VettaFi

Investing in Energy Infrastructure MLPs

MLP Primer: A guide for both new and experienced investors

A Master Limited Partnership (MLP) is a publicly traded limited partnership with shares (called units) that trade on major stock exchanges. An MLP has the liquidity of a publicly traded company as well as an advantageous tax structure that allows MLPs, like all partnerships, to pay no federal taxes at the company level. This tax structure is one reason that MLPs can pay out distributions noticeably higher than those of traditional C-Corporations.

An investment in energy infrastructure MLPs is an investment in North America's continued production and consumption of transportable energy over the next several decades.

MLPs own the pipelines, storage tanks, and processing facilities that bring energy from the wellhead to America's doorstep and increasingly to the coast for exports. In the energy industry, these activities describe "midstream," which is the bridge between production (upstream) and consumption (downstream). Our focus is primarily on midstream or energy infrastructure MLPs (midstream and energy infrastructure are used interchangeably in this primer). While still related to the energy industry, most MLP business lines do not have direct exposure to commodity price fluctuations. Their businesses function primarily on a set fee per volume or fee for service basis. In short, the business model is driven by volumes.

There are three levels of MLP education in this guide:

- **MLP 101** is designed for those who are starting from the beginning or who would like a refresher on the basics of MLPs and their history. We've also detailed the basic investment thesis.

- **MLP 201** goes into further detail on MLP business models and discusses the importance of shale in growing U.S. energy production. This section is for those investors wanting to have a firm grasp on MLP economics before investing. We explain the nuances of the various company structures, the regulations around pipelines and pipeline tariffs, fundamentals, and the valuation metrics typically used for the MLP space.

- **MLP investing** is designed for those investors who have decided to invest. This section walks through each MLP access product, explaining the pros and cons as well as exploring which goals might be met by each. This section includes considerations for selecting individual securities and investing in products, whether active or passive.

MLP 101

What is a Master Limited Partnership?

MLP stands for Master Limited Partnership. Most people think of MLPs as energy pipeline companies with an advantageous tax structure, which is an extreme simplification, but not untrue. All partnerships in the U.S., including MLPs, pay no federal income tax[1] at the partnership (or company) level. Unlike most partnerships, MLPs are public companies, trading on the major stock exchanges and filing reports with the Securities and Exchange Commission (SEC). Midstream MLPs are involved in the transportation, processing, and storage of oil,

The basic midstream MLP business models[2]

Transportation

Just like it sounds, transportation MLPs move energy commodities like oil and natural gas from one place to another. In North America, most energy travels through a pipeline, but it can also move via truck, railcar, or ship. Pipelines are the cornerstone of energy infrastructure MLPs.

Processing

Processing encompasses any business that transforms a raw commodity into a usable form. It involves removing impurities like water and dirt from wellhead natural gas and separating the natural gas stream into pipeline-quality natural gas and NGLs, which are used as heating fuels and petrochemical feedstocks.

Storage

Storage includes tanks, wells, and other facilities both above and below ground. These assets provide flexibility to the energy economy, so there is propane available for winter heating, gasoline for summer driving and jet fuel for the holidays.

[1] Technically, each partner or unitholder (the name for an MLP shareholder) is allocated his or her proportional share of income, expenses, and ultimately taxes. This allocation is detailed on a Schedule K-1, which investors receive at the end of the year.

[2] Please see MLP 201 for an in-depth look at all MLP business functions.

natural gas, and natural gas liquids (NGLs). MLPs may also store and transport renewable fuels and byproducts like captured carbon dioxide.

How is an MLP different than a traditional corporation?

There are key differences between MLPs and corporations. Most notably, by limiting themselves to handling natural resources and minerals, MLPs do not pay federal income tax at the entity level. This means that they can pay out more of their cash flow to investors. Corporations, on the other hand, do pay federal income tax.

MLPs are also governed differently than regular corporations. Companies such as Exxon, Apple, and Ford are primarily owned by shareholders. Decisions are made by management teams as well as by shareholders at an annual meeting where major issues are decided by voting. A shareholder has one vote per share owned, and either a majority or a plurality of votes may be required for particular decisions. Many MLPs, on the other hand, are governed by their general partner.

MLPs generally have two classes of owners: the general partner (GP) and the limited partner (LP). The general partner interest of an MLP is typically owned by a major energy company, an investment fund, or the direct management of the MLP. The GP controls the operations and management of the MLP and typically owns some portion[3] of the LP. Limited partners (aka people who own units) own the remainder of the partnership but have a limited role in its operations and management. Legally, the general partner has no fiduciary duty to make decisions that will benefit LP unitholders, although what benefits the GP typically benefits the LP when it comes to managing the business.

How do midstream MLPs make money?

MLPs typically operate fee-based business models. They earn a set fee for each barrel of oil or million British Thermal Unit (MMBtu) of natural gas transported, stored, or processed (in the case of natural gas) regardless of the price of the hydrocarbon. This is because these companies typically do not own the oil or gas.

MLPs generally sign long-term contracts (five to 20 years in length) with their customers, which makes for stable cash flows. Accordingly, the revenue

[3] GPs owning 2% of the LPs is a typical lower limit; however, some GPs own a majority of the LP units.

equation for most business activities is fairly simple: price multiplied by volume. As such, more volumes mean more cash flows. On the price side, a federal agency sets the fee charged by interstate liquids pipelines, and the fee increases with inflation. Pipeline fees can also be negotiated with a customer based on the cost of operating the pipeline or based on market rates for liquids and natural gas pipelines. On the volume side, growing production of U.S. oil and natural gas over the last several years has necessitated more energy infrastructure such as pipelines, storage tanks, and processing plants. Growing demand for U.S. energy domestically and abroad can also require more infrastructure, including export facilities.

How do investors make money with MLPs?

If you own a stock, there are two ways to make money. First, the price of the stock increases and you can sell it for more than you bought it. Formally, this is known as price appreciation or capital appreciation. The other way to make money is through dividends. MLP dividends are called distributions because of the partnership structure.

Two ways to make money with stocks

1

Price appreciation =
price of stock increases

2

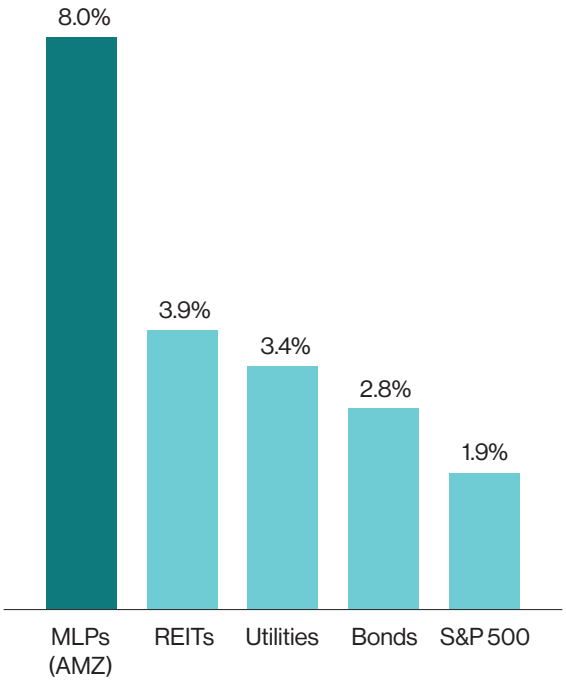
Income =
stock pays a dividend

The amount of distributions relative to the unit (or share) price is known as yield.

It is worth noting that MLP distributions are not guaranteed and vary depending on the MLP. Unlike real estate investment trusts (REITs), which must distribute a certain percentage of their cash flow each quarter, the partnership agreements of individual MLPs determine the level of distributions.

The historical average yield of MLPs over the past 10 years has been 8%, which means that if you invested $100, on average, you would be paid $8 each year. The chart below shows yields for MLPs, represented by the Alerian MLP Index (AMZ), compared to other asset classes. MLPs boast a higher yield than utilities and REITs, which are asset classes known for their income potential.

MLPs historical average yield (10 years) compares favorably to other income investments



REITs are represented by the NAREIT Real Estate 50 Index. Utilities are represented by the S&P 500 Utilities Index. Bonds are represented by the Bloomberg US Aggregate Bond Index.

Source: VettaFi, Bloomberg as of May 31, 2024.

The History of MLPs

In 1981, Apache Corporation created the first MLP, Apache Petroleum Company (APC). By combining the interests of 33 disparate oil and gas programs into one, APC was able to operate them more efficiently. As APC was traded on both the New York Stock Exchange and the Midwest Exchange, investors were easily able to buy and sell these interests just like shares of stock rather than having to wait for the sale of the whole business to realize their profits.

Other oil and gas MLPs soon followed, as did real estate MLPs. And throughout the 1980s, more and more businesses became involved until there were cable TV MLPs, hotel MLPs, amusement park MLPs, and even the Boston Celtics became an MLP. Soon, the government noticed (after all, it was losing out on taxes!), and Congress worried that every corporation, especially Exxon, would become an MLP.

Congress passed the Tax Reform Act of 1986, and President Ronald Reagan signed it on the South Lawn of the White House. In addition to eliminating several other tax shelters, the act defined the structure of the modern MLP. Section 7704 of the Revenue Act of 1987 limited which businesses could be MLPs, delineating that an MLP must earn at least 90% of its gross income from qualifying sources, which were strictly defined as: transportation, processing, storage, and production of natural resources and minerals. Any MLPs that had other kinds of income could remain MLPs, but in the past 30 years, most have gone private or converted to other structures.

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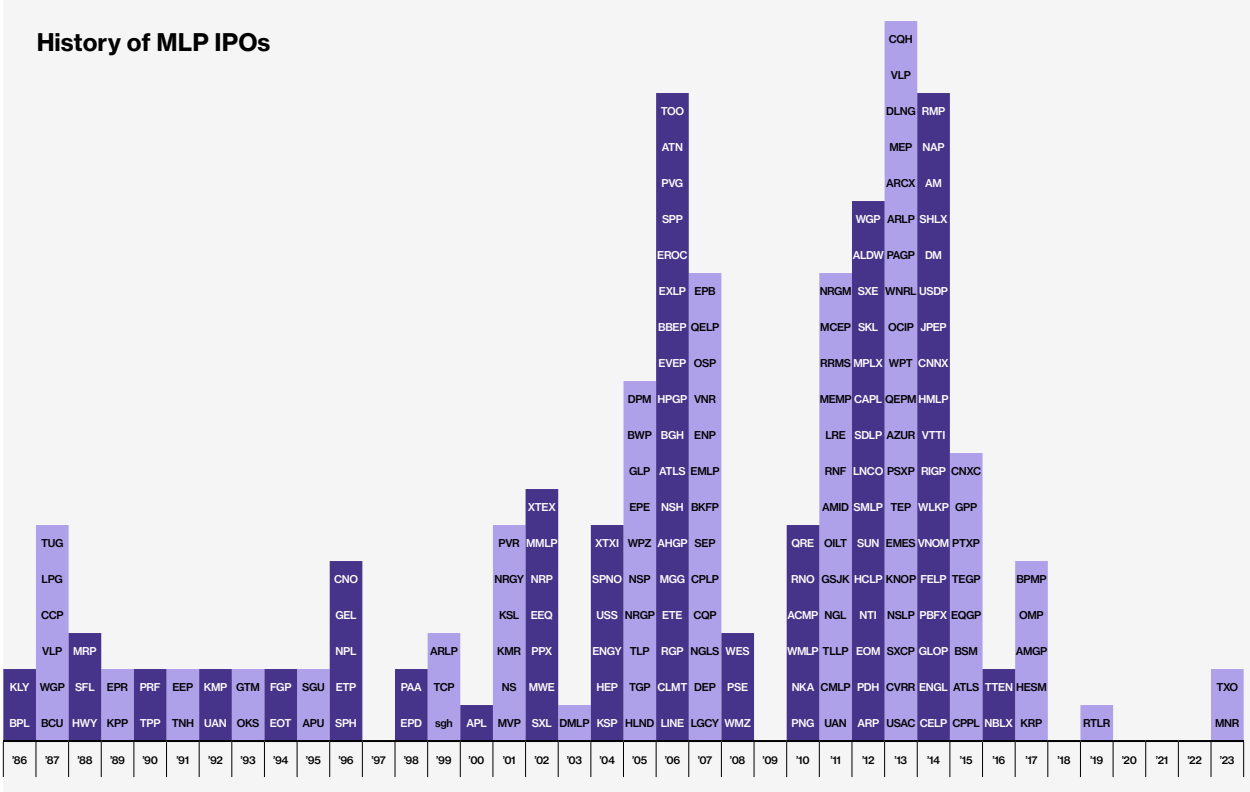
> An MLP must earn at least 90% of its gross income from transportation, processing, storage, and production of natural resources and minerals.

By the turn of the new millennium, MLPs began to own ships for the seaborne transportation of energy resources as well as the storage tanks and bobtail trucks necessary for propane distribution. Several coal companies also became MLPs, and in 2006, after a long hiatus, the upstream (oil and gas producer) MLP returned but then declined during the 2014-15 oil price downturn. In 2012 and 2013, more non-traditional MLPs came to market. Two upstream MLPs went public in 2023, marking the first MLP IPOs since 2019.

While there are different types of energy MLPs, VettaFi predominantly focuses on midstream or energy infrastructure MLPs in the Alerian index suite.



Source: VettaFi as of May 31, 2024.

The pipeline business, explained

The modern pipeline network in the U.S. has its roots in the outbreak of World War II.[4] Before the war, the East Coast was the largest consumer of energy in the country. Refined products (such as gasoline, diesel, and jet fuel) were delivered from Gulf Coast refineries via tankers. Tankers also carried raw crude oil from the Middle East. However, once the U.S. became involved in the war, German submarines began sinking these tankers. Together, the government and the petroleum industry built pipelines that could cover long distances and transport large amounts of oil. This network subsequently fueled the economic boom that followed the war, and many of those original pipelines are still in service today.

There are both large diameter trunklines that function like interstates (instead of being four lanes wide, they are often 42" in diameter, or large enough for a child to stand inside), as well as smaller delivery lines that connect the large pipelines to each town. Product traveling through trunklines is fungible – the customer will receive product on the other end that is the same quality as that which was sent, but they won't be the exact same molecules. It is as if someone sent $100 to a college student through a bank. That student will not get the exact same $100 bill as his or her benefactor sent, but the student doesn't care because $100 is $100. Money is fungible. However, smaller delivery lines operate on a batch system, where the exact same molecules are delivered as were shipped. In this case, our lucky college student gets a couple dozen cookies, and the ones delivered are the exact same cookies his or her parents baked, not cookies that some other people made.

[4] Source: Pipeline 101

Energy renaissance

The term "energy renaissance" refers to the transformative growth in U.S. energy production that began around 2010 and culminated in the U.S. becoming a net energy exporter in 2019.

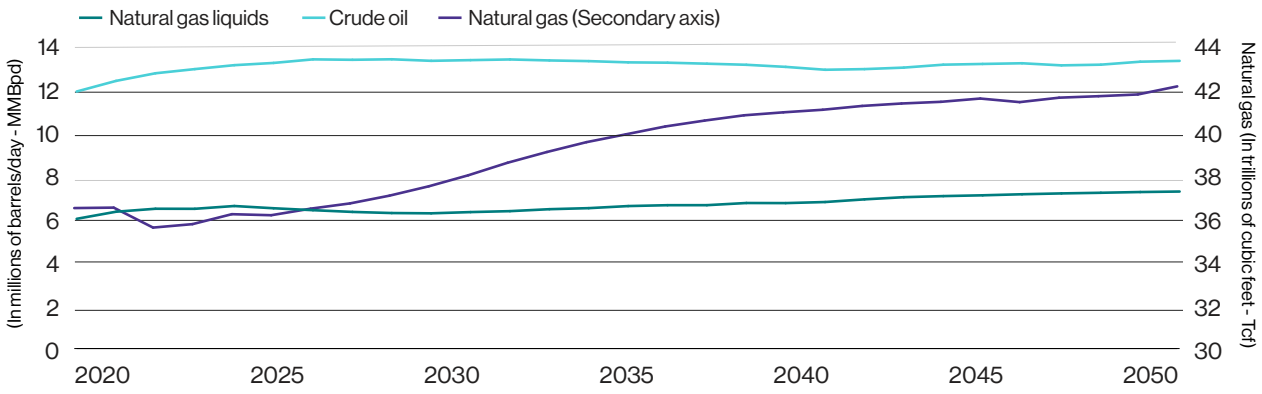
Prior to the 2000s, much of the energy industry was focused on peak oil supply and the ways companies and our society would have to shift in response. While producers knew that oil reserves existed, accessing the oil in a cost-effective way was difficult. Experts forecasted that expensive and complex recovery methods would be needed to continue to produce even a modest number of barrels.

In the early 2000s, the natural gas industry in the U.S. began widespread application of horizontal drilling and hydraulic fracturing. The technologies were not new, but the combination of both technologies made it possible to profitably produce the large reserves of crude oil, natural gas, and NGLs trapped between layers of North American shale rock. Horizontal drilling was developed in the first half of the 20th century, and the first commercial applications of hydraulic fracturing took place in 1949. After seeing the success of natural gas companies in applying these technologies, oil producers began implementing the same drilling technology, and saw strong production growth from oil wells.

In 2009, the U.S. became the world's largest producer of natural gas. By 2012, the U.S. had an abundance of natural gas, leading to lower prices, but gas production continued to grow. In 2014, rapid growth in U.S. oil production had led to a global crude oversupply and weakness in oil prices. A multi-decade ban on U.S. crude exports was lifted by Congress in December 2015. In 2018, the U.S. became the world's largest oil producer[5]. For the first time since the early 1950s, the U.S. in 2019 was a net energy exporter and has remained so in subsequent years.

The U.S. exports liquefied natural gas (LNG) and millions of barrels per day of crude and refined products like gasoline and diesel. As shown in the chart below, U.S. energy production of oil and NGLs is expected to grow moderately and remain fairly steady over the long-term, with natural gas production expected to grow noticeably. Continued production growth and rising exports of liquefied natural gas should help the U.S. remain a net energy exporter.

Long-term outlook for U.S. energy production remains constructive



Source: Energy Information Administration, Annual Energy Outlook 2023

[5] https://www.eia.gov/todayinenergy/detail.php?id=37053

What the North American energy landscape means for MLPs

The tremendous growth in U.S. oil and natural gas production necessitated a significant investment in the buildout of new energy infrastructure. While not as dramatic, energy production from Canada has also increased, necessitating new infrastructure. The production growth seen over the last decade or so in the U.S. and Canada would not have been possible without these infrastructure assets.

- **New oil pipelines:** New oil pipelines were required to move crude from producing regions to demand centers, including the coast for export.
- **New natural gas pipelines and processing facilities:** Growth in natural gas production required new pipelines, as well as new processing facilities to get the gas into a usable form.
- **Liquefaction plants:** Liquefaction plants were built to facilitate exports of liquified natural gas.
- **Fractionation plants and export facilities for natural gas liquids:** The production of natural gas liquids also increased, creating more demand for fractionation facilities (the plants that process NGLs) and export facilities. The U.S. is a significant exporter of NGLs.
- **Increased storage capacity:** Storage capacity was needed to support the transportation and consumption of the full suite of hydrocarbons.

Clearly, this massive infrastructure buildout had a hefty price tag, with midstream companies spending significant capital for years. However, annual capital investment peaked in 2018 or 2019 as production growth rates were expected to moderate. The weakness in oil prices in 2020 led to a decline in U.S. energy production, and companies recalibrated spending plans in response, with some planned projects tabled. While U.S. energy production has recovered, MLP capital spending plans are generally more modest than in the past. As such, MLPs are expected to enjoy the fee-based cash flows of previously completed projects, while reduced growth spending should allow for significant free cash flow generation.

Risks

If you have listened to a company's earnings call, viewed an investor presentation, or perused a company's annual report, you will have noticed disclaimers and/or a discussion of risk factors. While some of these risks may be unlikely to occur, they could impact your expected total return. While several key risks are discussed below, this list is not intended to be exhaustive.

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Commodity price sensitivity – Since MLPs do not typically own the oil and gas they transport, their business performance is not directly connected with the price of oil or gas. However, commodity prices can have implications for midstream businesses. For example, if commodity prices are very low, upstream companies will drill less and demand will fall for gathering pipelines and other infrastructure. Additionally, in an environment with falling commodity prices, investor psychology may connect energy infrastructure with the broader energy sector and commodity prices beyond what the underlying business models would otherwise indicate. In other words, commodity prices can impact sentiment for MLPs.

Interest rate risk – Because many investors have historically owned MLPs for yield, they have been perceived to trade similarly to yield instruments such as bonds or yield asset classes like utilities and REITs. For MLPs, rising interest rates can be a headwind in two ways: 1) fixed-income investments become more attractive, increasing competition for investor dollars among yield vehicles, and 2) borrowing costs rise. The higher yield of MLPs in comparison to other yield-oriented investments like REITs and utilities may help insulate them from the impact of rising rates. Continued distribution growth can also help offset greater competition from rising rates. Finally, several companies have used free cash flow to reduce debt, which helps mitigate higher borrowing costs from rising rates.

Legislative risk – Legislative risk mostly stems from the potential that Congress could change or abolish the beneficial MLP tax structure. Most MLP industry analysts, together with VettaFi, view a change in the MLP tax status as unlikely.In recent years, bipartisan legislation has been introduced to extend the MLP structure to renewable energy companies.

Environmental risk – Some pipelines in major transportation corridors were constructed in the 1950s and 1960s. An aging pipeline system as well as high-profile oil spills and gas leaks have increased investor concerns regarding transportation safety and environmental risks. Pipelines are by far the safest form of transportation for oil and natural gas. Increased maintenance and new technologies enabling more frequent and accurate monitoring of pipelines has helped improve pipeline safety.

Alternative energy and demand destruction – The potential for alternative energy (solar, wind, hydro, electric vehicles, etc.) to replace hydrocarbon-based energy is a long-term risk for energy infrastructure MLPs as demand for the products handled by midstream companies could change. Energy transitions tend to take many years, but energy infrastructure MLPs are actively evaluating opportunities in alternative energy today. Perhaps, pipelines could be repurposed in the future to transport captured carbon dioxide or hydrogen. Existing infrastructure assets should be largely compatible with drop-in fuels like renewable natural gas or renewable diesel that have a similar chemical makeup as their hydrocarbon-based counterparts. The adoption of alternative energy sources represents a risk for energy infrastructure but may also provide opportunities.

Recontracting risk – Recontracting refers to midstream companies having to renew or establish new contracts with customers when existing long-term agreements expire. Market dynamics may have changed since previous agreements were put into place, potentially making it difficult to sign contracts with a similar fee structure. Companies often stagger their agreements across their asset base and even for a single pipeline to help mitigate recontracting risk.

Regulatory risk – Government policies impacting the production of oil and natural gas or the regulation of pipelines could have implications for energy infrastructure companies.

Permitting risks – The permitting process for a new pipeline involves federal and state government approvals and permits, as well as environmental impact studies and potentially eminent domain complications. Each state has its own regulations, and pipelines often pass through many states. Should an approval not be granted (or conditionally granted), a pipeline may need to be rerouted, which is an expensive and time-consuming necessity. Any delays or cost overruns in the permitting process may make the project less profitable, as well as potentially prevent the pipeline from being built, resulting in lost sunk costs for the company. With fewer major new-build pipelines under construction, permitting risk has become less relevant for many midstream companies.

MLP 201

The creation and definition of the modern MLP

The modern MLP structure was created by an act of Congress in 1986. In addition to eliminating a number of tax shelters, it defined the structure of the modern MLP. Congress limited the scope of MLPs via Section 7704(d) of the Internal Revenue Code, part of the Revenue Act of 1987. To maintain pass-through status and pay no entity-level tax, a publicly traded partnership must derive at least 90% of its income from qualifying sources. As it currently stands, Section 7704(d)(1)(e), the relevant section for energy MLPs, defines qualifying income as follows:

(A) interest, (B) dividends, (C) real property rents, (D) gain from the sale or other disposition of real property (including property described in section 1221(a)(1)), (E) income and gains derived from the exploration, development, mining or production, processing, refining, transportation (including pipelines transporting gas, oil, or products thereof), or the marketing of any mineral or natural resource (including fertilizer, geothermal energy, and timber), or industrial source carbon dioxide, or the transportation or storage of any fuel described in subsection (b), (c), (d), or (e) of section 6426, or any alcohol fuel defined in section 6426(b)(4)(A) or any biodiesel fuel as defined in section 40A(d)(1), (F) any gain from the sale or disposition of a capital asset (or property described in section 1231(b)) held for the production of income described in any of the foregoing subparagraphs, and (G) in the case of a partnership described in the second sentence of section 7704(c)(3), income and gains from commodities (not described in section 1221(a)(1)) or futures, forwards, and options with respect to commodities. Section 7704(d)(4) provides that "qualifying income" also includes any income that would qualify under section 851(b)(2)(A) or section 856(c)(2).

Any pre-1986 MLP that had other kinds of income was given a grandfather clause and allowed to continue to use the structure, but most have gone private or converted to another structure.

The evolution and expansion of MLPs

If a company is thinking about forming an MLP or an existing MLP is wondering if a certain type of business would generate qualifying income, a private letter ruling (PLR) may be requested from the IRS. A PLR is a public document that can provide insight

into the reasoning of the IRS. A PLR cannot be used as precedent and applies only to the MLP requesting it. The IRS redacts the company's name and some specifics from the PLR.

Natural resources were originally designated as oil, gas, petroleum products, coal, timber, and any other depletable natural resource defined in Section 613 of the federal tax code. In 2008, newly issued PLRs more broadly interpreted the definition of natural resources for the first time since 1987 to include limited alternative fuels[6] businesses, specifically the transportation and storage of ethanol, biodiesel, and liquefied hydrogen. Since then, the scope of PLRs has broadened, and the number issued has significantly increased.

In 2013, there were 29 PLRs issued, many of which covered businesses and products ancillary to the drilling process and traditional midstream activities. The IRS began interpreting the law to include assisting in the hydraulic fracturing process via fluids handling, waste treatment and disposal, and mining and processing of sand and ceramic proppants.

In 2017, following a review period by the IRS, new guiding regulations were issued detailing and clarifying what was originally spelled out in the tax code – namely, that there is no exclusive list of activities, but extended processing and manufacturing are not included. The intention is that raw natural resources may only be refined into a traditionally saleable form, but that processing beyond that point (for instance, petrochemical manufacturing) is not a qualifying activity. PLRs may still be needed, but not likely to the same extent seen in 2013.

Shale revolution

For many decades, producers drilled for oil and gas in rock formations such as carbonates, sandstones, and siltstones.These formations, known as conventional formations, have multiple porous zones that allow the oil and gas to flow naturally through the rock. This ability of rocks to allow fluids to flow is known as permeability. Conventional formations have higher permeability than unconventional formations like shale rock. Vertical drilling, which involves drilling straight into the ground, worked for many years on conventional formations because once the drill bit hit a particular area, the high permeability would allow the hydrocarbons to be extracted easily.

Shale is a type of geological formation found in sedimentary rocks. For quite some time, the energy industry has known that oil and gas existed in shale. But because shale rock is not as permeable, using old techniques with vertical drilling did not make it economically feasible to recover resources because it would only capture a limited amount. Three technologies together truly changed the game for extracting shale resources: 3D seismic imaging, horizontal drilling, and hydraulic fracturing.

In short, 3D seismic drilling tells producers where to drill, horizontal drilling increases the amount of area drilled, and hydraulic fracturing solves the issue of low permeability.

Here's a more in-depth look at each.

- **3D seismic technology:** uses acoustic energy, vibrations, and reflected signals to determine the location and density of rock formations. Think of it like an underground map.

[6] The full list of alternative fuels includes ethanol, methanol, as well as other alcohol fuels; biodiesel and biodiesel fuel mixtures; and liquefied fuels such as hydrogen, petroleum gas, liquefied natural gas (LNG), and liquid fuels from coal and biomass.

Major natural gas, crude oil, and NGL plays in the U.S.

The map on the left shows some of the major natural gas, crude oil, and NGL plays in the U.S. There are shale plays in Canada as well, such as the Montney Shale in Alberta and British Columbia. Energy infrastructure companies built the pipelines, terminals, storage facilities, and processing plants to get production from these regions to end markets or the coast for export in usable form.

- Current play – oldest stacked play
- Current play – intermediate depth/age stacked play
- Current play – shallowest/youngest stacked play
- Prospective play
- Basin

- **Horizontal drilling:** allows the operator to drill a well, and then manipulate the drill bit underground to make a 90-degree turn and cover a much larger area. Multiple (up to 20 or more) horizontal wells can be drilled from a single drill pad, lowering drilling costs, increasing efficiency, and minimizing the impact to the environment. After the well is drilled and lined with casing, it is ready for hydraulic fracturing.

- **Hydraulic fracturing:** describes the process in which a mixture of water, sand, and other chemicals is pumped into a well at a very high pressure to break up shale rock. The highly pressurized mixture lets a driller open all those tiny pockets. The water is then removed, and the remaining sand props open the rock, allowing hydrocarbons to flow freely to the surface.

The General Partner/Limited Partner relationship

MLPs historically have had two classes of owners: the general partner and limited partners. The GP controlled the operations and typically owned a 2% equity interest along with incentive distribution rights (IDRs), which will be explained later in more detail. As the space has evolved, most MLPs have eliminated their IDRs, and their GP interest has become a non-economic interest. Other MLPs have no GP at all.

Just like a corporation may have thousands of shareholders, MLPs also have thousands of unitholders (the name for MLP shareholders). They provide capital to the company but have no role in the partnership's operations or management. In traditional corporations, the management team and board of directors have a fiduciary

duty to shareholders. However, MLP partnership agreements specifically state that no fiduciary duty is owed to unitholders, and no unitholder vote is necessary to approve major changes, something for which MLPs have frequently received criticism. While unitholders may have no legal recourse on the grounds of fiduciary duty, the GP/LP structure was designed to align the interests of all parties. The desire to align the GP and LP was the basis for IDRs. Essentially, as the distribution to unitholders increased and surpassed target levels, the GP was also monetarily rewarded.

While the GP/LP structure and IDRs were intended to align interests and incentivize distribution growth, IDRs became a burden as MLPs matured. Accordingly, most MLPs have bought out their IDRs by issuing LP units or through other transactions. The elimination of IDRs has been a key component in improving MLP corporate governance in recent years.

The history of incentive distribution rights (IDRs)

Most MLPs no longer have IDRs, but IDRs are explained here for historical context. The general partner's board of directors dictates the amount of the LP distribution.

If a GP owns IDRs, it will increasingly benefit from successive distribution increases. Owning IDRs incentivizes the GP to grow the LP distributions by entitling GPs to receive a higher percentage (generally up to 50%) of incremental cash distributions when the distribution to LP unitholders reaches certain thresholds.

Sample IDR tiers	Unitholders	General Partner
Minimum quarterly distribution	98%	2%
First target distribution	98%	2%
Second target distribution	85%	15%
Third target distribution	75%	25%
Thereafter	50%	50%

This works very similarly to income tax brackets in the U.S. IDRs typically begin with the GP receiving 2% of the total cash flow, equal to its LP equity interest. When the distribution increases to the next tier, the GP will begin to receive a higher percentage of the cash flows above that point, say 15%. Typically, the highest tier is a 50/50 split of incremental cash flow. The cash received also increases[7] when the number of LP units outstanding increases. While the GP technically has no legal fiduciary duty to the LP, there is an alignment of interests between GPs and LPs, in that both want to see LP distributions grow steadily over time.

As the LP moves into the higher IDR splits, IDRs can become a burden to the cost of equity. An MLP with a GP and IDR structure can have a higher cost of equity, and the return on an acquisition or project must compensate both the LP and the GP. For this reason, most MLPs have bought back their IDRs. The reasons cited for these transactions include lowering the company's cost of capital, increasing financial flexibility, and simplifying and aligning corporate structure. Additionally, the investment community expressed frustration with IDRs in the past. For these reasons, IDRs have largely been eliminated from MLP structures.

[7] This is due to the fact that IDRs are based on a percent of total cash flow distributed, not cash flow distributed per unit. When additional LP units are issued, the LP is paying out more cash even without a distribution increase. For instance, if units outstanding increase by 5%, the cash flow to the GP will also increase by 5%.

MLP consolidation into corporations

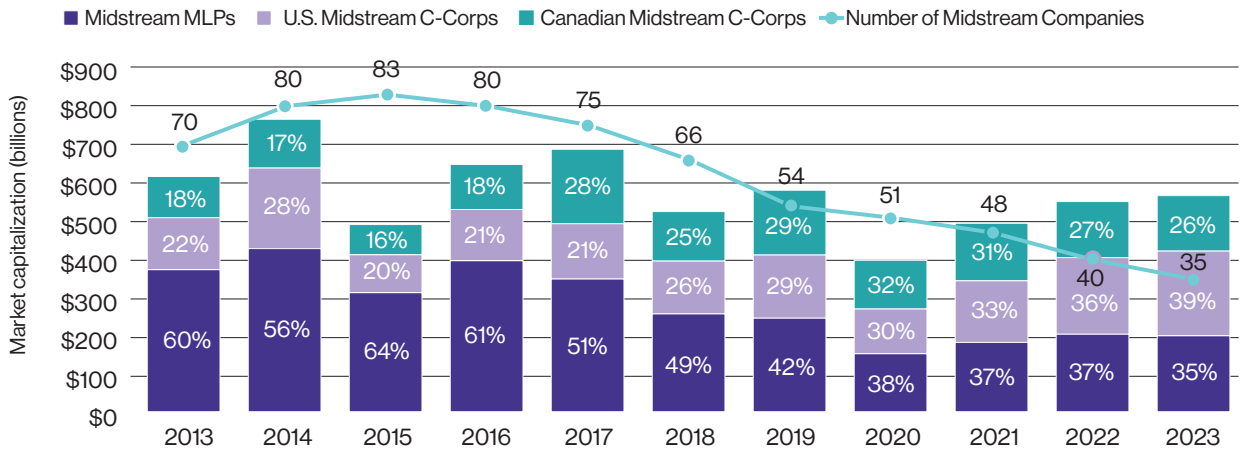
As discussed above, IDRs became a burden to MLPs over time by increasing the cost of equity, which increased the required return on an acquisition or project. A high cost of equity was particularly challenging when MLPs were investing heavily in new projects using equity capital. While some MLPs bought out their IDRs to address this issue, others have been involved in reorganization transactions to simplify corporate structure and lower the cost of capital. In some cases, the GP has acquired its MLP; while in other cases, the MLP has bought out its GP.

In a landmark transaction for the MLP and energy infrastructure space, Kinder Morgan (KMI) reorganized in 2014 by consolidating two publicly traded MLPs and an LLC into one corporation and simultaneously eliminated IDRs. From 2015 to 2017, a few other MLPs were acquired by their C-Corporation parents, but consolidation of MLPs by C-Corporation parents accelerated in 2018 for a variety of reasons, including depressed equity valuations, a FERC policy change related to fees charged by natural gas pipelines, the desire to simplify structure (eliminate IDRs), and tax law changes. There was a wave of consolidation announcements in 2018 and 2019. Consolidation transactions slowed during the pandemic but picked up again in 2022. As a result of consolidation among third parties and related companies, MLPs now represent a smaller portion of the overall North American energy infrastructure universe than in the past as shown in the chart.

Distributions

Stable distributions were historically a hallmark of the MLP space, though the energy downturn that began in the second half of 2014 blemished that track record. Additional distribution cuts were made in early 2020 in the wake of the COVID-19 pandemic. When an MLP is going through financial difficulties, it can free up cash flow by reducing or eliminating its distribution. While some MLPs continued to grow their distributions through challenging periods, other MLPs cut their distributions. MLP distributions are not guaranteed and depend on each partnership's ability to generate adequate cash flow. Unlike Real Estate Investment Trusts (REITs) that must distribute a certain percentage of their cash flow each quarter in order to retain their tax-advantaged designations,

The North American midstream universe changed significantly over the last decade



Source: VettaFi as of December 31, 2023. Values may not add due to rounding. Compression and Marketing & Distribution companies not included.

MLPs have no such requirements. Like REITs, MLPs pay no taxes at the entity level, so they can distribute much more of their cash flow to investors. Typically, the partnership agreements of individual MLPs determine how cash distributions will be made to GPs and LPs.

MLP financing evolved with equity self-funding

In the past, MLPs would often rely on equity markets for funding growth capital. In order to build new projects or acquire a new asset, they would issue debt and equity for financing. Because equity capital markets were depressed following the oil downturn of 2014-16, issuing equity for MLPs became expensive (yields were high) and difficult (lack of appetite from investors). As a result, MLPs have largely shifted towards self-funding the equity portion of their growth capital using retained cash flows beginning in 2017-18. More moderate capital spending since 2018 and 2019 has also reduced the need for equity issuances. The shift to equity self-funding was positive for MLP investors as equity dilution has subsided. In fact, many MLPs now have buyback authorizations in place and are repurchasing equity instead of issuing new equity.

Understanding MLP financial metrics

MLP financial metrics can be nuanced relative to other sectors. For example, when it comes to MLPs, investors, analysts, and management teams tend to look past the more common earnings metrics and focus instead on cash flow metrics. Historically, the MLP investment community focused on distributable cash flow (DCF). Similar to how REITs define their cash flow from operations as funds from operations (FFO), MLPs used DCF as the primary measure of cash available to distribute to unitholders or to fund growth. DCF is considered a non-GAAP financial measure and is not standardized. As such, the definition and calculation of DCF may vary among partnerships, as ultimately, each MLP determines its definition of DCF in its partnership agreement. The calculation of DCF is typically the following:

DCF = net income (+) depreciation, depletion, and amortization (-) cash interest expense (-) maintenance capital expenditures (+/-) other non-cash items.

Because DCF is not familiar to many investors and is not standardized, many MLPs have moved away from or deemphasized DCF in favor of more common cash flow metrics, such as free cash flow. This has also coincided with significant free cash flow generation across the MLP space since 2020.

For MLPs, earnings metrics become markedly less useful when it comes to business models that still require significant capital investment, albeit less than in the past. Earnings (as reported in quarterly statements) are standardized and subject to accounting rules, so there are often differences between reported earnings and the actual cash flow generated. The main culprit is non-cash depreciation contained in the Depreciation, Depletion, and Amortization (DD&A) accounting line item. On the income statement, depreciation spreads the cost of an investment (such as a processing plant or pipeline) over its useful life. Accelerated depreciation, used by most MLPs, allows greater deductions in the early years of an asset's life. However, neither of these represents an actual cash outflow. Depreciation can be very high for MLPs given the buildout of energy infrastructure in recent years. Once in service, however, these assets immediately begin generating cash flows with minimal maintenance expenses. Most MLP investors prefer to focus on these actual cash

flows rather than earnings metrics that don't affect the distribution. Earnings per unit often has limited usefulness for MLPs.

Tax efficiency and accounting with MLP investing

As mentioned previously, MLPs pay no taxes at the entity level if 90% or more of their income is from qualifying sources. Due to the tax efficiency of the structure, MLPs typically have a lower cost of capital compared to traditional C-Corporations. The pass-through nature of a partnership means the items on an MLP's income statement flow through and are proportionately allocated to the end investor.

To explain this in further detail, a unitholder's cost basis is adjusted upward by the amount of partnership income allocated to that unitholder and adjusted downward by the amount of cash distributions (or actual payments) received. For most MLPs, cash distributions exceed allocated income, and the difference between distributed cash and allocated income is treated as "return of capital" to the unitholder and reduces the unitholder's basis in the units. Typically, 70%-100% of MLP distributions are considered tax- deferred return of capital, with the remaining portion taxed at ordinary income rates in the current year.

As long as the investor's adjusted basis remains above zero, taxes on the return of capital portion of the distribution are deferred until the units are sold. If an investor's basis reaches zero, then future cash distributions will be taxed as capital gains in the current year.

Upon selling the MLP, the gain resulting from basis reductions is recaptured and taxed at ordinary income rates, and any remaining gain is taxed at capital gain rates for investments held greater than one year.

An MLP's tax pass-through status applies at both the federal and state level. An MLP unitholder is responsible for paying state income taxes on the portion of income allocated to the unitholder for each individual state in which the MLP operates. For companies that have assets spanning across the U.S., this can mean a considerable number of additional filings for the investor. In most cases, however, unless the unitholder owns a large

position,[8] the share of allocated income is small, and the unitholder may not have to file in some states due to minimum income limits. Additionally, some states, such as Texas and Wyoming, do not have state income taxes.

If an investor is looking to own an MLP in a tax-advantaged account such as an IRA, partnership income (not cash distributions) may be considered unrelated business taxable income (UBTI) and subject to unrelated business income tax (UBIT), if UBTI exceeds $1,000 in a year. The custodian of the IRA is responsible for filing IRS Form 990T and paying the taxes.[9]

From an estate planning perspective, if units are passed along to heirs, upon death of the unitholder, the basis is "stepped up" to the fair market value of units on the date of death and the gain resulting from basis reductions is not taxed.

MLP business models

Pipelines are perhaps the most familiar of the assets that midstream MLPs operate, but these companies are also involved in a much larger swath of the energy value chain.

Gathering & processing – Before hydrocarbons enter a large pipeline, they need to be gathered and, in the case of natural gas, processed. Gathering involves connecting wells to major pipelines through a series of small diameter pipelines. Gathering pipelines transport either crude oil or natural gas from the wellhead. Processing is required for natural gas and involves the removal of potential contaminants and separation of NGLs so that the gas can meet purity standards for pipeline transmission.

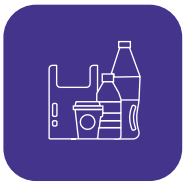
Gathering and processing companies focus on obtaining fee-based revenues by charging upstream companies a set fee for every million British Thermal Unit (MMBtu) of natural gas or barrel of oil that is gathered or processed. The contract often includes a minimum volume commitment or acreage dedication, which provides further cash flow stability. Occasionally, some MLPs will have different compensation structures, which may include payment in the form of keep-whole contracts. This allows them to keep the extracted NGLs and sell them to third parties at market prices.

Another contract structure is percent of proceeds (POP), in which the processor is paid by retaining a percentage of any processed natural gas or NGLs. As keep-whole and POP contract structures expose gathering and processing companies to volatility in commodity prices, the vast majority of companies have moved (or attempted to move) to a purely fee-based revenue structure.

Fractionation – At a fractionation facility, NGLs are separated into their individual usable components of ethane, propane, butane, isobutane, and natural gasoline. Ethane is primarily used as a feedstock, or input, into petrochemical plants to make ethylene, which is used to make plastics and other chemical products such as solvents and adhesives. Propane by itself can be used as a heating fuel or used as a feedstock to make propylene, which can be used in the manufacturing of textiles or plastics, such as headlights, eyeglasses, foam bedding, and water bottles. In general, ethane and propane make up the

[8] A large position is one where the potential return from buying individual MLPs outweighs the cost and hassle of the additional filings

[9] More information can be found in IRS Publication 598, Tax on Unrelated Business Income of Exempt Organizations, or in the Internal Revenue Code, Section 512 – Unrelated Business Taxable Income. As always, VettaFi is not qualified to and does not provide tax advice, so investors are urged to contact their tax professionals



Ethane
Petrochemical feedstock for making plastics, solvents, and adhesives

Propane
Heating fuel, used for cooking

Butane
Lighter fluid, petro-chemical feedstock for synthetic rubber, motor gasoline

Isobutane
Motor gasoline

Natural gasoline
Motor gasoline

bulk of the NGL stream, with a concentration ranging from 55% to 85%. Butane, isobutane, and natural gasoline are used to produce motor gasoline. Butane is the primary component of lighter fluid and can be used as a feedstock to make butadiene, which is used in creating synthetic rubber.

The majority of fractionation is done on a fee-for-service basis. However, the amount of fees earned depends on the amount of volumes fractionated, which in turn depends on something called the frac spread.[10] Essentially, the frac spread is a measure of the reverse of the adage "the whole is greater than the sum of its parts." With NGLs, the sum of the parts is worth more than the whole. Some NGLs must be removed for the natural gas stream to meet purity standards, but often they are only removed for additional profitability. The frac spread is the difference between the value of the NGLs if removed and the value of the NGLs if they are left in the natural gas stream and sold at the same price as natural gas. Ethane rejection is the industry term for when ethane prices are so low that it is better to leave ethane in the natural gas stream than extract it.

The high cost of NGL[11] handling, storage, and transportation additionally factors into the volumes of NGLs that will be fractionated. In order for the hydrocarbons to remain liquids, they must be kept under high pressure or cooled to very low temperatures. Additionally, gaseous NGLs are heavier than air and flammable, requiring increased safety measures. NGL storage typically takes place in underground caverns for these reasons, while the smaller amounts stored above ground are placed in insulated tanks and thicker steel.

Transportation – Transportation companies are the bread and butter of the sector. This fee-based business model is the most well- known and most frequently referenced, perhaps because it is one of the simplest to understand. Typically, midstream companies will enter long-term contracts with customers committing to use a certain amount of pipeline capacity. The midstream company will collect a fee per unit of hydrocarbon transported. Contract provisions such as take-or-pay agreements or minimum volume commitments allow the pipeline company to collect specified fees even if the customer does not fully use its committed capacity.

[10] If you are familiar with crack spreads for refineries, this is very similar.

[11] Compared to refined products

Interstate liquids pipelines are regulated by the Federal Energy Regulatory Commission (FERC), and rates are most often based on the FERC's oil pipeline index. Every five years, the FERC sets the ceiling rate by which tariffs will be increased, with the rate based on the Producer Price Index for Finished Goods (PPI-FG) plus an adjustment. Through 2026, these FERC-regulated pipelines will increase the tariff they charge by PPI-FG – 0.21%[12] every July 1.

Interstate natural gas pipelines generate revenue by collecting a tariff for each unit of natural gas transported under long-term commitments. Customers enter contracts for capacity for these pipelines in much the same way that apartments are rented, but instead of year-long leases, interstate natural gas pipeline contracts are often for five to 20 years. Like a lease, customers are obligated to pay regardless of whether they use the space. Additional fees are charged when a customer needs to inject or withdraw hydrocarbons to meet demand spikes or there is an oversupply.

For new-build projects, the length and terms of these contracts allow the pipeline company to earn the rate of return necessary to construct the pipeline. Transportation companies have historically avoided building speculative projects, given the capital intensity of pipelines. Instead, pipeline companies will move forward with projects once they have sufficient customer commitments.

Storage – Natural gas that is not immediately required for electricity generation or heating is stored until needed. The same is true of crude oil waiting to be refined and of refined products (such as gasoline, diesel, and jet fuel) waiting to be consumed. Storage facilities operate a fee-based business model similar to rent, with contract lengths generally ranging from one to five years. Storage tanks for crude oil and refined products may also have inflation escalators.

Liquefaction – Liquefaction refers to cooling natural gas and transforming it into a liquid state, so it can be shipped overseas for export. Exports of liquefied natural gas (LNG) from the U.S. have increased in recent years as LNG export capacity has increased and projects have come online.

Marketing and Distribution – Marketing and distribution refers to the selling of heating fuels like propane or motor fuels like gasoline and diesel through retail or wholesale channels. Marketing and distribution represents the last mile for the fuels segment of the energy value chain. Marketing and distribution companies connect finished energy products with consumers.

Compression – Natural gas is transported through pipelines using compression units placed along the pipeline system to pressurize the gas to move forward. Natural gas pipelines can also expand transportation capacity by placing additional compressor stations along a pipeline's route. Producers also use compression to extract more oil or natural gas out of a well. While those practices are different, the technology and services are similar.

MLPs are generally not involved in retail sales of energy; MLPs typically do not own gas stations, electricity generation, or local utility companies. However, MLPs may lease out real estate to gas

[12] https://www.ferc.gov/oil/general-information/oil-pipeline-index

stations and supply them with fuel, although they may not own or operate them.

Pipeline permitting

Natural Gas Pipelines

According to the Natural Gas Act[13], companies that would like to build an interstate natural gas pipeline must obtain a "Certificate of Public Convenience and Necessity" from the Federal Energy Regulatory Commission (FERC)[14] before beginning a project. This is a multi- step process:

1. **Pre-Filing and Environmental Review.** Pre-filing involves notifying all stakeholders of the proposed project and offering a medium for stakeholders to voice concerns related to the project. This phase also includes a study of the potential project site. This process begins several months before the application for the actual certificate is filed.

2. **Application for FERC Certificate.** This is the beginning of the formal process. Applicants must provide a great deal of data on the project, such as construction plans, route maps, schedules, and more.

3. **Environmental Review.** An official study is carried out on how the project will impact the environment. The public is then given an opportunity to comment on the results of the study. After this, the FERC will consider the comments and issue formal approval or denial of the project.

The timeline for this process can vary.

Petroleum pipelines

The permitting of oil pipelines is not subject to FERC regulation[15]. While companies constructing oil pipelines are required to obtain federal permits such as those described under the Clean Water[16] and Clean Air[17] Acts,, state approvals are the only governmental authorizations required for oil pipeline construction projects to move forward.

This may initially seem like an advantage for oil pipelines. Many would agree it is easier to acquire permits to build a pipeline from Oklahoma to Texas than from Pennsylvania to New York, for example. However, dealing with landowner issues in multiple states is not necessarily easy. If a landowner does not agree to the path of a pipeline and eminent domain authority does not exist in that landowner's state, the oil pipeline could be forced to take a more expensive alternative route. For natural gas pipelines, FERC approval includes federal eminent domain – a primary advantage of building a natural gas pipeline over building an oil pipeline.

Pipeline regulation

In the U.S., interstate liquids pipelines are regulated by the FERC. Unlike the antagonistic relationship most utilities have with their regulators regarding pricing, the FERC focuses on the safe and efficient transportation of energy throughout America. The FERC sets the ceiling rate for tariff increases on all interstate liquids pipelines following FERC's oil pipeline index. Through June 2026, the index will

[13] https://www.law.cornell.edu/uscode/text/15/717f

[14] https://www.ferc.gov/

[15] https://insights.alerian.com/ferctastic-what-mlp-and-midstream-investors-should-know-about-the-ferc

[16] https://www.epa.gov/laws-regulations/summary-clean-water-act

[17] https://www.epa.gov/laws-regulations/summary-clean-air-act

be based on PPI-FG - 0.21%[18]. The FERC reviews the PPI escalator every five years, and the historical values are shown below for context.

FERC escalator history

1995-2000	PPI -1.0%
2001-2005	PPI
2006-2010	PPI +1.3%
2011-2015	PPI +2.65%
2016-2020	PPI +1.23%
2021-2025	PPI -0.21%

For interstate natural gas pipelines, the FERC enforces the Natural Gas Act, which mandates that the rates charged must be "just and reasonable." This is determined by calculating the pipeline company's cost of service, plus a return on its investment.

Intrastate pipelines are regulated by the states themselves. The most famous state regulatory agency is The Railroad Commission of Texas[19] (a legacy name). State regulatory agencies work with pipeline companies to maintain standards of safety and maintenance.

Valuation

Valuation methods for MLPs have evolved as the midstream business model has evolved. EV/EBITDA and free cash flow yield, which allow for comparability across sectors, are likely to continue gaining traction going forward. The dividend discount model has also been used to value MLPs. Historical valuation metrics such as price to distributable cash flow (P/DCF) and the yield spread to the 10-year Treasury tend to be used less frequently than in the past. Price-to-earnings (P/E) ratios may also be used to value midstream companies, but P/E ratios can sometimes be distorted by the high depreciation expense for MLPs, which may make earnings appear minimal or negative when in reality their cash flows remain stable and growing.

MLP Investing

Energy infrastructure in portfolios

Now that you've read about the business models, risks, and fundamentals for MLPs, perhaps you have decided that an investment in MLPs is right for you and your portfolio. Now what? The first thing to do is decide how much of your portfolio to allocate to MLPs.

Many investors use MLPs in their equity income sleeve, their real asset sleeve, or their energy equity sleeve. In VettaFi's conversations with investors over the years, we've seen a typical allocation of 3%-6%;

Benefits of MLP Investing

Attractive yields
Midstream MLPs and C-Corps typically offer compelling yields above those provided by REITs or utilities

Stable cash flows
Fee-based, volume-driven business models that benefit from North American energy production and rising demand domestically and abroad

Energy infrastructure
Exposure to long-lived real assets that generate inflation-protected cash flows

Diversification
Low correlation to other income-oriented investments, including utilities and bonds; MLPs are not included in broad market indexes

[18] https://www.ferc.gov/oil/general-information/oil-pipeline-index
[19] https://www.rrc.state.tx.us/

although depending on the portfolio's objective, we've also seen upwards of 10%. It's important to keep in mind that investments in MLPs come with risks, as do all equity investments.

Buying individual MLPs

One of the lines that we repeat over and over is, "For a U.S. taxable investor comfortable filing K-1s and state taxes and building a diversified portfolio, s/he will always be better off buying individual MLPs directly." "Always" isn't a word financial folks use very often. To break that down, we mean an investor who is taxed in the U.S. and is investing in a taxable account (not an IRA, 401(k), or other tax-advantaged vehicle). Also, that investor is willing to receive and file K-1s (as opposed to 1099s) as well as filing any associated state taxes. Or, the investor is willing to pay an accountant to do so on her behalf. Also, the investor is willing to do the work of researching and choosing individual MLPs and taking on the associated risks with security selection and portfolio construction. If all those constraints are not a problem, the most tax-efficient way to access the asset class (and incidentally, pay the lowest fees) is to buy MLPs directly.

MLPs can be more tax-efficient investments than many other stocks due to the potential for tax-deferred distributions. From an estate planning perspective, if units are passed along to heirs, upon death of the unitholder, the basis is "stepped up" to the fair market value of units on the date of transfer, thereby eliminating a taxable liability[20] associated with the reduction of the original unitholder's cost basis.

For investors who are willing to research individual securities and who are comfortable with single-security risk, direct investment in individual MLPs may be an attractive option.

Of course, once investors have decided to buy individual securities, there is the question of which one(s) to buy. As an indexing and market intelligence firm, our desire is to equip investors to make informed decisions about energy infrastructure and MLPs. To maintain objectivity, we do not make stock picks.

However, after years of following the space, we have these recommendations for investors looking to put together a portfolio containing MLPs.

Management teams – Consider the management team of the MLP. Solid management teams are those that have led the company to build new projects on time and on budget, that have been effective and efficient stewards of investor capital, and that work well together and have excellent relationships with their customers, investors, and other industry stakeholders. They do what they say they will do and have a deep bench of talent.

Asset footprint – MLPs that already own land and rights of way in growth areas benefit from their established position by being able to expand their position without excessive political or regulatory headwinds. Additionally, companies that own a variety of assets along the energy value chain can clip multiple coupons along the way while also realizing cost savings from integration. MLPs with basin diversity have a natural hedge against changing hydrocarbon flows.

[20] As always, investors should consult a tax and/or estate planning professional for advice.

Capital allocation – In recent years, the energy industry has shifted from a grow-at-all-costs mentality to being more focused on returns and the best use of capital. This holds true for energy infrastructure MLPs as well. Companies should allocate capital based on what has the best returns for investors, whether it is pursuing an attractive growth project, increasing the dividend, or repurchasing equity.

Balance sheets – In recent years, financial flexibility has proved to be important as companies have navigated challenging macro environments, including the temporary but severe demand destruction for oil associated with the COVID-19 pandemic. Strong balance sheets and low leverage ratios provide for a greater margin of error in challenging environments.

Size – Larger MLPs can more easily access the capital markets and are more likely to get investment grade credit ratings, have higher trading liquidity, and reach a broader investor group. However, it also takes bigger projects, built or acquired, to move the needle for the company's bottom line.

The myriad of MLP investment products

Many investors do not fit the criteria listed above for buying individual MLPs, but thankfully, a variety of MLP access products are available to investors.

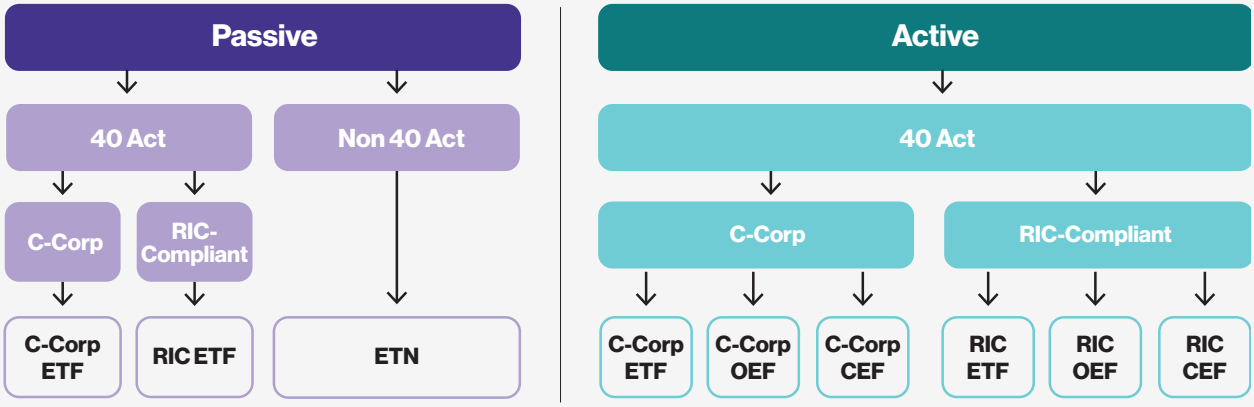
MLPs are pass-through structures that do not pay taxes at the entity level. Instead, income and deductions are passed through to the end investor. Regulated investment companies (RICs) such as closed-end funds (CEFs), mutual funds, and exchange-traded funds (ETFs) under the Investment Company Act of 1940 (collectively, "40 Act Funds") are also pass-through structures. Under current law, 40 Act Funds seeking to retain pass-through status are prohibited from owning more than 25% of their assets in MLPs. Funds that abide by this law are called "RIC-compliant."

There are funds that have more than 25% of their assets in MLPs; however, these funds are no longer pass-through structures and are required to pay taxes at the fund level. Functionally, this means that fund performance is reduced by the amount of taxes accrued (i.e., will be owed when positions are sold). Think of it like your employer withholding a certain portion of income taxes. In this case, the fund withholds (or accrues) a portion of the returns. Some funds will use leverage to offset some of the effect of taxes. While leverage can increase returns when performance is positive, leverage will also magnify losses when performance is negative. These funds are also able to preserve the return of capital benefit for their investors, and since they can own 100% MLPs, the proportion of income that is classified as return of capital is greater. They tend to be favored by investors seeking to maximize after-tax income.

Some funds are passively managed, where performance is linked to an index or benchmark. These funds tend to have lower fees. An actively managed fund has higher fees to account for the fact that a portfolio manager must be paid to choose individual stocks.

Decision tree

VettaFi has provided the decision tree below to help navigate the variety of investment products available.



Source: VettaFi

40 Act Funds – C-Corporation taxation – 100% MLPs

A 40 Act Fund, such as a mutual fund or ETF, that owns more than 25% MLPs will be taxed as a C-Corporation. As the underlying positions increase in value, the fund will accrue a deferred tax liability (DTL) to account for taxes that will be owed should the position be sold. This DTL is assessed at the corporate tax rate of 21% plus an assumed rate attributable to state taxes. The DTL is removed from the net asset value (NAV) of the fund, meaning that if the value of the underlying portfolio rises from $100 to $110, the fund's NAV will move from $100 to $107.90. As the position falls, the DTL will be reduced.

Advantages:

- Owning the underlying securities
- Generally higher after-tax income due to:
  - Tax character of distributions mirrors that of underlying portfolio
  - Fees are taken from the NAV, preserving the yield

Disadvantages:

- DTL mutes gains when the fund is in a net DTL position

Suitability:

- Taxable investors seeking after-tax yield

When the fund is in a net DTL position, the DTL effectively reduces the volatility of the underlying portfolio, assuming no leverage is employed. Some funds (typically closed-end funds) will use leverage to offset some of the effect of taxes. While leverage can increase returns when performance is positive, when performance is negative, leverage will also cause the fund to lose more money. If the fund has no DTL to unwind, it will track the underlying portfolio on a one-for-one basis. Fund distributions track the return of capital proportion of the underlying basket of securities and lower an investor's cost basis. This allows investors to enjoy the tax-deferred income associated with MLPs without the hassle of filing

a K-1. Additionally, investors in 40 Act Funds with C-Corporation taxation do not need to worry about UBTI if investing in a tax-advantaged account.

40 Act Funds – RIC compliant – less than 25% MLPs

Funds that own less than 25% MLPs do not pay taxes at the fund level, enabling them to pass through the entire return to their investors. The return of capital benefit from owning MLPs is muted due to the limit imposed on MLP ownership. Investors interested in RIC-compliant energy infrastructure funds should research what the fund owns for the other 75%. Common positions include midstream C-Corporations, utility companies, exploration and production companies, refiners, and MLP affiliates structured as C-Corporations.

RIC compliant 40 Act funds may be mutual funds, closed-end funds (CEFs) or ETFs.

Advantages:

- Ownership of the underlying securities
- Little to no tracking error

Disadvantages:

- Generally lower yield

Suitability:

- Tax-advantaged investors
- Total return investors in a taxable account
- Comfortable with non-MLP investments
- Prefer broad exposure to energy infrastructure (corporations and MLPs)

ETFs vs Mutual Funds

ETFs trade throughout the day, whereas mutual funds price only at the end of the day. However, mutual funds always price at NAV, while ETF prices are determined by the market. ETFs may also be sold short. Typically, MLP ETFs have lower fees, ranging from around 50 basis points (bps) to 100 bps. Mutual funds fees in this category are a bit higher and range from around 70-140 bps. Mutual funds may also use up to 33% leverage.

Closed-End Funds (CEFs)

CEFs were the first 100% MLP C-Corporation, 40 Act products. Like mutual funds, they can also use up to 33% leverage. Because CEFs do not have a creation/redemption feature, pricing may stray from NAV, causing them to trade at a premium or discount. Their liquidity is also constrained by the fund itself as opposed to the underlying securities held.

Exchange Traded Notes (ETNs)

An ETN is an unsecured debt obligation of the issuer. It is an agreement between an investor and an issuing bank under which the bank agrees to pay the investor a return specified in the issuance documents. MLP ETNs may track a basket that is 100% MLPs without accruing for DTL.

[21] Section 1260 of the Internal Revenue Code (http://www.law.cornell.edu/uscode/text/26/1260) contains some ambiguity with regards to ETNs. If constructive ownership rules were to apply, then long-term capital gains could be recharacterized as ordinary income. Accordingly, investors are advised to consult with their tax advisors.

Advantages:

- Little to no tracking error as the bank agrees to pay the return
- Intraday knowledge of portfolio holdings

Disadvantages:

- Coupons are taxed at ordinary income rates
- Potentially lower income if expense ratio is removed from coupon payments (varies by ETN)
- Exposure to the credit risk of the underlying bank

Suitability:

- Tax-advantaged accounts such as 401(k)s or IRAs
- Total return investors in a taxable account[21]
- Investors comfortable with the credit risk of the financial institution

Separately Managed Accounts (SMAs)

An SMA is an account that is managed by a portfolio manager. Unlike owning a basket of individual MLPs and receiving multiple Schedule K-1s, an SMA consolidates everything so that the investor only receives one Schedule K-1. SMAs may generate UBTI. Once UBTI exceeds $1,000 in an account, additional taxes may be assessed.

Advantages:

- Preserves tax characteristic of the underlying investment
- Typically lower fees than publicly traded products

Disadvantages:

- May generate UBTI
- Issues a Schedule K-1
- High minimum investment

Suitability:

- Large institutions such as pensions and endowments
- Very wealthy individual investors

Active versus passive

Although this will vary by investor, the next thing to decide in regards to an MLP investment philosophy is active versus passive management. While this decision is germane to any sector, there are a few things unique to the midstream space. Advocates of passive investing note that over the long term and after factoring in fees, active managers are unable to consistently outperform the index to which they benchmark their performance. Advocates of active investing argue that with extensive research on individual companies, selective investing, and close monitoring of securities, a portfolio manager can generate alpha, or risk-adjusted outperformance versus a benchmark.

Individual MLP market capitalizations range from a couple hundred million dollars to tens of billions of dollars. If an active manager running a $1 billion portfolio would like to put on a 1% position in a small MLP, liquidity constraints may prevent the manager from being able to enter or exit the position in a reasonable amount of time. This may cause active

managers to take large positions in the larger, more established MLPs, which are the same MLPs in a market-cap weighted index. This phenomenon is known as closet indexing.

Choosing an active manager

For those investors who are not comfortable choosing their own securities, but who still would like active management, VettaFi recommends considering the following factors when selecting an active manager.

History – While past performance is not an indication of future returns, it is worth looking into the track record of an active manager being considered.

Outperformance – The entire purpose of paying for active management is to outperform the benchmark index after fees. If the active manager is not consistently outperforming the index or is underperforming the index after fees, an investor is better served by investing in a passively managed product. Outperformance in a single year may be notable but consider whether the manager has outperformed in previous years and under various market conditions.

Differentiation – An active manager whose portfolio closely mimics an index may be engaging in closet indexing. Investors are encouraged to examine the underlying portfolio to be sure it matches the investment thesis and philosophy of the manager.

Choosing an indexed product

As an indexing firm, VettaFi constructs and maintains energy infrastructure and MLP indexes in the Alerian suite, which it licenses to its partners for the creation of passively managed investment products. Alerian launched the first real-time MLP index in 2006, which has since become the industry standard benchmark. VettaFi continues to work hard to maintain energy infrastructure and MLP indexes that meet the most rigorous standards. With that bias in mind, VettaFi recommends that investors looking for a passive investment consider the following when researching underlying indexes.

Transparency – Passive investors should know what they are buying. The methodology used to construct the index should be publicly available to investors, as well as fact sheets and supporting information. Transparency allows investors to be sure the underlying portfolio matches their investment thesis. For example, not all MLP indexes are the same — some are midstream focused and include corporations, others are focused on income, and others are focused on MLPs.

Objectivity – An index provider may be tempted to include certain energy infrastructure companies for subjective reasons: a personal investment, a relationship with the management team, or to juice returns on a stock already included in an actively managed fund. For each index, there should be rules in place to prevent personal opinions and emotions from impacting the construction and rebalancing of the index. Having a codified set of rules that is transparent and freely available to the public, as well as prohibiting index committee members from taking positions in individual energy infrastructure companies in their personal accounts, all help maintain objectivity. Additionally, indexing firms should be careful to avoid conflicts of interest with actively managed investments.

Conclusion

- MLPs are pass-through entities and do not pay federal income taxes at the company level. An MLP must earn 90% of its gross income from qualify sources, namely the transportation, processing, storage, and production of natural resources and minerals.
- Energy infrastructure MLPs perform the “shipping and handling” function of the energy value chain. Think transporting energy through pipelines, storing hydrocarbons, operating export terminals, and processing natural gas and natural gas liquids into usable commodities.
- Energy infrastructure is differentiated from other energy sectors by its fee-based business model. In providing services for fees, energy infrastructure MLPs generate stable cash flows that support generous dividends.
- Many investors use MLPs in income portfolios given historically generous yields and diversification benefits relative to other income investments, but energy infrastructure MLPs can also be used for an alternative, real asset, energy, or general equity allocation.
- While direct investment in an MLP will result in a K-1 for filing taxes, there are a number of investment products with MLPs only or MLPs and C-Corps that provide exposure to the energy infrastructure space with a 1099 tax form.

To learn more about VettaFi Indexing click here

About VettaFi

VettaFi is a provider of indexing, data & analytics, industry-leading conferences, and digital distribution services to ETF issuers and fund managers. It operates the ETFdb, Advisor Perspectives, and ETF Trends websites and the LOGICLY portfolio analytics platform --engaging millions of investors annually -- empowering and educating the modern financial advisor and institutional investor. VettaFi owns and administers the Alerian Series. For more information, please visit: www.vettafi.com.

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