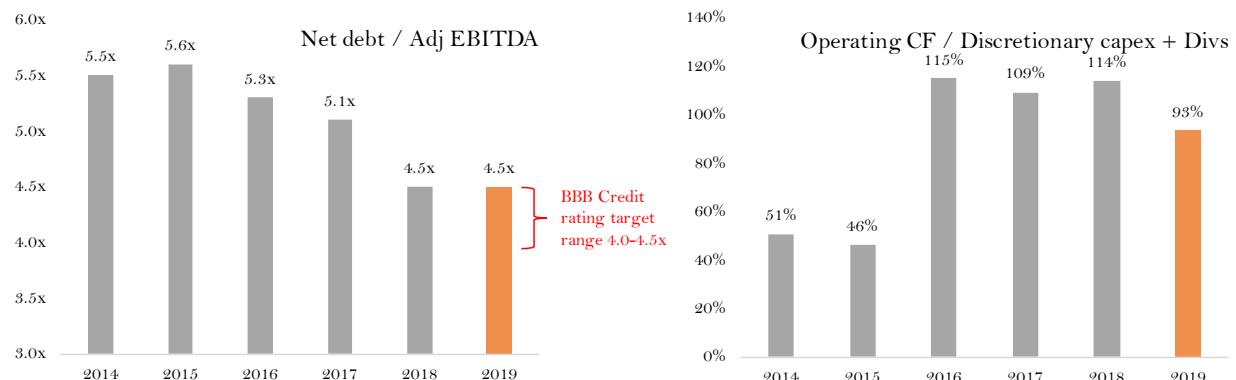
4D Infrastructure identified Kinder Morgan as a company that took important steps to strengthen its credit position and minimise commodity exposure following a share price correction in 2015. 4D took an initial stake in Kinder Morgan in June 2017 based on significant progress made in reducing debt, and the value represented by the company at its depressed share price.



Source: 4D Infrastructure & Bloomberg

Since 4D took its initial position, it has steadily increased it based on Kinder Morgan having sold its politically sensitive Trans Mountain Express Pipeline to the Canadian government, adopted a more conservative financing policy by utilising operating cashflow rather than external debt, further reduced debt to the target range required by rating agencies, had its credit ratings upgraded by the rating agencies, and announced significant dividend increases and share repurchases in 2019 and 2020. The improved credit position and a summary of asset sales is outlined below.

Asset sold	Buyer	Sale proceeds \$M	Rationale
50% Southern Natural Gas (SNG)	Southern Company	1,470	Raise capital to improve credit
30% Kinder Morgan Canada	IPO - Public investors	1,300	Provide financing for TMX expansion
Trans Mountain Express (TMX)	Canadian Government	3,400	Remove significant regulatory risk
20 Bulk terminals sale	Watco Companies	100	Non core asset sale



Source: 4D Infrastructure and company information