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User's guide to master limited partnerships

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- Master limited partnerships (MLPs) are hybrid entities that issue publicly traded equity interests and operate largely in the energy sector. Interest in MLPs has grown over the past decade: Their number more than tripled to 110 and their market capitalization grew tenfold to $414 billion.[1]

- Many investors' interest in MLPs is driven by the potential for enhancing yield and return. All should be aware of the investment implications associated with using MLPs for such purposes.

- Investors must also consider some practical implications. The direct method of investing in MLPs—buying partnership units—involves the receipt of Schedule K-1 tax forms, which some may find too complicated. Investing indirectly through a mutual fund or other vehicle eliminates Schedule K-1 but can result in MLP exposure different from what was expected.

- Given the risks and complications, MLPs may not make sense for most investors. MLPs may be more appropriate for those who are comfortable with the risks involved, want to overweight the energy sector, and are prepared for the practical implications of either direct or indirect investment in MLPs.

Note: The author thanks Brian J. Scott and Sarah Hammer, of Vanguard's Investment Strategy Group, for their contributions to this paper.

1 These figures refer to the energy segment that dominates the MLP universe, and reflect the ten years through December 2013. Sources: National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, and Interactive Data Corporation [IDC].

Companies have traditionally turned themselves into corporations to gain access to the public capital markets, but in 1981 certain business partnerships devised a different method: They issued ownership interests that could be traded. Thus, a new way to access the markets was born: the master limited partnership (MLP).

Master limited partnerships: The basics

The term *master limited partnership* is actually a colloquial name for a subset of the group of entities called *publicly traded partnerships* (PTPs). PTPs are hybrids combining the benefits of corporations and partnerships. Like corporations, PTPs issue publicly traded interests (called "units") that are accessible to investors with a brokerage account. However, PTPs are unincorporated entities under state law, like limited liability companies or limited partnerships, and are treated as partnerships for tax purposes. As partnerships, PTPs are able to pass through all income, gains, deductions, losses, and credits to investors, and they generally pay no entity-level taxes.[2] MLPs are simply PTPs that operate active businesses, as opposed to PTPs that operate passive businesses (such as certain types of exchange-traded funds).[3]

MLPs have distinct taxation characteristics that make them attractive to some investors but may have less value for others. In addition, for those new to MLPs, there are two key investment considerations to weigh: equity risk and sector concentration.

MLP units carry stock-like risk

The publicly traded units issued by MLPs—the predominant way investors gain exposure to them—represent the equity capital of a business, and as such, carry a level of risk similar to that of stock in a capital structure. In other words, MLP units are inherently riskier than bonds issued by the same company. Most equity investors in an MLP invest as limited partners. As with corporate shareholders, limited partners have no management responsibilities, are liable only to the extent of their investments, and share in the profits or losses and cash distributions of the MLP.[4]

MLPs are concentrated in the energy sector

Most MLPs are energy-related businesses. This is a result of tax-related legislation: To stem the potential loss in corporate tax revenue, the U.S. Congress decided in 1987 to restrict the MLP classification to certain sectors, including energy, real estate, and finance.[5] Over time, energy has become the predominant sector. Midstream oil and gas companies, in particular, have found the pass-through nature of MLPs appealing because of the inherently lower cost of capital.[6] This segment comprises pipeline and storage operators that make significant investments in infrastructure to transport and store products such as crude oil and natural gas.

These MLPs typically do not actually own the commodity but receive a fee based on the volume that is transported. Thus, the returns of these MLPs can be sensitive to the amount of energy product that is being transported.[7]

Notes on risk: All investing is subject to risk. Past performance is no guarantee of future returns. Investments that concentrate on a relatively narrow market sector face the risk of higher price volatility. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. Diversification does not ensure a profit or protect against a loss in a declining market. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

2 Section 7704 of the Internal Revenue Code of 1986 addresses the U.S. federal tax treatment of PTPs. In general, for a PTP to be treated as a partnership rather than a corporation for tax purposes, it must annually derive at least 90% of its income from certain qualifying sectors, as described later in the text.

3 For example, certain ETFs investing in commodity-related instruments are structured as PTPs, and because these ETFs are passive investment vehicles, they are not considered MLPs.

4 There are important differences between owning MLP units and owning shares of stock that go beyond the matter of Schedule K-1 forms. For example, MLP investors generally receive cash distributions that are partially or fully tax-deferred, while corporate shareholders typically receive cash dividends that are fully taxable upon receipt; and limited partners generally have limited or no voting rights. MLPs also typically have *general partners*. These are generally large energy corporations that spin off noncore assets such as pipelines into a newly created MLP and then manage the business while retaining a small ownership piece and incentive distribution rights.

5 Congress allowed these sectors to retain the classification because they had traditionally used the partnership form. To qualify for MLP (or PTP) status, a company must derive at least 90% of its income from one of the designated sectors.

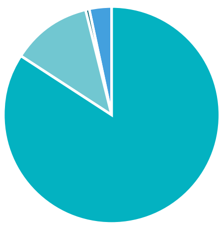
6 Finance companies are concerned that Congress may revoke MLP status for them. Real estate companies increasingly prefer the REIT structure.

7 Energy product volumes can be affected by, among other things, a sustained decline in energy prices, energy regulatory changes, energy supply disruptions, environmental accidents, and acts of terrorism.

Figure 1. Most MLPs operate in the energy sector, particularly midstream oil and gas

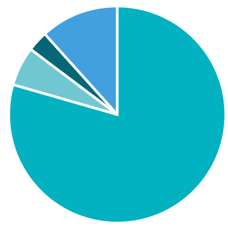
As of December 31, 2013, 110 of 135 MLPs were energy firms

MLP market capitalization: $491.3 billion



84%	Energy
12%	Financial
1%	Real estate
3%	Other

Energy MLP market capitalization: $413.5 billion



80%	Oil and gas midstream
6%	Oil and gas upstream
3%	Oil and gas downstream
11%	Other

Notes: In calculating market capitalization, we included only the traditional, publicly traded limited-partnership units of each MLP. We excluded classes of units held privately by the MLP itself or its affiliates as well as unconventional "i-share" investments that pay distributions in the form of stock rather than cash.

Sources: Vanguard calculations, based on data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, and Interactive Data Corporation (IDC).

By now, the term *MLP* is associated almost exclusively with the energy sector, and nearly all MLP pooled vehicles track the energy sector. Thus, we focus the rest of this discussion on energy MLPs. These have gained in popularity recently, although they remain very concentrated, with aggregate market capitalization equivalent to 2% of the U.S. stock market today[8] (roughly the size of the nation's largest energy company, ExxonMobil). Currently excluded from broad-market indexes largely for tax reasons, energy MLPs are commonly viewed as a way to boost portfolio yield and performance, two topics we discuss next.

Benchmarks used in our calculations

The energy MLP returns in this paper are derived from a comprehensive, market-cap-weighted return series constructed by Vanguard to reflect the full return history of these partnerships. We constructed this series to fill a gap. The most widely used MLP index is backdated only as far as 1996, whereas MLPs have existed since 1981.

Our return series covers the period from January 1981 through December 2013. It employs data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, and the Interactive Data Corporation.

For other asset types, we use benchmarks deemed to fairly represent the relevant market. **U.S. stocks** are represented by the Wilshire 5000 Total Market Index through April 2005, the MSCI US Broad Market Index from May 2005 through May 2013, and the CRSP Total Market Index thereafter. **U.S. bonds** are represented by the Barclays U.S. Aggregate Bond Index. **U.S. Treasury securities** are represented by the Barclays U.S. Treasury Bond Index.

8 Sources: The market capitalization of energy MLPs is derived from a Vanguard-constructed MLP series using data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, and IDC. The broad stock market capitalization is based on the CRSP US Total Market Index. Data are as of December 31, 2013.

Potential uses of MLPs in a portfolio

Using MLPs to boost portfolio yield

Some investors may find the relatively high yields of energy MLPs appealing, especially given the current low-rate environment. As of year-end 2013, energy MLPs boasted a yield of 5.5%, compared with 4.4% for the FTSE NAREIT All REITs Index, 2.0% for the S&P 500 Index, and 2.5% for the Barclays U.S. Aggregate Bond Index.[9] The high yields stem from several factors, including the absence of corporate taxes and a propensity to distribute nearly all cash flow to limited and general partners.[10] MLPs are thus similar to another type of income security, REITs (real estate investment trusts). Both tend to distribute nearly all income and cash flows to investors, and both give retail investors access to a specific type of hard asset: energy infrastructure and real estate, respectively.

Although the high yields are tempting, investors should recognize that using investments such as MLPs to boost portfolio yield may have the inadvertent effect of increasing volatility or otherwise changing the risk profile of the portfolio (Jaconetti, Kinniry, and Philips, 2012). For example, investors who shift some of their fixed income allocation to MLPs may face increased risk because—being equity instruments—MLP units have been about as volatile as stocks and three times as volatile as bonds.[11]

On the other hand, those considering shifting part of an equity allocation to MLPs should be aware that this can mean overweighting the energy sector, particularly energy infrastructure. Investors using a broad market index fund or ETF already have exposure to this sector, including the infrastructure segment. As **Figure 2** shows, MLP units have demonstrated moderately high correlations with the energy sector, and **Figure 3** shows that within the sector, MLPs were most highly correlated with the infrastructure segment (storage and transportation) in the period from June 2005 through December 2013.[12] Thus, investors looking to use MLPs to boost yield must ask themselves whether they believe it is worth the trade-offs involved—either higher portfolio risk or increased weighting of the infrastructure segment of the energy sector.

Figure 2. Correlations of returns of energy MLPs with benchmark returns in various asset categories: January 1981–December 2013

Benchmark category	Correlation
U.S. bonds (broad taxable market)	0.01
U.S. Treasury bonds	–0.10
U.S. stocks (broad market)	0.45
Energy sector	0.47
REITs	0.38
Commodities	0.24
Crude oil	0.28

Notes: Returns start in 1981, the inception year of MLPs. Returns for MLPs, U.S. bonds, U.S. Treasury bonds, and U.S. stocks are based on the benchmarks listed in the box on page 3. Other returns are based on these benchmarks: for REITs, the FTSE NAREIT All REITs Index; for the energy sector, the MSCI US Energy Index (starting with that index's inception in June 1992); for commodities, the S&P GSCI Commodity Total Return Index; and for crude oil, Crude Oil–Brent Current Month FOB (Free on Board).

Sources: Vanguard calculations, based on data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, IDC, and Barclays Live.

9 The average historical yield for MLPs is an estimated 7.5%, based on data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, and IDC. If yield is used as a valuation metric, MLPs are currently overvalued relative to their historical level.

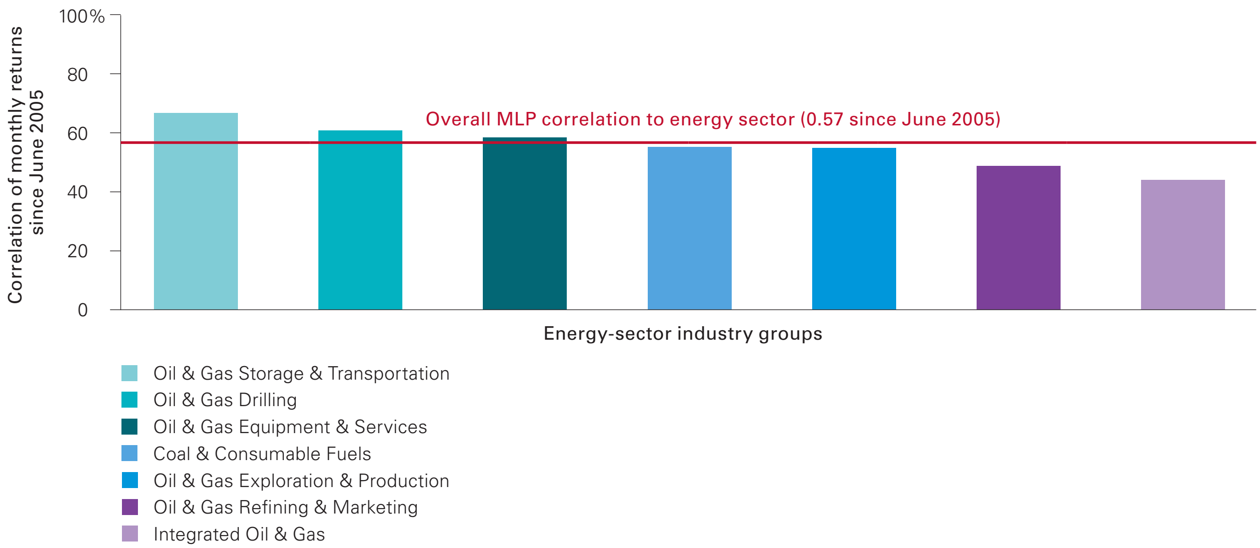
10 Available cash flow is generally calculated as operating cash flow less maintenance capital expenditures. For example, one of the largest MLPs, Kinder Morgan Energy Partners, L.P., seeks to distribute 100% of its available cash to its partners on a quarterly basis. It defines available cash as all cash receipts less cash disbursements and changes in reserves.

11 Sources: Vanguard calculations based on data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, IDC, and Barclay's Live. Using annualized standard deviation of returns, MLPs, stocks, and bonds exhibited volatility of 16.5%, 15.5%, and 5.0%, respectively.

12 Although MLP correlations with the energy infrastructure segment were highest, from a risk and return perspective MLPs did behave differently. For example, the infrastructure segment exhibited higher risk, reflecting its relatively small number of companies: As of December 31, 2013, the segment had just eight companies, compared with a total of 110 MLPs across the energy sector.

Figure 3. Within the energy sector, MLPs have been most highly correlated with infrastructure

Return correlations from June 2005 through December 2013



Notes: Industry group returns are based on GICS sector sub-indexes within the Russell 3000 Index. Correlations are calculated from June 2005, the earliest date for which the sub-index data are available, through December 2013.

Sources: Vanguard calculations, based on data from Factset, the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, and IDC.

In addition to recognizing the risks associated with a yield-focused strategy, investors should consider the fact that higher yields do not necessarily result in higher total returns (Jaconetti et al., 2012). This is because distributions from equity instruments do not reflect value creation. Equity distributions simply reduce the value of the company, and hence, the value of its shares (or units). In fact, interest payments from fixed income investments play a larger role in total returns because the principal amount is generally fixed.

How did MLPs perform during the global financial crisis?

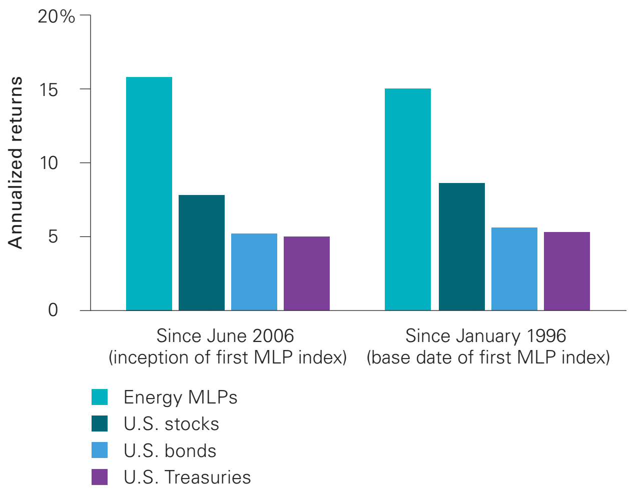
Some commentators have suggested that correlations with various asset classes (shown in Figure 2) are low enough to warrant including MLPs in a portfolio to diversify risk. However, investors should note that during periods of market stress, correlations among risky assets, even if not normally very high, can increase dramatically as investors gravitate toward "risk-free" instruments such as U.S. Treasury bonds (Philips, Walker, and Kinniry, 2012). Because MLPs are highly dependent on external sources of capital for growth (as most cash flows are paid out to investors), these businesses can be especially sensitive to market crises characterized by significantly reduced bank lending. During the global financial crisis,* for example, as uncertainty increased concerning the growth prospects of equity products, MLPs and stocks returned –35% and –51%, respectively, while Treasury bonds returned 13%.**

* The global financial crisis is defined here as extending from November 2007 through February 2009, dates that provide the closest month-end returns from the peak of the Standard & Poor's 500 Index in 2007 to its trough in 2009.

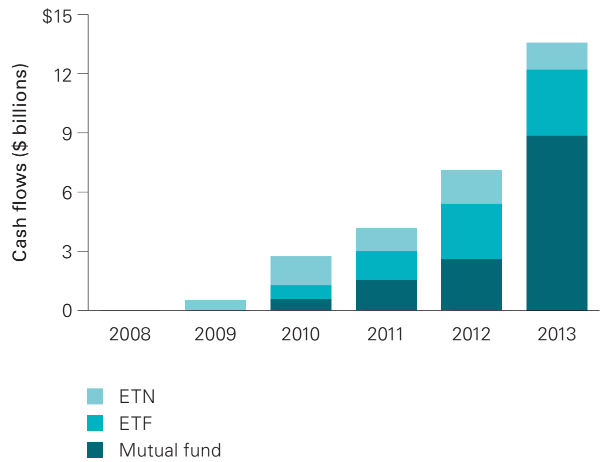
** Returns are derived from the benchmarks listed on page 3.

Figure 4. Cash flows into MLP vehicles have coincided with strong recent performance

a. Relative returns



b. Cash flows into vehicles focused on MLPs



Notes: Returns are based on the benchmarks listed on page 3. "Inception of first MLP index" refers to the launch of the widely followed Alerian MLP Index. "Base date of first MLP index" refers to the start date for data used to determine retroactive performance of the Alerian index. Closed-end funds, by definition, do not have any cash flows, because they are closed to creations and redemptions.

Sources: Vanguard calculations, based on data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, IDC, Barclays Live, and Morningstar, Inc.

Using MLPs to enhance returns

Much of the recent interest in MLPs may be linked to the strong performance reported in MLP benchmarks. The first of these benchmarks was created in 2006, with backtested data dating to 1996 (the base date).[13] As **Figure 4** shows, the impressive returns that began to be publicized then were followed by mounting cash flows. MLPs' strong recent returns can be attributed in part to the energy boom in the United States, which has spurred demand for energy infrastructure.

Although the short-term record of MLPs is appealing, investors should recognize that it does not reflect the entire history of these products. Performance figures shown to investors are often limited to the benchmarks from which they are derived, and MLP benchmarks have only been around since 2006—whereas MLPs have existed for more than 30 years. Even the base date of the oldest MLP benchmark, 1996, is 15 years after the launch of the first MLP (1981).

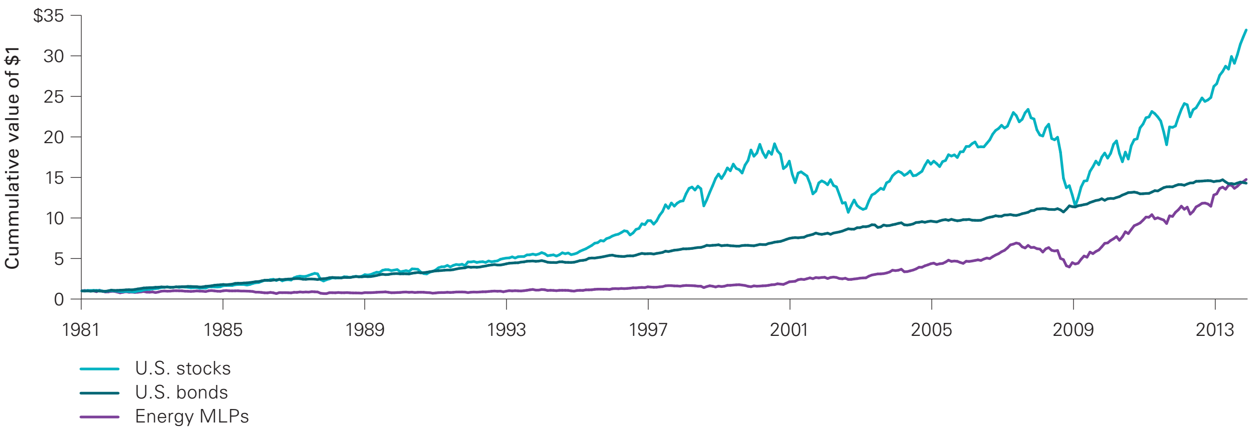
To bridge the gap, we constructed a comprehensive, market-cap-weighted return series of all energy MLPs that existed since 1981, using data from the providers listed on page 3. Over this entire period, MLPs returned an average of 8.5% annually versus 11.2% for stocks and 8.4% for bonds. The weaker overall performance of MLPs reflects a "lost decade-and-a-half" from 1981 to 1995, a period spanning an energy crisis that caused many MLPs to go bankrupt or merge with other companies.[14] Of the 49 energy MLPs that launched in the 1980s, 34 (69%) were bankrupt, liquidated, merged, or restructured within ten years; just 4 are still alive today in their original form.

13 "Base date" refers to the starting date used by the index provider to calculate hypothetical performance of the index before it actually existed. The provider does this by retroactively applying the index methodology to historical data.

14 The severe drop in energy prices in 1986 affected many MLPs. Although MLPs are now concentrated in the midstream segment, where they are paid predominantly on volumes transported, they are still indirectly exposed to commodity prices. For example, if oil prices stay persistently low, midstream operators may face decreased volumes, which would cut into their profits and thereby reduce their unit prices.

Figure 5. Cumulative performance over lifespan of energy MLPs: A 'lost decade-and-a-half'

Growth of $1 initial investments in stocks, bonds, and energy MLPs, January 1981 through December 2013



	Average annual return	Annualized standard deviation	Ending value of a $1 investment
1981–1995: 'Lost' to an energy slump			
U.S. stocks	14.5%	14.8%	$7.57
U.S. bonds	11.9	6.3	5.38
Energy MLPs	1.1	18.3	1.19
1996–2013: Better times for energy			
U.S. stocks	8.6%	16.2%	$33.19
U.S. bonds	5.6	3.5	14.29
Energy MLPs	15.0	14.7	14.75
Full period, 1981–2013: A contrast with stocks			
U.S. stocks	11.2%	15.5%	$33.19
U.S. bonds	8.4	5.0	14.29
Energy MLPs	8.5	16.5	14.75

Note: Returns are based on the benchmarks listed on page 3.

Sources: Vanguard calculations, based on data from the National Association of Publicly Traded Partnerships, Thomson Reuters Datastream, IDC, and Barclays Live.

Examining how an asset class has performed over long periods can provide a broader picture of that asset's sensitivity to market and industry cycles.[15] If performance is the reason for considering adding MLPs to a portfolio, investors should ask themselves whether they have enough confidence in the future prospects of the MLP space to warrant an allocation to MLPs in addition to the existing energy exposure they may already have through a broad-market fund. Ultimately, Vanguard believes that instead of basing investment decisions solely on recent performance, investors should apply realistic risk-and-return expectations founded on the recognition that the high (or low) risk-adjusted performance of a given asset during a given time period is highly unlikely to persist forever (Kinniry and Philips, 2012).

15 Given the strong recent performance of MLPs, investors may wish to compare current valuations to historical valuations. The most common valuation metrics for MLPs include price-to-distributable cash flow, enterprise value-to-EBITDA (earnings before interest, taxes, depreciation, and amortization), and yield spread to the 10-year Treasury note. Price/earnings ratios are not commonly used because they are not the best representation of cash flow. In the MLP space there is an emphasis on cash flows, instead of earnings, as the two may differ by a large amount.

Practical implications of investing in MLPs

Once investors understand the investment implications of using MLPs in a portfolio, they should consider the practical implications. There are two ways to invest in MLPs: directly, by purchasing units, or indirectly through an instrument that either holds or tracks MLP units. Each method has its advantages and drawbacks. Ultimately, there is no silver bullet to investing in MLPs, and investors deciding between the two methods must determine which characteristics they value most.[16]

Direct investment in MLPs

In the direct method, investors purchase units of one or more MLPs, thus becoming a partner in each business. A key advantage of direct investing is pass-through taxation. As partnerships, MLPs generally pay no corporate taxes; instead, they pass through net income and gains untaxed to investors, who then pay personal income tax on their share of these proceeds.[17] MLPs' pass-through status is a key driver of their high yields, because it eliminates the double taxation that applies to corporate dividends (the corporation pays tax on its income, and the investor pays tax on the dividend from that income). MLPs thus can distribute more of their cash flow.

In addition, in general, most distributions that MLPs pay out are treated as *nontaxable* returns of capital to the unit-holders. This is because MLPs often generate large depreciation and amortization costs from capital investments in pipelines and tankers. Such costs offset the MLP's income; as a result, the allocation of net taxable income to investors can be much smaller than the actual cash distributions they receive. Investors generally pay current taxes only on the small portion of distributions (typically 10% to 20%) that represents the MLP's net income and gains.

Although this deferral of tax liability is an aspect of direct ownership that has been attractive to many investors,[18] it merely represents tax deferral, not tax avoidance, for the investor. These returns of capital lower the cost basis of the MLP investment, and investors must eventually pay tax on the amount by which the cost basis was reduced when the investment is sold.

Along with these potential advantages,[19] a direct investment in MLPs poses a potential disadvantage for investors unfamiliar with receiving and interpreting Schedule K-1 tax forms. Limited partners annually receive a Schedule K-1 reporting their share of an MLP's income, gains, deductions, losses, and credits. Schedule K-1 tax forms are more complicated than the Forms 1099 provided by corporations—complex enough that many advisors suggest buying MLP units directly only when a significant sum can be invested.

In fact, MLP partners generally are required to file an income tax return in each state in which the MLP operates, and to pay state taxes on their share of the net income and gains attributable to those states. In addition, tax-exempt investors such as endowments and foundations, as well as retirement plans, may be subject to unrelated business taxable income (UBTI) taxes on MLP income.

Indirect investment in MLPs

Investing indirectly means gaining exposure to MLPs through investment vehicles that hold or track them. Such vehicles include closed-end funds, mutual funds, exchange-traded funds (ETFs), and exchange-traded notes (ETNs). In addition to diversification, key advantages these vehicles provide are that they eliminate the need to deal with Schedule K-1s and do not generate UBTI.

16 Many of the key differences between the direct and indirect methods are tax-related. As with all investments, taxes should not be the sole factor driving the investment decision. Note that the information provided here is not intended to be and does not constitute tax advice.

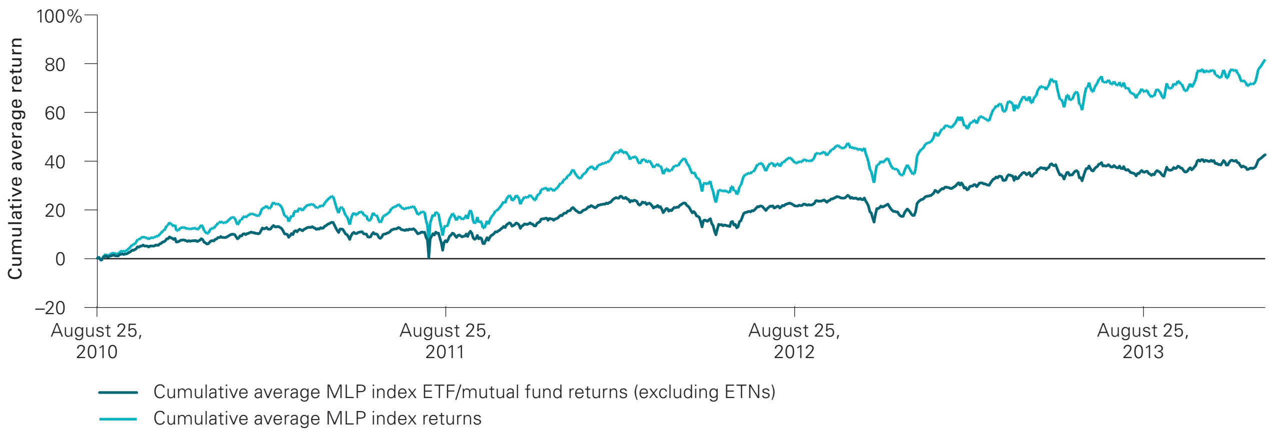
17 Unlike corporations, MLPs pass through income, gains, deductions, losses, and credits to investors annually, regardless of whether the MLP makes cash distributions.

18 As long as the adjusted cost basis remains above zero, taxes on returns of capital are deferred until units are sold. When units are sold, an investor will recognize long-term capital gains on the sale if the investor has held the units for more than one year—except that the portion of the gain that arises from the downward basis adjustments (e.g., depreciation or amortization) will be recaptured and taxed as ordinary income. Note that this portion is potentially significant. Similarly, when an investor's cost basis drops to zero, any future cash distributions will be taxed as capital gains, subject to the same exception. If the investor were to die and leave the MLP units to an heir, the MLP units would receive a step-up in cost basis to fair market value; therefore, no income tax would generally be due on the built-in gains in the inherited MLP units.

19 Another potential advantage of direct investing is the diversification that would be available to an investor, such as an institution, with access to a private partnership vehicle that invests in a range of MLPs. In this case, the investor would be treated as owning its share of the underlying MLPs and would receive a Schedule K-1 form.

Figure 6. An indirect investment in MLPs may provide unexpected exposure

Over three-plus years, index vehicles holding MLPs diverged from their benchmarks in cumulative returns



Notes: August 25, 2010, marked the launch of the first index vehicle tracking MLPs. Returns are calculated from that date through year-end 2013 and reflect total returns based on net asset value (NAV). The number of these vehicles was seven as of December 31, 2013. Exchange-traded notes (ETNs) are excluded from the chart because ETNs are not technically index funds, but, rather, debt-like instruments.

Sources: Vanguard calculations based on data from Morningstar, Inc., and Bloomberg.

However, indirect investments often provide different exposure to MLPs than what the investor may be looking for. For example, because of regulatory requirements, vehicles that hold more than 25% of their assets in MLPs generally must be structured as regular corporations for U.S. federal tax purposes. That means they must pay corporate-level taxes, negating a primary advantage of direct MLP investing—the avoidance of double taxation on income. Investors using such vehicles will thus obtain a return significantly lower than that of the underlying MLPs, by an amount that reflects the corporate taxes incurred by the vehicle.[20] The cumulative tax drag on returns created by the corporate fund structure can be substantial, as shown in **Figure 6**.

On the other hand, investment vehicles that limit their MLP exposure to 25% or less of assets can operate as regulated investment companies and benefit from the pass-through taxation typical of mutual funds.[21] However, owing to their limited holdings in MLPs, such vehicles will naturally experience returns significantly different from those of pure-play MLP vehicles.

Lastly, exchange-traded notes are debt-like instruments issued by a bank that promise the return of an index, minus applicable fees. ETN investors must pay ordinary income tax on the entirety of the coupon income distributed by the ETN—a feature that erases a key reason many investors seek MLPs, namely the opportunity to receive cash distributions with tax-deferred treatment. Further, the tax treatment of MLP ETNs more generally is not entirely clear, and investors are taking on some tax risk by investing in these instruments.[22]

20 The corporate taxes that the vehicle must pay include an accrual for deferred tax liabilities on unrealized gains. In other words, corporate taxes are paid both on income provided by the MLPs to the vehicle and on unrealized gains or price appreciation in the MLPs owned by the vehicle, which will be subject to taxation when the MLPs are sold.

21 Regulated investment companies are those that do not pay entity-level taxes, provided they meet certain ongoing qualification requirements and distribute all of their income and gains to shareholders annually. Regulated investment companies can pass tax liability through to shareholders only in connection with the payment of dividend distributions, including net long-term capital gains.

22 Currently, ETN issuers generally treat these as prepaid forward contracts or open transactions that are not debt for tax purposes. Under this treatment, ETN holders can sell their notes at a long-term capital gain or loss (provided they held their interests for more than a year). An additional tax question arises as to whether these ETNs constitute constructive ownership transactions under the Internal Revenue Code, which would have the effect of converting all or a portion of a holder's long-term capital gains on sale into ordinary income.

Figure 7. Comparison of direct versus indirect methods of MLP investing

	Direct method	Indirect method		
	Master limited partnerships	Closed-end fund, mutual fund, exchange-traded fund with **more than 25% of assets** in MLPs	Closed-end fund, mutual fund, exchange-traded fund with **25% or less of assets** in MLPs	Exchange-traded note
Liquidity	Daily	Daily	Daily	Daily
Tax structure	Partnership	Regular corporation	Regulated investment company	Unclear, typically prepaid forward contract
Pass-through entity?	Yes	No	Modified pass-through	N/A
Underlying exposure	MLPs	MLPs	MLPs and MLP affiliates	MLP index
Federal tax reporting	Schedule K-1	Form 1099	Form 1099	Form 1099
Taxation of distributions	Mostly return of capital (see Note below)	Mostly return of capital (see Note below)	Mix of ordinary income, capital gains, and return of capital	Interest income
Generates UBTI?	Yes	No	No	No
Issuer credit risk	No	No	No	Yes

Note: The extent to which distributions constitute tax-deferred return of capital for an investor will generally decline over time.

Source: Vanguard.

ETN investors must also be aware of two additional risks that mutual fund and ETF investors do not face. Because ETNs are debt-like instruments, they expose investors to credit risk—the risk that the issuer may not be able to meet its payment obligations under the instrument. Second, market price deviations from net asset value (NAV), known as premiums and discounts, can be more significant and occur more frequently for ETNs than for ETF structures, because ETN providers sometimes cap the asset size of their products to prevent their hedging instruments from growing too large.[23] Historically, ETNs that are no longer creating new shares have exhibited significant premiums on occasion (sometimes 5% or more above NAV). Investors need to be wary of ETNs that currently trade at a premium, because a sudden price swing back toward NAV could significantly harm returns.[24]

Given the risky, concentrated nature of MLPs, the existing exposure to energy infrastructure companies that investors may already have in their portfolios, and the practical complications associated with MLP investing, many investors may want to think twice before adding MLPs to their portfolios. Those who do so need to be aware of the risks they are taking on, including the overweighting of the energy sector, and to be ready for the tax reporting involved.

For investors who wish to invest in MLPs, a market-cap-weighted approach would suggest, as of year-end 2013, an allocation of roughly 2% in a stock portfolio or 1.2% in a 60%/40% stock/bond portfolio.

23 An ETN is a promise from the issuer to pay the return of an index, a promise that is not guaranteed by any underlying collateral. Thus, the ETN issuer has an unsecured debt obligation, which it often attempts to hedge by holding long positions in the assets underlying the ETN index. When the ETN grows in size, the issuer may find it difficult to hedge its obligations, and therefore may decide to cap the issuance of additional shares of ETNs. Given the complexity and associated risks, ETNs may not be suitable for all investors.

24 For example, among the four exchange-traded vehicles (which all happened to be ETNs) that had suspended share creation as of March 31, 2014, according to the New York Stock Exchange website, and that provided NAV data to Bloomberg, the average premium during the month before the suspension was 0.1%, and the average premium during the month after the suspension was 4.9%.

Conclusion

The interest that MLPs have generated lately among investors and advisors stems from several factors, including the potential for enhancing yield and improving return. Investors considering a portfolio allocation to MLPs must evaluate whether the potential benefits are worth the added risks and practical complications.

Although MLPs have displayed attractive yield and performance in recent years, those rewards have come with notable risk, as MLP units represent equity investments concentrated in the energy sector. In addition, MLP benchmarks are late creations that do not encompass the performance of these investments since their beginning in 1981. A look at their full history provides a broader picture of the asset's vulnerability to market and industry cycles. Vanguard consistently cautions investors against making investment decisions solely on the basis of strong recent performance.

For those who are comfortable with the investment implications of MLPs in a portfolio, the next step is to consider the practical implications. Buying units directly offers straightforward exposure to MLPs but forces investors to deal with complicated Schedule K-1 tax forms. Investing indirectly eliminates the Schedule K-1 concern but can result in MLP exposures significantly different from what the investor was seeking.

Although an allocation to MLPs may not make sense for most investors, it may be appropriate for those who are comfortable with the risks involved, are looking to overweight the energy sector in their portfolios, and are prepared to deal with the practical implications of either direct or indirect investment in MLPs.

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