Evolution of midstream energy

As we look at the changing landscape for midstream energy, we continue to see companies simplifying their structure by either eliminating incentive distribution rights (IDRs) or some MLPs converting to C-corps. We think this evolution is good for the sector. We believe that those companies better suited as C-corps will prosper with the conversion and for those that remain MLPs it will result in a more sustainable model as the cost of capital is lowered and corporate governance is improved.

Components of total return for an equity security

Dividend yield • Earnings per share growth • Change in market multiple

Maturation of the MLP business model

	MLPs Version 1.0	MLPs Version 2.0
Return components	• Distribution yield • Distribution per unit growth • Change in market multiple	• Distribution yield • Distributable cash flow per unit growth • Change in market multiple
Qualities	• Distribution coverage 1.0x - 1.3x • Equity and debt markets fund projects – Distribution coverage less in focus since equity market access readily available – Overnight offering discounts < 5% • IDRs prevalent • Shareholder return primarily through distribution – Distribution growth = distributable cash flow growth • Asset class beyond midstream – Lower quality cash flow proved less suitable	• Distribution coverage 1.2x - 1.5x – Allows for accelerated debt reduction • Excess cash flow and debt markets fund projects – Greater accretion from reduced dilution – Reduced equity market need and lower debt levels reduce unit price volatility • IDR elimination improves LP unit holder and management alignment • Shareholder return through distribution, debt reduction and unit repurchases – Distribution growth ≤ distributable cash flow growth – Focus on cash available vs. cash distributed – Metric more opaque than distribution growth

Qualities outlined above are estimates only and are meant to highlight some of the differences in select performance metrics for those certain MLPs that have chosen to modify their corporate structure in the manner described in this piece.
Qualities outlined above are not indicative of future performance metrics.

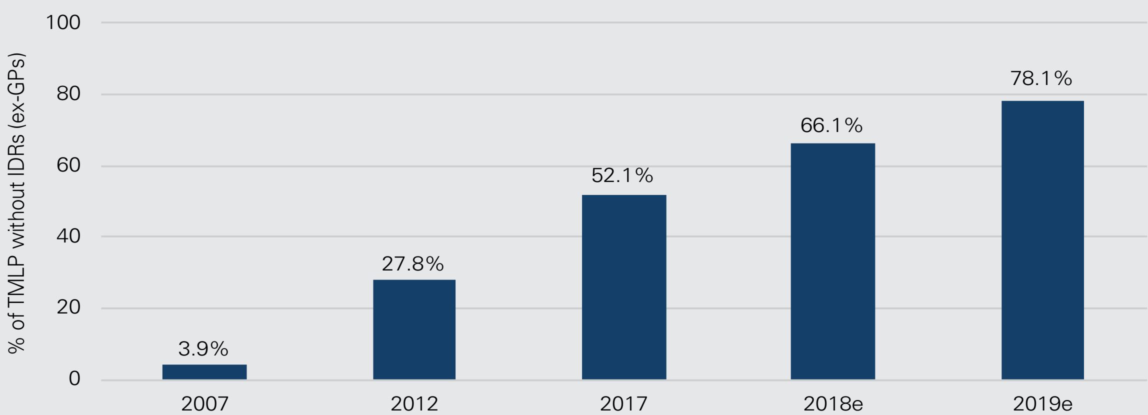
An incentive distribution right (IDR) is a right of the General Partner in the MLP to a greater proportion of the Limited Partnership's quarterly distributions. The IDRs provide the GP with an increasing cut of the incremental distributable cash flow from the MLP.

Simplification

An increasing number of companies are moving to simplify their corporate structure by eliminating IDRs or rolling up to a C-corp. The simplification process can vary depending on if the general partner (GP) is a publicly-traded C-corp, has IDRs or other assets.

Currently, more than half of the MLPs that comprise the Tortoise MLP Index® (TMLP) no longer have IDRs, including six of the seven largest MLPs, and we expect that trend to continue. By the end of 2019, we anticipate that nearly 80% of current TMLP constituents will not have IDRs, including all of the 10 largest MLPs.

Percent of TMLP without IDRs



As of 3/31/2018. Source: Tortoise. Note: Anticipated simplifications assume MLPs remains outstanding for forecast period.

In our view, removing IDRs results in a more sustainable MLP model as cost of capital is lowered and corporate governance is improved. A lower cost of capital should result in increased competitiveness for projects and acquisitions, higher return on invested capital and ultimately, enhanced longevity of distribution growth. We believe that simplifications and IDR eliminations enhance corporate governance in the MLP sector by improving transparency and alignment between the GP and the LP, which could attract incremental institutional investors.

Many companies are assessing their options to determine if there is an advantage to rolling up to a C-corp structure. We think this is a company-specific decision and conversion may make sense for some MLPs, but not necessarily all. Broadly, transactions that are taking place from a position of strength are handled and received much differently than some of the historical transactions that occurred from a position of weakness, usually related to balance sheet pressures.

Many MLPs are expected to evaluate C-corp conversions as tax reform and FERC income tax allowance ruling narrows cost of capital advantage and fund flows into the MLP sector remain tepid. For some midstream companies, the C-corp structure may be more attractive, particularly if, as part of a transaction, the company is able to avoid paying taxes for a period of time. Potential benefits include a broader investor universe, which means access to a deeper pool of capital and improved corporate governance to shareholders.

However, there are several considerations to explore before making the decision to convert to a C-corp. The entity level taxation of 21% vs. 0% for MLPs. It's hard to argue that there isn't value to having no entity level tax as an MLP versus having a tax liability. Also, the conversion is potentially taxable to current unitholders and MLP distributions are more tax advantaged than dividends.

We do not believe C-corp conversions will necessarily result in significant negative impact to yield or lead to wide-spread distribution cuts. The impact to distributions/dividends will be company-specific, but we believe most instances will result in limited income impact. The focus on distributable cash flow/unit growth instead of distribution growth shifts the return philosophy from current income to total return.

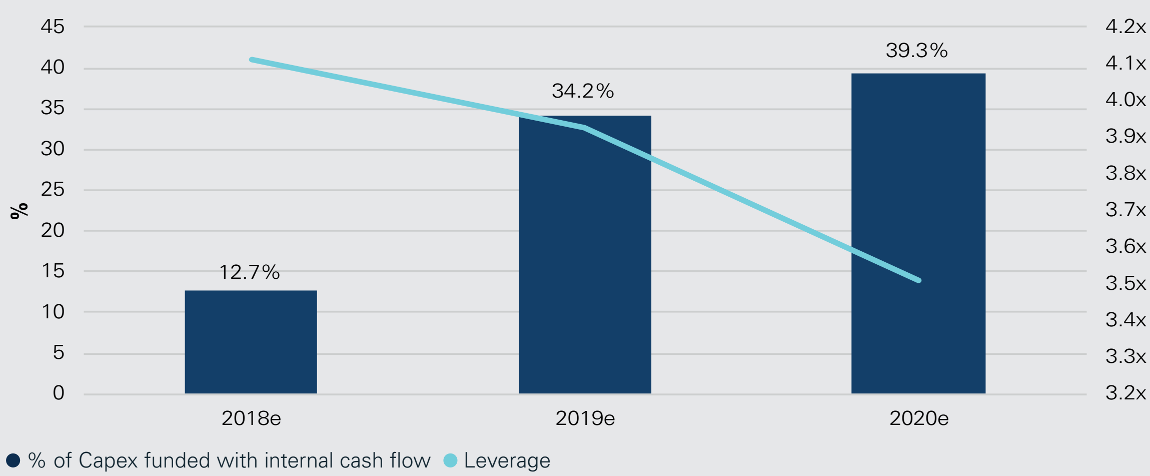
Ultimately, we are structure agnostic. We believe asset quality and execution drive value in the midstream space, not corporate structure.

Funding capital expenditures

Many MLPs are expected to continue the move towards the self-funding model for equity needs, reducing reliance on capital markets access. MLP equity issuance is expected to decline over the next three years as excess cash flow (higher distribution coverage) and debt capacity increase, while capex budgets moderate.

Higher distribution coverage is expected over the next several years as a result of operating leverage (volume growth), new projects coming online and some companies reducing distributions or slowing distribution growth. With higher coverage, companies are expected to direct an increasing amount of internal cash flow to funding capital expenditures. By 2020, we project approximately 40% of capex will be funded by internally generated cash flow, up from approximately 13% in 2018. Companies are also expected to benefit from balance sheet capacity as leverage is projected to decline over the next three years.

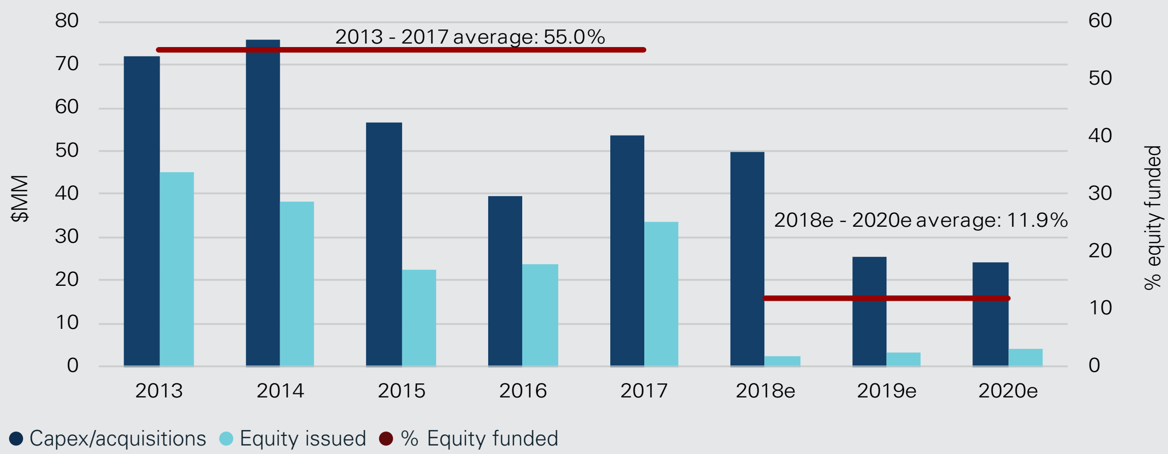
Funding capex/acquisitions with internal cash flow



As of 3/31/2018. Source: Tortoise, Bloomberg, Wells Fargo. Note: Equity issuance excludes IPOs.

As a result of higher excess cash flow, increased debt capacity, and moderating capex, equity issuance is expected to decline. Historically, equity issuance has comprised about half of total funding needs (capex + acquisitions). We expect equity funding to fall from approximately 51% in 2013-2017 to 10%-20% from 2018-2020, translating into $4-$6 billion of equity issued during this time frame, well below the approximately $30 billion issued in 2017. Multiple options exist and funding may come in the form of preferreds, private investment in public equities (PIPEs) or other alternative equity.

Total capex/acquisitions vs. equity issuance



As of 3/31/2018. Source: Tortoise, Bloomberg, Wells Fargo. Note: Equity issuance excludes IPOs.

Tax reform

From a tax perspective both the C-corp and the MLP structures benefitted from tax reform. C-corps received a corporate tax rate reduction from 35% to 21% and going forward non-corporate MLP investors benefit from a 20% deduction for qualified business income from such investments, along with a reduction in the highest marginal individual tax rate by 2.6%.

FERC implications

On March 15, 2018, the Federal Energy Regulatory Commission (FERC) ruled against an existing policy allowing MLPs to include an income tax allowance (ITA) in cost-of-service rates. Removal of this allowance in cost-of-service calculations may result in a lower tariff rate and ultimately lower cash flow for affected pipelines. This change only affects MLPs with interstate natural gas and crude oil pipelines operating on a cost-of-service basis. Pipelines using negotiated or market-based rates are unaffected. The ruling also does not impact pipelines held by C-corporations or gathering and processing assets. Ultimately, we do not believe the FERC announcement will materially impact the midstream sector. Many MLPs issued press releases confirming this lack of materiality shortly after the announcement.

On July 18, 2018 FERC issued its final ruling related to the treatment of income taxes for natural gas cost of service pipelines and it included a few changes from the March ruling. We think the ruling provides clarifications and changes that will positively impact the MLPs that operate cost of service pipelines.

Potential catalysts

We believe that positive energy fundamentals will translate to strong midstream cash flow growth in 2018. Significant operating leverage in various areas where capital is already spent and new projects are expected to drive incremental volume and cash flow growth as crude oil, natural gas and NGL supply is projected to increase significantly over the next few years. MLP investors should expect to see sustained quarterly growth in income growth over the next two years for first time since 2015.

We should see increasing structural clarity as simplifications and IDR eliminations continue. Simplifications and IDR elimination transactions should improve cost of capital and GP/LP alignment enhancing corporate governance. We expect the LP income stream from distributions to be held close to flat in many future simplification transactions. The evolving MLP business model of higher distribution coverage reduces equity issuances and reliance on capital markets access.

Clarity from FERC and midstream companies regarding income tax allowance ruling should also be a catalyst for midstream energy. More complete information from FERC on its final rate-making policy should reduce uncertainty. Thorough updates from companies on range of impacts are expected to reduce investor concerns. Valuations have been compelling, which we believe will lead to new investors entering the midstream space. We also expect continued M&A in midstream energy including corporate to corporate, private equity taking companies private as well as stock buybacks and/or insider purchases.

As catalysts play out, the midstream energy sector is expected to attract fund flows resulting in improved equity valuations.

Conclusion

We continue to have a high conviction for MLPs and the midstream energy sector. We understand that many investors like midstream energy companies for the current income that they provide. We also recognize that the distribution cuts by several MLPs and some MLP products have diminished investor confidence in the midstream sector. At Tortoise, our focus is on sustainable income. Our high quality, company-focused, actively managed approach has served our investors well during turbulent times, specifically in regards to income. We think owning quality companies with asset footprints in strategic production areas is the key to growing income streams. For the overall sector, we think investors should see sustained quarterly in income growth. A growing income stream should be a big catalyst for the midstream energy market, restoring investor confidence by signaling renewed health of the sector.

For additional information,
please call 888-870-3088 or visit www.tortoiseadvisors.com

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Master limited partnerships (MLPs) are subject to many risks, including those that differ from the risks involved in an investment in the common stock of a corporation. Holders of MLP units have limited control and voting rights on matters affecting the partnership. Holders of units issued by an MLP are exposed to a remote possibility of liability for all of the obligations of that MLP in the event that a court determines that the rights of the holders of MLP units to vote to remove or replace the general partner of that MLP, to approve amendments to that MLP's partnership agreement, or to take other action under the partnership agreement of that MLP would constitute "control" of the business of that MLP, or a court or governmental agency determines that the MLP is conducting business in a state without complying with the partnership statute of that state. Holders of MLP units are also exposed to the risk that they will be required to repay amounts to the MLP that are wrongfully distributed to them. In addition, the value of the funds' investment in an MLP will depend largely on the MLP's treatment as a partnership for U.S. federal income tax purposes. If an MLP does not meet current legal requirements to maintain partnership status, or if it is unable to do so because of tax law changes, it would be treated as a corporation for U.S. federal income tax purposes. In that case, the MLP would be obligated to pay income tax at the entity level and distributions received by the funds generally would be taxed as dividend income. As a result, there could be a material reduction in the funds' cash flow and there could be a material decrease in its net asset value. Furthermore, MLP interests may not be as liquid as other more commonly traded equity securities.

MLPs = Tortoise MLP Index®, a float-adjusted, capitalization-weighted index of energy MLPs. To be eligible for inclusion in the Tortoise MLP Index®, a company must be publicly traded, organized as a limited partnership or a limited liability company, and be classified as an "energy MLP" by the Master Limited Partnership Association (MLPA). Tortoise MLP Index® is the exclusive property of Tortoise Index Solutions, LLC, which has contracted with S&P Opco, LLC (a subsidiary of S&P Dow Jones Indices LLC) to calculate and maintain the Indices. The Index is not sponsored by S&P Dow Jones Indices or its affiliates or its third party licensors (collectively, "S&P Dow Jones Indices"). S&P Dow Jones Indices will not be liable for any errors or omission in calculating the Indices. "Calculated by S&P Dow Jones Indices" and its related stylized mark(s) are service marks of S&P Dow Jones Indices and have been licensed for use by Tortoise Index Solutions, LLC and its affiliates. S&P® is a registered trademark of Standard & Poor's Financial Services LLC ("SPFS"), and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). It is not possible to invest directly in an index. Index returns and yields shown are presented before management fees and other expenses of Tortoise advisory products and services. Clients or investors in Tortoise products and services will experience returns and yields reduced by advisory fees and other product expenses.

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