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# SteelPath MLP Primer

## Executive Summary

Master Limited Partnerships, or MLPs, are engaged in the transportation, storage, processing, refining, marketing, exploration, production or mining of natural resources. By confining their operations to these specific activities, their equity interests, or units, are able to trade on public securities exchanges, like the shares of a corporation, but without entity-level taxation. Of the more than 100 partnerships that OFI SteelPath follows closely, approximately 80% trade on the New York Stock Exchange (NYSE) with nearly all of those remaining trading on the NASDAQ. MLPs must make public filings with the Securities and Exchange Commission and must file 10-Ks, 10-Qs, and notices of material changes like any publicly traded corporation. MLPs are subject to the record-keeping and disclosure requirements of the Sarbanes-Oxley Act.

Since 1996, the MLP asset class, as measured by the Alerian MLP Index (NYSE: AMZ), has produced a compound annual total return of approximately 16.5% versus 4.6% for the broader market.<sup>1</sup> These strong returns were generated through a combination of current yield and consistent distribution growth largely driven by the performance of energy infrastructure MLPs, the primary MLP subsector. Energy infrastructure MLPs own and operate the long-lived, high value physical assets needed to solve the logistical challenges that stand between the production of raw natural resources (at often remote locations) and the delivery of resources in a usable form to the consumer of those natural resources such as refineries, utilities and chemical plants. These assets include pipelines, treating and processing plants, terminals, and storage facilities as well as certain truck, rail and shipping assets.

Other MLP subsectors include oil and gas exploration and production (E&P), propane distribution, shipping, coal production, natural gas compression, and refining as well as several others. Today, the market capitalization of the energy MLP asset class totals more than \$590 billion.<sup>2</sup>

Of the subsectors or businesses described above, only energy infrastructure is unique, or nearly so, to the MLP asset class. Nearly every pure-play energy infrastructure operator has chosen to

organize as an MLP with only a handful organized as corporations. Importantly, energy infrastructure operators have historically generated predictable and growing cash flows (and therefore distributions) predicated on the following:

- Long-lived, high value physical assets that play a critical, must-run role within the energy value chain.
- Assets in place tend to benefit from substantial barriers to entry and may capture attractive organic investment opportunities.
- Operating leverage which can enhance the benefit of throughput growth.
- Tariff increase potential, with certain assets benefiting from inflation-linked tariff adjustments.

The market capitalization of the energy MLP sector has grown exponentially over the last decade, driven by asset rationalization of energy infrastructure from legacy corporate owners (e.g., major oil and gas companies) into MLPs, and by demand for new energy infrastructure. In 2000, the sector's market capitalization was a mere \$20 billion, this figure doubled by 2003 to \$40 billion, doubled yet again by 2006 to \$80 billion, and now stands at more than \$590 billion.<sup>3</sup> OFI SteelPath expects the MLP market capitalization to continue to grow from asset rationalization and, more importantly, as MLPs continue to build and

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1. Source: Bloomberg. Return data calculated through 12/31/13. **Past performance does not guarantee future results.**  
 2. Source: Wells Fargo Securities MLP Monthly, July 2014.  
 3. Sources: Bloomberg and Wells Fargo Securities.

operate new energy infrastructure assets to accommodate North America's growing production of crude oil, natural gas and natural gas liquids.

The evolution of the MLP structure as the dominant form of organization used by energy infrastructure operators may be compared to how real estate investment migrated to the Real Estate Investment Trusts (REIT) structure. In similar fashion, the MLP structure is an efficient choice to house and manage energy infrastructure assets. Not only does the lack of an entity-level tax result in tax expense savings, but it also frees managers to focus purely on cash-on-cash returns as opposed to having to manage to minimize corporate taxes. Further, the ability to publicly list equity interests enables a much more efficient avenue through which to raise capital to fund new investment than that provided to private partnerships; a necessity given the hundreds of billions of dollars of capital investment required over the last decade and the hundreds of billions that will likely need to be invested over coming decades.

As the size of the sector has expanded, so too has institutional ownership of MLPs. In 2005, institutional ownership was estimated at only 23%, with the remaining held by retail investors. For 2013, institutional ownership expanded to an estimated 39%.<sup>4</sup> We believe institutional ownership is likely to continue to expand as the sector's market cap continues to grow and as investor awareness continues to improve.

Prior to North America's energy renaissance, revenue growth for energy infrastructure operators primarily derived from modest growth in the demand for gasoline and diesel, spurring pipeline volumes, as well as modest but predictable tariff rate increases.

While certain MLPs and subsectors continue to offer similar attributes, today the MLP space is much more diversified with the most dominant driver of growth stemming from North America's energy renaissance. Thematically, therefore, MLP investing today represents an investment in North America's growing oil and gas production volumes.

We believe the sector's growth potential and, importantly, the visibility of this growth potential is greater today than in the pre-energy renaissance period. Comparing the growth expectations published by a prominent MLP research group<sup>5</sup> from year-end 2009 to April 2014 provides an example of this shift: average multi-year growth expectations for those midstream

MLPs under coverage was 4.5% and is now 8.5% while the average growth expectation for the 10 fastest growing MLPs has shot from 8.4% in 2009 to 18.8% today.

Burgeoning production of oil and gas from unconventional shale reserves has reversed the country's long trend of slow production declines, and has created an impetus to update and expand the country's pipeline network and related infrastructure. Demand for new infrastructure is evident in the record-breaking capital spending plans announced by MLPs and by recent swings in price differentials between regions, as growing production outstrips low cost take-away capacity.

Domestic oil and gas production is collectively expected to grow approximately 20% (approximately 2.7% per annum)<sup>6,7</sup> through the end of the decade, making the U.S. one of the top energy producers in the world. With this continued rise in oil and gas production, greater volumes can be expected to flow through existing assets. Further, additional assets will be needed to de-bottleneck transportation routes and to accommodate the complex logistics associated with the quality differences inherent in crude production. Natural gas production growth will require similar solutions as well as additional assets for treating and processing and to handle other co-products.

Industry estimates for the amount of U.S. energy infrastructure investment needed in coming decades vary from \$640 billion<sup>8</sup> to nearly \$900 billion. These estimates suggest significant energy infrastructure investment opportunities remain. Additionally, OFI SteelPath estimates that a substantial amount of U.S. energy infrastructure is currently held in both private and public corporate structures that may be rationalized into the asset class through acquisition and the creation of new MLPs.

As a result, OFI SteelPath believes that this emerging asset class benefits from macro dynamics that are supportive of what we consider to be relatively low risk growth. Further, we believe the relative visibility of these growth prospects is unique. As market expectations for everything from gross domestic product (GDP) and job growth, to inflation and treasury rates, have varied materially over recent years, the production growth of domestic natural gas and crude oil has steadily risen in step with advances in drilling technologies and techniques rather than any particular economic measure.

4. Source: Morgan Stanley, 4/17/13.

5. Source: Wells Fargo Securities.

6. Source: IHS—"Oil & Natural Gas Transportation & Storage Infrastructure: Status, Trends, & Economic Benefits," December 2013.

7. Source: EIA—"Annual Energy Outlook 2014 Early Release Overview," 12/16/13.

8. Source: The INGAA Foundation—"North American Midstream Infrastructure Through 2035—Capitalizing on Our Energy Abundance," ICF International, 3/17/14.

However, MLP units are equities and have reflected some trading price correlation to the broader markets, particularly in times of turbulence. Therefore, investors should not expect their MLP equities to trade agnostically to broader market turbulence should it occur. Importantly though, history has shown that MLP equities, particularly energy infrastructure MLP units, tend to rebound healthily in the wake of market turbulence. As a result, infrastructure MLPs have exhibited low long-term correlation to the broader markets. We believe this price resilience stems from the operational stability many infrastructure MLPs have displayed over a number of cycles. Infrastructure MLPs benefit from fee or fee-like margins which exhibit little volatility and the volumes transported or stored have remained relatively stable even in extreme economic scenarios.

It is also important to note that many businesses utilizing the MLP structure are not related to energy infrastructure. Over the past few years there has been a trend closer to the wellhead which introduces assets with more basin-specific risks and commodity price exposure. There have also been MLP initial public offerings (IPOs) in businesses as diverse as liquefied natural gas (LNG) shipping, compression, proppant supply, salt water disposal, and refining. While the expansion of business types using the structure adds new complexities and greater analytical burden to portfolio construction, the addition of these new businesses may also provide investment opportunities. However, many of these businesses do not offer those characteristics which we believe make energy infrastructure investment unique today (i) underlying businesses with little margin variability or exposure to the broader economy and (ii) interesting growth potential. Taken together we believe this combination represents a unique risk to reward opportunity.

However, attention should be paid to the sector's dependence on the capital markets to fund capital investment. MLPs, by their nature, distribute the majority of free cash flow to investors and, therefore, look to the equity and debt capital markets to fund substantial capital spending. This need for capital in coming years may also act as a regulator to substantial near-term asset class valuation improvements. Further, a significant disruption in the capital markets, as was experienced during the financial crisis, could result in a slowing of growth plans at individual MLPs as their ability to fund investment could come into question. While the sector's dependence on the capital markets does create risks it should also be noted that this dependence encourages fiscal discipline. Managers must produce results or lose funding for future projects.

The core thesis that SteelPath was founded on in 2004, and maintains today, is that energy infrastructure MLPs seek to offer a unique risk-to-reward dynamic due to the relatively low risk nature of the underlying businesses combined with substantial growth opportunities that today primarily stem from North America's energy renaissance. As an asset class, we believe MLPs are on a growth trajectory very similar to that experienced by REITs in the late 1980s. Though today the MLP sector remains institutionally under-owned, interest is increasing and new investment product structures are making access to the asset class more palatable for investors. Importantly, liquidity and market capitalizations have reached the point where MLPs can comprise a meaningful portion of a large institution's portfolio and this improvement in liquidity appears to be slowly attracting these participants.

On average, in a normalized market environment, OFI SteelPath expects between 5 and 10 MLP IPOs each year for the foreseeable future. Supportive domestic production trends should continue to spur demand for new assets providing investment opportunities. While acquisition-fueled growth may be less important today than in the days prior to North America's energy renaissance, we expect meaningful acquisition activity to continue as well.

We believe these trends are likely to be supportive of business growth. Further, if the sector continues to provide superior distribution growth and total return potential than other yielding equities, moderate growth in institutional participation will likely continue and, we believe, may also help to both support and rationalize valuations.

## Why Invest in Energy Infrastructure?

Energy infrastructure can be defined as those long-lived, high value physical assets needed to solve the logistical challenges that stand between the production of raw natural resources at often remote locations, and the delivery of a usable feedstock to the consumer of those natural resources such as refineries, utilities and chemical plants. These assets include pipelines, treating and processing plants, terminals, and storage facilities as well as certain truck, rail, and shipping assets. Exploration & production (also referred to as “upstream”) and refining (“downstream”) would not be possible without the network of energy infrastructure (“midstream”) that connects them.

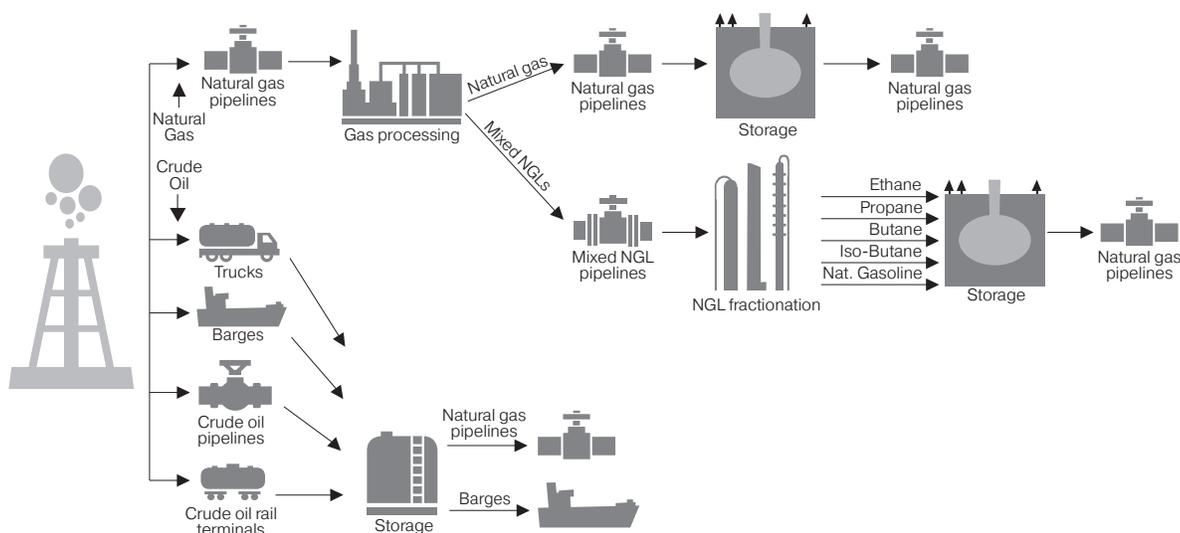
## Unlocking Value in Midstream Assets

Traditionally, midstream assets were held by oil majors, refiners, and utilities and viewed as cost centers required to conduct operations. However, ownership of these assets has been shifting in part because managers of, and investors in, these broader businesses tend to focus on performance measures that are not aided by the ownership and maintenance of midstream assets: exploration success rates, refinery yields, a utility’s rate base, etc. Therefore, these traditional owners of midstream assets are not well rewarded for the capital allocated to midstream assets. Further, on a standalone basis, these stable, high free cash flow assets often garner better

market trading multiples than the cyclical refineries and oil and gas producers, or slow growth utilities that own them.

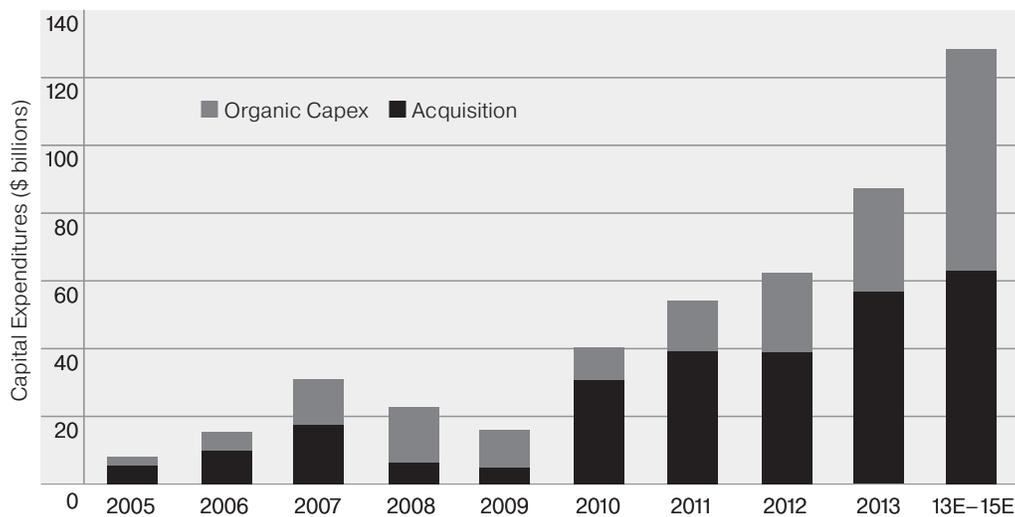
As energy majors looked for ways to improve valuations and free up capital, midstream assets began to migrate to the MLP structure. Defined in its current form by Congress in 1986, the structure was ideally suited to house these businesses. The lack of entity level taxation allows free cash flow generated to flow to investors in an unfettered manner, while the ability to publicly list equities not only allows for efficient market value recognition but also allows for the ability to raise new equity in proportions that are sufficiently sized for the large capital investment opportunities that typify energy infrastructure.

E&P companies in particular are motivated to sell these businesses, given the premium that is placed by their investors on making commodity price-sensitive investments that involve both greater risk and greater potential reward. Additionally, as standalone energy infrastructure operators, MLPs have the incentive, expertise, and freedom to potentially maximize use and profitability of these assets. Recently, low natural gas prices have further incentivized E&P companies to divest their midstream assets to bridge funding gaps in their drilling budgets.



**Chart 1**

**MLP Capital Expenditures**



Sources: Company data and Wells Fargo Securities, LLC estimates as of 1/8/14.

The pace of acquisition activity within the sector has been strong, averaging over \$31 billion per annum from 2009 to 2013. We believe substantial energy infrastructure acquisition targets remain available and that acquisition activity should continue at a healthy pace in coming years. Additionally, there are many groups of assets—including refineries, oil/gas field service providers, petrochemicals, and others—that have begun to utilize the structure, adding substantially to the pool of potential acquisitions.

**U.S. Shale Discoveries to Drive Substantial Energy Infrastructure Investment**

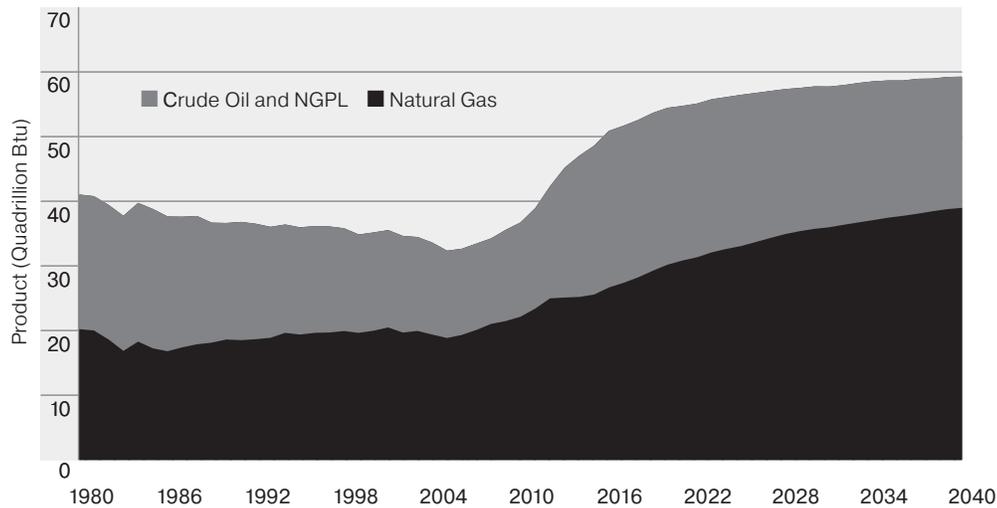
In the decades preceding the current energy renaissance, domestic hydrocarbon production appeared to be in terminal decline. Therefore, individual crude oil or natural gas midstream assets rarely demonstrated significant volume or revenue growth. Refined petroleum product midstream assets benefited from only modest, though stable, growth in domestic fuel consumption. While midstream MLPs provided steady financial results and many grew admirably through acquisition, the ability to find asset-level growth was limited.

However, in the middle of the last decade, technological advances pioneered and pursued by domestic independent oil and gas companies enabled the economic production of shale gas. Most notable among these advances are horizontal drilling and hydraulic fracturing (or “fracking”) techniques. Though these methods were first broadly used to aid the production of relatively dry natural gas from shale and other tight “unconventional” reserves, these techniques were later tailored and perfected to aid wet natural gas production (natural gas combined with natural gas liquids) as well as oil production.

Thanks to these advances, U.S. oil production is growing for the first time since the 1980s, and the U.S. has reclaimed its position as one of the world’s largest natural gas producers. The Energy Information Administration (EIA) estimates that U.S. crude oil and natural gas production growth will exceed 75% and 35%, respectively, between 2010 and 2020, radically altering the domestic energy landscape.

Chart 2

## EIA Historic and Estimated U.S. Energy Production



Source: EIA Annual Energy Outlook 2014.

Legacy networks of pipelines and other midstream assets, originally put in place to serve conventional domestic production that peaked in the 1970s, are not sufficient to meet the logistical needs resulting from unconventional production. For this reason, E&P companies willing to take the risk of finding and developing new shale resources have had to simultaneously solve the logistics challenge of moving their growing production to market, such as coastal chemical and refining centers.

Over previous decades, declining domestic production of crude oil was offset by ever increasing dependence on imported oil. Therefore, much of the country's oil pipeline network is designed to take imported waterborne crude to inland refineries. These legacy assets are not well suited to accommodate mid-continent production that now has higher demand on the coasts.

In the past, the producers seeking these markets, or the refiners seeking this feedstock, would have invested in the necessary logistics assets themselves, but often today midstream MLPs are bidding for and winning the business to build and operate these assets in exchange for long-term commitments. This relationship has generated a greater overall efficiency of capital as producers can direct their spending on acquiring acreage and drilling wells, refiners can focus on improving their yields through process upgrades, and midstream MLPs can grow their businesses by building and operating lower returning but stable assets.

Further, the emergence of third-party midstream providers has served to improve the efficiency and pace of midstream development. Previously, aggressively competitive producers in a region were more likely to treat infrastructure as a competitive advantage to harbor rather

than to work together to seek the best logistics solution for all involved. Multi-party projects were usually only consummated after years of contentious negotiation. Standalone midstream providers can gain consensus and commitments for major infrastructure projects much more efficiently.

While the time, money and energy expended by domestic producers, refiners, and midstream companies to overcome these logistical challenges are enormous, it is rare that these challenges garner much attention on a broader level. However, in recent years growing energy infrastructure bottlenecks have gained greater notice. For example, over much of the past several years, increases in domestic production have served to push regional pricing points, such as West Texas Intermediate (WTI) at Cushing, Oklahoma, well below the price of crudes prevalent in global trade, such as the Brent benchmark. Prior to this surge in North American production, these two pricing points typically traded near parity.

Beyond supply constraints, there is also a rapidly increasing need for additional infrastructure to meet changes in demand. In December 2013, IHS Global published a study, using an updated, grounds-up approach, that estimated base-case required energy infrastructure spending of \$890 billion between 2014 and 2025; an average of more than \$80 billion per year. Also, in March 2014, the Interstate Natural Gas Association of America (INGAA) and ICF International published an update to their 2011 study that posits more than \$640 billion of midstream energy infrastructure is required through 2035. Importantly, the INGAA study did not consider infrastructure required for refined products.

Much of this future infrastructure demand is expected to result from power generation as utilities switch from coal to natural gas as a fuel source. A reconfiguration of the existing natural gas pipeline network and the build-out of additional natural gas storage facilities will be required to ensure sufficient capacity and the high availability required to serve a demanding national power grid. Growing production of oil and other liquid hydrocarbons will necessitate meaningful expansion of the country's liquids infrastructure assets (including pipelines, processing facilities, terminals, refinery capacity, splitters, etc.) and a new paradigm of crude and refined products exports is likely.

Since the success of domestic producers reversed the country's oil and gas production decline, MLP investment in new assets, also known as organic capital investment, has increased dramatically. In 2005, total organic capital spending by MLPs was just \$3 billion, in 2011 MLPs invested \$15 billion in organic projects, this sum rose to \$23 billion in 2012 and in 2013 over \$31 billion of organic capital was spent.<sup>9</sup>

Clearly, burgeoning demand for energy infrastructure spurred by oil and gas production growth has resulted in enormous investment opportunities for asset class participants and the probability exists that much investment will be needed in the years ahead. Of course, capital spending is not intrinsically helpful to business growth; rather, only the new cash flows assumed to be generated should be cheered by investors. In fact, it is likely that the most dramatic beneficiaries of the energy renaissance are those operators with existing assets positioned to handle growing volumes with little investment needed. In prior years, few individual assets offered significant growth potential but MLPs were able to grow through acquisition. In today's environment, growth may be achieved through organic investment in new assets, the acquisition of existing assets, and through volume growth within an MLP's existing portfolio of assets.

### Why Own Master Limited Partnerships?

MLPs are businesses organized as partnerships that also have publicly listed equities. The vast majority of MLPs list their equities on major exchanges such as the NYSE or the NASDAQ. MLPs are also, and perhaps more accurately, known as publicly traded partnerships or PTPs; in fact, the primary association for the asset class is the National Association of Publicly Traded Partnerships (NAPTP).

Though the partnership structure is widely used across many industries and business types, most partnerships

cannot access public markets to raise equity capital. The specific legislation that allows certain businesses formed as partnerships to access the public markets, and therefore created MLPs or PTPs, originated in the 1980s and is discussed in further detail in the Appendix.

Like all partnerships, MLPs do not have an entity level income tax burden but instead earnings pass through to partners where those earnings become part of the individual partner's tax accounting. This lack of entity level income taxation, all else equal, leaves more cash available to return to investors as distributions. Notably, this structure allows managers freedom to pursue the best investments for partners unfettered with income tax management concerns.

However, the advantages of the structure have little to do with why OFI SteelPath focuses on this asset class. And, clearly, a bad business in a good structure would still not be a good investment. What is interesting about the MLP asset class is that over the past decade energy infrastructure assets have migrated to the structure; similar to how real estate assets migrated to the REIT structure in previous decades. Therefore, if an investor wishes to invest in the energy midstream market, the preponderance of the available options are structured as MLPs. Investing in MLPs involves additional risks as compared to the risks of investing in common stock, including risks related to cash flow, dilution and voting rights. An investment in an MLP fund does not offer the same tax benefits of a direct investment in an MLP.

Further, OFI SteelPath believes that midstream, or energy infrastructure, investment today can offer an attractive and unique risk-to-reward proposition based on:

- **Stable Businesses** Energy infrastructure assets generally generate reliable cash flows and fee or fee-like margins stemming from volume trends that have been relatively agnostic to the vicissitudes of the broader economy.
- **Growth Potential**
  - Substantial business growth potential stems from domestic oil and gas production trends as well as the acquisition of existing assets from legacy corporate owners.
  - Margin growth may be achieved as certain operators can increase tariff rates over time including those with inflation-linked, annual tariff adjustments.

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9. Source: Wells Fargo Securities.

We believe these attributes are important drivers to the strong historical performance of the asset class and relatively low correlation to the broader markets, including the fixed income market. Further, we believe the asset class has now reached a market capitalization and a trading liquidity threshold that can allow institutional participation which we believe may help to further support valuations over time.

### Thematic Investment in U.S. Energy Production Growth

Not long ago, numerous liquefied natural gas (LNG) receiving terminals (regasification plants) were planned along U.S. shores as conventional wisdom held that our own, domestic production of natural gas was likely to continue to decline and the only way to prevent skyrocketing natural gas prices was to increase imports. Today, of course, it is apparent that our domestic supply of natural gas is so great that many companies, including some MLPs, are looking to provide the ability to export natural gas by constructing liquefaction facilities.

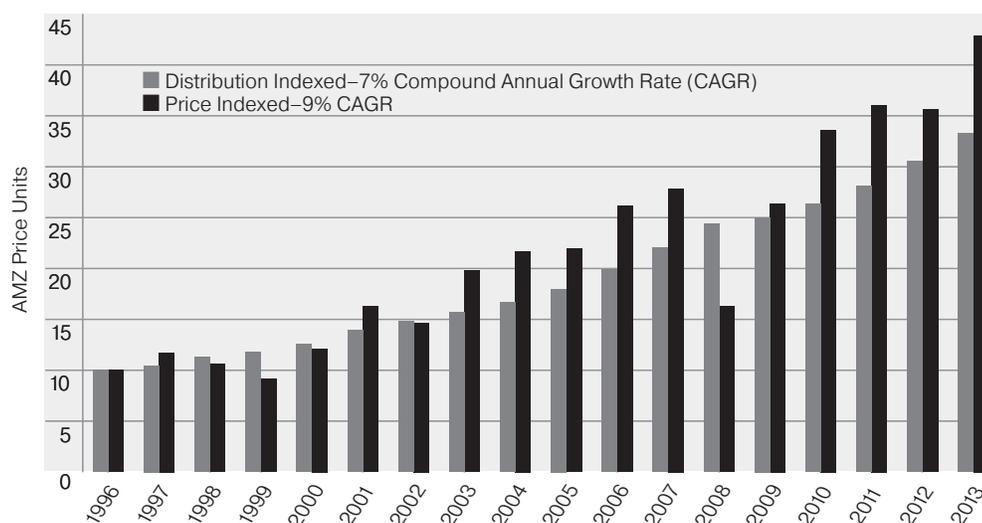
It also appeared the only sources of North American crude oil production growth were the Canadian oil sands and offshore discoveries, primarily in the Gulf of Mexico. While both of these sources of crude oil production growth remain important, domestic, onshore crude oil production is now in the ascendency. This onshore

production is coming from oil shale, or otherwise unconventional reservoirs, thanks to producer ingenuity and their ability to translate the drilling and completion techniques that opened up gas shale to these oil resources. Thus far, U.S. production growth has not materially lowered the global price of crude oil, as measured by the Brent pricing point. However, the impact of this production growth can be seen in the decline in imports of light sweet crude from overseas producers and in the impact on prices at certain domestic pricing points, such as West Texas Intermediate (WTI) priced at Cushing, Oklahoma, which over much of the past several years has traded at a historically wide discount to Brent despite being of a higher quality (lighter and sweeter).

The production of natural gas liquids (NGL) has also surged in recent years. NGLs are those other hydrocarbons that are produced coincident with the production of crude oil and natural gas such as ethane, propane, butane, isobutane and natural gasoline. In fact, as natural gas, primarily methane, has dropped to and sustained a price that provides producers little economic incentive to drill in many previously attractive areas, producer focus has shifted to natural gas basins where NGLs represent a larger proportion of production. By focusing on these liquids-rich gas plays, producers can improve their economics through the additional sale of NGLs.

Chart 3

#### Alerian MLP Price Index and Distribution Growth



Sources: Bloomberg and OFI SteelPath. The Alerian MLP Index (AMZ) is a composite of the 50 most prominent energy Master Limited Partnerships that provides investors with an unbiased, comprehensive benchmark for this emerging asset class. Index performance is shown for illustrative purposes only and does not predict or depict the performance of the Oppenheimer SteelPath Funds. The index is unmanaged and cannot be purchased directly by investors. **Past performance does not guarantee future results.**

Along with this production growth is a much greater need for energy infrastructure. Few consumers need crude oil in the middle of North Dakota, where the Bakken shale formation is located. This production must make its way to refineries across the country creating the need for additional pipeline, terminal, trucking and rail capacity. Similarly, natural gas must be transported from often remote wellhead locations to storage facilities, power facilities, or industrial consumers, and must be treated and processed along the way. The NGLs that are produced coincide with natural gas and which are extracted through processing must then be further separated through fractionation. Further, the resultant NGL products must also be transported to refineries, chemical manufacturers, and other consumers of NGLs.

Over the next decade it appears that hundreds of billions of dollars of greenfield investment will be required. MLPs have been the primary builders of new infrastructure in recent years and we believe they will likely undertake the majority of future infrastructure investment as well. Further, as the energy and investment communities continue to argue over the price that oil should trade at in the coming years—whether \$70 per barrel or \$150 per barrel—it appears ever more certain that production will continue to grow to the benefit of the infrastructure through which these volumes must pass.

Over the past 15 years, MLPs as represented by the Alerian MLP Index have outperformed the S&P 500 Index with a compound annual return of 16.8% versus 4.6% for the broader market.<sup>10</sup> Many investors look at the historical returns wistfully believing they have missed out, however, past performance does not guarantee future results. Consider, though, that much of this performance was achieved prior to the energy renaissance when U.S. production of crude oil and natural gas was actually declining.

While MLPs were able to grow during this era through the acquisition of existing assets (a “roll-up” strategy), we believe that without the energy renaissance that is now underway, it is likely that MLP performance would have eased in recent years. Instead, U.S. crude oil and natural gas production is growing, and as a result some existing assets are providing growing cash flows and we believe investment opportunities abound. So, while the heyday of the “roll-up” MLP may have faded, today’s growth opportunities appear no less impressive. In our opinion, the resultant combination of durable underlying businesses with substantial business growth potential helps to create a unique investment proposition.

### Better Business Models

Midstream assets, as their name indicates, are situated between the producers of hydrocarbons (“upstream” companies, such as E&P corps) and the users of these hydrocarbons (“downstream” companies, such as refineries, chemical companies, and retail consumers). Without midstream assets, producers cannot get their production to market for sale nor can refineries and chemical plants get the feedstock necessary to put their assets to work making products, such as gasoline, diesel, jet fuel or plastics. Therefore, midstream assets represent a “must-run” link in the energy value chain.

The critical part played by midstream within this logistics chain and the relatively small cost of transportation compared to the value of the products being transported or produced, results in a customer focus on reliability and certainty of capacity availability. This desire for reliability and access tends to lead the industry towards long-term contracts and less focus on cost. Most midstream asset operators offer service through contracts that reflect their “must-run” status and which, generally, provide for little margin volatility. Accordingly most midstream operators earn a fee or fee-like margin based on volume.

For this reason, midstream revenues depend to a greater degree on the volume handled than any other specific factor. As a result, OFI SteelPath believes that North America’s energy renaissance has particularly positive implications for these midstream providers. While North American-focused production companies may also do well in the years ahead, the producers of oil and natural gas must accept the risk that the market pricing of the commodities they are producing may decline and impact their margins despite volume growth. Midstream providers may benefit from this volume growth through steady per volume fees and, therefore, could experience little direct impact from commodity price variability.

Most midstream assets require extensive, complicated, and drawn-out permits. To accommodate incremental customers, expanding existing assets is almost always more economical than building new assets and the ability to create new rights of way is very limited. Therefore, operators with existing asset footprints in areas of growth are typically advantaged in winning incremental business.

Further, as reliability of service is paramount, midstream customers give preference to proven, fiscally stable operators with strong safety and performance track records. These barriers to entry are significant and,

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10. Source: Bloomberg. Return data calculated through 12/31/13. **Past performance does not guarantee future results.**

generally, help to prevent the commoditization of services. As a result, midstream assets may be viewed as entrenched regional franchises that, in turn, support existing cash flows and, in some cases, consistent growth.

Interstate pipeline assets are governed by the Federal Energy Regulatory Commission (FERC). Historically, the FERC has been an evenhanded regulator, providing stable and pragmatic rule-making and allowing reasonable rates of return to pipeline owners, in our opinion. For investors, we believe this means that MLPs with substantial interstate pipeline footprints can invest in projects that may provide sound rates of return. Intrastate pipeline assets, pipelines that do not stretch across state borders, are typically regulated by state level agencies. Similar to the FERC, these agencies have historically been fairly benign, allowing for a reasonable business environment.

Midstream businesses also inherently exhibit high operating leverage. Said differently, midstream assets are characterized as having high fixed costs but low marginal costs. Transporting an incremental barrel of oil or cubic foot of natural gas requires very little additional expense and so the additional revenue associated with that volume largely flows to the bottom line. As a result, growing volumes, even if modest, can potentially translate into meaningful bottom line growth for MLPs and distribution growth for investors. Of course, operating leverage can work against pipeline operators (and investors) when volumes decrease, which puts a premium on risk assessment as well as contract length and stability.

It's worth noting that the MLP structure itself provides some tangential benefits complementary to the business model. The lack of entity-level taxation allows greater free cash flow available for distribution. Perhaps more importantly, investors expect MLPs to distribute most of their free cash flows, after maintenance capital spending has been satisfied. This level of distribution is not required by any legislation but is simply expected, and is normal operating procedure within the asset class. We believe this expectation for meaningful cash distributions on a quarterly basis may help to de-risk an investor's return experience versus low or no-dividend stocks where the achievement of a positive return is solely dependent on market price appreciation.

Notably, too, most equities tend to trade based on earnings per share (EPS) multiples and earnings growth expectations. Since dividends are not deductible to lower corporate tax obligations, the

payment of dividends does little for a corporate manager's tax management efforts. Traditional corporate managers are incentivized to focus on the growth of EPS and, therefore, are expected to reinvest free cash flow into new opportunities. When attractive investment opportunities abound, this incentive could work to the benefit of shareholders but when such opportunities begin to wane, corporate managers may begin to invest in more and more speculative opportunities in an attempt to demonstrate the potential for EPS growth. Corporate managers are incentivized to depend on tax-deductible borrowing to a greater degree, or other measures that may benefit generally accepted accounting principles earnings per share (GAAP EPS), regardless of cash-on-cash return expectations.

Within the MLP sector, investors focus on cash metrics that support the payment of cash distributions. GAAP improvement to earnings per share is not enough; investments must prove accretive on a per unit, cash basis. This dynamic punishes management teams looking to empire build for the sake of simply getting bigger and rewards management teams who deploy capital wisely.

We believe that the focus on cash returns and the need to access the capital markets to fund large capital outlays that results from the sectors' cash distribution expectations instills a healthy discipline on managers. When poor investments or a deteriorating business environment threaten an MLP's ability to meet its distribution obligations, that MLP's equity price can tumble dramatically. Hence, this focus on distributions helps to instill healthy discipline but can also result in exaggerated price volatility for those companies who fail to operate successfully.

In summary, we believe midstream MLPs have the potential to generate attractive returns relative to their business risk for some time, driven by the following factors:

- Inherent barriers to entry that preserve margins and help provide attractive organic investment opportunities that often generate near-term accretion to the distribution.
- A position in the value chain that leads to relatively low risk, fairly predictable, commodity price agnostic, "toll road" cash flows for investors.
- Fixed-cost business models that allow predictable revenue growth, even at modest rates, to reach the bottom line in a meaningful way.

Importantly, these are the same factors that have allowed these businesses to perform well in the past. Perhaps the greatest difference today versus history is the progression of North America's energy renaissance which has improved the outlook for crude oil, NGL, and natural gas volume growth. At the same time, growth in the domestic consumption of refined products, primarily gasoline, has moderated; though this slowing is in part being offset through the exportation of refined products to international markets.

### Hard Asset Play in a Potentially Inflationary Environment

Midstream assets have very long useful lives. In some cases, particularly for pipelines, the useful life, assuming proper maintenance, is well in excess of 50 years. Like other hard assets, midstream assets can potentially provide a natural inflation hedge. Replacement value for energy infrastructure should increase with inflation as property acquisition, material and labor costs typically rise as well. Therefore, over time, owners of energy infrastructure should be able to charge higher rates; similar to the expectation that rents for real estate should climb over time.

In addition to this traditional hard-asset inflation protection, many MLP assets have direct inflation protection through the FERC regulatory regime. For example, interstate petroleum pipelines are subject to annual rate adjustments that are currently equal to the PPI for finished goods plus 2.65%,<sup>11</sup> which provides a direct and timely cash flow adjustment to changes in the inflationary environment. Though this regime applies primarily to those interstate pipelines deemed to be "non-competitive," many pipelines that do not fall directly under this mandate also benefit from similar, inflation-linked tariff adjustment provisions.

### MLPs Exhibit Low Correlation with the Broader Equities Market

The majority of equity asset classes and sectors tend to be strongly positively correlated with the broader market. However, MLP returns have exhibited statistically low correlation with the broader market over medium to long-term periods of observation. Using monthly returns through December 31, 2013, the 10-year average correlation between the AMZ Index and S&P 500 Index is only 0.52.<sup>12</sup>

Despite this attractive long-term behavior, MLPs have reflected heightened correlations in times of market distress. Of course, correlation is a fairly limited statistic in that it simply provides a measure of how two returns move directionally relative to one another over a period of time. It does not capture long-term trends in returns. For example, during the 2008 financial crisis, using July 2008 to February 2009 as our period of observation, correlation of weekly price performance was 0.75 with price declines of 30.4% for MLPs and 41.8% for the S&P and when including the impact of distributions, MLP total return loss is reduced to 25.6%. As noted in the table below, similar disparities can be seen during the entirety of 2010, as well as during the period of elevated volatility from May 2011 to September 2011 period.

An increase in correlation between MLPs and the broader market in times of turbulence does not always hold. For instance, over the volatile period post the "dot com" bubble, using August 2000 to February 2003 as an observation period, correlation of weekly price performance between MLPs and the S&P was only 0.38 with a price gain of 41.3% for MLPs versus a 44.7% loss for the S&P.

#### Select Comparison Periods of Correlation and Return

Period	Weekly Correlation	Price Returns			Total Returns		
		S&P 500 Index	AMZ Index	Difference	S&P 500 Index	AMZ Index	Difference
July 2008 to February 2009	0.75	-41.8%	-30.4%	<b>11.4%</b>	-40.7%	-25.6%	<b>15.1%</b>
January 2010 to December 2010	0.67	12.8	27.4	<b>14.6</b>	15.1	36.6	<b>21.6</b>
May 2011 to September 2011	0.63	-17.0	-12.7	<b>4.3</b>	-16.3	-10.6	<b>5.7</b>

Sources: Bloomberg and OFI SteelPath. MLPs are represented by the AMZ Index. Indices are unmanaged and cannot be purchased directly by investors. Index performance is shown for illustrative purposes only and does not predict or depict performance of the Oppenheimer SteelPath Funds. **Past performance does not guarantee future results.**

11. Source: Federal Energy Regulatory Commission, margin applicable for the period July 2011 through July 2016.  
 12. Source: Bloomberg.

Though it is frustrating that MLP prices can often experience weakness in sympathy with the broader equity markets despite little fundamental linkage, we also have witnessed that MLP prices tend to correct quickly after a period of volatility. For example, even though the market plummeted in 2008-2009, the recovery for MLPs was fairly swift and dramatic. In 2009, the S&P 500 Index gained back 23.5% while the AMZ Index was up 61.9%. So while MLP unit prices are not immune to the temperament of the market in the short term, the pricing mechanism has corrected itself in short order as investors have been brought back by attractive fundamentals. This trend of quickly recovering after market turbulence appears to explain in part why long-term correlation statistics reflect less strength.

We believe this low long-term correlation and history of rebounding quickly from market corrections stems from the fundamentals that underpin the infrastructure business model. Fee-based pipeline businesses, with long-term contracts for firm capacity, simply have less cash flow volatility than many other businesses, such as manufacturing, retail, financials, etc. Furthermore, midstream businesses, even those without long-term contracts, benefit from a backdrop of inelastic demand for services.

Historically, the inelastic demand for refined products from consumers represented the primary example of this inelasticity. Today, this dynamic is overwhelmed by the impact of hydrocarbon production growth out of shale plays. Since these production volumes are a result of technological improvements rather than new

demand spurred by some change in the economy, we believe these volumes should reflect little exposure to the broader economy. For this reason, we believe production, and therefore pipeline volumes, should remain stable or possibly continue growing even in the face of macroeconomic weakness.

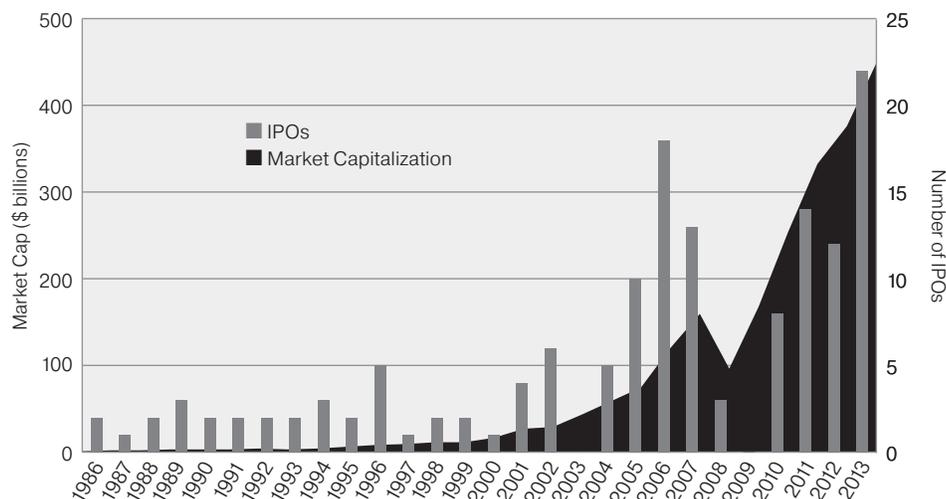
Correlation is, of course, a lagging indicator—it tells investors where the relationship with the market has been, not where it is going—so its usefulness should not be overestimated. On the other hand, we see no fundamental reason why the sector's historical pattern of low long-term correlations to the broader market should change and, if so, adding an MLP allocation may help reduce portfolio beta<sup>13</sup> to the broader market.

### Growth of MLPs Parallels REITs

The current growth trajectory of MLPs appears to strongly resemble that of REITs during the 1990s. Similar to MLPs, REITs were created as a tax-advantaged structure to encourage investment in that particular sector. We believe there is a similar parallel between the emergence of REITs as a distinct asset class and the growth that we have seen—and expect to continue to see—in MLPs. In 1985, there were approximately 37 equity REITs with a combined market capitalization of just over \$3 billion. At the end of 2013, there were approximately 203 equity REITs representing \$670 billion in market capitalization.<sup>14</sup> MLPs have followed a similar trajectory, increasing from 20 partnerships and \$15 billion in market capitalization in 2000, to 110 partnerships with roughly \$593 billion in market capitalization in June 2014.<sup>15</sup>

Chart 4

#### MLP Market Capitalization and Initial Public Offering History



Source: U.S. Internal Revenue Service.

<sup>13</sup>. Beta is a measure of the volatility, or systematic risk of a security in comparison to the market as a whole.

<sup>14</sup>. Source: National Association of Real Estate Investment Trusts.

<sup>15</sup>. Source: Wells Fargo Securities, July 7, 2014.

Congress created the REIT structure in 1960 and the first REIT was listed on the NYSE in 1965. Through time the structure grew and evolved, incorporating new segments of the market, including mortgage and healthcare. Following the REIT IPO boom of the late 1980s and early 1990s and the migration of institutional real estate allocation dollars from the private to public markets, REITs have experienced a revaluation as a more mature asset class, trading on average at a 160 basis-point<sup>16</sup> premium to 10-year U.S. Treasury bond yields over the past 15 years.

As a comparison, MLPs have traded at an average 300 basis-point premium to the 10-year U.S. Treasury yield since 1996. Furthermore, the MLP yield premium over REITs has averaged 155 basis-points over the same time period.<sup>17</sup> We believe the yield dispersion between the MLP asset class and REITs is interesting. Fundamentally, energy infrastructure and real estate investment share some basic similarities; both sectors invest in durable assets that can potentially provide an attractive cash flow stream to investors and which could provide some level of inflation protection as the value of these assets increase over time with inflation. Further, we believe the asset risk profiles of REITs and MLPs are, at worst, similar but we note that MLPs have generally provided better distribution growth historically. Further, midstream MLPs may exhibit greater fundamental consistency than REITs during periods of market uncertainty. For example, the dividend per share for the MSCI U.S. REIT Index declined 10.8% in 2008 and 42.0% in 2009 compared to the 9.3% and 1.2% distribution rate

increases reflected in the AMZ Index in 2008 and 2009, respectively.<sup>18</sup> In fact, the REIT Index dividend was still 23.6% below its 2007 peak at year end 2013, while the AMZ distribution rate was 54.4% higher than in 2007,<sup>19</sup> however, past performance does not guarantee future results.

Therefore, OFI SteelPath would posit that the yield spread between MLPs and REITs may be more likely to contract than to expand. This yield disparity is likely a function of the restrictions that have been placed on institutional ownership of MLPs. Further, until recently, the MLP sector's market capitalization was simply too small to attract institutional interest. We believe as the sector's market capitalization continues to grow, so too will institutional interest which may help to narrow this disparity.

### The Future of MLPs

While traditional midstream assets (pipelines, storage, etc.) have long dominated the space, the packaging of other energy-related assets in the MLP structure has also begun. The Federal tax code allowing for the MLP structure was meant to spur development of the country's natural resources more broadly than just midstream. In fact, the first MLPs were oil and gas producers but these entities largely fell out of favor after the oil price collapse of the 1980s resulted in poor performance for many of these entities. As the asset class has grown and gained greater investor interest over recent years, several MLPs operating non-traditional assets have entered the market.

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<sup>16</sup>. A basis point is one hundredth of one percent.

<sup>17</sup>. Sources: Bloomberg and OFI SteelPath.

<sup>18</sup>. Source: Bloomberg.

<sup>19</sup>. Source: Bloomberg.

For example, today there are MLPs focused on refining, petrochemicals, fertilizer, saltwater disposal and frac sand mining. Additional asset types on the horizon include biofuel blending and processing, and other energy-related services. Though these types of businesses had not previously been owned by entities utilizing the MLP structure, these types of activities have always been allowed under the applicable tax code construct. In fact, new MLP sponsors can, and often do, request the IRS to review the applicability of the current rules to their business, known as a private letter ruling (PLR). Over the last few years, the number of PLRs issued by the IRS relating to MLPs has continued to grow from four issued in 2010 to 23 issued in 2013.

Members of Congress have also expressed interest in broadening the scope of qualifying income applicable to the MLP structure. The MLP Parity Act would expand the definition of MLP qualifying income to include solar, wind, geothermal, hydropower and other renewable energy sources. While the bill has been introduced into multiple sessions of Congress, thus far it has yet to make it out of Committee for full Congressional consideration.

Clearly the MLP structure has been an effective and efficient structure for U.S. midstream companies to raise capital. Today, thanks to the highly competitive, standalone midstream subsector that the structure helped to encourage, the U.S. boasts the world's most efficient and flexible energy infrastructure network to the benefit of the broader economy as well as

individual and industrial consumers. Use of the structure by other businesses along the U.S. energy value chain may provide similar benefits and should be encouraged.

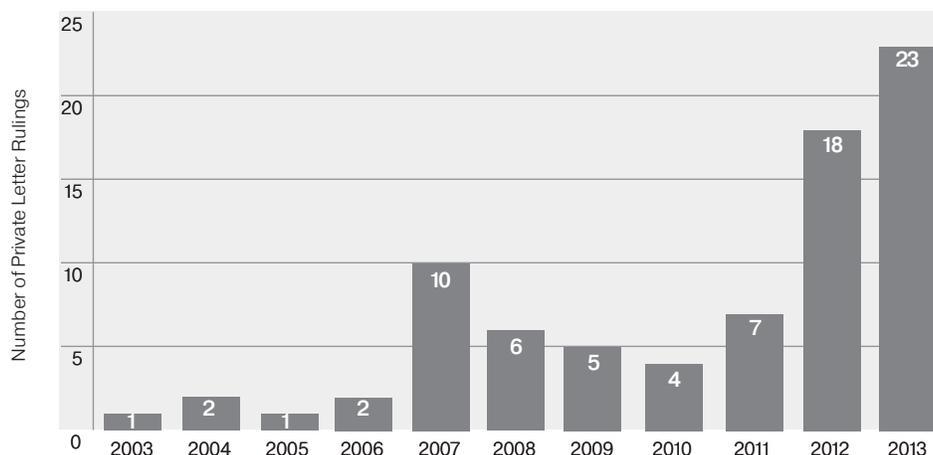
However, investors should, as always, carefully consider all investments before committing capital. The attributes that make a midstream MLP compelling, such as stable underlying cash flows that are generally agnostic to commodity prices or the vicissitudes of the broader economy, are not inherent to the MLP structure but to the underlying business. The skeptic would warn that some of these new, less stable businesses may simply be utilizing the MLP structure to leverage the market's perception that MLPs are low risk in hopes of achieving a valuation improvement; a trend that has highlighted the importance of due diligence.

### Capital Market Dependence Instills Fiscal Discipline

Partnerships are likely to continue to deploy high levels of capital investment as existing midstream assets continue to migrate to the MLP structure through acquisition and as new midstream assets are constructed. Since most MLPs pay out the majority of their excess cash flow as distributions to investors, this capital investment will likely be funded through the issuance of additional equity and debt into the capital markets. Clearly this reliance on the capital markets for growth capital carries risk should the capital markets experience disruption. But we also believe this reliance has instilled a sense of capital discipline in the sector.

Chart 5

#### IRS Private Letter Rulings on Qualifying Income



Source: U.S. Internal Revenue Service.

Unlike other sectors of the economy, MLP management teams must have the vote of confidence from the public markets before they proceed on a project. Further, due to the sector's focus on distributions and cash flow per unit, projects or acquisitions that are cash flow dilutive or only minimally accretive are quickly exposed. There is little incentive for management teams to pursue questionable transactions to simply boost GAAP earnings. We believe the focus on cash flows and fiscal discipline inherent in the asset class is, in part, responsible for the asset class's strong performance track record and is in contrast to the focus on GAAP earnings and entity-level tax management faced by C-corp managers.

Notably, equity offerings can result in issuer price weakness following an offering or once anticipated by the market. Therefore, the asset class's reliance on the capital markets combined with the enormous investment potential surrounding North America's energy renaissance could mean MLPs experience additional market price volatility. In fact, periods of sector underperformance relative to the broader markets in recent years has often coincided with periods of heavy equity issuance by sector participants. Generally, however, the capital raised has been used to fund attractive growth projects that should benefit issuers over the long term.

Over the past five years, the annual pace of MLP debt and equity offerings have more than quadrupled and reached \$76 billion in 2013, a record for the MLP space. Notably, while equity and debt capital markets activity slowed in 2009, the capital markets remained open to MLP issuers as approximately \$17 billion in capital was raised. The ability of MLPs to access capital over this period is, we believe, a testament to the stability of their

underlying businesses and the value that investors place on their stable and growing distributions.

### What Is a Midstream Asset?

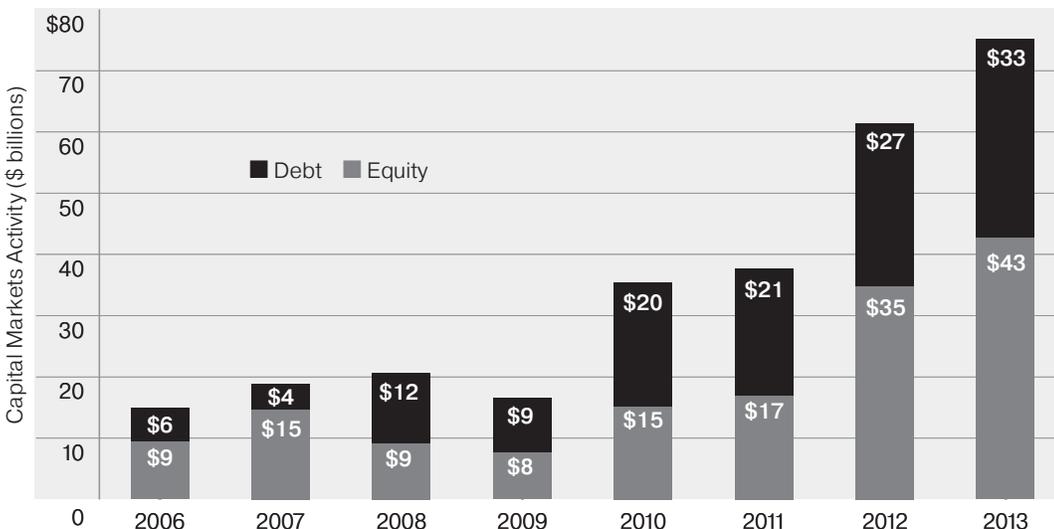
Midstream services can be thought of as those activities that fall between, but do not include, upstream (the exploration for and production of hydrocarbons) and downstream (the refining of these hydrocarbons) on the energy value chain. Traditional midstream operations can be broadly grouped into four categories: pipeline transportation, terminals/storage, marine transportation, and gathering and treating. These categories can further be subdivided by product types such as crude oil, refined petroleum products, natural gas, natural gas liquids and bulk products like coal.

### Crude Oil and Petroleum Products Infrastructure

Crude oil and petroleum products infrastructure assets enable the gathering, transporting, and delivery as well as the storage and processing of crude oil from the well-head to the refinery and then to the end consumer in the form of various refined products such as gasoline, diesel, jet fuel and others. In the past, when U.S. crude oil production was in decline, domestic energy infrastructure was primarily designed around existing production centers and to enable rising volumes of imported crude to reach domestic refining centers. Now that prolific resources have emerged domestically, significant new construction is required to shepherd these growing volumes from new producing regions to processing and refining centers and then ultimately to domestic and foreign consumers of refined products.

Chart 6

#### MLP Capital Markets Activity



Sources: Wells Fargo Securities and SteelPath.

## Transportation

The U.S. crude oil and petroleum products transportation system links oil wells and import terminals to refineries, which, in turn, are linked to end users of petroleum products. This system is comprised of networks of pipelines, terminals, storage facilities, tankers, barges, rail cars and trucks. Throughout the distribution system, terminals exist to provide storage, distribution, blending, and other ancillary services. Crude oil that is pumped to the surface from reservoir deposits is collected on gathering pipelines to a central tank battery or flow directly to a tank battery near the wellhead. Crude oil is then brought to longer haul trunk pipelines via truck or pipeline to be transported to refineries that refine this feedstock into refined products which are then stored or transported to end-users.

Crude oil and refined petroleum products are transported by pipelines, marine transportation, railroads and trucks. Pipelines are the most efficient mode of transportation for long-haul movement, followed by tankers/barges. Until recently and except for short distances, rail and truck usage was considered an inferior solution and, therefore, accounted for only a small percentage of long-haul petroleum transportation.

More recently, however, rail and truck volumes have surged as production increases resulting from the development of new shale plays continues to outpace the construction of additional pipeline capacity or the scope of where pipelines can be efficiently placed. Additionally, rail and truck assets can offer an attractive solution by providing flexibility for producers to deliver to markets that are offering better realized pricing than that offered by markets accessible by pipeline. The ability to find premium markets and the more common application of unit trains to rail implementation has resulted in greater use of rail for long-haul service. In fact, the amount of crude oil and refined petroleum products transported by rail surpassed 708,000 carloads during 2013, up 31% from 2012 alone.<sup>20</sup>

Even as pipeline capacity increases, it appears that rail and truck assets will continue to be an important midstream service due to the flexibility and geographic reach offered.

The crude oil and petroleum products transported, stored and distributed through pipelines and terminals include:

- Crude oil and condensates, which are used as feedstock by refineries.
- Heavy oils and feedstock for further processing by refineries and petrochemical facilities.

- Transportation fuels such as gasoline, diesel, jet fuel, kerosene and heating oil.
- Liquefied petroleum gases (LPGs), which are produced as byproducts of crude oil refining and as part of natural gas production (these include butane and propane).
- Blendstocks, which are blended with petroleum products to enhance various specifications, such as raising a gasoline's octane or oxygen content.

Products shipped on such systems are typically generic products. These products meet published standard specifications; shippers will receive equivalent product but may not get back the actual product shipped. Segregated products are branded products or specific blendstock materials. On segregated shipments, shippers will receive specific products.

With pipeline transportation, crude oil and refined petroleum products travel at roughly three to five miles per hour in long-haul trunkline pipelines. The greater the volume being transported on a given day, the faster the product generally moves. It can take anywhere from two to three weeks for a batch of petroleum products to move from a refinery tailgate in Houston, Texas, to the New York harbor.

Interstate pipelines carry crude oil and refined products across state boundaries and are subject to FERC regulation on the rates charged for their services, on the terms and conditions of the services they offer, and on the location, construction, and abandonment of their facilities. Intrastate pipelines transport within a particular state and are not subject to regulation by the FERC, but rather individual state agencies responsible for such oversight.

Interstate petroleum pipelines benefit from a benign overarching federal regulatory framework, which provides management teams with a strong incentive to innovate and cut costs. Unlike traditional cost-of-service or authorized rate-of-return utility rate-making, petroleum products pipelines do not necessarily have to share cost improvements with their customers. After an initial rate is set, as per the 1992 Congressional Energy Policy Act, the tariff rate structure on the pipeline is increased by the prior year's change in the PPI for Finished Goods plus a 2.65% margin every July 1. This additional margin is reconsidered every five years with the current 2.65% level to be reset in July 2016.

Transportation tariffs vary depending on where the product originates, where ultimate delivery occurs, and any applicable discounts. All interstate transportation rates and discounts are in published tariffs filed with the FERC. Tariffs are designed to ensure appropriate rates of return for pipeline owners, with annual tariff increases functioning as an embedded cost recovery mechanism—thus providing a built-in inflation hedge for partnerships that own crude oil and refined product interstate pipelines. Published tariffs serve as contracts, and shippers nominate the volume to be shipped up to a month in advance.

In addition, supplemental agreements are entered into with shippers that typically result in volume and/or term commitments by shippers in exchange for reduced tariff rates. These agreements typically have terms of one to 10 years. Product services such as ethanol loading, additive injection, and custom blending are performed as needed under monthly or long-term agreements. Pipeline operators generally do not take title to the product they are shipping, leaving little direct commodity exposure.

Competition with other pipeline systems is based mainly on transportation charges, quality of customer service, proximity to end users, and history of individual customer relationships. However, given the different supply sources on each pipeline, pricing at either the origin or terminal point on a pipeline may outweigh transportation costs when customers choose which line to use. Notably, competition in and around a pipeline system per the FERC definition may also result in the classification of that pipeline system as competitive and result in a market-based rate structure in lieu of the tariff rate structure as described above.

### **Terminals**

Terminals are storage and distribution facilities that handle crude oil and refined petroleum products. Terminals are typically located in close proximity to refineries and are generally classified as either inland or marine. Inland terminals generally consist of multiple storage tanks that are connected to a pipeline system. Products are loaded and unloaded from the common carrier pipeline to storage tanks and directly from storage tanks to a truck or rail car loading rack. Marine terminals primarily receive petroleum products by ship and barge, short-haul pipeline connections from neighboring refineries, and common carrier pipelines. Refiners and chemical companies will use third-party terminals when their facilities are insufficient due to size constraints, specialized product handling requirements or geographic considerations.

Terminals generate fees primarily by providing short- and long-term storage of crude oil and refined petroleum products, as well as ancillary services. Revenue is generated by charging customers a fee based on the amount of product that is delivered through the terminal. In addition to throughput fees, revenue is generated by charging customers a fee for providing services such as blending and additive injection. These facilities can be used not only to segregate, in separate tanks, the many different grades of crude oil, and the various product outputs of refineries, but also provide other value-added services such as ethanol blending. Terminals are unregulated and rates are market-based as a result. Terminal contracts, which typically provide storage for anywhere from a few days to several months, generally last for one year with annual renewal provisions. Most of these contracts contain a minimum throughput provision that obligates the customer to move a minimum amount of product through a terminal or pay for terminal capacity reserved but not used. In general, similar to pipeline operators, terminal operators do not take title to the products that are stored in, or distributed from, their terminals.

Terminal demand is greatest in a contango market, in which future petroleum prices represented by the forward curve are higher than prevailing spot prices. In these circumstances, customers tend to store more product to arbitrage the higher prices by locking in the spread using the futures market. When backwardation exists (where futures prices are lower than spot prices), customers tend to transport more product to end markets to take advantage of current higher prices in lieu of storing product.

Accordingly, terminals may experience varying degrees of profitability and use as market structure fluctuates and depending upon the terminal's primary use. Terminals used heavily by customers seeking to arbitrage the futures curve can experience weakness over periods of sustained backwardation, whereas terminals primarily used to solve the logistical challenges of product staging and segregation are less exposed to these market forces.

## Midstream Natural Gas Industry?

Natural gas is rapidly growing as a global energy source, accounting for approximately 22% of world energy consumption today. This growth has been driven by plentiful reserves, the environmental benefits of its cleaner burning nature, and the broad range of its applications.

Once natural gas is produced from a well the producer seeks to deliver the natural gas and its components to end markets for sale. Midstream natural gas assets generally consist of natural gas gathering and transportation systems as well as storage, treating, and processing facilities. Midstream service providers typically compete around proximity of midstream assets to the producing well(s), available capacity, breadth and quality of services offered, relationships with the producer or intermediary, and rates and terms of service.

### Transportation

Long haul pipelines transport natural gas from producing regions to customers such as local distribution companies (LDCs), industrial users (such as iron and steel manufacturers and chemical plants), and electric generation facilities. Similar to crude oil and refined product pipelines, interstate pipelines carry natural gas across state boundaries and are subject to FERC regulation on the rates charged for their services, terms and conditions of the services they offer, and location, construction, and abandonment of their facilities.

The FERC regulates the natural gas transportation industry by reviewing applications for the construction and operation of natural gas pipelines and natural gas storage projects. The tariffs each interstate natural gas pipeline can charge its customers are subject to FERC approval. The FERC's decision on an interstate pipeline and storage tank's tariff is subject to the Natural Gas Act, which states that the rates charged must be "just and reasonable," and not unduly discriminatory. Most rates are established using three types of structures: the cost-of-service method, the negotiated rate method, and the market-based rate method. In areas deemed non-competitive, either a cost-of-service or a negotiated rate (i.e., agreed upon by operator and shipper) mechanism are the basis for establishing a pipeline operator's rates. Notably, this rate-setting methodology of non-competitive markets for natural gas pipelines contrasts with the inflation escalator built into rates (PPI + 2.65%) for crude oil and refined products pipelines; although this is not to say the ultimate total return on investment is lower on a natural gas asset. A market-based rate may be employed in areas where the operator can demonstrate it lacks market power, analogous to the crude oil and refined products pipeline construct.

Intrastate pipelines, likewise, provide transportation within a particular state and are not subject to FERC regulation, but rather to governance at the state agency level.

### Gathering

Natural gas gathering systems generally consist of a network of small-diameter pipelines that collect natural gas from producing wells and often aggregating production to central locations where treating and processing facilities are located and from which the natural gas is transported to trunkline pipelines for further transmission. Gathering systems operate at design pressures that maximize the throughput from all connected wells. Some systems are supported by a reserve dedication, which commits the producer to utilize the midstream service provider's system for all current and future production for a specified period, often for the life of the producer's reservoir lease. More recently, minimum volume commitments have also been used.

Since wells produce at progressively lower pressures as they age, it becomes increasingly difficult to deliver production against the pressures that exists in the connecting gathering system. Natural gas compression is a process in which a volume of gas at an existing pressure is compressed to a desired higher pressure, allowing gas that no longer naturally flows into a higher pressure downstream pipeline to be brought to market. Field compression is typically used to allow a gathering system to operate at a lower pressure or provide sufficient pressure to deliver gas into a higher pressure downstream pipeline.

### Dehydration

Natural gas collected at the wellhead often has a variety of components that can render it unsuitable for long-haul pipeline transportation or use by customers. Produced natural gas can be saturated with water, which must be extracted through dehydration to prevent corrosion and potentially the formation of ice. Specifically, water can cause corrosion when combined with carbon dioxide (CO<sub>2</sub>) or hydrogen sulfide (H<sub>2</sub>S) in natural gas. In addition, condensed water in a pipeline can raise pipeline pressure.

### Treating

In addition to water, natural gas collected through a gathering system may also contain impurities such as carbon dioxide and hydrogen sulfide, depending on the reservoir from which it is derived. Natural gas with elevated amounts of carbon dioxide or hydrogen sulfide can be damaging to pipelines and fail to meet end-user specifications. As a result, gas with impurities higher than what is permitted by pipeline quality standards is treated with liquid chemicals called amines at a separate plant prior to processing. The treating process involves a continuous circulation of amine, which has a chemical affinity for carbon dioxide and hydrogen sulfide that allows it to absorb the impurities from the gas. After mixing, gas and amine are separated and the impurities are removed from the amine by heating. To further alleviate the potentially adverse effects of these contaminants, many pipelines regularly inject corrosion inhibitors into the gas stream.

### Processing

Once water and other impurities are removed from natural gas, the gas may be distilled again in what is referred to as natural gas processing. This processing involves the separation of natural gas into pipeline quality natural gas and a mixed stream of natural gas liquids (NGLs). The primary component of natural gas is methane ( $\text{CH}_4$ ), but wellhead gas often contains varying proportions of NGLs, which include ethane ( $\text{C}_2\text{H}_6$ ), propane ( $\text{C}_3\text{H}_8$ ), normal butane ( $\text{C}_4\text{H}_{10}$ ) isobutane ( $\text{C}_4\text{H}_{10}$ ) and natural gasoline. NGLs are used as heating fuels and as feedstock in the petrochemical and oil refining industries.

Natural gas pipelines have specifications as to the maximum NGL content of the gas to be shipped. In order to meet quality standards for pipelines, natural gas that does not meet these specifications must be processed to separate and remove liquids. Even in cases where the specifications are met, there can be incentives for processing when the value of the separated gas stream (consisting of methane and NGL components) has a higher value than a mixed gas stream, which is often the case. NGLs are typically recovered by cooling the natural gas (first by external refrigerants and then by manipulating the pressure gradient via an expansion turbine) until the mixed NGLs separate from the methane through condensation. Cryogenic recovery methods are processes where this is accomplished at very low temperatures and provide higher NGL recovery yields. After being extracted from natural gas, the mixed NGLs are typically transported to a fractionator for separation of the NGLs into their component parts.

Natural gas processing facilities have some flexibility in the extent to which they separate NGLs from natural gas.

The actual volume of NGLs produced is often determined by the degree to which NGL prices exceed natural gas prices and the cost of separating the mixed NGLs from the natural gas stream. When the value of extracting discrete NGL products is less than what would be achieved by allowing them to remain in the natural gas stream, the recovery levels of certain NGL products, particularly ethane, can in some instances be reduced. Ethane rejection and similar processes to reduce NGL recovery are still limited by pipeline and end-user specifications, although blending with low NGL content natural gas (referred to as dry gas as opposed to NGL-rich wet gas) can sometimes be used as an alternative to processing.

While most midstream services are offered through fee-based contracts based on volumes handled or capacity reserved, processing revenues can be based on mechanisms with greater margin variability. Processing contracts can take on a number of forms including:

1. Fee-based arrangements.
2. Percentage of liquids contracts, which effectively give the processor long exposure to NGL prices.
3. Percentage of proceeds contracts, which effectively give the processor long exposure to natural gas and NGL prices.
4. Keep-whole contracts, which effectively creates a long NGL/short natural gas position for the processor and exposes the processor to what is referred to as the fractionation spread (the processor retains ownership of the NGLs and is required to reimburse the producer for the value of the lost heat content from the NGLs having been stripped out, creating the short gas position).

### Fractionation

Fractionation is the method by which NGLs are then separated into their individual components. NGL fractionation facilities separate mixed NGL streams into discrete NGL products. In the U.S., NGLs are produced primarily by gas processing plants but also include the LPG output by crude oil refineries.

Fractionation isolates the component NGLs by using their boiling points. NGLs are fractionated by heating mixed NGL streams and sending them through a series of distillation towers. As the temperature of the NGL stream is increased, the lightest (lowest boiling point) NGL product boils off the top of the tower, where it is condensed and moved to storage. The remaining stream is then sent to the next tower, where the process is repeated and a different NGL product is separated and stored. This process continues until the NGL stream has been separated into its components.

After NGLs are fractionated, the fractionated products are transported to customers or stored for future delivery. Ethane is primarily used in the petrochemical industry to produce ethylene, a key building block for a wide range of plastics and other chemical products. Propane is used in the production of ethylene and propylene and as a heating fuel, an engine fuel, and an industrial fuel. Isobutane is commonly used to enhance the octane content of motor gasoline. Normal butane is used in the production of ethylene, butadiene (an important component of synthetic rubber), motor gasoline, and isobutane. Natural gasoline, a mixture of pentanes and heavier hydrocarbons, is used primarily to produce motor gasoline and petrochemicals.

NGL products must be pressurized or cooled to a liquid state for storage or transportation. The mixed NGLs delivered to fractionation facilities from domestic gas processing plants and crude oil refineries are typically transported by NGL pipelines and, to a lesser extent, by rail car and truck. Fractionation operations are often undertaken by MLPs which have midstream segments that engage in many of the midstream services previously mentioned (e.g., gathering, treating and processing). Both producers and end users will look to store NGLs to ensure an adequate supply for their respective customers over the course of the year and, in particular, periods of heightened demand.

MLPs that own or operate natural gas processing and fractionation plants must manage a unique set of complex risks associated with the basis between natural gas and various NGL products. With the benefit of developing hedging markets, most MLPs have become quite sophisticated in their management of these risks, though financial hedging is never an absolute substitute for long-term, fee-based contracts as the benefits of hedging expire when the hedges do, and few hedges are perfect.

Over recent years, the persistent low natural gas price environment has led producers to seek out wet natural gas plays to benefit from the relatively better pricing of NGLs. This producer focus on wet plays has marginalized the notion of bypassing the processing and fractionation steps in the natural gas value chain. The economics behind this shift have also led to a shift to a more fee-based processing contract mix and fee-based fractionation contracts.

### Storage

Natural gas storage facilities are used by natural gas end users such as local distribution companies (LDCs) to ensure a reliable supply for their customers and their marketing and trading businesses as part of a purchase and sale strategy. Natural gas is typically stored

in underground facilities such as salt dome caverns and depleted reservoirs. Natural gas demand is usually greater during the winter because it is mainly used for heating by residential and commercial customers. Typically, excess natural gas delivered during summer months is stored to meet the increased demand during winter months. However, as natural gas-fired electric generation continues to increase, demand for natural gas during the summer months to meet cooling needs should rise accordingly. Storage demand and margin can fluctuate with the shape of the futures curve depending on contracted volumes and terms, average contract length, discretionary volumes (or in-house marketing and trading), and revenue from additional services.

Natural gas is typically stored underground in salt formations and depleted reservoirs because above-ground storage tends to be uneconomical. Salt formations are not altered by the stored products and can contain large quantities of natural gas safely and in a cost-effective manner. A salt cavern is formed by drilling and dissolving an underground cavern in a naturally existing salt formation and installing related surface facilities. Water mixed with salt, or brine, is used to displace the stored products and to maintain pressure in the well as product volumes change.

Notably, natural gas storage facilities were highly coveted only a few years ago with several facilities selling at meaningfully above average valuation multiples. However, natural gas storage margins have generally been poor over recent years as persistently low natural gas prices have simply served to remove absolute margin opportunities for summer/winter spreads as well as shorter term spreads. While the U.S. energy renaissance has largely been beneficial to most midstream businesses, natural gas storage operators have suffered and this experience provides a cautionary example of the impacts of the energy renaissance on legacy industries and assets that may be difficult to predict.

### LNG Transportation

As the use of natural gas continues to rise internationally, the gap between the expected demand by consuming nations and their production levels is also increasing, requiring the shortfall to be met with imports. A majority of the global supply of natural gas has traditionally been stranded given the dislocation in producing regions and end markets and the difficulty in transporting gas between the two. Pipeline transportation is generally the most cost-effective means of transporting natural gas, although such transportation is naturally limited by distance and terrain. When pipeline transportation is not possible or natural gas demand sufficiently exceeds available supply, liquefied natural gas or LNG provides a way to import natural gas.

LNG provides an economical way to transport natural gas via ship by cooling natural gas to a liquid form. This cooling significantly reduces volume, enabling storage and transportation by ship over long distances, thereby helping regions with inadequate reserves or limited access to long-distance transmission pipelines to meet their natural gas demand. LNG is transported overseas in specially built tanks on double-hulled ships to terminals where it is offloaded and stored in insulated tanks. The LNG is regasified and then shipped by pipeline for distribution to natural gas customers. LNG carriers are usually enlisted to carry LNG on time charters, where a vessel is hired for a fixed period of time, typically 20 to 30 years. LNG shipping historically has been predicated on long-term, fixed-rate time charter contracts owing to how expensive LNG carriers are to build, as well as the need for natural gas customers to maintain a reliable supply of natural gas.

The two primary groups of LNG vessel operators are nationalized energy and utility companies and independent ship owners. Given the complex, long-term nature of LNG projects, major energy companies historically have transported LNG through their captive fleets. However, independent ship owners are starting to gain a greater share of LNG ship charters. Similar to other tanker and barge operations, the increasing ownership of the world LNG fleet by independent owners is mainly attributable to: (1) the desire of some major energy companies to reduce their commitment in the transportation business, which is non-core to their operations; (2) the cost of financing new LNG carriers; and (3) in the case of LNG, the high construction costs of liquefaction and regasification facilities.

The volume of LNG shipped internationally is increasing quickly as a result of recent improvements in liquefaction and regasification technologies, decreases in LNG shipping costs, and increases in demand from consuming regions located far from natural gas reserves. Historically, Indonesia, Malaysia and Algeria have been the major LNG exporters, with the Middle East, Africa, Australia and Russia expected to become large exporters over time. There is also potential for the U.S. to emerge as an LNG exporter to find an outlet for its burgeoning excess supply of natural gas. Within the U.S., numerous LNG export, or liquefaction, projects are being pursued. One major hurdle for these projects is the receipt of export authorization by the Department of Energy (DOE). Until recently only one facility had received this approval but the DOE has now begun to authorize additional facilities. If the current capacity

approved by the DOE enters service on the timelines expected by the facility sponsors, the U.S. could be a major natural gas exporter by the end of the decade. The largest importers of LNG have traditionally been Japan, South Korea and Taiwan, with Europe emerging as a major importer as well. It is likely that there will be a significant increase in the amount of LNG shipped from major gas-producing areas to regions with insufficient gas production in order to meet expected increases in global natural gas demand.

### Valuing Midstream Energy Businesses

No single valuation technique should be considered an infallible divining rod of future performance. In our experience, future events and perception changes of either a company's risk or growth opportunities will ultimately have a dramatically greater impact on stock performance than any other factor. This experience and belief drives our fundamentals-focused, bottoms-up investment style. However, a reasonable and realistic valuation framework is also necessary to build a portfolio that can perform well over time, a period long enough that market mispricing may work in an investors favor, and in order to assess the valuation impact potential fundamental changes may yield.

Not surprisingly, investors ought to determine the fair value of an MLP based on the same fundamentals of finance that a knowledgeable analyst would apply to any publicly traded corporate entity or private enterprise. Today's fair value should reflect the expected future cash flow stream to the investor, appropriately discounted for the risk associated with the stream of payments and the time value of money. While such a fundamental approach to valuation seems almost quaintly academic when analyzing companies without a meaningful dividend or distribution, application to the high payout MLP asset class allows a closer alignment of theory to reality.

However, investors often look at current yield, the most recent annualized distribution over the current unit price, as the primary measure of value when comparing MLPs. In this simplified approach, investors compare near-term distribution growth expectations and buy those whose yields seem to be comparably high. This approach can lead to conclusions that defy common financial theory, so it is important to be aware of the prevalent use of this approach and the market opportunities and pitfalls that can result. Risk may be underappreciated; near-term, visible growth may be overvalued; and long-term or less obvious growth may be undervalued.

## Stable, Growing Distributions—The Defining Characteristic of the Midstream MLP Model

While exposure to the long-term growth dynamics of U.S. energy infrastructure is attractive in its own right, one has to acknowledge that many investors are attracted by the cash flow from MLP distributions. Most MLPs pay a distribution that is less than the cash flows generated by the underlying assets, but in excess of net income. While there is no legal requirement regarding the level of unitholder cash distributions, a precedent has largely been set that investor interest in any given partnership is predicated on cash distributions that are consistently paid out in the same manner that a corporate board sets a dividend policy.

### Distributable Cash Flow

Sustainable free cash flow can also be defined as distributable cash flow (DCF). In general, DCF represents the cash flow produced by the underlying business, reduced for spending to maintain assets.

DCF is generally calculated as earnings before interest, taxes, depreciation and amortization (EBITDA) plus non-cash losses, minus interest expense, maintenance capital expenditures, general partner interests and non-cash gains. Most MLPs provide their calculation of DCF on a quarterly basis and most MLPs follow a fairly consistent methodology but, notably, DCF is a non-GAAP measure without a truly standard definition. An important component of calculating DCF is determining what the partnership's maintenance capital spending has been for the period. While each partnership will determine its maintenance capital level internally and use this measure for its distributable cash flow calculation, and ultimately the distribution that it pays out, each investor needs to make an assessment as to the validity of the published metrics and adjust accordingly for their own valuation purposes.

In most partnership agreements, DCF is defined as the capital required to maintain the operating capacity of assets. While this definition may be appropriate for assets with consistent expectations for volumes going forward, it may fail to deliver a DCF figure that represents truly sustainable cash flows for assets with greater variability. For example, field level gathering pipelines are likely to experience declines as the particular wells they are connected to begin their natural declines. Some MLPs with gathering assets will include in their

maintenance capital spending the proportionate cost of laying new well connections required to maintain volumes at current levels. Others do not, trading all new well connection spending as growth capital instead of maintenance capital spending. While such differences in methodology can be frustrating for analytical purposes, adjusting maintenance spending for these differences in order to derive a more consistent DCF is advisable, and in some instances can result in DCF figures that are materially different than those reported by the partnership, though this is not normally the case.

Distribution coverage is another key metric to understand when investing in MLPs. Distribution coverage is the ratio of distributable cash flow to the cash actually paid out as distributions. Depending on the relative stability of cash flows, partnerships have historically maintained 1.05–1.20x cash coverage of their distribution. A distribution cut or even heightened concern over distribution stability can significantly impact a partnership's unit price; as has been witnessed throughout the sector's history with several examples provided over the 2008–2009 period. The outsized impact distribution cuts historically wrought on equity prices has created a self-regulating mechanism that has, largely, led management teams to pursue prudent distribution policies.

MLPs with more volatile underlying businesses, such as refining, have begun to pursue variable distribution policies. To be sure, there are volatile businesses already housed in the MLP structure but which have molded a stable distribution policy to these volatile cash flows. Such policies have little impact on our valuation approach; we suggest a focus on expected cash flows rather than distributions paid. Perhaps some information is lost through the variable distribution policy, in that a stable distribution policy forces the MLP management team to reveal what they believe is a sustainable level of cash flows over the cycle. However, we have seen managements quite dramatically miss this mark before so the information lost may not represent such a loss after all.

### Net Asset Value

We believe the best approach to determine fair value of companies within the sector is to perform a sum-of-the-parts net asset value analysis based on a reasonable base case of assumptions. Further, to identify entities whose values are significantly dependent on potentially volatile margins, we believe it is useful to subject each potential portfolio holding to a sensitivity analysis. For example, an MLP's portfolio of assets may include commodity price sensitive gas processing facilities.

The presence of such commodity price sensitive margin does not necessarily make the MLP a poor investment but the potential volatility of the margin derived from those assets must be appreciated. An analyst should consider the base case and bear case value of those assets to guard against overpaying for those potentially volatile margins. Further, it is important to ensure the MLP's leverage, distribution level, and hedging policies are appropriately conservative given the presence of those more volatile margins.

As discussed above, target yields, the most common valuation approach used by MLP analysts, presents pitfalls. Another commonly used approach is discounted distributions. While an improvement over a pure yield-based approach, in our opinion, discounting expected distributions can also lead to pitfalls: (1) It is difficult to account for the various risk characteristics of an MLP's portfolio of assets through a single discount rate, and (2) this approach may place a higher value on partnerships that are paying out a relatively larger share of cash flows generated regardless of whether such payout ratios are appropriate.

### Cost of Capital

Cost of capital is a function of the business risks underlying a security and the particular rights and obligations associated with the security being analyzed. Owners of the equity securities of an oil and gas company, whose profits vary dramatically with commodity prices, expect to earn a better return, should those prices remain stable, than the owners of the equity securities of a pipeline company who are not taking similar commodity price risk. This basic, fundamental notion is often underappreciated in some parts of the investment community.

Similarly, if an interstate pipeline generates stable cash flows, but is at risk to have its tariff arrangements restructured through FERC action or through recontracting, its business risk profile is adversely affected.

Depleting assets increase the business risk profile, as well, because they force the company to make acquisitions to maintain cash flow. Examples of depleting asset businesses include exploration and production, gathering and processing and mining.

At OFI SteelPath, we attempt to apply an appropriate cost of equity to each business held within an MLP based on that business's underlying risks. For instance, if a partnership owns a low risk, interstate pipeline we would expect to earn a lower return on equity on related cash flow than cash flow generated by a more volatile asset such as a processing plant. We then sum the derived value of these individual businesses to determine the MLP's overall, estimated value. We believe this approach is best matched to the variety of businesses held by asset class participants and provides a more reliable foundation than attempting to apply a single cost of equity to an MLP's aggregated free cash flows. We also attempt to apply these cost of equity benchmarks across our prospective investments in a consistent fashion.

Clearly, however, a company's cost of equity capital does not necessarily bear any relation to its current yield; Microsoft does not have a 3.0% cost of equity by virtue of its yield, and neither does a low yielding MLP. We continue to be amazed at the frequent use of current yield as a cost of equity equivalent, by both MLP management teams and sell-side analysts.

### Relative Yield

Historically, MLPs have largely been thought of as fixed-income substitutes with a focus on the yield component, despite the lack of a strong correlation between yield indices and MLP unit prices. Further, many MLPs are truly growth vehicles. Given the asset class's approximate 7% annualized distribution growth rate over the last decade,<sup>21</sup> with top performers substantially above this mean, we believe capital gains are likely to constitute a large part of total return for top performers. Consequently, yield dispersion metrics (relative to historical levels, to the MLP group, to relevant individual MLPs, to U.S. Treasury yields, and to other yield-oriented investments such as real estate investment trusts) are increasingly sub-optimal in valuing these yield-growth hybrid instruments.

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21. Sources: Bloomberg and OFI SteelPath.

## Other Relative Price Metrics

Enterprise Value/EBITDA (EV/EBITDA) and Price/Distributable Cash Flow (P/DCF) metrics, among others, are also helpful in gauging what near-term market expectations are being reflected in an MLP's unit price. However, these metrics also fail where relative yield does, in that they are simple and blunt tools with which it is difficult to appropriately incorporate and calibrate future growth potential and associated risk of current cash flows.

Further, EV/EBITDA can provide very misleading results if not adjusted to account for the impact of the general partner and the IDR cash flows. Much of the analysis provided by Wall Street fails to make these adjustments, and as a result, some MLPs appear to be trading at very attractive EV/EBITDA multiples when in fact they are trading at very high multiples versus their peers after that ratio is adjusted appropriately. Although near-term pricing inefficiencies exist due to limited institutional participation, we believe that the most compelling investment theme in this space is to select partnerships with strong management teams and assets that are poised to grow significantly, and to hold these investments as the growth stories play out over the long term.

## Determining Accretion

Arguably, the frequent use of an MLP's yield as a cost of equity proxy by MLP management teams and analysts could be attributed to poor wording. Perhaps the commentators are intending to describe the math behind determining whether an acquisition (or other capital expenditure) once completed and funded will increase or decrease per unit distributable cash flow.

For example, if MLP A were to buy a pipeline for \$100 million and the cash flow generated by that asset is expected to be \$10 million per year then as long as the incremental interest expense, associated with that portion funded with debt, and the incremental common unit distribution and incentive distribution obligations, associated with that portion funded with the issuance of new units, is less than \$10 million, then that acquisition is mathematically, potentially accretive. Such a calculation is simple math.

While this math can be a helpful tool for an analyst (helping to quickly determine the per unit magnitude of capital spending), it is by no means an accurate measure of the economic benefit of an acquisition. The acquirer's

true long-term economic benefit must take into account the acquired asset's risk profile and the commensurate required rate of return. If a low risk, interstate transportation company purchases riskier, commodity price-sensitive gas-gathering and processing assets, the acquisition may allow for a distribution increase based on the commodity price environment assumed for the acquisition but that acquisition could still be dilutive to per unit equity value.

Using an artificially low and theoretically incorrect cost of equity capital can lead to exorbitantly "accretive" transactions that offer no true economic benefit to unitholders over the long term. Further, management teams in blind pursuit of such "accretive" acquisitions may venture into industries and businesses outside of their core area of expertise. The annals of business history are replete with examples of misguided acquisitions. While the MLP group may have fewer examples due to the sector's focus on cash flows, it is certainly not immune.

## Fundamental Risks

Fundamental risks for MLPs include, among others, the potential for:

1. Regulatory changes.
2. Demand destruction.
3. Supply constraints.
4. Macroeconomic changes.
5. Environmental accidents.
6. Changes to tax laws.
7. Terrorist attacks.

## Regulatory Risk

The majority of assets in the sector are regulated by the Federal Energy Regulatory Commission (FERC). The FERC regulates parts of the electric, natural gas, liquefied natural gas (LNG), hydropower, and oil industries. The FERC is an independent regulator within the Department of Energy. FERC’s mission is to assist consumers in obtaining reliable, efficient and sustainable energy services at a reasonable cost through appropriate regulatory and market means. In order to accomplish this mission, FERC is focused on promoting the development of safe, reliable, and efficient energy infrastructure that serves the public interest.<sup>22</sup>

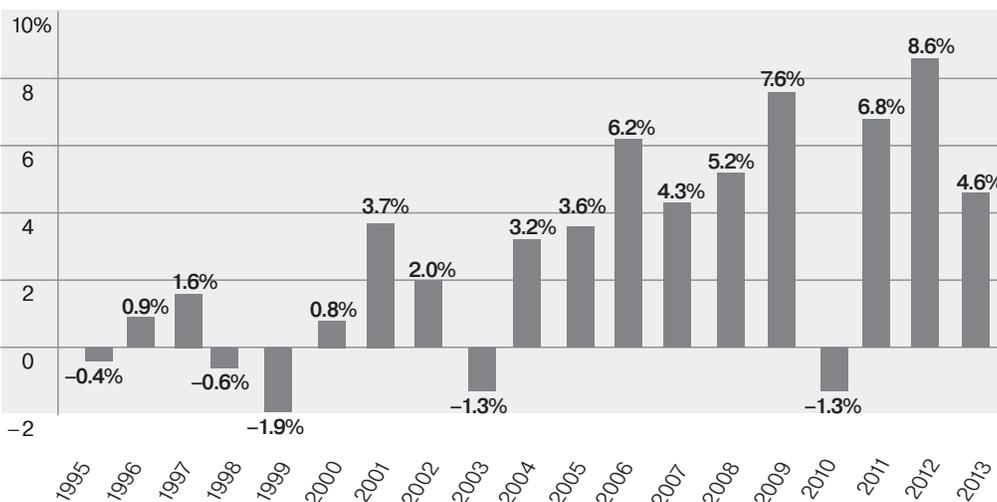
Neither the Secretary of Energy, nor Congress, nor the President of the United States can review FERC rulings, although FERC rulings can be reviewed in the federal courts. The FERC is a self-funding agency that collects charges and fees from the companies it regulates. In order to prevent the FERC from overcharging companies, a collection limit is placed on the Commission each year.

The FERC regulates the natural gas transportation industry by reviewing applications for the construction and operation of natural gas pipelines and natural gas storage projects. The tariffs each interstate natural gas pipeline can charge its customers are subject to FERC approval. The FERC’s decision on an interstate pipeline and storage tank’s tariff is subject to the Natural Gas Act,

which states that the rates charged must be “just and reasonable,” and not unduly discriminatory. Most rates are established using three types of methods, the cost-of-service method, the negotiated rate method, and the market-based rate method. In the cost-of-service method, a pipeline operator submits data supporting its requested rate that will allow it to recover its cost of providing service and earn a reasonable return on its investment. The negotiated rate method creates a rate based on negotiations between the pipeline operator and shipper. The market-based rate method is used if the operator can demonstrate there is sufficient competition in the region it is serving.<sup>23</sup> Further, the facility could still charge market-based rates even without sufficient competition if it can prove it would be in the best interest of the public to have market-based rates so as to encourage more storage services and the facility can prove customers would be adequately protected. Intrastate, as opposed to interstate, natural gas pipelines are regulated by state agencies.

Chart 7

Annual FERC Index-Based Rate Adjustments



Sources: Federal Energy Regulatory Agency, Bloomberg and OFI SteelPath.

22. Source: <http://www.ferc.gov/about/strat-docs/strat-plan.asp18:1.0.1.14.64&idno=18>

23. Source: Ratemaking for Energy Pipelines, American Gas Association, <http://opsweb.phmsa.dot.gov/pipelineforum/docs/Ratemaking%20for%20Energy%20Pipelines%20071111.pdf>

Generally, FERC sets rates within the interstate oil and other liquid product pipeline industries through a pipeline rate inflation methodology that is based on the Producer Price Index for Finished Goods (PPI-FG). Oil and other liquid product pipelines can charge a cost-of-service rate if “it shows that there is a substantial divergence between the actual costs experienced by the carrier and the rate resulting from application of the index such that the rate at the ceiling level would preclude the carrier from being able to charge a just and reasonable rate within the meaning of the Interstate Commerce Act.”<sup>24</sup> From the 1992 Energy Policy Act through today, there have been only four substantive changes to the pipeline inflation indexing methodology, and all four of these have been positive for pipeline owners. Starting in 1995, every July 1, pipeline tariffs had been increased by the change in PPI-FG minus 1.00%. Starting July 1, 2001, the escalator was based solely on the change in PPI-FG. On July 1, 2006, the tariff escalator was increased to PPI-FG plus 1.30%. Most recently, on July 1, 2011, the adjustment rate was changed to PPI-FG plus 2.65% and this will remain in place for a five-year period at which time the PPI-FG modifier will be again be adjusted. This methodology generally allows a partnership’s unit holders to benefit from performance improvements achieved through technological and efficiency gains.

We believe these methodologies create incentive for continuous process improvement and are more investor-friendly than the regulatory environment to which traditional utilities are subject, where returns from such improvements would largely accrue to customers in the next rate case. Because of the positive effects of the current regulatory environment, we believe this is the single most significant risk to the sector’s ongoing long-term cash flow growth trajectory. That being said, we view the likelihood of such a change as very small.

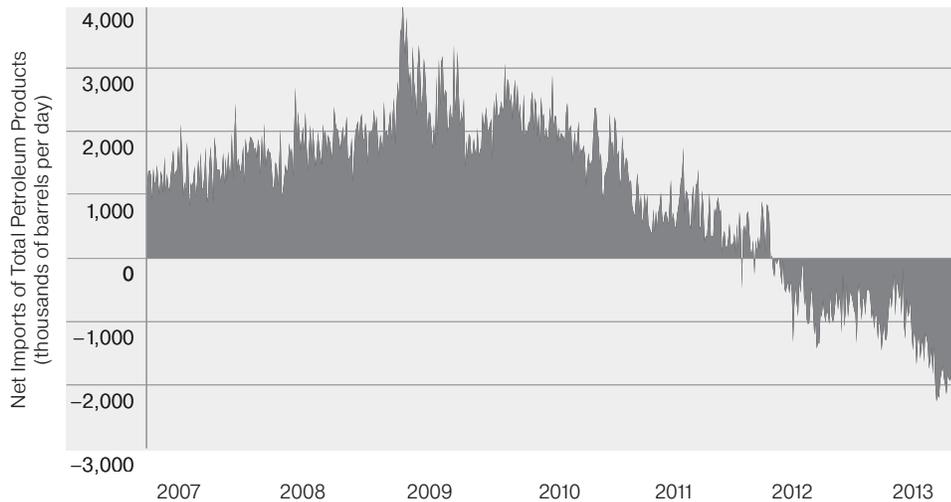
In addition to FERC, many mid-stream companies operate under the regulation of the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA), an agency of the U.S. Department of Transportation that develops and enforces regulations for the nation’s pipeline transportation system, as well as shipments of hazardous materials by land, sea and air. Historically, PHMSA has shown itself to be a pragmatic regulator, often choosing to work alongside the industry to improve overall safety rather than doing so from a more enforcement-oriented role.

The transportation of crude oil and petroleum products by rail, a PHMSA-regulated activity, has risen sharply in recent years and is likely to be a regulatory topic to monitor as rail continues to meet industry needs in situations where pipelines or trucking have not provided viable or flexible transportation options. As “crude-by-rail” volumes have increased so has stress on the existing system and therefore the need for better monitoring. For example, after some rail accidents highlighted the sensitivity of transporting crude oil produced from the Bakken shale, in 2013 PHMSA began a coordinated effort to increase inspections and data collection to verify compliance and evaluate needs for further regulation. On May 7, 2014, PHMSA issued an Emergency Order that requires better coordination and disclosure when transporting Bakken crude, as well as advisory comments relating to the use of older rail cars when transporting crude produced from the Bakken.

<sup>24</sup> Source: Interstate Commerce ACT, Title 18: Conservation of Power and Water Resources, Part 342.3—Oil Pipeline Rate Methodologies and Procedures, Indexing.

Chart 8

## U.S. Weekly Net Imports of Total Petroleum Products



Source: EIA.

## Demand Destruction

Since 1949, U.S. petroleum and other liquids consumption has grown at a compounded annual growth rate of 1.6%. Over this period, U.S. consumption of natural gas has grown at a compounded annual rate of 2.6%.<sup>25</sup> Leveraging this modest “sales growth” with inflationary pricing power through a fixed-cost asset has been a successful business model for domestic energy infrastructure owners. Combining this base business strength with the acquisition of assets from legacy corporate owners allowed operators to provide mid-single digit distribution growth to investors for over a decade.

Though refined product demand has largely exhibited inelasticity to price changes, a potential threat to refined product pipeline volumes is demand destruction resulting from high and sustained product pricing (gasoline, diesel, etc.). In fact, while refined product demand only exhibited year-over-year declines twice between the years of 1990 and 2005, thereafter demand has trended lower and has only registered year-over-year *growth* in 2010. This demand decline can be attributed mostly to a decline in consumption by the transportation sector, which accounts for approximately 75% of demand.<sup>26</sup>

Continuous technological improvements in vehicular engine design are likely to further advance average fuel efficiency measures. In 1986, the Corporate Average Fuel Economy (CAFE) for a passenger car was 26 miles per gallon (mpg). In 2011, CAFE for a passenger car was

30 mpg.<sup>27</sup> Given expectations for continued improvements in CAFE levels and an expectation for modest growth in vehicle miles traveled, the EIA forecasts liquid fuels consumption for the purpose of transportation will decline at a compounded annual growth rate of 0.3% over the 2012 to 2040 time period.<sup>28</sup> Natural gas is also becoming a very competitive fuel; particularly for industrial scale fleets where fueling logistics are simpler to overcome.

After legislation in 2007 that mandated increasing levels of ethanol use in gasoline, the IRS added ethanol blending to the list of qualifying types of income for MLPs in 2008. Since then, several MLPs have added this service to their business lines. After an initial jump in usage, consumption growth moderated following the 2012 expiration of a \$0.45 per gallon tax credit. According to the EIA Annual Energy Overview for 2014, ethanol consumption in motor gasoline and E85 is expected to increase 1.6% in 2014 from 2013, and 2.2% in 2015. Ethanol consumed in motor gasoline and E85 has been expected to grow at a compound annual growth rate of 0.6% from 2012 to 2040 according to the EIA.<sup>29</sup> However, as supply has been unable to keep up with mandated demand we have seen several recent relaxations of near-term government targets. In the U.S., the EPA has recently proposed reduced 2014 quotas for ethanol usage, and in September 2013 the European Parliament passed a measure to reduce the ethanol mandates in its Renewable Energy Directive to 6% of consumption from the original 10%.

25. Source: EIA Annual Energy Review, 9/27/12 <http://www.eia.gov/totalenergy/data/annual/>

26. Source: EIA Monthly Energy Review, March 2014.

27. Source: Summary of Fuel Economy Performance by the U.S. Department of Transportation, 4/28/11.

28. Source: EIA Annual Energy Outlook 2014, April 2014.

29. Source: EIA Annual Energy Outlook 2014, 12/16/13.

In 2011 for the first time since 1949, the U.S. exported more petroleum products than it imported.<sup>30</sup> In 2011, net exports of petroleum products from the United States averaged approximately 60,000 barrels per day (bpd).

Exports subsequently increased to approximately 813,000 bpd in 2012 and over 1.1 million bpd in 2013. Pipeline and logistics systems which can be employed to reach export facilities are less impacted by purely domestic consumption trends. We expect U.S. exports of refined petroleum products will continue to expand.

Accordingly, we expect a shift to slower domestic liquid fuels consumption than what was experienced in the decades prior to 2007. However, we also note many petroleum product pipeline operators should benefit from annual tariff improvements on products shipped to help maintain and grow margins at acceptable levels and should benefit from ancillary services such as blending and terminaling. Many of these operators have also been amongst the most pronounced beneficiaries of recent domestic crude oil production growth as many operate both crude oil and refined products focused assets.

Notably, the risk of more dramatic demand destruction in reaction to extreme price levels appears to be waning. Consider the following:

- According to the EIA, the U.S. produced approximately 5.5 million barrels of oil per day in 2010. In 2013, the U.S. produced approximately 7.5 million barrels per day; which represents an increase of 36%.
- According to the EIA's January 2014 Short-Term Energy Outlook, oil production in the U.S. is expected to increase to 8.54 million barrels per day in 2014, an increase of 15% over 2013.<sup>31</sup>
- In its Annual Energy Outlook for 2013, the EIA estimated that there were 233 billion barrels of technically recoverable oil in the U.S. based on data from January 1, 2011.<sup>32</sup>
- In May 2013 the United States Geological Survey (USGS) released a report<sup>33</sup> that indicated the Bakken

shale in North Dakota and Montana held 7.4 billion barrels of undiscovered, technically recoverable oil, a figure almost twice the size of the USGS' 2008 report that estimated 3.0 to 4.3 billion barrels of undiscovered, technically recoverable oil.<sup>34</sup>

Over a very short period of time, U.S. domestic crude oil production has gone from a state of seeming perpetual decline to leading the world in year-over-year production growth. The long-held assumption that the U.S. would become ever more reliant on foreign oil imports has dramatically changed. The U.S. has now imported less foreign oil year-over-year for seven years in a row and expectations for greater energy independence going forward have become common place.<sup>35</sup> With this dramatic shift in the U.S. crude oil supply/demand dynamic, fear of ever-rising global crude oil prices are also subsiding.

Consider that since crude oil (WTI Cushing) pricing hit a low of near \$11.00 per barrel (bbl) in late 1998, pricing rose in a nearly uninterrupted fashion until peaking at approximately \$145.00 per bbl in July 2008; representing a 1,347% increase over a decade. Given the strength and consistency of this trend, most market analysts and prognosticators believed it inevitable that crude pricing would continue to march higher. Such a belief was further supported by the commonly held perspective that the expanding economies of China, India and others would continue to consume more oil while the world's ability to increase production was nearly exhausted.

In contrast to these expectations, over the past two-years oil pricing has largely maintained between \$80 per bbl and \$100 per bbl with a number of well-regarded analysts now expecting prices to soften in coming years. In the least, we believe the success of oil shale production domestically, and prospects for the spreading use of these drilling techniques, are likely to continue to diminish the risk of an extended crude oil price spike.

<sup>30</sup> Source: EIA, "February 2012 Petroleum Supply Monthly."

<sup>31</sup> Source: EIA Short-Term Energy Outlook 1/7/14.

<sup>32</sup> Source: EIA, "Assumptions to the Annual Energy Outlook 2013."

<sup>33</sup> Source: USGS, "USGS Releases New Oil and Gas Assessment for Bakken and Three Forks Formations" 5/2/13.

<sup>34</sup> Source: USGS, "3 to 4.3 Billion Barrels of Technically Recoverable Oil Assessed in North Dakota and Montana's Bakken Formation"— 25 Times More Than 1995 Estimate—," 4/10/08.

<sup>35</sup> Source: EIA, U.S. Net Imports of Crude Oil & Petroleum Products.

The demand for natural gas has strong growth potential, but, of course, risks to this assumption exist as well. The two biggest catalysts for natural gas demand growth are coal-to-gas switching for power generation and the exportation of natural gas.

Natural gas has gained significant market share from coal over the last decade, rising from 18% of power generation in 2004 to 27% in 2013.<sup>35</sup> This general trend is likely to continue as older generation coal plants are retired. According to BENTEK Energy there is nearly 16 gigawatts (GW) of gas-powered generation capacity under construction within the U.S. and 30 GW of coal-powered generation slated for retirement through 2018 (and some Wall Street analysts have predicted 60 GW of likely coal retirements). However, recent declines in coal prices coupled with improving, albeit still depressed, natural gas prices have facilitated some volatility in shorter-term market share. For instance, in 2013, coal's percentage of total power generation of 39% was up from 37% in 2012, but down from 42% in 2011. Natural gas' share of power generation fell to 27% in 2013 from 30% in 2012 but was still above its 25% market share in 2011.<sup>36</sup>

Though the fuel mix shift in the recent past was impacted by the extreme lows reached in natural gas prices, thus providing an unusually strong incentive for generators to run natural gas fired plants when possible, a more permanent shift to natural gas within the generation mix is likely to continue to unfold.

In the EIA's 2014 Annual Energy Outlook, the Agency forecasts power generation from natural gas to grow at a compounded annual rate of 1.4% while power generation from coal is expected to grow at a compounded annual rate of 0.4% over the time period of 2012 to 2040.<sup>37</sup>

Exportation of natural gas is currently limited by the lack of domestic liquefaction capacity but the first capacity additions are underway. In order to economically ship natural gas, it must be cooled to -161 degrees Celsius

which reduces the volume of gas by a factor of 600.<sup>38</sup> This liquefied natural gas (LNG) is then transported on LNG tankers to overseas markets. Liquefaction projects cost billions in capital and typically take four or more years to permit and build. These projects have become viable as the U.S. is now able to produce abundant natural gas at a price that is well below the international price of natural gas. The price of natural gas in the U.S. tumbled from a peak of \$15.39 per MMcf in December 2005 to a low of \$1.84 in March 2012 as U.S. natural gas production capacity far outpaced domestic demand for natural gas. Over the past two years, natural gas directed rig counts have fallen 62% from the peak in October 2011. Despite this drop-off, natural gas production has actually continued to moderately, but steadily, increase. As a result, pricing remains relatively depressed. At an average price of \$3.73 per MMBtu during 2013, domestic pricing remains well below international pricing; with European prices averaging \$11.79 per MMBtu and prices in Japan averaging \$16.02.<sup>39</sup>

The U.S. Government commissioned two studies to examine the effects of natural gas exportation. The studies were conducted by the EIA and Northeastern Educational Research Association (NERA) Economic Consulting, a private global economic consulting firm. The EIA study focused on price reaction to LNG exports and came to the conclusion that natural gas pricing would stabilize as the U.S. ramped up LNG export capacity due to increased natural gas production.<sup>40</sup> The second study focused on the U.S. economy's reaction to exporting natural gas. The study concluded that the net economic benefits of LNG exports increased as the level of LNG exports increased.<sup>41</sup>

As of March 2014, there were a total of 31 projects that had applied for approval from the DOE to export domestically produced LNG to free trade agreement (FTA) countries and non-free trade agreement (non-FTA) countries.<sup>42</sup> So far, 29 projects had received approval to export to FTA countries, but only four had received approval to service non-FTA countries.

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36. Source: EIA, June 2014 Monthly Energy Review, June 25, 2014.

37. Source: EIA, Annual Energy Outlook 2014.

38. Source: Liquefaction Process, Repsol.

39. Source: World Bank Commodity Market.

40. Source: EIA, "Effect of Increased Natural Gas Exports on Domestic Energy Markets, January 2012.

41. Source: NERA Economic Consulting, "Macroeconomic Impacts of LNG Exports from the United States, December 3, 2012.

42. Source: [http://energy.gov/sites/prod/files/2013/12/f5/Summary%20of%20LNG%20Export%20Applications\\_0.pdf](http://energy.gov/sites/prod/files/2013/12/f5/Summary%20of%20LNG%20Export%20Applications_0.pdf)

While South Korea is the world's second largest importer of LNG and is a FTA country, most free trade agreement countries do not offer large enough markets to make LNG export projects economical. The growth in demand for natural gas from exporting LNG will depend on the amount of LNG the DOE permits to be exported annually, which will dictate the number of LNG export projects approved, and the ability of project sponsor to reach long-term purchase agreements to support investment in these highly expensive, long lead-time projects.

The export of natural gas through pipelines to Canada and Mexico could also increase demand. According to BENTEK Energy, Mexico will be building and expanding natural gas power plants to a total of 9,302 MW between 2013 and 2025. This is equal to about 1.39 Bcf/d of natural gas, part of which will come from the U.S. The National Energy Board (NEB) of Canada has approved an application by LNG Canada Development Inc. to export LNG at the rate of ~1.2 trillion cubic feet of natural gas per year.<sup>43</sup> If more LNG export facilities are approved in Canada, U.S. produced natural gas could be exported to Canada to meet demand needs, as many U.S. natural gas plays are actually located closer to Canadian population centers than much of the new Canadian shale plays, which are more proximal to the West coast.

### Supply Constraints

While the risk of potential demand destruction stemming from a sustained crude price spike appears to have diminished, the risk that low oil prices could result in production declines has increased. Weak oil prices stemming from oversupply could cause producers to drill less aggressively which would impact midstream volume expectations. The economics of unconventional oil drilling vary from well to well but even at \$60 per bbl, the major oil plays still have an internal rate of return (IRR) over 10%.<sup>44</sup> Further, not all crudes are the same quality, with lighter and sweeter crudes historically trading at better prices than heavier, sour crudes. Crudes can also trade at different prices at different locations due to localized supply and demand dynamics that can be impacted by logistical bottlenecks. Therefore, production reaction to a weak price environment can vary dramatically across geographies.

The decline in natural gas prices over the past several years provides an example of these complexities. While drilling in certain basins is down materially over the past

few years, such as the Haynesville shale, with resultant negative implication for midstream assets in those basins, other basins, such as the Marcellus, are thriving.

Further, fracking has been targeted by certain groups as a potential environmental hazard. Concerns have been raised that fracking can contaminate underground drinking water, that fracking itself uses too much water, and that fracking could result in seismic activity. Separating fact from fiction in this debate can be difficult due to the inherently complex science involved. For instance, while methane gas has been discovered in well water near fractured wells, methane gas has been discovered in well water long before oil and gas drilling was ever pursued and so determining whether contamination is natural or related to nearby fractured wells is difficult to determine. Because of this uncertainty, some counties and states have banned fracking or limited its use. Another problem facing exploration and production companies is the lack of universal regulation of fracking. The Environmental Protection Agency (EPA) is currently conducting a study on the potential impacts of fracking on drinking water resources. The study was started in 2011, with the results expected to be released during 2014. In July of 2013, the Department of Energy released the results of a yearlong study that showed no evidence that chemicals used in fracking moved up to contaminate drinking water aquifers at a western Pennsylvania drilling site.

Clearly, though, expectations for robust oil and natural gas production growth in North America, that largely stems from the use of fracking, and other technological breakthroughs, is a major driver to the growth outlook for midstream operators today. Therefore, any major restriction on the use of these techniques would have a meaningfully negative impact on the growth outlook for midstream businesses.

The success of shale development has also created supply risks for certain assets and will have additional impacts going forward. Impacted are those infrastructure assets that serve market connections that have become or may become obsolete. For example, a number of legacy natural gas production basins (shallow Gulf of Mexico production, coal bed methane in the Rockies, etc.) have experienced dramatic production declines, or significantly missed previous growth expectations, as these fields have become uneconomic in today's natural gas price environment.

<sup>43</sup>. Source: NEB, "NEB Approves 25-Year Export License to LNG Canada Development Inc.," 2/4/13.

<sup>44</sup>. Source: BENTEK Benposium – Oil Production Presentation, 5/13/13.

The midstream assets servicing these basins and providing takeaway capacity from these basins have similarly suffered. Surging production of light sweet crude oil from the mid-continent has lessened the need for pipelines taking foreign imports from the coast to mid-continent refineries. Over the coming years, the tremendous growth in Marcellus production in the Northeast is expected to impact assets in the region that were built when it was believed the Northeast had no significant local supply basins.

Natural disasters could also curtail supply for an extended period. For example, on August 30, 2005, when Hurricane Katrina hit, 8.8 Bcf/d of natural gas production (18% of average daily production) and 1.4 MMb/d of oil production (28% of average daily production) was shut-in. Twenty-five days later, when Hurricane Rita hit the Texas Gulf Coast, 8.1 Bcf/d of natural gas production (16% of average daily production) and 1.5 MMb/d of oil production (30% of average daily production) was shut-in. Four weeks after Rita made landfall, 5.6 Bcf/d of natural gas production and 1 MMb/d of oil production was still shut-in. Notably, during hurricanes Katrina and Rita, no interstate long-haul natural gas pipelines were shut down or reduced capacity. Six interstate oil, refined product, and LPG pipelines were shut down for periods ranging from two to six days.

### Macro Supply Disruptions

While the amount of imported oil and refined products continues to decline, the U.S. still relies on imports of these commodities to meet our energy demand. Since energy infrastructure assets are often operated to earn a fee on a per-volume basis, a material and sustained disruption to the importation of these commodities could impact the revenue generating ability of many MLPs. For instance, if global political tensions were to result in a curtailment of foreign oil imports then those U.S.-based refineries dependent on such imports as a feedstock would be unable to produce refined products (gasoline, diesel, jet fuel, etc.) at normal levels and the pipelines transporting those refined products would similarly suffer a loss of revenue.

However, the potential impact of this risk does appear to be diminishing. Recent and expected growth in domestic crude oil production has and is expected to continue to result in less reliance on foreign oil imports with Canadian imports representing a growing proportion of that diminishing foreign oil dependence. A report by

Citigroup Inc. predicts North America will become energy independent by 2020<sup>45</sup> and the International Energy Agency (IEA) predicts the U.S. could be almost energy self-sufficient by 2035.<sup>46</sup>

### Environmental Accidents

Energy infrastructure assets carry products that can be both dangerous and harmful to the environment if asset failure, or accidental or purposeful damage, were to result in a release of these products. Costs to repair damaged facilities, to clean up environmental contamination, or resulting from death or injury can be significant. However, the vast majority of MLPs carry significant insurance to help offset the impact of such instances. Further, energy infrastructure customers demand highly reliable and safe service making continuous asset maintenance a requirement of any energy infrastructure provider, such as MLPs. In fact, most MLPs have strong safety and operating track records and no environmental accident has yet resulted in an MLP having to cut or eliminate its distribution to common unit holders. A recent example of this is the Enbridge Energy Partners (EEP) pipeline leak in July 2010. In this instance, an EEP pipeline in Michigan cracked and leaked an estimated 20,000 barrels of oil. EEP worked with regulators to remediate the spill and repair the pipeline. Though the cost of clean-up and repair was significant, EEP's insurance coverage was substantial and the partnership was able to meet these costs without disrupting distributions.

### Tax Law Changes

There is always the risk that the tax structure MLPs enjoy, created with the Tax Reform Act of 1986, could end. However, given the need for meaningful energy infrastructure to continue the gains made thus far in the ongoing energy renaissance, coupled with a visible effort to expand the MLP umbrella, we believe the structure is resilient. Overall, we see a low possibility of removal or significant alteration of the current MLP tax structure due to the relatively small tax revenue to be raised compared to the significant benefits the sector has provided.

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45. Source: Citigroup Inc, "Energy 2020: Independence Day, Global Ripple Effects of the North America Energy Revolution," February 2013.

46. Source: IEA, "World Energy Outlook 2013," November 2013.

Recently, tax code simplification has gained political momentum though the probability of any significant progress in this regard is difficult to gauge. Some analysts fear that pass-through entities, such as MLPs, could potentially be impacted if such legislation were to be enacted. However, no such legislation has yet gained support. According to the Congressional Joint Committee on Taxation (JCT), the amount the federal government would gain from changing the tax structure for publicly traded partnerships (PTPs) would be minimal. According to the JCT, the total revenue loss over five years (2013-2017) from the current tax structure of PTPs with qualified income derived from certain energy-related activities is \$1.34 billion dollars per year.<sup>47</sup> Recall, MLP earnings do not go untaxed but are simply passed through to owners who ultimately owe tax on those earnings (unlike REITs which can effectively shield all earnings from taxation).

In contrast to the relatively immaterial tax revenue that could be raised by changing the tax status of MLPs, the sector has provided significant benefits. During the years 2007 to 2013, MLPs spent over \$120 billion on organic capital expenditure.<sup>48</sup> The infrastructure built by MLPs has allowed the U.S. to take advantage of the current energy renaissance. As energy production in this country continues to grow, more midstream energy infrastructure will be needed.

More broadly, the energy sector has been one of the primary contributors to the country's improved economic outlook following the 2008 financial crisis. In 2013, employment in the oil and gas extraction sector increased 6% and has increased 24% since 2010.<sup>49</sup> Not only are jobs in this sector growing at a rapid pace, but they pay almost 51% more than the national average. The oil and gas extraction industry has one of the highest annual mean wages at over \$92,000.<sup>50</sup> According to IHS, the entire unconventional oil and gas value chain currently supports more than 2.1 million jobs. IHS also found that in 2012, the full value chain of industrial activity and employment associated with unconventional oil and natural gas contributed more than \$74 billion in federal and state government revenue.<sup>51</sup> Midstream is the backbone of this energy development, literally making this economic growth possible.

In a study done by former Assistant Treasury Secretary for Economic Policy, Phillip Swagel, and former Deputy Assistant Treasury Secretary for Tax Analysis, Robert Carroll, it was found that the higher cost of capital

resulting from corporate taxation of MLPs would reduce pipeline investment by close to 30% or more immediately following the change to corporate tax status, with investment still 13% to 20% lower 10 years after the change. This would result in U.S. businesses and households facing higher energy costs of over \$13 billion per year.

There are secondary effects of the energy renaissance and MLP infrastructure build out. Low natural gas prices are lowering electricity prices, creating cheaper feedstock for chemical companies, and creating a manufacturing renaissance in the U.S. All of this activity has created more jobs for those in the energy industry and across other industries. According to IHS, the unconventional gas and unconventional oil industries have an employment multiplier of 3.2 and 4.1, respectively. According to a study done by Quantria Strategies, from 2012 to 2016 the midstream MLP industry will support more than 1.6 million jobs on an annual equivalent basis. Even foreign companies are looking to expand their footprint in the United States to access skilled labor, end markets, and advantaged energy and feedstock pricing. For example, France's Vallourec completed a \$1.1 billion plant in Ohio to make steel tubes for oil and gas wells and Egypt's largest publicly traded company, Orascom, is building a \$1.8 billion fertilizer plant in Iowa.

The MLP tax structure has also seen support from politicians as some have tried to expand the definition of qualifying income to include alternative energy sources (wind, solar, hydro-electric, solid waste, and production of biofuels). Biofuels (including ethanol and biodiesel) were added as qualifying natural resources in 2008, and further expansionary efforts have recently gained some momentum as it appeals to the politics of both Democrats and Republicans. One such proposal, The Master Limited Partnership Parity Act ("MLP Parity Act"), has gained bipartisan support in both the House and the Senate and expands the MLP umbrella to include wind, closed and open loop biomass, geothermal, solar, municipal solid waste, hydropower, marine and hydrokinetic, fuel cells, and combined heat and power, as well as allowing a range of transportation fuels to qualify, including cellulosic, ethanol, biodiesel, and algae-based fuels, as well as energy-efficient buildings, electricity storage, carbon capture and storage, renewable chemicals, and waste-heat-to-power technologies.<sup>52</sup>

47. Source: Staff of the Joint Committee on Taxation, "Estimates of Federal Tax Expenditures for Fiscal Years 2012-2017," 2/1/13.

48. Source: Wells Fargo MLP Monthly, January 2014.

49. Source: Bureau of Labor Statistics.

50. Source: <http://www.bls.gov/news.release/ocwage.htm>

51. Source: <http://press.ihs.com/press-release/economics/us-unconventional-oil-and-gas-revolution-increase-disposable-income-more-270>

52. Source: U.S. Senator Chris Coons, <http://www.coons.senate.gov/issues/master-limited-partnerships-parity-act>.

### Terrorism

Since the terrorist attacks on September 11, 2001, the petroleum and natural gas industry has made steps to improve security around their infrastructure. The Pipeline Safety Improvement Act of 2002 was signed into law streamlining the permitting process from emergency pipeline restoration. In 2003, President Bush issued a directive clarifying executive agency responsibilities for identifying, prioritizing, and protecting critical infrastructure. This directive brought government officials and industry associates together to create an infrastructure protection program. Since 2003, the Transportation Security Administration (TSA) has been visiting major pipeline and natural gas distribution operators to review security plans. TSA also issued revised pipeline security guidelines in 2010 and 2011. Most MLPs do not have insurance covering terrorist attacks on assets either due to the cost being too high or insurance companies no longer covering losses from acts of terror or war.

### Trading Risks

It can be helpful to consider not only fundamental risks present in the asset class but also trading risks. Fundamental risks may impact a company's results and, therefore, cause poor stock price performance as investors react to such a change. Trading risks represent those market factors that can impact an equity's price performance but which have little fundamental impact.

The sensitivity of fixed income securities to a rising rate environment is an example. Though a rising rate environment may hold no particular negative consequence for a given company's credit outlook, that company's bonds remain susceptible to price weakness as investors are still likely to demand a higher yield to buy that issuer's debt, all else equal, simply because of the higher yield environment.

Higher yielding equities, such as MLPs, REITs, and Utilities, can also exhibit weakness during a rising rate environment, though the degree of sensitivity can vary dramatically. The MLP asset class has also traded in sympathy with the broader markets during periods of weakness. Again, the degree of this trading risk can vary but MLPs showed particular sensitivity during the sharp-market sell-off seen over the second half of 2008.

### Interest Rates

As a hypothetical example, assume an equal-weighted portfolio of MLPs today yields 6.50%. If the yield curve were to rise by 100 basis points (bps) and if the market were to, in effect, treat MLP equities as perpetual bonds and require the yield spread between this basket of MLPs and the current treasury market to remain consistent, then this 100 bps increase in rates would result in a 13% price decline. Of course, by this logic a 3.50% yielding REIT would decline 22% and a 2.00% yielding equity, such as IBM, would sell off 33% under this same scenario.

However, as shown in Chart 9, from 1996 through 2014, there have been approximately seven instances where the 10-year U.S. Treasury yield rose by more than 100 bps and the average price performance of MLPs over those periods was a 4.8% gain. However, past performance does not guarantee future results. In fact, in only four of those instances did MLPs experience negative price performance. While REITs and Utilities haven't performed quite as well over those periods, delivering average losses of 0.6% and 0.5%, respectively, those asset classes also performed better than what would be expected by the bond equivalent math.<sup>53</sup>

What this history reveals is that the market does not necessarily require a consistent yield spread for MLPs or REITs (or IBM). This finding is not surprising if you consider the supply and demand dynamics at work. Investors looking at MLPs, like any investment, are willing to purchase when the total return potential appears commensurate with the risk inherent. Notably, from 1999 through 2013 MLPs have provided investors an annualized total return of approximately 17%.<sup>54</sup> Implicit in the price history of MLPs over these periods is that investor's total return expectations must have remained robust enough to mitigate any adverse effects of the higher rate environment. In other words, though a 100 bps move in the yield curve may increase the return potential of certain alternative investments, we believe the perceived total return potential of MLPs has generally remained good enough that few investors chose to sell MLPs to purchase these other assets.

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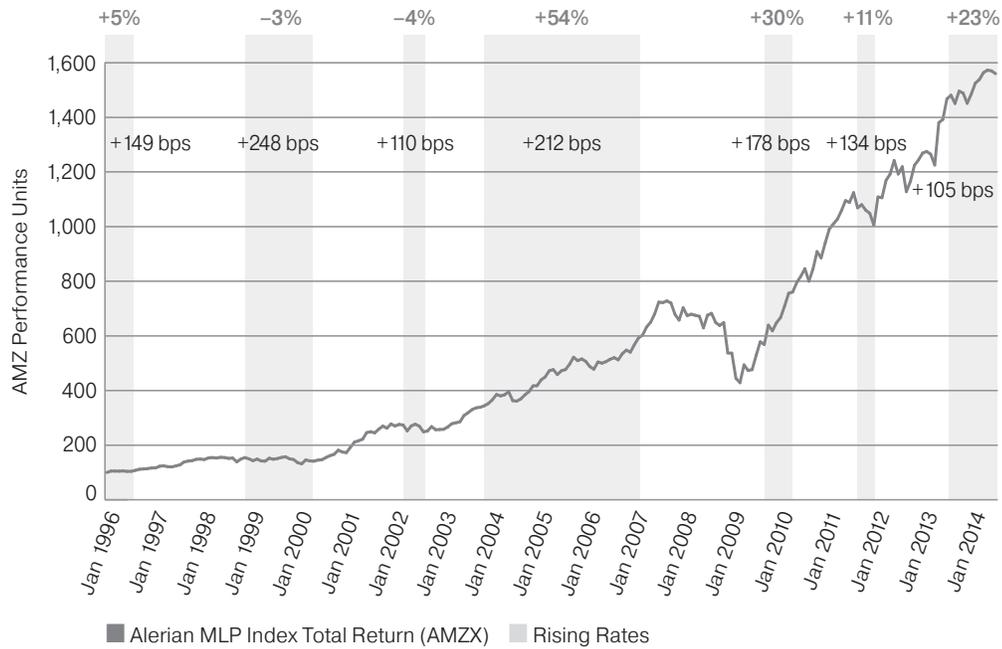
53. Sources: Bloomberg and OFI SteelPath. **Past performance does not guarantee future results.**

54. Sources: Bloomberg and OFI SteelPath. **Past performance does not guarantee future results.**

Chart 9

## Alerian MLP Index

AMZX Performance During Periods of Rising Interest Rates



Sources: OFI SteelPath, Alerian, Board of Governors of the Federal Reserve System and Barclays Research. Index performance is shown for illustrative purposes only and does not predict or depict the performance of the Oppenheimer SteelPath Funds. Indices are unmanaged and cannot be purchased directly by investors. **Past performance does not guarantee future results.**

Uptrending Rate Periods			10-Year Treasury Yield			AMZ Total Return Index		
Start	End	Days	Start	End	Difference	Start	End	Return
1/1/96	7/5/96	186	5.57%	7.06%	1.49%	100.00	105.29	5.29%
10/2/98	1/21/00	476	4.31	6.79	2.48	148.32	144.59	-2.52
11/9/01	4/1/02	143	4.34	5.44	1.10	284.52	273.03	-4.04
6/13/03	6/28/06	1,111	3.13	5.25	2.12	329.55	508.66	54.35
12/18/08	6/18/09	182	2.08	3.86	1.78	429.31	558.45	30.08
10/6/10	2/8/11	125	2.41	3.75	1.34	956.70	1,058.14	10.60
7/24/12	6/27/13	338	1.44	2.49	1.05	1,215.02	1,492.02	22.80

Sources: Alerian Capital Management, Board of Governors of the Federal Reserve System and Barclays Research. Index performance is shown for illustrative purposes only and does not predict or depict the performance of the Oppenheimer SteelPath Funds. Indices are unmanaged and cannot be purchased directly by investors. **Past performance does not guarantee future results.**

Many investors also worry that MLPs may have performed well over the past decade simply because the rate environment has been friendly. While MLPs may have benefited from this environment, so have most other asset classes, from real estate to technology stocks. It is also important to note that over the past decade MLPs have been able to grow their distributions by a compounded annual rate of 7.5%. In other words, midstream businesses have not only been able to distribute a significant level of cash to investors but have steadily grown those distributions over time. However, the current yield spread of the AMZ to the 10-Year Treasury is around 263 bps versus a pre-financial crisis average of 226 bps.<sup>55</sup> This suggests that to the extent the asset class remains susceptible to yield spread revision, a healthy buffer remains to absorb additional increases in the interest rate environment.

As a result of the above, the correlation of MLP price performance to treasury price performance over the past decade has been very weak; in fact, the correlation has been a negative 0.17. Though, as discussed, periods of rapid and unexpected rate increases can cause the sector to perform weakly.

### Equity Volatility, Correlation and Beta

Over longer periods of time, the correlation of MLP price performance, as measured by the AMZ, to the performance of the broader market, as measured by the S&P 500 Index<sup>56</sup> is relatively low at 0.52. In general, the correlation statistic increases when the time frame is shortened to consider only more recent behavior. For instance, over the past five years the correlation statistic<sup>57</sup> increases to 0.67. This more recent period statistic reflects a greater influence from the heightened correlation experienced during the financial crisis. For the five-year period prior to the financial crisis, the correlation<sup>58</sup> is only 0.40. OFI SteelPath believes the lack of correlation over relatively calm market periods may be attributed to the relative lack of exposure midstream businesses have to the broader economy. However, during periods of market turbulence, MLPs can trade in sympathy with the markets and exhibit higher correlation.

Though “market turbulence” does not have a universal definition, since 2000 there have been 12 periods where the S&P 500 Index lost over 10% in less than 50 days.<sup>59</sup> Over these periods, the correlation between the S&P 500 and MLPs averaged 0.62.<sup>60</sup> Notably, following the terrorist attacks of September 11, MLPs showed a 0.82 correlation with the broader markets.<sup>61</sup> During the sharp drops experienced in June and September 2002, the correlation rose to 0.78.<sup>62</sup> In the period surrounding October 2008, when the S&P 500 lost 35%, the correlation was 0.83.<sup>63</sup>

In fact, over the entire 2008 financial crisis, the correlation markedly increased, not just during the shorter term market shocks, but throughout the crisis. This correlation increase prevailed not only between the broader market and MLPs but also across numerous industries. Though it is impossible to know with certainty what led to the increase in correlation, OFI SteelPath believes that the primary correlating factor was simply the severity and pervasiveness of the crisis. Other periods of weakness seemed to have been concentrated on certain sectors, such as technology or energy trading, and, therefore, market participants were generally able to conclude that the prospects for industries or businesses far afield from these troubled sectors were unlikely to experience a prolonged impact. However, the financial crisis, particularly at its apex, appeared potentially devastating to not only a handful of large banks but also to entire economies and perhaps even to the ability of certain financial markets to continue functioning.

Looking more closely, let's define the 2002 market turbulence as the period where the S&P 500 was below the 200-day moving average (September 28, 2000 to April 14, 2003). When the market was finding a bottom in July 2002 and again in October 2002, the correlation was 0.72<sup>64</sup> and 0.78,<sup>65</sup> respectively. In contrast, over the entire recession (including these periods), the correlation was only 0.46.<sup>66</sup>

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55. Sources: Bloomberg and OFI SteelPath. As of 6/26/14.

56. Source: Bloomberg. Correlation of monthly returns from April 2004 through March 2014.

57. Source: Bloomberg. Correlation of monthly returns from April 2009 through March 2014.

58. Source: Bloomberg. Correlation of monthly returns from August 2003 through July 2008.

59. Source: Bloomberg.

60. Source: Bloomberg.

61. Source: Bloomberg. Correlation of weekly returns from September 11, 2001 through December 11, 2001.

62. Source: Bloomberg. Correlation of monthly returns from June 2002 through September 2002.

63. Source: Bloomberg. Correlation of weekly returns from September 2008 through November 2008.

64. Source: Bloomberg. Correlation of daily returns from July 17, 2002 through July 25, 2002.

65. Source: Bloomberg. Correlation of daily returns from October 2, 2002 through October 10, 2001.

66. Source: Bloomberg. Correlation of weekly returns from September 28, 2000 through April 14, 2003.

As most observers of the space will testify, MLPs do tend to trade in sympathy with the broader energy space more frequently than the broader market. We believe this is due to investor perception that MLP revenues are tied more closely to the prices of the commodities they transport or store than they actually are. The correlations between MLP price performance and the Energy Select Sector Index (the "IXE," an index comprised of the energy components of the S&P 500 Index) over the past 10 years was 0.64. Further, observation of the rolling 1- and 2-year correlation figures indicates that the correlation between MLPs and the IXE has slowly increased over the past decade. A potential explanation for this increase is the proliferation of gathering and processing MLPs and exploration and production MLPs. Some of these entities experienced meteoric success as commodity prices soared prior to the financial crisis followed by financial distress when commodity prices subsequently corrected. The resultant focus on these names might certainly have skewed the market's perception of the entire space.

Comparing MLP price performance directly to crude oil price performance, however, reveals a much weaker link. The correlation of MLPs to crude oil over the past 10 years has been relatively low at 0.33 and has remained fairly resistant to pronounced increases during periods of short-term shock other than the late-2008 and early-2009 crude oil collapse, during which correlation increased to 0.49.

The 10-year average weekly correlation between MLPs and indexes that track Real Estate Investment Trusts (REITs) and Utilities is 0.46<sup>67</sup> and 0.60,<sup>68</sup> respectively. Though, these correlations reflected a less dramatic increase in times of stress.

Of course, the correlation statistic is a lagging indicator—it tells investors where the relationship with the market has been, not where it is going—so its usefulness should not be overestimated. On the other hand, we see no fundamental reason why the sector's historical pattern of heightened correlation during periods of turbulence but relatively low long-term correlation should change going forward.

Correlation is a fairly limited statistic in that it simply provides a measure of how two returns compare in the direction of their movements over a period of time. While these correlation statistics are interesting on a technical basis it is notable that during the 2002 recession, the market lost 37% while MLPs returned 62% as measured by the total returns of the S&P 500 Index and the AMZ, respectively. Similarly, let us consider the 2008 recession where the S&P 500 Index remained below the 200-day moving average from December 26, 2007 to June 1, 2009. While MLPs were highly correlated (0.73) to the market during the entire period, they also outperformed the market by over 20% on a total return basis, losing only 15% compared to the market's loss of 38%; again, as measured by total return. In 2010, the correlation of weekly price performance between the AMZ Index and the S&P 500 Index was quite high at 0.67 but over this period the AMZ Index generated a 36% total return and the S&P 500 Index generated a 15% total return. Like volatility, investors generally don't mind higher correlation in periods of positive returns.

Another statistic that provides useful information is beta.<sup>69</sup> Whereas correlation provides an indication of the strength of the directional relationship of returns, beta provides an indication of the relative magnitude of expected returns. In other words, a stock or sector with a 0.50 beta to the broader market would be expected to exhibit about half the change in price for any given change in the price of the broader market.

The beta over the past 10 years between MLPs and the broader market has been 0.80 and 0.55 between MLPs and the IXE. Therefore, while the MLP sector tends to move directionally with the broader markets and the broader energy markets, the sector also tends to experience less dramatic movements.

<sup>67</sup>. Source: Bloomberg. Correlation of weekly returns of the AMZ and the MSCI U.S. REIT Index from 2003 through 2013.

<sup>68</sup>. Source: Bloomberg. Correlation of weekly returns of the AMZ and the Dow Jones Utilities Index from 2003 through 2013.

<sup>69</sup>. Beta is a measure of the risk of a security or portfolio in relation to an independent variable (i.e., the general market or other specified benchmark). The independent variable has a beta of 1.00 by definition. Any security or portfolio with a beta greater than 1.00 is considered more volatile, while a beta of less than 1.00 would be less volatile.

### Appendix

#### A History of the Creation of MLPs

Limited partnerships (LPs), the closest predecessors to MLPs, rose to prominence following the passage of the Economic Tax Recovery Act of 1981, which established a very generous 15-year cost recovery period for all real estate assets. The new tax code provisions marked the beginning of a period of rapid growth in the number of real estate LPs designed as tax shelters. These partnerships purchased real estate properties on significant leverage and depreciated their properties using the newly established accelerated cost recovery system (ACRS), leading to substantial tax write-offs. Although these partnerships were marketed as conservative, capital-appreciating investment vehicles, their eventual fallout suggests that very few were run with long-term economic profitability as a motive.

High net worth individuals purchased interests in these private or non-publicly traded LPs to offset taxable income generated by other sources such as salaries, dividends, interest, and investment income. These limited partners were considered passive investors, because they were not involved in the day-to-day active management of the partnership and assumed no personal liability beyond their original investment.

During the same period, there were a number of E&P partnerships with rapidly depleting asset bases that were marketed to high net worth individuals who did not realize both the commodity price dependence nor the depleting nature of the underlying resource. Many of these E&P companies went bankrupt as a result of a turn in commodity prices and the lack of a productive resource base. These early oil and gas partnerships left a bad taste in many investors' mouths and prejudiced them against the structure for years to come, as they lumped any energy-focused partnership in the same group with these failed enterprises. Today's MLP is very different from these failed commodity price-dependent, depleting reservoir partnerships of the early 1980s that hurt so many investors.

Five years after the initial legislation, President Ronald Reagan signed into law the Tax Reform Act of 1986 (TRA), which cracked down on the proliferation of real estate tax shelters and established the foundation for the modern MLP. The modified accelerated cost recovery system replaced the ACRS, and the cost recovery period was extended to 27.5 years for residential real estate and 31.5 years for nonresidential property. TRA eliminated the preferential tax rate on capital gains and lowered overall marginal tax rates, reducing the value of the deductions taken through tax shelters.

TRA Section 465 extended the capital-at-risk limitations of the tax code to real estate tax shelters, preventing limited partners from increasing their cost basis for their share of the partnership's debt unless they were personally liable for repayment. Since limited partners generally provided non-recourse financing and were only liable for their invested capital, they were no longer able to record tax losses and deductions on their personal tax returns that significantly exceeded their investment, as had been done for the past several years.

But what really led to the demise of the tax shelters was TRA Section 469, which prohibited passive investors from using partnership losses to offset taxable income from other sources, i.e., the very thing that the real estate tax shelters were created to do for their high net worth investors. The only partnerships that would survive under the new law were those with mature assets that actually generated passive income.

While TRA established the structural boundaries for LPs, the Revenue Act of 1987 created the business or operating boundaries, eliminating the special tax status for all except those engaged in natural resource activities. In addition, TRA specified that publicly traded partnerships engaged in the exploration, marketing, mining, processing, production, refining, storage, or transportation of any mineral or natural resource would not pay federal taxes in order to encourage investment in the development of domestic natural resources.

### General/Limited Partner Structure

An MLP's equity ownership is generally divided between limited partners (LP) and a general partner (GP). The limited partner interests are represented by the limited partner units that are publicly traded. Traditionally, the general partner interest was retained by the MLP's sponsor, usually an integrated energy firm, who would run and manage the business of the MLP. The portion of the MLP owned by limited partners typically equals 98% and the portion allocated to the general partner interest is the remaining 2%. In addition, the GP sponsor will also typically receive an additional payment referred to as incentive distribution rights (IDRs).

Conceptually, the purpose of the IDR mechanism is to incentivize the sponsor to grow its assets and the distributions to its limited partners. At IPO, the GP sponsor typically only receives 2% of the cash distributions paid by the MLP, a share equal to its nominal ownership interest, but the IDR structure allows the GP to receive an increasing share of the cash flows disbursed by the MLP as the distribution rate is increased.

Importantly, though GP's have only a 2% nominal ownership interest, the GP controls the management of the MLP through the terms of the partnership agreement. Therefore, entities looking to raise capital by packaging their midstream assets in an MLP IPO can sell a majority stake in the entity, maximizing proceeds, while retaining strategic control and a continuing economic benefit through retention of the GP and IDR interests. Relative to shareholders of public corporations, limited partners in MLPs have restricted voting power. As such, GPs have little accountability to limited partners and can only be removed from control of the limited partnership in specific circumstances.

The term GP MLP refers to general partner and IDR interests that are held within a publicly traded partnership structure (MLP) and sometimes these interests are held within a traditional corporate structure (C-corp). Typically, these GP MLPs also own a significant amount of limited partner units in addition to the GP and IDR interests. A number of publicly listed oil and gas companies are MLP sponsors and therefore own general partner and IDR interests in an MLP in addition to their other assets. However, because these companies' primary business is not the management of MLP assets, they are not typically referred to as GP MLPs.

Due to the mechanics of the IDR cash flows, investing in GP MLPs can present both a great deal of risk as well as reward. To better understand why, it is important to understand how the IDR structure works. Essentially, once an MLP's quarterly distribution rate eclipses a certain amount, the holder of the IDR receives an increasing share of total cash distributed by the partnership. The most important aspect of the structure to understand is that just as the IDRs benefit disproportionately from distribution increases at the MLP, the IDRs also suffer disproportionately from distribution cuts.

In addition, IDRs represent a call on total cash flow distributed and so IDR payments will increase not only from distribution rate increases but also from simply an increase of MLP units outstanding through, for example, follow-on offerings or the use of equity to consummate an acquisition. In other words, if an MLP increases its units outstanding by 10%, the GP will see a cash flow increase of 10%, assuming the distribution rate remains flat.

As an illustration, assume a generic GP with an underlying MLP that delivers annual distribution growth of 6% while issuing 10% of additional equity annually. This generic GP's 10-year compound annual distribution growth rate would be 27% versus that 6% distribution growth provided by the underlying MLP. If we remove the effect of equity issuance from the model, to separate the impacts of the distribution rate increase from the impact of simply issuing more units, the GP MLP's growth rate would decline from 27% to 16%.

While the growth potential of GP MLP's is impressive, their risk is equally so. If in the above hypothetical scenario, the underlying MLP were forced to cut its distribution by 25%, the cash flowing to the GP would decrease by 82%. If the MLP were forced to cut its distribution by 50%, the cash flowing to the GP would decrease by 95%.

A number of MLPs have either acquired their general partner or purchased their incentive distribution rights; this trend hit a peak in 2010 over which six of these transactions were consummated. Typically, management teams suggest the incentive behind buying out these interests is to lower their long-term cost of capital. IDRs effectively create a drag on an MLP's cash flow growth, making it more difficult for organic growth projects or potential acquisitions to be accretive to MLP unitholders.

While cost-of-capital control is certainly a reasonable consideration, also note that the majority of these IDR or GP buyouts have occurred at attractive multiples providing sponsors substantial profits. Given the intrinsic risk of the IDR cash flows as described above, these transactions can also serve to de-risk the sponsor's investment. In other words, a sponsor may choose to buy-in their IDRs at a high multiple after a period of favorable fundamentals and rapid distribution and IDR payment growth thereby "locking-in" this value created. By doing so, the sponsor is protected from the potential for subsequent fundamental weakness that may force a reduction of the distribution rate that could dramatically impact the value of the IDRs. In fact, some IDR buyouts have proven long-term favorable to common unit holders while others have resulted in questionable results.

General partners have also dealt with cost of capital issues in other ways, including resetting IDRs to lower levels (effectively lowering the maximum percentage of distributed cash flows that can be allocated to the IDR payment) and offering IDR subsidies, in which case a GP will temporarily forgo a portion of their IDR payment to make a particular acquisition accretive to its MLP.

To better understand how the IDR burden can impact an MLP's growth, consider a hypothetical example. Assume a mature MLP whose IDR and GP payments are already consuming 30% of distributed cash flow. If an MLP with a current yield of 6% were to make an acquisition at 8x cash flow that resulted in a 10% increase in units outstanding, and assuming the transaction was financed with the typical half equity and half debt split, that acquisition would increase distributable cash flow per unit by 8%. By comparison, if a similar MLP with no IDR burden were to make the same acquisition for the same price, that acquisition would increase distributable cash flow per unit by 14%.

Beyond just the cost of capital impact of the IDR structure on an MLP, we also believe that as the MLP space matures, institutional investors will increasingly seek out those MLPs without the IDR burden and push back on MLPs that retain this structure. Not only is the IDR mechanism incredibly complicated (this discussion has only presented the IDR calculation in general terms; the details are far more complicated), but institutional investors typically dislike this unusual mechanism.

Of course, MLP management teams with IDRs would argue that the sector has done incredibly well and point to the IDR structure as being a key driver of that performance. While there is certainly merit to this argument, many investors will conclude that the structure is overly skewed towards benefitting management (the GP) over LP unit holders as the underlying business grows. In other words, an incentive is a good idea but the traditional IDR structure may simply be too much.

Further, the alignment of interest is not perfect. Consider, for instance, that the GP is rewarded through the IDR mechanism for simply issuing units. This means that the GP may be incentivized to make a very large acquisition, for which many units will be issued, that is not profitable enough to raise the per unit distribution rate to limited partners over a smaller acquisition that is more accretive on a per unit basis.

Though there are some negative aspects of the general partner structure and the IDR burden, MLPs have performed very well and investors within the asset class have generally fared well. However, it is important that investors understand and consider the impact of the IDR structure and the potential conflicts of interest caused by the general partnership structure when making an investment decision. OFI SteelPath urges new sponsors to either pursue a structure without an IDR mechanism or to modify the common IDR structure to eliminate the high splits. We believe that doing so will improve investor perception, corporate governance and the long-term performance of the MLPs that choose to do so.

The table on the next page depicts how the IDR structure affects distributions for a hypothetical MLP that is currently paying a \$0.50 quarterly LP unit distribution, has 100 million LP units outstanding, and has distribution tiers at \$0.0625, \$0.1250, and \$0.25 per LP unit.

### Hypothetical Incentive Distribution Rights Structure

Declared Distribution Rate and Units Outstanding				
Distribution per Unit			\$	2.00
# of Shares (in millions)				100
Distribution Rate for Each Distribution Tier				
1st			\$	0.25
2nd			\$	0.50
3rd			\$	1.00
Tier % or "Splits" (reflects allocation of cash distributed)				
	Initial	1st Tier	2nd Tier	3rd Tier
	2%	15%	25%	50%
	98%	85%	75%	50%
Per Unit Allocation by Tier				
Initial			(\$0.25–\$0.00)	\$ 0.250
1st			(\$0.50–\$0.25)	0.250
2nd			(\$1.00–\$0.50)	0.500
3rd			(\$1.00–\$2.00)	1.000
Total LP Distribution Allocation by Tier				
Initial			(\$0.25 x \$100)	\$ 25.0
1st			(\$0.25 x \$100)	25.0
2nd			(\$0.50 x \$100)	50.0
3rd			(\$1.00 x \$100)	100.0
Total (in millions)				\$ 200.0
Total GP and Incentive Distribution Allocation by Tier				
Initial			(\$25.5 – \$25.0)	\$ 0.5
1st			(\$29.4 – \$25.0)	4.4
2nd			(\$66.7 – \$50.0)	16.7
3rd			(\$200.0 – \$100.0)	100.0
Total (in millions)				\$ 121.6
Total Distribution Allocation by Tier				
Initial			(\$25.0 / 98%)	\$ 25.5
1st			(\$25.0 / 85%)	29.4
2nd			(\$50.0 / 75%)	66.7
3rd			(\$200.0 / 50%)	200.0
Total (in millions)				\$ 321.6
Allocation of Total Cash Distributed				
			in millions	%
LP Unit Holders			\$ 200.00	62%
GP and Incentive Holder			\$ 121.59	38%
Total (in millions)			\$ 321.59	100%

Source: OFI SteelPath.

### Income Tax Treatment

Given the stable cash generation of most MLP business models, these partnerships are able to return a majority of their excess cash flow back to unit holders. This return of capital has become the cornerstone of MLPs, as investors have come to expect stable cash flows and dependable yields. In addition to stable, cash-generating assets, MLPs do not pay corporate taxes and, consequently, are able to pass on a greater portion of earnings to their limited partner unitholders.

Unlike the dividends paid by corporations, MLP distributions, like the cash distributions paid by any partnership, are not considered earnings, or income, in the period received. Instead, each year MLP partners are allocated their share of partnership earnings which are taxable as income. The quarterly cash distributions paid to investors typically exceed by a material amount the net income allocation. Investors in MLPs must treat their share of taxable income as ordinary income for tax purposes, but the amount by which distributions exceed allocated income serves to reduce an investor's basis in that MLP. This reduction of basis is not taxed when the cash distribution is received but rather creates a tax obligation when the security is sold. This creates a tax deferral of that portion of the distribution received.

In the initial years of ownership, because of an IRS election that allows partnerships to adjust their inside basis for new partners (the "754 election"), a partnership will typically generate little in the way of taxable income for new investors (allocated taxable income will typically equal 10%-20% of the cash distributions received). This income allocation cannot be used to offset passive losses from other investments, but other investment expenses can be deducted from the same MLP's passive income and loss and result in a net positive, called portfolio income. Net losses from an MLP are considered passive losses and cannot be deducted from taxable income, but can be carried forward into future tax years to reduce an investor's share of taxable income from the same MLP. Any losses remaining after the sale by an investor of his MLP units can be used to offset other income in that tax year. When an investor files his taxes, he will receive a Schedule K-1 from the MLP, which will identify his share of the partnership's income and losses. Distributions that exceed an investor's outside basis will be taxed at the capital gains rate as return of capital. The investor's allocated income will vary depending on the partnership's operating earnings,

deductions and credits, and generally in practice he will continue to receive a modest "shield" relative to his distribution.

Every time that an MLP makes an acquisition or an investment, the investor is allocated additional depreciation on that investment, which creates a tax shield that will continue as long as the MLP continues to invest new money. The depreciation shield has two components, the underlying basis of the assets, and the depreciation of the investor's basis in the stock, so typically the partner will continue to receive depreciation to the extent that the partnership has income.

U.S. tax-exempt investors, including pension funds and IRAs, generally cannot or prefer not to own MLPs as they will generate Unrelated Business Taxable Income (UBTI) for the investor. Foreign investors generally do not own MLPs because they are subject to FIRPTA (Foreign Investment in Real Property Tax Act), which requires them to file a U.S. tax return and pay income taxes on capital gains of securities bought and sold on U.S. securities exchanges (unlike for example, buying and selling Microsoft, which would only be taxed in the investor's country of origin). Both U.S. tax-exempts and foreign capital can enter the MLP marketplace through corporate blocker structures (e.g., a C-Corporation taxable structure) and other more tax-efficient offshore vehicles.

### Comparison of MLP Investment Vehicles

Institutional participation in the MLP sector has historically been limited due to several significant barriers to entry, including restrictions on traditional mutual fund ownership and UBTI generation for tax-exempt institutions.

UBTI creates Unrelated Business Income Tax (UBIT). Under the UBIT rules, tax-exempt institutions and retirement accounts must pay tax on income from a business that is not related to their exempt purpose. Because of the pass-through nature of an MLP, or any partnership, unit holders are treated by the tax code as if they are directly earning the MLP's income. Therefore, the tax is owed on the retirement account's share of the MLP's taxable business income as reported on the K-1. Though there is a deduction that covers the first \$1,000 of unrelated business income from all sources; after that, the retirement account will owe tax.

An additional barrier is the fact that MLP distributions and income allocations have historically been considered non-qualifying sources of income, which impedes regulated investment companies (RICs) such as traditional mutual funds from investing. The American Jobs Creation Act of 2004 brought an element of relief by modifying the tax code to allow up to 25% of a RIC's portfolio to be invested in MLPs. Additional administrative burdens for RICs include the timing of income allocation and the various state and federal tax filing requirements.

There has been a concerted effort by the investment management community to address these fund-level restrictions and several new fund structures have been introduced in the MLP space over the last several years, including open-end mutual funds, exchange-traded funds, and exchange-traded notes. These funds are structured to block the UBTI, non-qualifying income, and tax reporting issues that have commonly kept institutions and other investors on the sidelines. However, key difference between these structures can have an impact on investor returns and perceived performance.

#### **Fund-Level Tax Accounting**

In order to address the MLP ownership restrictions imposed on RICs, most MLP investment funds elect to be taxed as corporations. This distinction allows the funds to block UBTI and the income normally allocated to direct MLP investors, while still delivering a 1099 tax form.

MLPs pay quarterly cash distributions to investors that typically exceed by a material amount the net income allocation. Investors in MLPs must treat their share of taxable income as ordinary income for tax purposes, but the amount by which distributions exceed allocated income serves to reduce an investor's basis in that MLP. This reduction of basis is not taxed when the cash distribution is received but rather creates a tax obligation when the security is sold. This creates a tax deferral of that portion of the distribution received.

Similar to an individual investor, investment funds are able to benefit from the tax deferral on distributions received. In addition, similar to individual holders, these

funds must pay tax on portfolio gains. However, while individuals rarely track their portfolios on an after-tax basis, to ensure investors in the funds are treated fairly, these funds must accrue on a daily basis the deferred tax liability ("DTL") for unrealized gains within NAV. Similarly, in the event of portfolio losses, the funds would reflect this reduction of the deferred tax liability within NAV.

#### **Closed-End Funds**

The first MLP-focused investment structures were closed-end funds and the first of these was launched in 2004. Closed-end funds are traded much like a traditional corporate equity. These funds conduct initial public offerings of a set number of shares and then those shares traded on an exchange like any equity. The price at which closed-end fund shares trade is simply based on the activity in the shares on the exchange; in other words, the price at which closed-end fund shares trade may be materially different than the NAV of the underlying securities held. Closed-end funds typically elect to be taxed as corporations and typically utilize financial leverage to offset the effects of the deferred tax accrual.

#### **Open-End Funds**

OFI SteelPath launched the first family of open-end MLP mutual funds in early 2010, with the intent of offering investors access to the asset class with daily liquidity at NAV; a first for the industry. By investing directly at NAV, investors can avoid the issues of buying or selling at a discount or premium to the underlying investment portfolio. The level of financial leverage employed typically varies from fund to fund.

Similar to closed-end funds, open-end funds typically elect to be treated as corporations for tax purposes. To note, several funds have recently launched as traditional RIC funds, without corporate taxation, in an attempt to negate the impact of the deferred tax accrual on NAV. However it should be noted that these vehicles are limited in the amount of MLP equity they can own, capped at 25% of the fund's net assets. While such vehicles may appear more efficient from a tax perspective, the ability to own only limited exposure to MLPs typically produces materially different exposure than an all-MLP portfolio.

For investors seeking to potentially offset the impact of the DTL accrual on daily NAV changes, OFI SteelPath launched an open-end fund which uses a modest amount of financial leverage. It can be argued that leverage provides little to investors other than increasing portfolio volatility but given the daily DTL accrual acts to lower daily volatility, it was determined that a prudent degree of leverage may help to provide investors a more normalized level of daily volatility without restricting the fund's investment flexibility.

### **Exchange Traded Funds (ETFs)**

The first MLP ETF was launched in late 2010, with generally the same structure as the open-end funds. However, MLP ETFs are designed to track the performance of passive indices and ETF shares trade on public exchanges. While MLP ETFs typically elect to be taxed as corporations, new RIC-structured ETFs have recently been launched with the same pros and cons as the RIC-structured open-end funds previously mentioned.

### **Exchange Traded Notes (ETNs)**

The oldest surviving MLP ETN was launched in 2009. Generally these securities represent an unsecured note obligation of the issuer and any distributions received are considered interest income for tax purposes and, therefore, are considered ordinary income for investors. Similar to ETFs, a market maker attempts to balance the price at which the notes trades and NAV, although balance sheet constraints have at times limited certain issuers from creating enough new units to meet demand, creating a premium to NAV. Financial leverage across ETNs varies by offering.



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