



## Master Limited Partnerships

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### Description of MLPs

A Master Limited Partnership, or MLP, is a partnership that has its shares (called “units”) traded on a public exchange, such as NYSE or NASDAQ. As partnerships, MLPs are passthrough entities for tax purposes, meaning they do not pay taxes at the corporate level. As currently defined by the U.S. Tax Code, MLPs are required to generate at least 90% of their income from activities with “qualified sources”<sup>1</sup> such as depletable natural resources. Such activities include oil & gas exploration & production, mining, gathering & processing, refining, compression, transportation, storage, marketing and distribution. MLPs operate in a number of natural resources-related businesses and have been popular vehicles for investment due to their tax-advantaged high distribution payout structure and, in certain cases, cash flows backed by long term contracts. While REITS have statutorily required distribution minimums, MLPs do not. MLPs have the ability to grow, and thus increase distributions, through

additions to their asset bases by acquisition or development.

### MLP Structure

Typically, an MLP’s ownership consists of a general partner (GP) and limited partners (LP). The LPs provide capital but have no role in managing or operating the MLP and have limited voting rights. They are, however, entitled to receive cash distributions and their units are publicly traded, allowing for liquidity. In contrast, the GP tends to hold a small stake (e.g., 2%) but have full management responsibility and control of the business (See Exhibit 1).

Many MLPs operate what may be described as a “toll-road” business model, meaning they receive a fee for handling the customers’ product without taking ownership of the commodity. MLPs can have long term contracts with their customers, often with attractive features such as “take-or-pay” and inflation escalators that help provide cash flow stability and limited commodity price exposure. MLPs typically

operate in asset intensive businesses with high barriers to entry which can also help ensure their cash flow stability.

### MLP Distributions

MLPs typically pay almost all of their distributable cash flow (“DCF”) in the form of quarterly distributions. Due to their high payout ratios, MLPs are often reliant on debt and equity capital markets to finance growth. In order to grow, an MLP needs to develop its existing assets and/or acquire new assets, as well as raise the necessary capital to execute its growth plans. To retain access to the capital markets, MLPs are motivated to retain a strong balance sheet and not rely too heavily on debt to finance growth. However, existing investors will experience dilution as more MLP units are issued.

The GP usually owns Incentive Distribution Rights (“IDRs”) that entitle the GP to a greater percentage of incremental cash flows that are distributed by the MLP. The IDRs are akin to a performance fee and help motivate the GP to increase the per unit distributions. Initially, the GP is entitled to its pro rata share (e.g., 2%) of the cash distributions. As distributions increase and reach certain levels (i.e., “splits” or “tiers”), the GP is entitled to a larger percentage of the incremental cash distribution – in some cases up to 50%. Hence, in a typical structure, the GP has an incentive to grow distributions. The particular MLP’s partnership agreement spells out the terms of its IDRs.

Exhibit 2 illustrates the mechanics of how cash flows are allocated between the LPs and the GP, based on the Incentive Distribution Rights schedule. The “Declared Distribution” refers to the amount of cash distributable to the GP (prior to the IDR) and the LP at each tier level. (See Exhibit 3). As cash distributions grow, the GP (based on its GP interest *plus* the IDR) is allocated a greater percentage of the total distributions.

As the distribution flows through each tier, more incremental cash is allocated to the GP. Note that it would take \$5.42 of total distributions to fill each tier, resulting in \$3.92 (72%) to the limited partner and \$1.50 (28%) to the general partner.

An issue with IDRs is that they effectively raise the cost of capital for the MLP (which only issue LP units when they raise capital). As cash distributions increase (thereby lifting the tier levels) the LP unit gets a smaller share of incremental dollars. MLPs with high splits (e.g., 50%) can find that acquisitions are uneconomic for the LPs as the LPs only receive 50% of incremental distributions, but provide virtually 100% of the capital. In the last several years, some GPs reduced their splits or exchanged their IDRs for LP units to alleviate this issue.<sup>2</sup>

### History of MLPs

MLPs were first formed in the early 1980s in the oil & gas sector. Soon after, other types of businesses formed MLPs as well, including real estate, restaurants, cable TV, amusement parks, and even the Boston Celtics. MLPs provided a way to raise capital from smaller investors by offering them a tax-efficient investment that was also publically tradable. By the mid-1980’s, Congress became concerned that MLPs would provide a way for large numbers of corporations to avoid corporate income tax. In 1987 Congress passed legislation that limited partnership tax treatment to those entities earning at least 90% of their income as “qualifying income,” which they defined as follows:

“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”<sup>3</sup>



**Exhibit 1: Graph of MLP Structure**

Source: Meketa Investment Group

Tier	LP (%)	GP (%)	Declared Distribution
1	98	2	Up to \$1.00
2	85	15	\$1.00 to \$2.00
3	75	25	\$2.00 to \$3.00
4	50	50	Over \$3.00

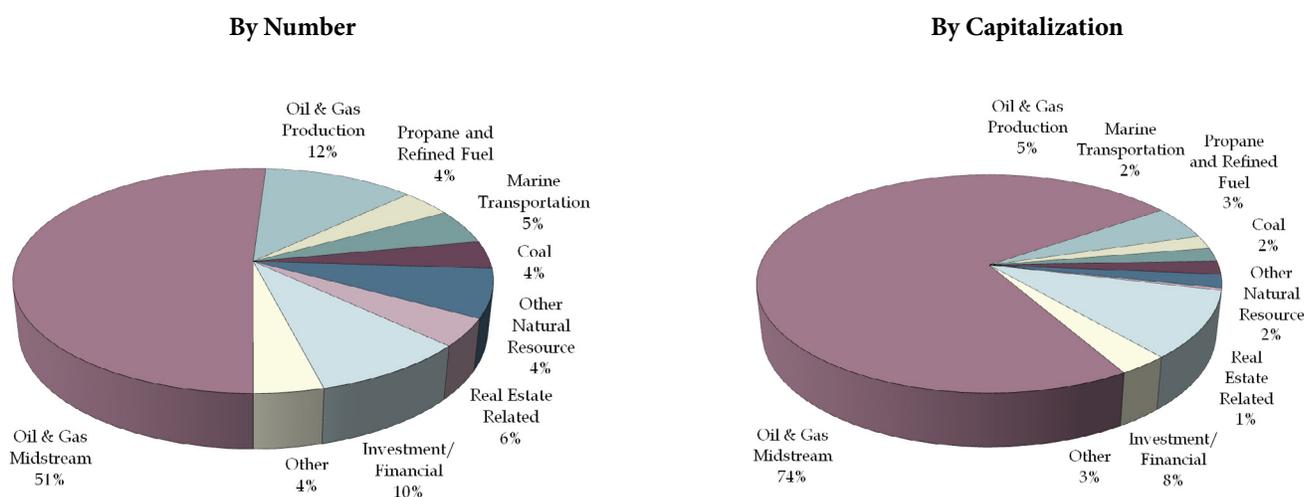
**Exhibit 2: Incentive Distribution Rights Structure for Example MLP**

Source: Meketa Investment Group

Tier	LP (\$)	GP (2%)	GP (IDR)	GP Total (\$)	Total GP Share of Tier Cash Flow (%)
1	0.98	0.02	0.00	0.02	2
2	0.98	0.02	0.15	0.17	17
3	0.98	0.02	0.30	0.33	33
4	0.98	0.02	0.96	0.98	50
Total	3.92	0.08	1.42	1.50	28

**Exhibit 3: Declared Distribution Allocation for Example MLP**

Source: Meketa Investment Group



**Exhibit 4: MLPs by Industry Group**

Source: “Master Limited Partnerships 101: Understanding MLPs”, National Association of Publicly Traded Partnerships, 10/4/13

In the late 1980’s and the 1990’s some integrated energy companies sold or spun off their “midstream” or pipeline-related assets to MLPs. These became the foundation of the current MLP universe. Over time, MLPs engaged in marine transportation of petroleum products, propane distribution, and the coal industry were formed. In the late 2000’s, MLPs focused on oil & gas exploration and development, often with hedging to protect cash flow and distributions, were formed. Through the passage of the Renewable Energy and Job Creation Act in September 2008, the definition of “qualifying income” was expanded to include the transportation and storage of renewable fuels, further increasing the MLP universe. (See Exhibit 4).

**Overview of the MLP Market**

Currently, there are over 110 MLPs trading on major exchanges, with oil & gas midstream activities – gathering, processing, natural gas compression, pipelines, storage, refining, distribution, and marketing – representing the dominant activity. However, the rising popularity of the MLP asset class has drawn entrants beyond the midstream area. Nontraditional assets such as oil sands, chemicals, refiners, and drilling rigs have accessed the MLP marketplace. In some cases, the businesses are supported by stable cash flows and long-term contracts which can lead to stable payout models.

In other cases, the businesses could experience volatile cash flows (e.g., exploration or commodity-related MLPs) or are composed of a single asset which could lead to variable payouts to investors.

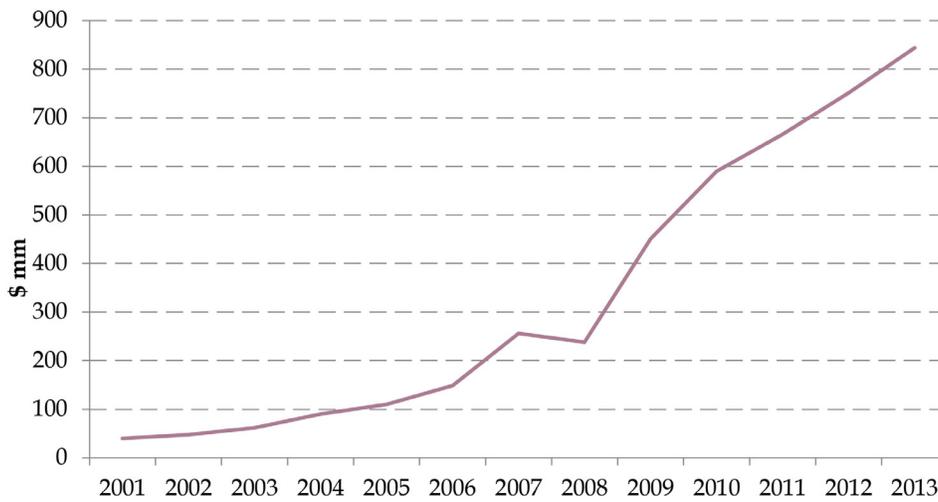
The market value of the MLP universe has grown substantially since 2000. This has been the result of IPOs, secondary equity issuance and appreciation. (See Exhibit 5).

As the MLP market has grown, so has its liquidity. Average daily liquidity increased from approximately \$40 million per day in 2001 to nearly \$900 million per day in 2013 (See Exhibit 6). While historically a retail-oriented investment, institutions have steadily increased their share of the MLP market place. Approximately 65% of MLP interests are held by retail investors, with the balance held by institutional investors such as closedend funds, mutual funds, hedge funds. Increasing awareness of MLPs among institutional investors, including pension funds, is expected to contribute to the ongoing growth and liquidity of the assets class.

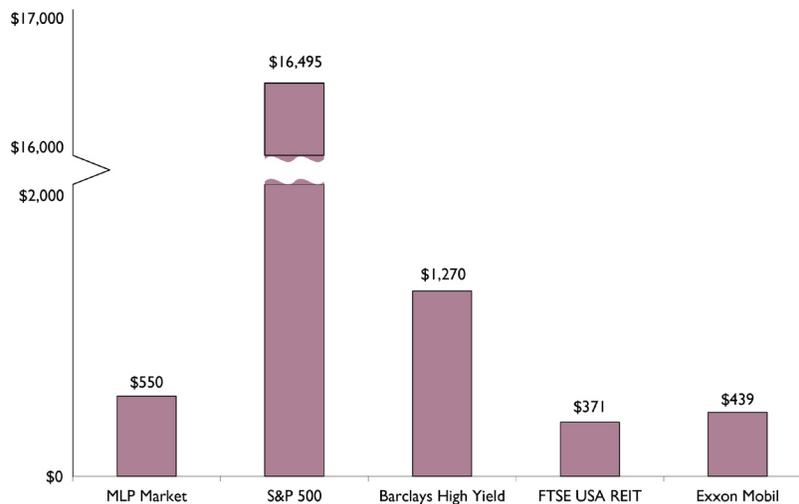
While the MLP market has grown substantially, it remains small compared to other asset classes such as high yield bonds and much smaller than the broad equity market. The entire MLP market is similar in size to the market capitalization of Exxon Mobil. (See Exhibit 7).



**Exhibit 5: Total Market Capitalization of MLP Universe (\$ bn)**  
 Source: Goldman Sachs  
 Total MLP market



**Exhibit 6: Average Daily Trading Liquidity**  
 Source: Goldman Sachs, Morgan Stanley  
 Total MLP market



**Exhibit 7: Comparison of Market Capitalization**  
 Source: Goldman Sachs, Datastream as of December 31, 2013.

As shown in Exhibit 8, MLPs have historically increased their distributions over time in aggregate. In general, MLPs have businesses that have high barriers to entry which allows them to distribute a high level of their available cash flow. Contracts in the form of “take or pay,” natural monopolies, and in some cases federal regulation can all provide a high level of business stability. Additionally, many of the projects in which they invest have relatively visible time lines. This allows investors to estimate when new projects will come on line and hence add to the MLP’s distributions. The rising level of distributions, even in the midst of the Global Financial Crisis, has been a key factor in driving investor interest. However, investors should recognize that individual MLPs can also cut dividend payouts due to business, competitive, or other reasons.<sup>4</sup>

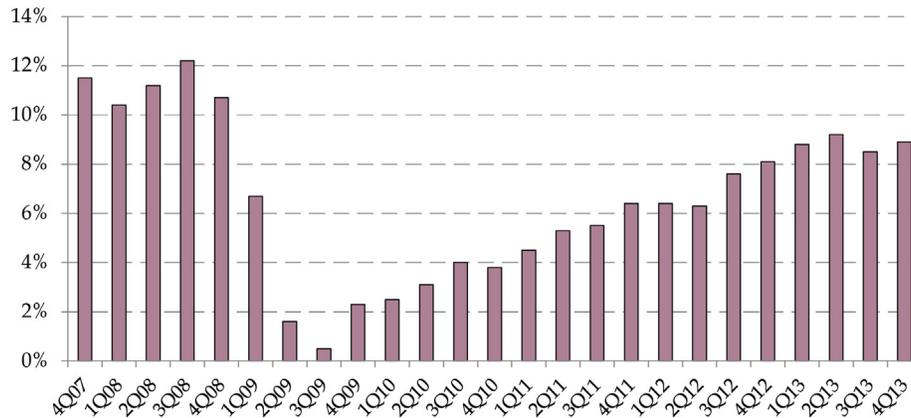
MLP’s operate in a number of businesses with a variety of contract structures and sensitivities to commodity prices (Exhibit 9). For example, natural gas and crude oil pipelines are often viewed as lower risk businesses given their longer contract lengths and revenue that is either volume based or has takeorpay structure. In general, pipelines do not take title to the commodities and their revenue is not directly related to commodity prices; however,

pipelines do have indirect exposure to commodity prices as their growth is related to continued development of domestic oil and gas. Gathering systems, fractionation, and terminals tend to have shorter contracts and have revenues with more exposure to the volume of product transported or treated. Exploration and production businesses typically operate under market rates with short term-hedging contracts and thus may have more exposure to commodity price changes.

### Return Characteristics

A key driver of investor appetite for MLPs has been their strong yield characteristics and steady dividend growth. Historically, MLPs have provided attractive yields compared to other alternatives such as REITs, bonds and stocks. As of spring 2014, MLP yields are slightly below those for high yield bonds. (See Exhibit 10).

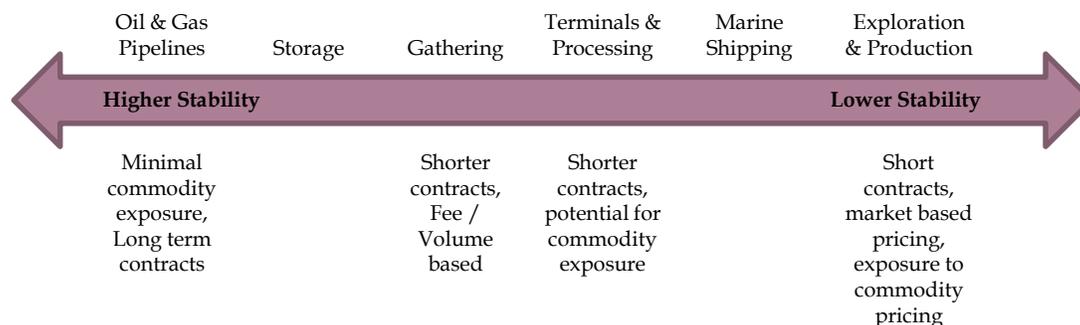
In addition to yield, MLP investor returns are affected by distribution growth and changes in valuation (e.g., yield compression/expansion). For example, in 2013, the components of the Alerian MLP index had a yield of 7.1% and had distribution growth of approximately 7.1%. In addition, MLP yield spreads compressed (the “risk premium” compared to U.S. Treasuries



**Exhibit 8: MLP Year over Year Distribution Growth**

Source: Goldman Sachs.

Figures are capital market weighted and based on the 97 MLPs in the Goldman Sachs research coverage.



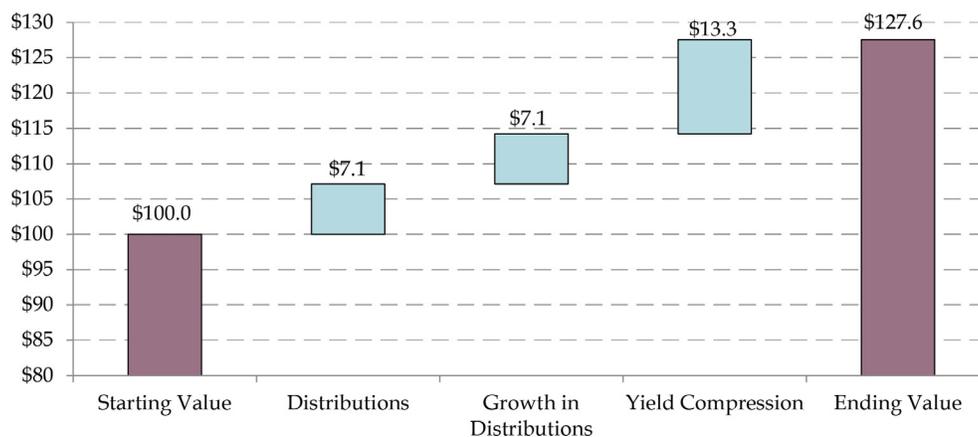
**Exhibit 9: MLP Sector Cash Flow Stability**

Source: Meketa Investment Group

Alerian MLP Index (%)	S&P 500 Index (%)	FTSE NAREIT Index (%)	Barclays Aggregate (%)	Barclays High Yield (%)
5.8	2.2	3.9	2.4	6.7

**Exhibit 10: Annualized Yields (as of April 30, 2014)**

Source: Thompson Reuters, Bloomberg, and Ibbotson.



**Exhibit 11: Decomposition of 2013 Total Returns (Alerian MLP Total Index)**

Source: Goldman Sachs.

	Alerian MLP Index	S&P 500	S&P North American Natural Resources	S&P 1500 Energy	Barclays Aggregate	Barclays High Yield	S&P GSCI Commodity	NAREIT Equity
2013	27.6	32.4	7.5	6.0	-2.0	7.5	-1.2	9.1
2012	4.8	16.0	2.2	4.3	4.2	15.8	0.1	20.1
2011	13.9	2.1	-7.3	3.9	7.9	5.0	-1.2	7.3
2010	35.9	15.1	23.9	21.4	6.6	15.1	9.0	27.6
2009	76.4	26.5	37.5	16.4	5.9	58.2	13.5	27.4
2008	-36.9	-37.0	-42.6	-35.8	5.2	-26.2	-46.5	-37.3
2007	12.7	5.5	34.4	34.5	7.0	1.9	32.7	-17.8
2006	26.1	15.8	16.8	22.1	4.3	11.9	-15.1	34.4
2005	6.3	4.9	36.6	33.7	2.4	2.7	25.6	8.3
2004	16.7	10.9	24.6	32.4	4.3	11.1	17.3	30.4
2003	44.5	28.7	34.4	25.0	4.1	29.0	20.7	38.5
2002	-3.4	-22.1	-13.0	-9.6	10.3	-1.4	32.1	5.2
2001	43.7	-11.9	-15.6	-11.2	8.4	5.3	-31.9	15.5
2000	45.7	-9.1	15.8	19.6	11.6	-5.9	49.7	25.9

**Exhibit 12: Total Return by Calendar Year**

Source: Thomson Reuters, Bloomberg, and Ibbotson

	Alerian MLP Index	S&P 500	S&P North American Natural Resources	S&P 1500 Energy	Barclays Aggregate	Barclays High Yield	S&P GSCI Commodity	NAREIT Equity
Annualized Return	19.3%	3.7%	9.2%	10.3%	5.7%	7.9%	4.2%	11.9%
Standard Deviation	16.1%	15.5%	22.6%	20.6%	3.5%	10.2%	23.3%	21.5%
Sharpe Ratio	1.19	0.10	0.42	0.47	1.15	0.62	0.23	0.60
Max Drawdown	-43.1%	-55.5%	-56.5%	-50.9%	-4.9%	-35.7%	-67.8%	-68.3%

**Exhibit 13: Risk and Return (January 2000 to April 2014)**

Source: Thomson Reuters and Meketa Investment Group

became smaller) thereby increasing return by 13.3%. Overall, the Alerian MLP index had a return of 27.6% in 2013 (See Exhibit 11).

Since 2000, the Alerian MLP index has lost money in only two calendar years, while outperforming the US equity market in eleven of those years (See Exhibit 12). Note, however, that in 2008 the Alerian MLP index had a valuation decline that was similar to the broad stock market while also experiencing net outflows.

MLPs have demonstrated volatility and drawdowns similar to equities and higher than fixed income assets (See Exhibit 13).

However, MLPs have delivered attractive overall returns. MLPs have also generated high risk-adjusted returns, as demonstrated by their high Sharpe ratio.

As Exhibit 14 illustrates, the Alerian MLP index has demonstrated a modestly positive correlation to U.S. equity indexes (0.40 to the S&P 500). This is a lower correlation than that between US equities and REITs (0.63), an asset class with similar tax-advantaged income characteristics. MLP's correlation to commodities was even lower than to equities (0.30 to the S&P GSCI index) reflecting the

	Alerian MLP Index	S&P 500	S&P North American Natural Resources	S&P 1500 Energy	Barclays Aggregate	Barclays High Yield	S&P GSCI Commodity	NAREIT Equity
Alerian Energy MLP	1.00							
S&P 500	0.40	1.00						
S&P NA Nat. Res.	0.46	0.70	1.00					
S&P 1500 Energy	0.48	0.70	0.96	1.00				
Barclays Aggregate	-0.01	-0.09	-0.03	-0.08	1.00			
Barclays High Yield	0.57	0.64	0.52	0.53	0.16	1.00		
S&P GSCI Commodity	0.30	0.30	0.65	0.73	-0.02	0.28	1.00	
NAREIT Equity	0.35	0.63	0.44	0.41	0.14	0.64	0.21	1.00

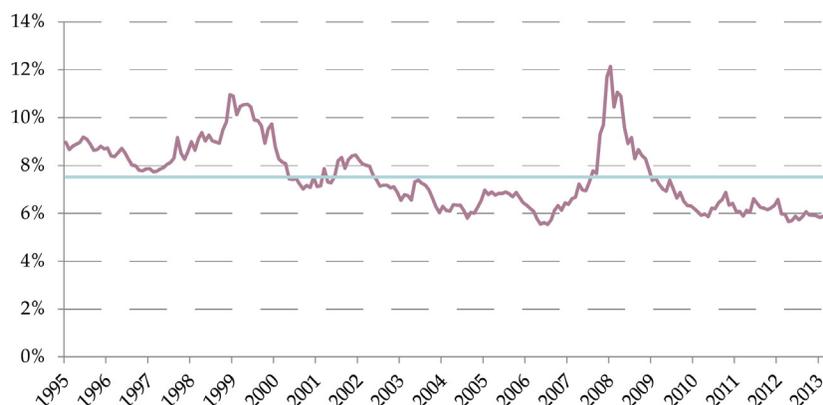
**Exhibit 14: Correlations (January 2000 to April 2014)**

Source: Thomson Reuters and Meketa Investment Group

Inflation Regime	Alerian MLP Index (%)	S&P 500 (%)	S&P North American Natural Resources (%)	S&P 1500 Energy (%)	DJ UBS Energy Spot Price (%)	S&P GSCI Commodity (%)	FTSE NAREIT (%)	CPI (%)
Top 10%	2.8	-0.5	27.3	25.4	41.7	31.9	-0.6	4.4
Top 25%	13.0	3.7	25.9	26.7	32.9	24.3	10.9	3.9
Bottom 25%	12.8	-1.4	-6.0	-2.7	-10.5	-18.1	2.3	0.8
Bottom 10%	-5.1	-17.9	-22.0	-20.9	-28.6	-37.1	-24.7	-0.1

**Exhibit 15: Average Annual Performance during Inflationary Periods (January 2000 to April 2014)**

Source: Thomson Reuters and Meketa Investment Group



**Exhibit 16: MLP Yields**

Source: Thomson Reuters and Meketa Investment Group

relatively low impact that commodity price changes have on MLP cash flows (particularly midstream MLPs).

Because MLPs invest in the natural resource sector, investors may consider them to be a good inflation hedge. Exhibit 15 displays the rolling 12-month performance during periods of high and low inflation. Unsurprisingly, commodity indices and energy spot prices display a very high link to the rate of inflation. Energy stocks and natural resource stock more broadly also display a very tight connection to inflation. MLPs, however, do not display the same relationship. The chart below shows average annualized performance of various assets during periods defined by rolling 12-month inflation as measured by CPI. In the case of MLPs, they provided only modest returns during periods of relatively high inflation and performed relatively well during relatively low inflationary periods. Note that this does not include data prior to 2000, so it is difficult to assess how MLPs might perform in a very

high inflation environment like the late 1970s. Still, perhaps due to the “tolling” nature of their revenues, they do not appear to be as good an inflation hedge as commodities and natural resource stocks.

### MLP Valuations

A primary consideration when investing in any asset class is its current valuations level. Perhaps the best measure for assessing valuations for the MLP market is the yield of the Alerian MLP index. Using yields may also allow for a relative comparison to other asset classes that likewise offer a yield component.

As Exhibit 16 shows, as of April 2014, MLP yields were at one of their lowest levels ever recorded over the history of the MLP marketplace. This implies that future returns for MLPs may well be lower than past returns. This should not be surprising, given how high past returns have been.



**Exhibit 17: MLP Spreads**

Source: Thomson Reuters and Meketa Investment Group.

Investors should also consider whether MLPs look attractive relative to the other opportunities that are available to them. Exhibit 17 shows the difference between MLP yields and the yield on the 10-year US Treasury (i.e., the yield spread). As of April 2014, the spread was slightly below its historical average.

**MLP Spreads**

As described previously, MLP returns are affected by their distributions, the growth of their distributions, and compression or expansion of MLP yields compared to other assets. MLPs generally have stable business models which provide a foundation for their distributions. Additionally, they have the ability to grow by building or acquiring assets. These factors, together with continued growth in the United States energy infrastructure network, support an outlook for continued distribution growth.

**Benchmarking**

The MLP sector has a number of indices that an investor could choose for measuring the performance of the sector or benchmarking their portfolio. The characteristics of the most prominent MLP indices are outlined in Exhibit 18.

The Alerian MLP index is the most widely followed benchmark. It is a float-adjusted, capitalization-weighted total return index of 50 of the largest energy MLPs. Of note is that all the indexes listed above, like other capitalization weighted indexes, are affected by the price movements of the index’s largest holdings; however, they are more concentrated than many traditional equity indices (e.g., in the case of the Alerian MLP index, the top 10 holdings account for approximately 60% of the index value).

Criteria	Alerian MLP Index	S&P MLP Index	Tortoise MLP Index	Wells Fargo MLP Index
# of Constituents	50	56	94	92
Weighting Method	Market-cap weighted	Market-cap weighted	Market-cap weighted	Market-cap weighted
Rebalance Frequency	Quarterly	Annually	Quarterly	Quarterly
Market Capitalization Threshold	> \$500 million	> \$300 million	> \$200 million	> \$200 million
Liquidity Threshold	6 month median daily trading volume > 25,000 units	3 month average value traded > \$2 million	None	None
Public Float Requirement	Investable Weight Factor >20%	None	None	None
Float Adjusted	Yes	Yes	Yes	Yes
Individual Security Weighting Cap	No	15%	10%	No
Minimum Share Price	> \$10 (preferred)	None	None	None
Exploration & Production Companies Included	Yes	Yes	Yes	Yes

**Exhibit 18: MLP Benchmarking**

Source: Meketa Investment Group

## MLP Market Outlook

A key growth driver for the MLP market is the substantial infrastructure requirements to gather, transport and process oil and gas liquids resulting from the growth in shale resource development in North America. Technologies such as horizontal drilling and hydraulic fracturing are making vast deposits economically feasible to extract. The resulting increase in supply of natural gas reserves has caused a dramatic decline in natural gas prices (from a peak of over \$10 in 2008 to a price closer to \$3 in late 2012, and since recovering to \$4.50 in 2014)<sup>5</sup> Low natural gas prices led many power companies to switch from coal to gas. For example, there have been announcements of significant numbers of coal-fired power capacity retirements in the Southeast and Midwest, with additional retirements expected in the Southwest.

In addition to increased domestic usage of natural gas, the Department of Energy has so far approved six applications for the export of natural gas with a total expected capacity of 9.3 billion cubic feet (“bcf”) per day. Furthermore, North American oil production has been increasing. Production from Canada (largely Alberta bitumen and oil sand) and U.S. shale (from basins such as the Marcellus, Bakken, Eagle Ford and Niobrara) have led to estimates that the U.S. could replace a large portion of the oil currently being imported and that it will become a net oil exporter by 2030.

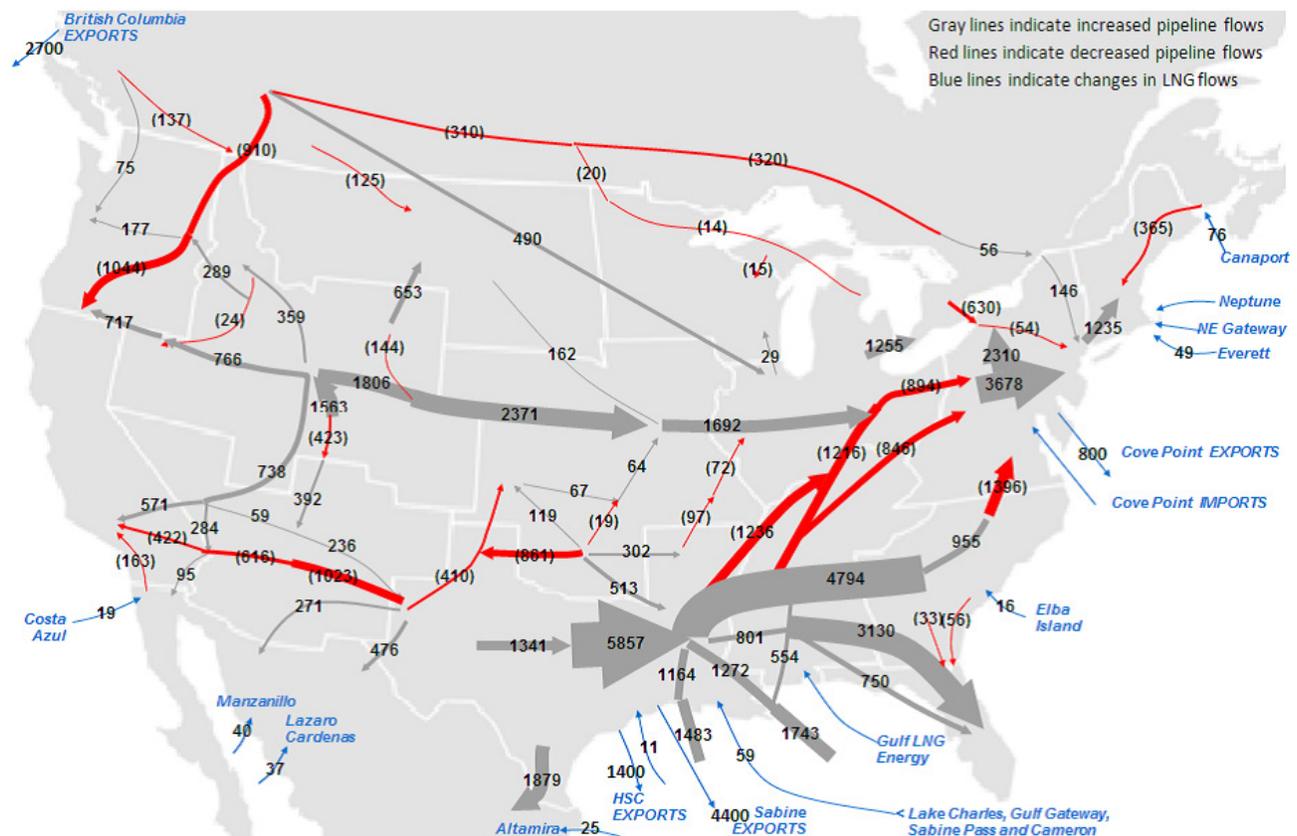
In many cases, this new exploration and production of oil and gas is in geographic areas that have not traditionally been significantly involved in energy production. This means that the necessary infrastructure for gathering and transporting these commodities

does not exist. As a result, industry participants estimate that over \$640 billion is needed to meet the midstream equipment and infrastructure requirements through 2035.<sup>6</sup> As shown in Exhibit 19 the dramatic increase in North American natural gas production is expected to lead to substantial changes in how it is moved within North America.

One implication of the rapid development of energy infrastructure is the risk that certain assets could become obsolete. For instance, infrastructure serving “liquids-rich” basins is favored over operations in “drier” basins. Industry, macroeconomic, production cost, and political changes could impact the economic viability of extracting resources from certain basins. As such, the related pipeline infrastructure could be detrimentally affected by such changes.

## Ways to Invest in MLPs

Institutional investors have used a variety of methods to invest in MLPs. Beyond building a portfolio of MLPs directly, there are asset managers who can build customized portfolios through managed accounts, and a number of publicly traded closed-end funds, ETFs and ETNs. While publicly-listed, pooled investment vehicles provide diversification, liquidity, and simplified tax reporting for the investor, they lose the tax efficiency associated with the direct ownership of MLPs. Also, while most open-end funds (e.g., mutual funds) are structured as tax passthrough vehicles, they are limited to no more than 25% of their assets in MLPs (or other tax-pass through investments) otherwise they would lose their tax passthrough characteristics.



**Exhibit 19: Natural Gas Flow Change from 2014 to 2035 (MMcfd)**

Source: 2014 INGAA Foundation report: North American Midstream Infrastructure through 2035.

	Description	Benefits	Issues
Direct Investing	Investor builds and manages MLP portfolio internally (i.e., actively managed).	Full control of asset selection and portfolio management. All distributions and income pass through to investor.	Administrative burden related to taxes and record keeping. Lower liquidity (have to sell investments separately). Fees: None (internally managed).
Separate Managed Account (SMA)	Investment manager builds and manages MLP portfolio (i.e., actively managed).	Professional oversight of portfolio. Manager may be able to assist with administrative issues. All distributions and income pass through to investor.	Administrative burden related to taxes and record keeping. Lower liquidity (have to sell investments separately). Fees: Negotiated. May include performance fee.
Closed End Fund	Publicly listed vehicle with a fixed number of shares. Investment focus is MLPs and is often actively managed.	Improved liquidity (can sell entire vehicle). No K-1s, only a single Form 1099. No UBTI.	Can trade at a premium or discount to NAV. Vehicle treated as a corporation for tax purposes and pays taxes on gains and income before passing on to investor, thereby reducing distributions. Can have significant index tracking error due to reserves for future taxes based on portfolio gains. Structure can include leverage. Fees: 0.75% to 1.25%
Exchange Traded Fund (ETF)	Publicly listed vehicle that holds a portfolio of MLPs. Portfolio typically tied to an index (i.e., passively managed).	Improved liquidity (can sell entire vehicle). No K-1s, only a single Form 1099. No UBTI.	Vehicle treated as a corporation for tax purposes and pays taxes on gains and income before passing on to investor, thereby reducing distributions. Can have significant index tracking error due to reserves for future taxes based on portfolio gains. Fees: 0.75% to 1.25%
Exchange Traded Note (ETN)	Debt instrument with return linked to an MLP index (i.e., passively managed).	Improved liquidity (can sell entire vehicle). No K-1s, only a single Form 1099. No UBTI.	Counterparty credit risk. Fees: 0.80% to 1%

**Exhibit 20: Access to MLPs**

Source: Meketa Investment Group

As noted in Exhibit 20, closed end funds and ETFs can suffer from potentially significant tracking error issues due to their requirements to reserve for capital gains taxes. As such, these are not likely to be a good alternative for tax-exempt investors. Additionally, those investors seeking to build a portfolio of individual MLPs should recognize that certain securities may have limited float or daily liquidity. Potential investors should research the particular characteristics of individual MLPs (e.g., what basins it has exposure to, the average length of contracts) to understand the underlying risk differences among MLPs. Investors making larger investments may need to carefully plan their trades to avoid disrupting the market price for a particular MLP.

**Tax Implications of MLP Investments**

The MLP structure is considered tax efficient in that the MLP itself does not pay taxes and therefore its distributions are not subject to “double taxation” (i.e., unlike companies, which pay corporate tax,

then investors pay taxes on dividends). Unlike a corporation, an MLP is considered to be the aggregate of its partners rather than a separate entity. MLPs pay no corporate-level taxes. Instead, the MLP passes income and losses to the unit holders themselves who are ultimately responsible for paying taxes.

Because MLPs are partnerships, unit holders receive IRS K-1 statements issued by the individual MLPs. Each K-1 will indicate the unitholder’s share of net income, gain, loss, and deductions. Additionally, the unit holder will receive information on the MLP’s activity in each state in which it conducts business and the unitholder may be required to file taxes in each of those states. To the extent an investor has direct ownership of multiple MLPs, the administrative burden would increase.

Tax-exempt investors have additional tax issues when considering an investment in MLPs. Under current tax law, tax-exempt organizations are exempt from U.S. federal income tax on passive

investment income. However, given the MLP's tax pass-through structure, an MLP is likely to generate UBTI (Unrelated Business Taxable Income).

While certain state and municipal-related investors maintain they are not subject to UBTI, a tax-exempt organization is required to file with the IRS. Investors should evaluate the tax implications and related administrative complexity of MLP investments when considering this asset class.

Investors should note that there have been discussions in Congress to change tax rules for pass-through investments such as MLPs and REITs, as part of a broader revenue-raising effort. Such a change would likely have a significant impact on the attractiveness of MLPs to taxable investors and the MLP market as a whole. For example, the 2011 changes to the tax treatment of Canadian royalty trusts (which had a similar tax favored structure) led to a significant deterioration in their value. While the likelihood of a change to MLP tax treatment seems small, investors should monitor developments.

### **Risks and Considerations**

As with any investment, there are unique risks related to investing in MLPs. Some of these risks are due to the legal structure of MLPs and some are borne of the market in which they operate.

#### ***Return volatility***

MLPs, particularly in times of market stress, can demonstrate equity-like volatility and drawdowns. The majority of MLPs continue to be held by retail investors who may react to negative news by selling their positions.

#### ***Changes to distributions***

Collectively, MLPs have historically increased their distributions in aggregate. However, individual MLPs can change and, in some cases, decrease their distributions for strategic, competitive, or other business reasons.

#### ***Market illiquidity***

The MLP marketplace remains small compared to domestic equities and bonds. Investors with larger portfolios may experience difficulty in efficiently building or reducing their positions, due to limited trading volumes.

#### ***Limited diversification***

Much of the market's investable value is represented by a limited number of MLPs. Specifically, approximately 60% of the Alerian MLP Index value is represented by the index's ten largest MLPs.<sup>8</sup>

#### ***Changes in interest rates***

A key attraction of MLPs has been their comparatively high yields. An overall rise in interest rates could diminish MLPs' appeal if they are not able to generate a commensurate growth in distributions.

#### ***Energy market***

Growth in MLPs is expected to be driven in large measure by continued growth in domestic oil- and gas-related activity. A decrease in exploration and production activity, whether

due to an economic slowdown, regulatory changes, safety issues, substitution, or other factors, could reduce the cash flows available to MLPs.

#### ***Access to capital***

MLPs typically distribute a very high percentage of their free cash flow and as such need to regularly access the capital markets for debt and equity to finance their growth. Equity capital raises could be dilutive to existing unit holders.

#### ***GP/LP structure***

Through their IDRs, GPs obtain an increasing share of incremental distributable cash flow. This may serve as an incentive for GPs to rapidly grow distributable cash flow in what could be an unsustainable manner.

#### ***Tax and administrative complexity***

As tax pass-through vehicles, MLP unit holders are responsible for calculating and paying taxes due. In addition to Federal taxes, the vast majority of MLPs operate in multiple states potentially requiring the unit holder to review state-level tax obligations as well. Tax exempt investors may be subject to Unrelated Business Income Tax related to their holdings of MLP units.

#### ***Regulatory and tax changes***

In 2012, Congress and the IRS considered changes to the tax regulations for passthrough investments, such as MLPs, as a potential way to raise tax revenue as part of the overall budget balancing discussions. While this avenue was not pursued, Congress may reexamine the tax pass-through features of MLPs at a future date.

### **Summary**

U.S. energy infrastructure building is likely to continue for several years. MLPs provide a way to access this growth and therefore the MLP market is likely to continue its development. Many MLPs generate attractive cash distributions from steady, long-term contracts with potential for price appreciation due to growth. However, individual MLPs may experience business changes or competitive threats that could cause them to reduce dividend payments. Also, as publicly traded instruments, MLPs are subject to equity market risks, including participating in broad market downturns, such as in 2008, despite maintaining dividend payouts. Additionally, MLPs historically have not provided a significant hedge against inflation. Finally, the tax pass-through structure of MLPs could lead to tax filing complexity that should be considered before making an investment.

Overall, MLPs represent one of several ways to gain exposure to the secular growth in the U.S. energy market. Investors may also want to consider equity or debt of companies with exposure to this growth trend. Additionally, certain private equity and infrastructure managers participate in U.S. energy infrastructure development and could be considered by those investors with allocations to private market investments. We believe it is appropriate for certain investors to consider an allocation to MLPs within a broader energy investment portfolio.

## Appendix 1

### Glossary of MLP Terms

**Qualifying Income** – As defined by section 7704 of the Internal Revenue Code: “A partnership meets the gross income requirements... for any taxable year if 90 percent or more of the gross income of such partnership for such taxable year consists of qualifying income.”

“The term ‘qualifying income’ means - (A) interest, (B) dividends, (C) real property rents, (D) gain from the sale or other disposition of real property..., (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), (F) any gain from the sale or disposition of a capital asset... held for the production of income... and (G)... income and gains from commodities... or futures, forwards, and options with respect to commodities.”

“The term ‘mineral or natural resource’ means any product of a character with respect to which a deduction for depletion is allowable.”

**Distributable Cash Flow** – DCF is an indicator of an MLP’s ability to generate cash flow that can be used to sustain quarterly distributions to the unit holders. While not a GAAP measure, DCF can be calculated as Net Income adjusted for depreciation, amortization, and other non-cash items and after maintenance capital expenditures. An MLP’s specific measure of DCF will be defined in their partnership agreement.

**Incentive Distribution Rights** – IDRs are typically set out in the MLP agreement and provide the General Partner with a larger percentage of the MLP’s incremental cash flow distributions. These rights are designed to motivate the General Partner to grow distributions to Limited Partners.

**Unit Holder** – The holder of an ownership unit in a publicly traded limited partnership. The unit provides the holder with a stake in the MLP’s income and distributable cash flow.

**K-1 Statements** – A K-1 statement is an IRS form that is used to report the beneficiary’s share of partnership’s income, deductions, and credits.

## Appendix 2

### Glossary of Natural Resource Terms

**Exploration and production (E&P)** - Involves extracting the commodity (e.g., crude oil or natural gas) from the ground.

**Fractionation** - Fractionation is the process of separating a mixed NGL stream into its components.

**Gathering** - Encompasses smaller capillary-like pipes 4-to-6 inches in diameter and provides short-haul takeaway capacity from the wellhead, drawing oil or gas into the larger long-haul pipelines or for processing.

**Hydrocarbons** - Refers to a set of compounds extracted in either liquid (petroleum) or gaseous form (natural gas) and used in the energy, transportation, and petrochemical industries.

**Midstream** – Oil and gas pipelines and related infrastructure that handle, process, and transport oil, gas, and refined products from the point of production to a point of distribution.

**Natural Gas Liquids (NGLs)** – Many natural gas resources will include a set of gas liquids such as ethane, propane, butane, and natural gasoline known as NGLs. A “liquids rich” natural gas resource tends to have a higher percentage of NGLs. The primary uses for NGLs include: production

of plastics, insulation, lubricants, detergents, heating and refrigeration, petrochemical feedstock, gasoline blending and propellant.

**Oil Sands** – Oil Sands contain a mixture of sand, clay, water and a viscous form of petroleum referred to as bitumen. Bitumen is a thick, sticky form of hydrocarbon that will not flow unless it is heated or diluted with lighter hydrocarbons.

**Pipelines** – Pipelines are used to transport of various types of products across the country including natural gas, refined products, crude oil, and NGLs. These assets tend to have stable cash flows through fixed-fee contracts.

**Processing** – Involves purging impurities in order to meet specific pipeline specifications for transportation. Processing includes dehydration, treating and the extraction of the gas, natural gas liquids (“NGLs”) or oil from the resources stream.

**Shale** – A fine-grained, sedimentary rock composed of mud flakes from clay minerals and small fragments of other materials. The shale acts as both the source and the reservoir for the hydrocarbon.

**Storage** - Resources may be put in storage to ensure reliable supply when necessary as well as to take advantage of more favorable pricing. Companies store refined products and crude oil in above-ground facilities while underground facilities typically house natural gas within depleted reservoirs, aquifers, or salt cavern formations.

**Terminals** – Terminals serve to receive and distribute oil and gas products via vessels or pipelines. Terminals generate revenue from storage and handling activities, as well as from services such as blending and additive injection.

## Appendix 3

### Contract Structures

**Ship-or-pay contracts** – Pipeline companies lock in revenue for the long term, virtually eliminating price and volumetric risks.

**Throughput based contracts** – Involves locking in a fixed fee per unit of product. This exposes the business to changes in volume which is indirectly linked to the price of the commodity.

**Storage contracts** – Shippers typically pay a rental fee for usage of the storage so that they can manage varying levels of demand in different seasons. Owners of storage typically charge rates based on the difference between peak and off-peak commodity prices and therefore benefit when the futures price curve is positive.

**Commodity linked contracts** – These contracts require the owner of the asset to take some level of commodity price risk through either a share of proceeds, share of the product, or a margin off the commodity price. These contracts are more typical in processing, fractionation, and production businesses.

### Endnotes

1. Source: Internal Revenue Code Section 7704.
2. Examples include Niska Gas Storage L.P., Genesis Energy L.P., and PVR Partners, L.P.
3. Source: Section 7704 of the Internal Revenue Code.
4. Recent dividend cuts include Boardwalk Pipeline Partners (-80%), Eagle Rock Energy Partners (-30%), and Natural Resource Partners (-36%).
5. Source: Goldman Sachs. Figures are capital market weighted and based on the 97 MLPs in the Goldman Sachs research coverage.
6. Source: U.S. Department of Energy, U.S. Energy Information Administration.

7. Source: 2014 INGAA Foundation report: North American Midstream Infrastructure through 2035.
8. Source: Alerian as of March 31, 2014.
9. Pertaining to Closed-End Fund Entry in Appendix 4 - this excludes those vehicles that own less than 100% MLPs.
10. Pertaining to AUM in Appendix 4: As of March 28, 2013.

	Direct Investment	Managed SMA	Closed-End Fund	Exchange Traded Fund	Exchange Traded Note
<b>Tax Classification</b>	Partnership	Partnership	Taxable "C" Corp	Taxable "C" Corp	Structured Note
<b>Investment Management</b>	Active	Active	Active or Passive	Passive	Passive
<b>Tax Form</b>	Form K-1	Form K-1	Form 1099	Form 1099	Form 1099
<b>UBTI</b>	Yes	Yes	No	No	No
<b>Leverage</b>	No	No	Varies	No	Varies
<b>Number of Funds</b>	N/A	N/A	18	5	11
<b>AUM (\$Bn)</b>	N/A	N/A	\$15.2Bn	\$6.0Bn	\$7.3Bn

#### Appendix 4: Comparison of Investment Structures

Source: Alerian, Meketa Investment Group

#### Authors' Bios



**Frank Benham, CFA, CAIA**  
**Managing Principal**  
**Director of Research**  
**Meketa Investment Group**

Mr. Benham joined Meketa Investment Group in 1999. As Director of Research, Mr. Benham oversees all research projects, including white papers and the firm's annual asset study.

Mr. Benham leads the design of the firm's portfolio construction initiatives and he is key in constructing customized investment programs. Mr. Benham is a member of the firm's Investment Policy Committee, Private Markets Investment Committee, Infrastructure Investment Committee, and Natural Resources Investment Committee.

Mr. Benham received an undergraduate degree in Finance from Bentley College. He holds the Chartered Financial Analyst designation, and he is a member of the CFA Institute and the Boston Security Analysts Society. Mr. Benham also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association\*. Prior to joining Meketa Investment Group, Mr. Benham was employed at State Street Bank, performing operations analysis and developing process improvements.

Mr. Benham has served as a frequent speaker at industry events, including: the International Foundation of Employee Benefit

Plans Annual Conference, the NCPERS Annual Conference, the Investment Forum for Endowments, Foundations and Pension Funds, the Endowment and Foundation Forum, the Made in America Conference, the Institutional Investor Public Funds Roundtable, the Boston Security Analysts Society Asset Allocation Seminar, the Institutional Investor Global Real Assets Forum, the Institutional Investor Infrastructure Investment Forum, the SuperReturn Latin America conference, the Institutional Real Estate VIP conference, and the Investing in Infrastructure Assets Europe and Americas conferences.



**Christopher P. Tehranian**  
**Principal**  
**Head of Infrastructure Research**  
**Meketa Investment Group**

Mr. Tehranian joined Meketa Investment Group in 2007. A Principal of the firm, Mr. Tehranian works in the Private Markets Group specializing in infrastructure investments.

He focuses on performing due diligence of infrastructure opportunities, maintaining and establishing new relationships, and reporting. In addition, he assists clients with the development of investment policies, strategic planning, and program implementation. Mr. Tehranian sits on a variety of fund advisory boards, and speaks at numerous industry events.

Prior to joining the firm, he worked in capital budgeting, allocation, and financial management for the Gulf Power Company, a subsidiary of the Southern Company. Mr. Tehranian was previously employed as a portfolio analyst at Franklin Templeton Investments, and as an investment analyst at Segal Advisors.

He received a Master of Science in Finance from Boston College and a BS in Finance and International Economics from the University of Florida.



**Edmund A. Walsh**  
**Vice President**  
**Meketa Investment Group**

Mr. Walsh joined Meketa Investment Group in 2011 and has been in the investment industry for two years. A Research Analyst for the firm, Mr. Walsh's work includes asset allocation, risk management, and macro-economic research.

Mr. Walsh earned an MA in International Economics and Finance from Brandeis University's International Business School and a bachelor's degree in Political Science from The Ohio State University. He is pursuing a CFA designation and is an active

member in several professional societies, including the Quantitative Work Alliance for Applied Finance, Education, and Wisdom and the Boston Security Analyst Society.

Prior to joining Meketa Investment Group, Mr. Walsh was a research intern with State Street Associates in the Asset Allocation and Risk Management Group. Prior to that, he focused on similar research within an investment firm that he helped co-found. Before returning to graduate school, Mr. Walsh worked with the United Way of Central Ohio in a public policy research role.



**Steven Hartt, CAIA**  
**Principal**  
**Meketa Investment Group**

Mr. Hartt joined Meketa Investment Group in 2010 and has been in the financial services industry for twenty-six years. A Principal of the firm, Mr. Hartt works in the Private Markets Group where he focuses on client service and marketing, as well as performing due diligence on private markets managers. Additionally, Mr. Hartt leads our private equity co-investment and secondary transaction research.

Prior to joining the firm, Mr. Hartt was a Senior Vice President at Amalgamated Bank where he was in charge of alternative investments. While at Amalgamated Bank, Mr. Hartt managed the discretionary portfolios of private equity, debt, and infrastructure funds, in addition to the development, marketing and management of a private equity fund of funds. Prior to this, he spent eleven years at Citigroup in financial advisory, marketing and investment positions. He was also a senior member of Citigroup Alternative Investments where he was responsible for originating, evaluating, and managing private equity fund and direct investments. Mr. Hartt was also a summer associate at Dean Witter Reynolds and an assistant trader at Morgan Guaranty Bank.

Mr. Hartt received a Masters of Business Administration from Columbia Business School, and a Bachelor of Science degree, cum laude, from the University of Colorado, Boulder. Mr. Hartt holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association®.