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Assessing risks and opportunities in energy transportation and storage

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Identifying key changes in how a sector operates and is measured, and how its regulatory framework develops can be a rich source of investment opportunities.

We believe an evolutionary reform process is happening in the North American Energy Transportation & Storage (ETS) or midstream sector. Below we set out our reasoning. In our view, that change has not yet been fully reflected in share prices, and the value opportunity has been further enhanced by unwarranted price volatility in the recent COVID-19 turmoil.

What is Energy Transportation & Storage (ETS)?

Companies who treat, transport and store natural resources such as natural gas, natural gas liquids (NGLs) and crude oil form part of the broader GLIO Index. This includes the transformation of crude oil, natural gas and other commodities into derivatives or transformed products such as NGLs.

The pipelines which transport these products act as the glue between upstream exploration and production (E&P) and downstream distribution. The term "storage" covers caverns, buildings or underground tanks for gas and liquids.

Figure 1. shows the broad infrastructure value chain to transport oil, gas and other commodities, from drilling via lattice gathering networks to processing plants to downstream markets via large volume transportation pipelines. At downstream terminals, the commodities can be transported to end-customers via pipeline, rail or ship; refined at fractionation facilities; and stored or further manufactured.

Midstream assets are diverse by nature. The investability of the companies in the GLIO Index is determined by the quality of those assets, the contractual basis on which they are remunerated and whether the asset characteristics meet the GLIO infrastructure definition.[1]

Historically, a number of these companies had characteristics which would have designated them as 'fringe'. However the evolution of the sector has advanced in the past few years – they now better resemble infrastructure with qualities like minimum volume contractual commitments, limited/zero commodity exposure, improved debt gearing positions, more sustainable earnings and dividends, less-

Figure 1: Energy Infrastructure value chain

Source: 4D Infrastructure

1 The GLIO Index eligibility criteria and sector classifications are based on The Infrastructure Company Classification Standard (TICCS®) created by EDHECinfra.

Figure 2: GLIO ETS Index business risks and characteristics by operational function

Asset Type	Description	Long Contract	High Barriers	Counterparty Risk	Commodity Price Risk	Volume Risk
Utilities (Downstream)	Natural gas & renewables	4	4	4	4	4
Natural Gas Pipelines	Large volume gas pipeline	4	4	3	4	4
Export Terminals	Other gas & liquid export	2	4	3	4	3
Fractionation	Splits NGLs into contributing gases	3	3	2	3	3
Oil (liquids) Pipelines	Large volume oil pipeline	3	2	3	2	1
Storage	Gas & liquid storage	1	2	4	4	2
Gathering & Processing	Lattice pipeline networks	4	4	1	2	1

4 = least risky, 3 = below average risk, 2 = average risk, 1 = most risky Source: GLIO, 4D Infrastructure & CBRE Clarion

exposure to marketing businesses and greater capital focus on 'core' assets. To get an idea of the depth and complexity of the sector, Figure 2. breaks down eligible asset types and quantifies associated business risks.

The mistakes of 2014-2015

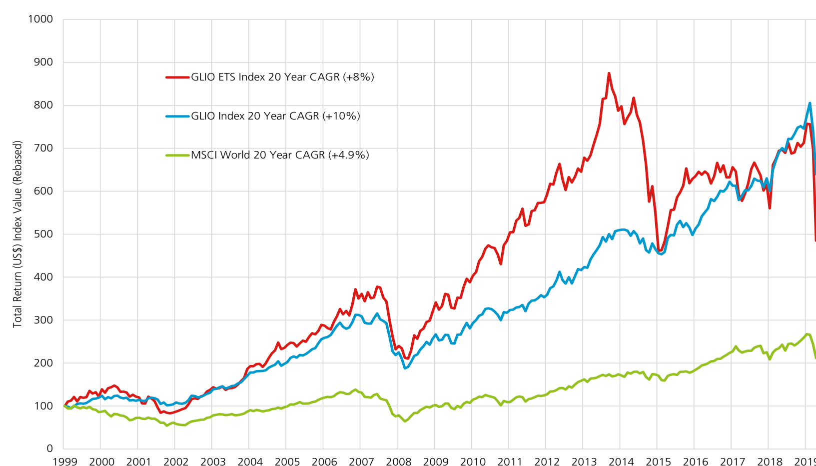
To understand the shift that the sector has undergone, we need to look at the recent past.

From an August 2014 peak, midstream companies' share prices fell sharply and the GLIO ETS Index had lost 47% of its value by December 2015 (see Figures 3 & 4). During this period, retail and generalist investors fled the sector due to concerns about company credit quality, earnings disappointments due to commodity exposure and dividend cuts by management. The GLIO Index (-9%) and MSCI World (-1.9%) were down slightly by comparison.

In a nutshell, corporate credit issues and prices were driven by the following factors – some of which were exacerbated by management mistakes:

- 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 mergers 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 – low return on invested capital.

Figure 3: GLIO ETS Index, GLIO Index & Global Equities Total Returns (USD) since December 1999



Source: GLIO, MSCI, as at June 30, 2020

Figure 4: GLIO ETS Index: trough to peak, peak to trough vs. GLIO Index & Global Equities

Period	Market	No. Months	GLIO ETS Index	GLIO Index	MSCI World
Dec 99 - May 01	Up	16	43.3%	24.3%	-19.4%
May 01 - Oct 02	Down	16	-42.0%	-17.7%	-27.6%
Oct 02 - Jun 08	Up	68	351.9%	195.0%	101.9%
Jun 08 - Mar 09	Down	9	-44.1%	-36.7%	-41.4%
Mar 09 - Aug 14	Up	65	316.7%	161.9%	151.7%
Aug 14 - Dec 15	Down	16	-47.3%	-9.0%	1.9%
Dec 15 - Jan 20	Up	49	63.8%	76.9%	56.0%
Jan 20 - Jun 20	Down	5	-25.2%	-12.8%	-4.9%

Source: GLIO, MSCI. As at June 30, 2020.

Performance: Green = best, Yellow = middle, Red = worst

- Management overstretched with large projects with high regulatory risk. Subsequently regulation and permission for new assets has become increasingly difficult.
- Structural changes in the sector resulted in some assets being used less and sometimes stranded.
- The sector was no longer supported by equity capital markets that previously had been wide open to new equity issuance.

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North American phenomenon

North America is unique in having a mature midstream sector that is disaggregated from the integrated oil companies and state-owned companies that have full value chain ownership of energy assets in other markets. The ability to invest in midstream without the upstream (producers) and downstream (refining) exposure is almost exclusively a North American phenomenon. It is a very targeted investment opportunity that fits well in a diversified infrastructure allocation.

Figure 5: Management reforms

Issue	Explanation	Examples
Dividend Cuts	Companies cut dividends led by oil-price drop and credit concerns	KMI – 72% cut WMB – 69% cut
Contract Restructurings	Companies restructured contracts to remove commodity exposure, add minimum volume commitments and extend maturities	OKE converts G&P from percent of proceeds to fee-based in Bakken
Debt Reductions	Companies de-geared and have improved balance-sheet strength, but some remain 'work in progress'	KMI, WMB & ENB Debt/EBITDA targets 4.5x from 6x in 2015
Non-core Asset Sales	Asset sales that are non-core to strategy, or exposure to commodity prices, provided liquidity to pay down debt	ENB divested G&P assets in 2018
Capital Discipline	Contract commitments required before final investment decisions, and rejection of non-core investment proposals	TRGP exit Whistler project KMI exit TransMountain expansion

Source: 4D Infrastructure

2016 onwards: Management response and reforms

Recognizing that earnings volatility and poor performance needed to be addressed, management undertook a number of measures. Management prioritized a reduction in gearing with varying degrees of success – some hitting targets, and some remain work-in-progress. Without the ability to easily sell equity in the public markets, de-leveraging takes time through growth and requires high returns on capital. Non-core assets have been sold in many cases and shareholder pay-outs, or dividends reduced to pay down debt. Post this deleveraging, the industry will be in a much stronger place.

Speaking broadly, these actions were rewarded. So from December 2015 to January 2020, GLIO ETS gained 64% – albeit to a lesser extent than the GLIO Index, which itself rose 77% (see Figure 4). Both GLIO ETS and the GLIO Index outperformed global equities which added a more modest 56%.

Performance recap:
Over a 20-year horizon, the GLIO Index added (+10%) and the GLIO ETS Index (+8%) annual compound total returns (USD). Both outperformed global equities (+4.9%) significantly. Historically, in bull markets the GLIO ETS Index outpaced the GLIO Index 75% of the time and MSCI World 100% of the time. In falling markets, the GLIO ETS Index fell further than the GLIO Index and MSCI World in all periods.

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2020, a déjà vu of 2015?

The impact on oil and gas prices of COVID-19 and a mild winter on the demand side, coupled with OPEC fallout on the supply side, has hit the share prices of many midstream companies. The GLIO ETS Index has fallen 25% since Jan 2020 (see Figure 4).[3] In our view, the H1 share-price slump could prove an overreaction and perhaps even a 'hangover' from investors' experiences in 2015.

Why do we say this? In general, 2020 midstream companies are in better shape than in 2015 and steeled to withstand the risks from a short-term commodity price slump, as long as economic common sense prevails. Broadly, management teams have made progress since 2016, however, those companies who are mid-transformation showed that leverage and pay-outs remain uncalibrated to manage through the unprecedented shock of H1.

"Our strong financial position, extensive and integrated assets, fee-based business model and high-quality customer base provide the foundation for a resilient business. It is a business built to weather volatile market conditions and well-positioned to resume growth. While the crude oil and natural gas markets remain challenging, the demand outlook for natural gas and natural gas liquids remains strong, and the reserves in the basins served by our systems have not moved. In fact, we believe that our ability to serve our customers is stronger than ever when demand recovers."

Terry Spencer, CEO, ONEOK

We believe the sector's ability to withstand short-term oil and gas price shocks is robust for several reasons:

- **Little exposure to poor credit quality.** On balance, many midstream companies are not significantly exposed to customers with poor credit risks. During historical crude price collapses like 2015/2016, when distressed midstream counterparties operated in lower production cost basins (Tier 1 and Tier 2), bankruptcy administrators continued drilling operations through the process.
- **Little exposure to energy commodity prices.** Many midstream investment

3 For the five months January 31, 2020 to June 30, 2020.

Master Limited Partnerships (MLPs)
MLPs are businesses that exist in the form of a publicly traded limited partnership. They combine the tax benefits of a private partnership – profits are taxed when shareholders receive dividends. This means they tend to offer high yields compared to other public companies. They are limited to operating in the natural resources and real estate sectors. They add another option for investors to gain exposure to energy infrastructure structure. However, investors should be aware of increased reporting obligations of owning MLPs. MLPs are not covered by the GLIO Index.

For more information: www.eic.energy

In the longer term, midstream will be impacted by the move to a carbon-neutral economy. But meantime the sector has an essential role to play as economies transition to cleaner energy over the coming decades. Investors should not lose sight of this as they talk about 'terminal value'.

companies have limited direct price exposure to either crude or gas prices. The contract remuneration structures for most companies are based on fees, often with minimum volume stipulation or take-or-pay provisions.

- **Limited sensitivity to energy volume volatility.** Although the midstream sector does have indirect volumetric exposure to crude prices, during periods of crude-oil price weakness the sector has seen relatively minor long-term volume and earnings reductions. Crude and associated gas production is often only temporarily halted by producers through 'shut-ins' of wells. Production often restarts when commodity prices recover.
- **Resilience of capital-intensive assets.** Midstream assets are capital intensive and long-lived, with capital allocation based on long-run return requirements. In troubled times, companies are likely to target stronger cash-flow generation by deferring growth projects or reviewing existing projects with higher return requirements to shore up balance sheets. >

Midstream Contract Terms
The contractual terms underpin the earnings resilience of the assets even in volatile commodity environments. The types of contracts commonly used in the sector to immunize from commodity prices are summarised below.

Take or pay – a contract provision obliging the buyer to pay for a certain minimum quantity of product, whether or not the buyer actually takes that quantity during the stated period. Usually stated in terms of an absolute quantity, or a percentage of total contract quantity, over a specified period of time.

Cost of service – a contract provision representing total cost of providing service, including operating and maintenance expenses, depreciation, amortization, taxes, and return on capital/rate base. Generally, the cost of service is the same as its revenue requirement. Importantly, lower throughput or revenues lead to higher tolls as the pipeline's costs are shared by the remaining shippers on the system.

Fee for service – a contract provides for a fixed fee per unit of production sold or service provided, not subject to commodity price risk but subject to volume risk.

Fixed toll – a contract which does not vary with changes in throughput. Usually based on fixed costs and throughput for a test year.

"As the first listed energy infrastructure real estate investment trust (REIT), we provide global investors a tax efficient way to own US pipelines, storage facilities, and similar assets. Our acquisition emphasis is targeting existing long-term contracted, regulated assets. Scarcity value of these assets continues to increase."

Jeff Fulmer,
Executive Vice President,
CorEnergy

Assessing the risks and opportunities

The downturn in energy and midstream stocks triggered a review of the individual companies within the GLIO ETS Index to understand which may be exposed to weak commodity prices. 4D Infrastructure also tested downside scenarios to reveal financial distress risk and how that would impact valuations. They believe that the sector will see price volatility until the market recognizes the disconnect between select company earnings and commodity pricing, which should play out over time.

Certain midstream subsectors have greater earnings exposure to lower production and crude price downside, such as Gathering and Processing (G&P) and marketing, and this may reduce growth outlooks. Others, such as pipelines, are largely immune. Considering revised base case scenarios and current share prices, many companies represent five-year internal rates of return above 20%. This would make them a "Strong Buy" according to many GLI managers valuations.

M&A could be a natural evolution, which could solve the competition and growth issues through efficiency and costs reductions. There is also near-term risk if private investors with significant capital and longer-term investment horizons bid for companies at low share prices. A 'healthy' premium could seal a transaction even while representing a large discount to fundamental valuation.

This is a real concern for the sector. Company boards and management teams hopefully exercise strong governance and good judgement in insisting that real fundamental value is recognized and paid by potential acquirers.

Regulatory risk needed to be factored into any investment decision. It has become costly and uncertain to build large-scale pipelines given local opposition, and even later this year this could be exacerbated by a change in US president.

You cannot write about the sector without mentioning ESG. While longer-term, midstream will be impacted by the move to a carbon-neutral economy, the sector clearly has an essential role to play as economies transition over to cleaner energy over the coming decades. Investors should not lose sight of this as they talk about 'terminal value'.

"We view energy transportation & storage as a key component of a diverse infrastructure allocation, however the complexities of the sector and its dependence on global economic growth make active management critical. We seek to add value within this sector through both stock selection and through dialing in the appropriate level of exposure to the sector within the portfolio at points in time."

Hinds Howard, CBRE Clarion Securities, Portfolio Manager Infrastructure

At this time, it is important companies embrace these changes and act transparently so investors can grasp the risk and opportunities the sector presents over the next 20 to 30 years. The work GLIO is doing with GRESB on company disclosure of sustainability governance, implementation, operational performance data and stakeholder engagement practises

will be important tools to help investors navigate through the GLIO ETS Index.

It is reasonable to say that among the infrastructure sectors covered by the GLIO Index, the energy transportation and storage sector could be seen as the most multi-faceted. To this end, companies should be assessed on a case-by-case basis to ensure investors capture those offering the highest price/value ratio. The complexity of the sector simply lends itself to a specialist active manager.

Conclusion

The GLIO ETS Index offers a wide-ranging exposure to a number of operations and functions within the midstream portion of the energy value chain. In fact, some companies like TC Energy and Enbridge even have their feet in the utilities sector through recent investments in natural gas, nuclear and renewables. Investment opportunities will depend on the underlying operations, counter-party risk, volume and commodity price exposure and the type and length of contracts in place with customers, and ESG factors over the mid to long term.

While the sector has largely moved on from the mistakes of five years ago, it seems that many investors do not fully understand the newly developed resilience that has been built. As such, it seems advisable that investors seek out an active specialist listed infrastructure manager to navigate through the variety of risks and moreover opportunities the sector presents.

Special thanks to Hinds Howard at CBRE Clarion for input to the article. Hinds writes a weekly update on the MLP sector: www.mlpguy.com

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