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### MLP Primer Fifth Edition

A Guide To Everything MLP

Master Limited Partnerships



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**Primer Fifth Edition - A Framework For Investment.** This report is an update to our previous MLP Primer (fourth edition), published in November 2010. The purpose of this reference guide is to familiarize investors with the Master Limited Partnership (MLP) investment. In this fifth edition, we have included some new information based on questions and feedback we have received from investors over the past few years. In addition, we have added and updated sections detailing topical issues and developments related to the MLP sector.

**Please see page 190 for rating definitions, important disclosures and required analyst certifications**  
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## Introduction -- A Framework For Investment

This report is an update to our previous MLP Primer (fourth edition), published in November 2010. The purpose of this reference guide is to familiarize investors with the Master Limited Partnership (MLP) investment. In this fifth edition, we have included some new information based on questions and feedback we have received from investors over the past few years. In addition, we have added and updated sections detailing topical issues and developments related to the MLP sector. As always, feel free to contact us with any questions or feedback.

### Why Own MLPs?

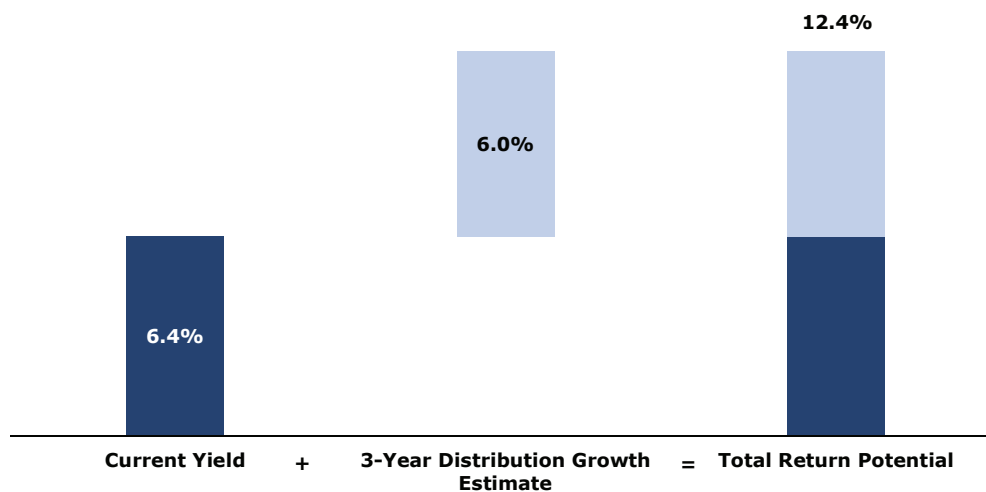
Since the publication of our last primer, the total market capitalization of energy MLPs has increased to more than \$445 billion from \$220 billion in November 2010 and the number of publicly traded energy MLPs has increased to 107 from 72 (excluding EEQ and KMR). Although the size of the asset class, in terms of market capitalization, has approximately doubled over the past three years, we believe energy MLPs are still relatively under-owned in comparison to other asset classes. There are several reasons investors should consider owning MLPs as part of an overall investment portfolio, in our view. These include the following:

- A Compelling Total Return Value Proposition, In Our View
- Strong Performance Track Record
- Tax Advantages
- A Potentially Attractive Yield
- A Potentially Effective Hedge Against Inflation
- Portfolio Diversification
- A Lower Risk (Beta) Way To Invest In Energy
- Estate Planning Tool
- Demographics

### A Compelling Total Return Value Proposition, In Our View

We believe MLPs are well positioned to generate a low- to mid-double-digit total return over time, consisting of a tax-advantaged yield plus modest distribution growth. We view MLP yields as secure and near-term distribution growth as highly visible. Our growth forecast is underpinned by a relatively healthy fundamental environment, supported by the continued need for additional energy infrastructure investment to support shale development, particularly for crude oil and natural gas liquids (NGL).

#### Exhibit 1. MLP Value Proposition



As of October 22, 2013

Note: Current yield and distribution growth estimates reflect the median for our coverage universe only

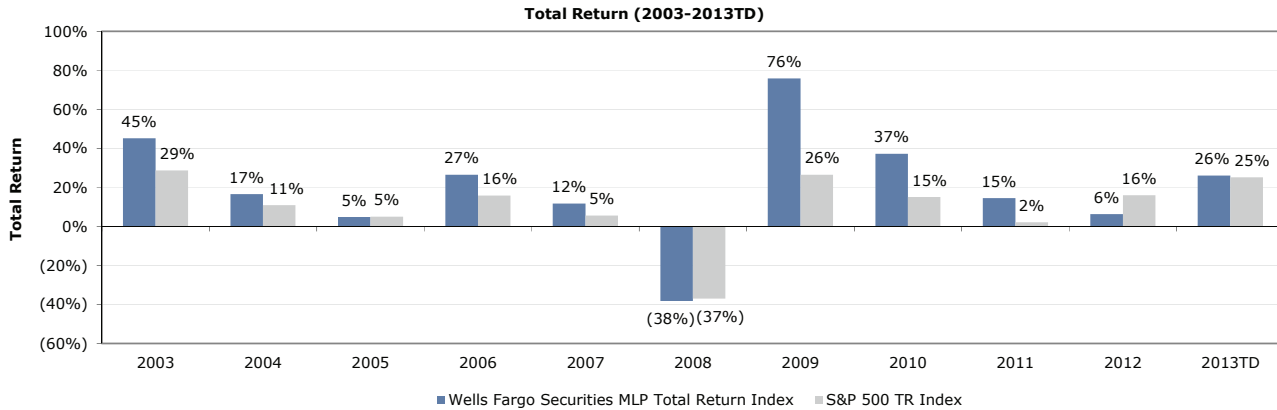
Source: Wells Fargo Securities, LLC

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**Strong Performance Track Record**

From 2003 to 2012, the Wells Fargo Securities MLP Index outperformed the S&P 500 Index in seven out of ten years (on a total return basis). During this time frame, MLPs delivered an annual total return of 16.4%, with lower risk (beta of 0.59 over this time frame), versus 7.1% for the S&P 500.

**Exhibit 2. MLP Total Returns Versus S&P 500 TR Index**



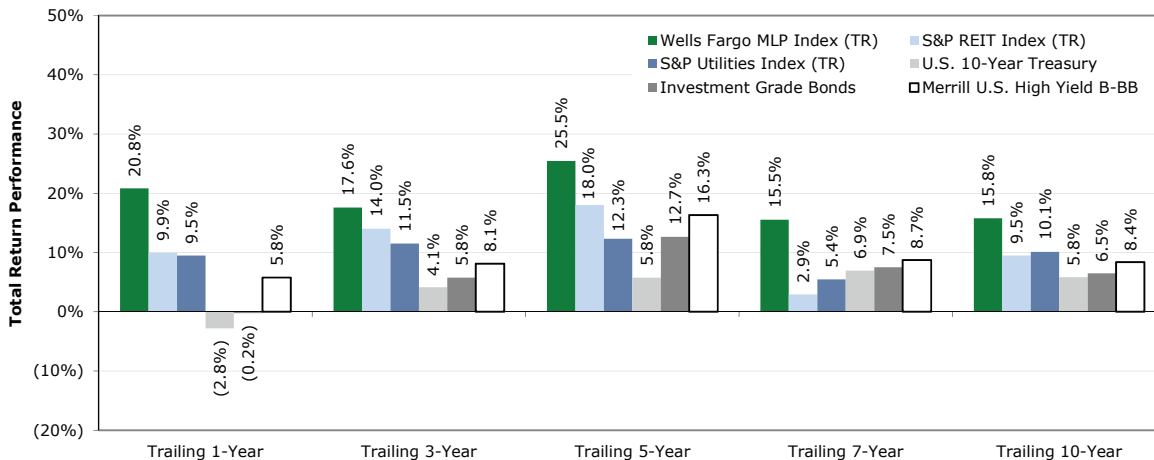
Index	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013TD
Wells Fargo MLP Index (TR)	45.2%	16.5%	4.8%	26.6%	11.7%	(38.2%)	75.9%	37.3%	14.5%	6.3%	26.0%
S&P 500 Index (TR)	28.7%	10.9%	4.9%	15.8%	5.5%	(37.0%)	26.5%	15.1%	2.1%	16.0%	25.1%
S&P 500 REIT Index (TR)	28.8%	29.2%	12.5%	41.6%	(17.1%)	(41.2%)	25.0%	31.7%	12.6%	19.5%	7.3%
S&P 500 Utilities Index (TR)	26.3%	24.3%	16.8%	21.0%	19.4%	(29.0%)	11.9%	5.5%	20.0%	1.3%	14.6%

As of October 22, 2013

Source: FactSet, Standard & Poor's, and Wells Fargo Securities, LLC

Though past performance does not guarantee future results, over the past ten years, MLPs have also outperformed other yield-oriented securities, including real estate investment trusts (REIT) and utilities, high yield and investment grade bonds, and the U.S. 10-Year Treasury. For the trailing three-, five-, seven-, and nine-year periods, MLPs generated annual total returns of 17.6%, 25.5%, 15.5%, and 15.8%, respectively. These returns have exceeded investment grade bond returns (as measured by the Merrill U.S. Investment Grade BBB Total Return Index) of 5.8%, 12.7%, 7.5%, and 6.5%, and high yield bond returns of 8.1%, 16.3%, 8.7%, and 8.4%, respectively, over these same periods. To note, for the trailing three-, five-, seven-, and nine-year periods, REITs generated annual returns of 14.0%, 18.0%, 2.9%, and 9.5%, respectively, while utilities' annual returns were 11.5%, 12.3%, 5.4%, and 10.1%.

**Exhibit 3. MLP Total Return Performance Versus Other Indices**



As of October 22, 2013

Source: FactSet, Standard & Poor's, and Wells Fargo Securities, LLC

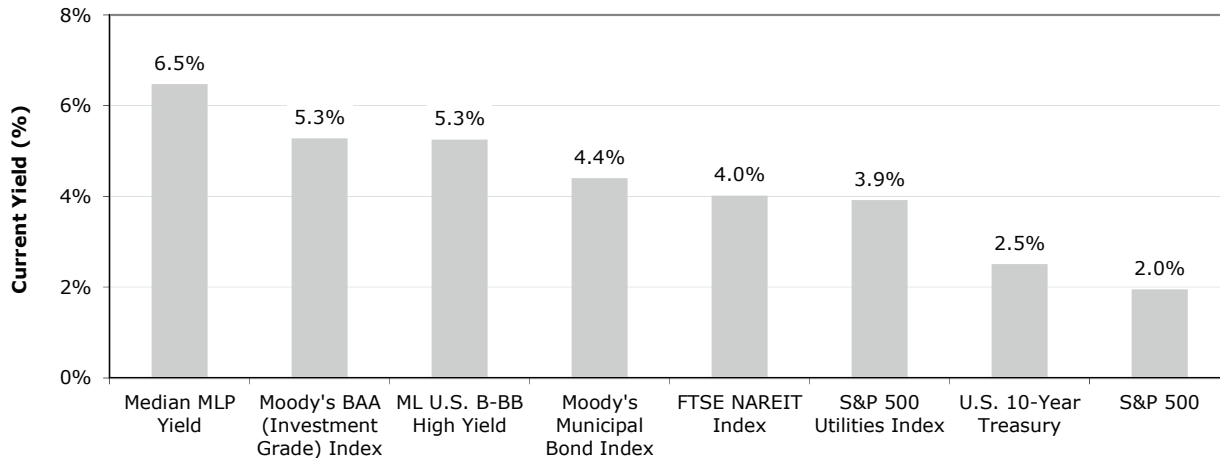
## Tax Advantages

MLPs offer investors a tax-efficient means to invest in the energy sector. An investor typically receives a tax shield equivalent to (in most cases) 80% of cash distributions received in a given year. The tax-deferred income is not taxable until the unitholder sells the security. (Please see *The Mechanics Of A Purchase And Sale Of MLP Units And The Tax Consequences* for more details.)

## Potentially Attractive Yield

Given the uncertain global economic outlook and relatively low interest rate environment, MLPs have been attracting incremental capital as investors focus on income-oriented securities. The median MLP yield is currently 6.5%, which compares favorably to other income-oriented investments on a risk-adjusted basis, in our view.

### Exhibit 4. MLP Yield Versus Other Yield Investments



As of October 22, 2013

Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC

## MLPs Can Be An Effective Hedge Against Inflation

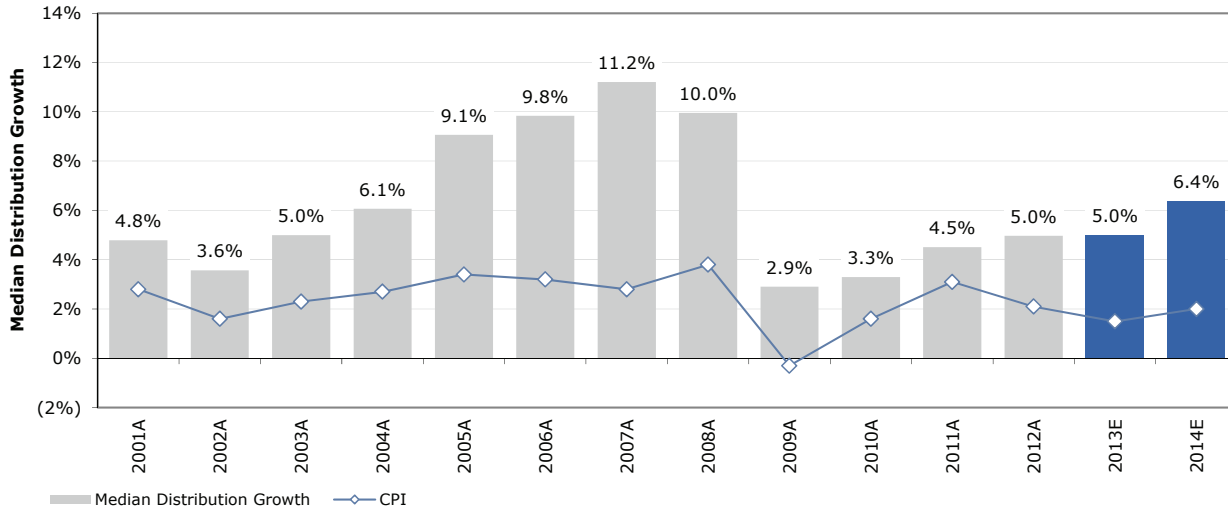
MLPs' current and growing income stream can provide an effective hedge against inflation for the following reasons:

- **Inflation adjusters.** Many pipeline MLPs have contracts that adjust for inflation annually (Producer Price Index (PPI) + 2.65%, for example);
- **Higher commodity prices.** Inflation would likely cause commodity prices to increase, which would increase revenue and margin for commodity-sensitive MLPs (principally gathering and processing and upstream);
- **Distribution growth.** Distribution growth has largely outpaced increases in the Consumer Price Index (CPI);
- **Low price correlation with inflation and interest rates.** MLP price performance is not as sensitive to interest rate movements and/or inflation as commonly perceived. While sudden spikes in interest rates have caused declines in MLP price performance, there has been only a negative 0.15 correlation between MLP price performance and the 10-year Treasury over the past five years.

Current MLP yields range from approximately 3% to 21%, excluding general partners (GP). Further, MLPs increased distributions at a historical three-year compound annual growth rate (CAGR) from 2010 through 2012 of 4.3%. In contrast, inflation as measured by the CPI, averaged 2.3% over the same period. We estimate a three-year distribution CAGR of 6.0% for MLPs in our coverage universe.

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Exhibit 5. MLP Distribution Growth Versus The CPI



Source: Partnership reports, U.S. Bureau of Labor Statistics and Wells Fargo Securities, LLC estimates

Portfolio Diversification

Historically, MLPs have exhibited low correlation to most asset classes and thus, provide good portfolio diversification, in our view. We note, however, that the correlation to crude oil prices has increased in the past few years, primarily due to the increase in the number of commodity-sensitive MLPs formed. The correlation with crude oil prices was 0.43 in 2012, up from 0.26 in 2007.

Exhibit 6. Wells Fargo Securities MLP Index Correlation With Other Asset Classes

	S&P 500	Natural Gas	Crude Oil	Utilities	REITs	Interest Rates (10-Yr Treasury) <sup>1</sup>	BLP HY US Corp Bond Index	HY Spread To US10Yr	IG Spread To US10Yr
2003	0.34	0.07	0.16	0.35	0.33	(0.61)	0.81	(0.26)	(0.17)
2004	0.32	0.17	0.32	0.39	0.37	(0.36)	0.78	(0.34)	0.23
2005	0.42	0.21	0.36	0.59	0.41	(0.51)	0.63	(0.54)	(0.67)
2006	0.42	0.12	0.36	0.42	0.34	(0.31)	0.65	(0.33)	0.20
2007	0.43	0.02	0.26	0.36	0.35	0.30	0.46	(0.15)	(0.33)
2008	0.70	0.22	0.49	0.64	0.45	0.11	0.88	(0.54)	(0.72)
2009	0.73	0.22	0.41	0.58	0.51	(0.66)	0.87	(0.81)	(0.73)
2010	0.66	0.15	0.55	0.60	0.57	(0.27)	0.82	(0.65)	(0.52)
2011	0.68	0.17	0.44	0.55	0.66	0.09	0.64	(0.61)	(0.53)
2012	0.60	(0.03)	0.43	0.39	0.52	(0.02)	0.80	(0.32)	(0.30)
<b>2013TD</b>	<b>0.62</b>	<b>0.00</b>	<b>0.32</b>	<b>0.49</b>	<b>0.56</b>	<b>(0.16)</b>	<b>0.55</b>	<b>(0.70)</b>	<b>(0.22)</b>
Last 3 years	0.64	0.06	0.41	0.49	0.60	(0.04)	0.71	(0.50)	(0.42)
Last 5 years	0.69	0.15	0.48	0.53	0.57	(0.15)	0.83	(0.66)	(0.71)
Last 10 years	0.65	0.14	0.41	0.56	0.47	(0.16)	0.79	(0.60)	(0.62)

Note<sup>1</sup>: Correlation is based on the average of monthly price changes and includes a 1-month lag for the 10-year U.S. Treasury

Note: Correlation data for fixed income products is based on the average of monthly price changes. All other correlations are based on daily percent changes.

As of October 22, 2013

Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC

### A Lower Risk (Beta) Way To Invest In Energy

MLPs offer investors an alternative way to invest in energy with lower risk as measured by beta. In 2012, energy MLPs had a median beta of 0.59 versus 1.21 for the S&P 500 Energy Index. MLPs had a median beta of 0.69 over the past five years (2008-2012). Traditional energy companies such as those involved in exploration and production and oilfield services have exhibited comparably more volatility, with an average beta of 1.36 and 1.47, respectively, over the past five years. During this time frame, the beta for the S&P 500 Oil & Gas Exploration & Production Index ranged from 1.31 to 1.46 each year, while the beta for the S&P 500 Oil & Gas Equipment & Services Index ranged from 1.33 to 1.54. The beta for the S&P 500 Utilities Index was between 0.40 and 0.79. This compares to a range of 0.59 to 0.74 for MLPs.

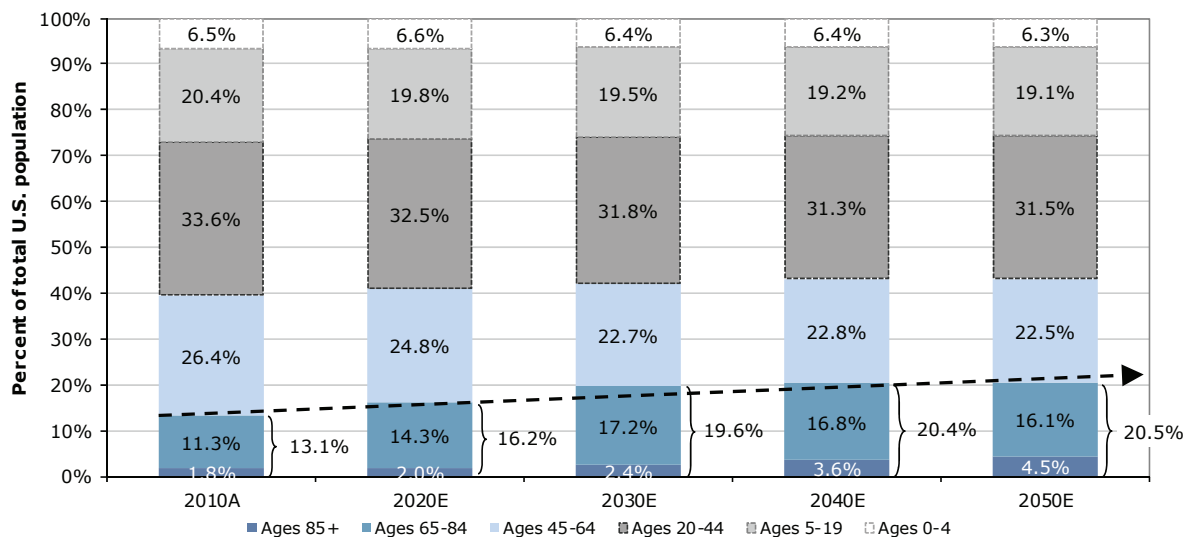
### Estate Planning Tool

MLPs can be utilized as a tax-efficient means of transferring wealth. When an individual who owns an MLP dies, the individual’s MLP investments can be transferred to an heir. When doing so, the cost basis of the MLP is reset to the price of the unit on the date of transfer. Thus, the tax liability created by the reduction of the original unitholder’s cost basis is eliminated.

### Demographics

Demographic trends should drive demand for income-oriented investments, in our view. Retiring Baby Boomers are likely to seek current income in a tax-efficient structure, which could drive demand for MLPs. According to the latest available data published by the U.S. Census Bureau, the age profile of the U.S. population for those more than 65 years of age is expected to account for approximately 19.6% of the total U.S. population by 2030, versus 13.1% in 2010. The U.S. Census Bureau projects the U.S. population to reach more than 420 million by 2050, of which more than 86 million (or 20.5%) will be 65 years of age or older. In 2010, the total U.S. population was 309 million, and 40 million people (or 13.1%) were 65 years of age or older. Based on this time frame and data, this represents an increase of approximately 114% in people 65 or older.

Exhibit 7. U.S. Population Age Profile Projection

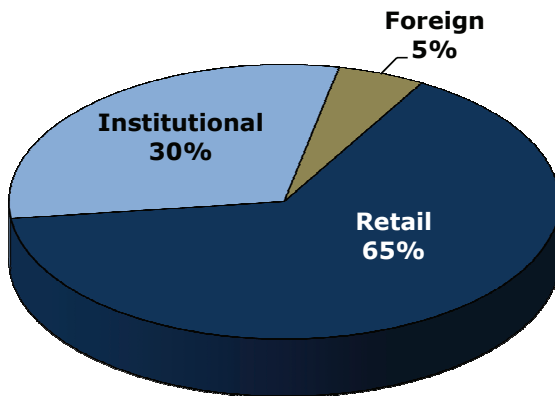


Source: U.S. Census Bureau and Wells Fargo Securities, LLC

## Who Can Own MLPs?

MLPs have historically been predominantly owned by retail investors. This is still true today. However, MLP ownership by institutions has become more prevalent as the asset class has grown and liquidity has improved. Since MLPs generate unrelated business taxable income (UBTI), certain tax-exempt investment vehicles such as pension accounts, 401Ks, individual retirement accounts (IRAs), and endowment funds would be subject to tax on MLP holdings, all else being equal. For more information on institutional ownership of MLPs, please see section *Can MLPs Be Held By Tax-Exempt Organizations (i.e. Retirement Accounts)?* in *Tax And Legislative Issues*.

### Exhibit 8. 2012 MLP Ownership Type



Source: PricewaterhouseCoopers, LLP and Wells Fargo Securities, LLC

## Mutual Funds Can Own MLPs

Since the *American Jobs Creation Act* was passed in October 2004, mutual funds have been permitted to own MLPs. However, there are some restrictions to investment: (1) no more than 25% of a fund's asset value may be invested in MLPs and (2) a fund may not own more than 10% of any one MLP.

In April 2010, SteelPath launched the first MLP-focused open-end (mutual) fund. The SteelPath Funds are registered investment companies and submit regular filings like other mutual funds. Yet unlike most mutual funds, which enjoy the tax benefits of being a regulated investment company, the SteelPath Funds elected to be a corporation (a C-Corp) for IRS reporting purposes. (Filing as a corporation allows SteelPath to invest more than 25% of its funds in MLPs) Consequently, the SteelPath Funds must pay corporate-level income taxes. Subsequent to SteelPath, many other fund managers launched MLP mutual fund products and there are now 17 open-end MLP mutual funds (including 3 non-dedicated MLP funds) in the market. For more information please see *Open-End Funds*.

## Challenges Remain For Mutual Fund Ownership Of MLPs

While a number of MLP dedicated fund managers have created mutual fund structures focused on MLP investments, the traditional mutual fund complexes have been slower to invest in MLPs. This is due to a number of administrative and other challenges, including the following:

- **Timing issues.** Mutual funds begin processing their investors' 1099s in November, but may not receive their MLP K-1s until late February or early March. Mutual funds are required to designate investors' income as ordinary income, long-term capital gains, and return of capital. However, without the K-1s, a mutual fund would have to make estimates that could prove incorrect. In certain instances this could lead to excise tax liability for the mutual fund or a mutual fund investor paying taxes not owed.
- **State filing requirements.** There are potential administrative burdens related to state filing requirements. Since some MLPs have operations (e.g., pipelines and storage tanks) in many states, a mutual fund owner of a partnership may be required to file income tax returns in every state in which the MLP conducts business (even if no taxes are owed). Clearly, the administrative burden required for such an undertaking could be prohibitive. Please see the Appendix for a list of states in which each MLP operates.
- **Liquidity.** MLPs' general lack of trading liquidity has been an obstacle to mutual fund investments. Given that large mutual fund complexes typically manage large pools of capital, liquidity can be a constraining factor to investing in MLPs. As the MLP sector continues to grow, we expect liquidity to improve.

## Certain Tax-Exempt Vehicles (IRA, 401K, etc.) Can Own MLPs, But Are Subject To UBTI

Tax-exempt investment vehicles such as corporate pension accounts, 401-Ks, IRAs, and endowment funds can own MLP units. However, these holding could be subject to tax because MLPs generate unrelated business taxable income (UBTI). This means MLP income is considered income earned from business activities unrelated to the entity's tax-exempt purpose. If a tax-exempt entity receives UBTI (e.g., income from an MLP and other sources of UBTI) in excess of \$1,000 per year, the investor would be required to file IRS form 990-T and may be subject to taxes on the excess UBTI above the \$1,000 threshold. We recommend consulting a tax advisor before investing in MLPs through any of these structures.

## Risks To Owning MLPs

**Tax and legislative.** While there is no legislation currently aimed at MLPs, a removal or alteration of MLPs' favored tax treatment would negatively affect performance. Further, legislation aimed at the oil and gas industry could affect MLPs (e.g., through carried interest, derivative legislation, cap and trade, and the climate bill).

**Capital markets access.** MLPs are highly reliant on equity and debt markets to fund growth. Because MLPs pay out the majority of their cash to unitholders, they must continually access the debt and equity markets to finance growth. If MLPs were unable to access these markets or could not access these markets on favorable terms, this could affect price performance and inhibit long-term distribution growth.

**A severe economic downturn.** Energy demand is closely linked to overall economic growth. A severe economic downturn could reduce the demand for energy and commodity products, which could result in lower earnings and cash flow.

**Commodity price risk.** Some MLPs have significant exposure to commodity price fluctuations, including partnerships involved in oil and gas production, gathering and processing, and coal. In addition, MLP unit prices tend to move in sympathy with commodity prices. For example, the Wells Fargo Securities MLP Index exhibited a correlation with crude oil prices of 0.43 in 2012.

**Rising interest rates.** MLPs have generally underperformed during periods of rapidly rising interest rates. Thus, during periods when investors anticipate rapidly rising rates in the future or if rates were to rise faster than expected, this could affect performance.

**A decline in drilling activity.** A slowdown in drilling activity could reduce oil and gas producer revenue, gathering fees, throughput volume into processing plants, and ultimately, pipeline volume.

**Execution risk related to acquisitions and organic projects.** MLPs' ability to grow is dependent, in part, on their ability to complete organic growth projects on time and on budget, and/or to successfully identify and execute future acquisitions.

**Regulatory risk.** MLPs are regulated across a number of industries. Interstate pipelines are regulated by the Federal Energy Regulatory Commission (FERC). Coal is one of the most heavily regulated industries in the country, being subject to regulation by federal, state, and local authorities. A change in the regulation of hydraulic fracking could reduce drilling activity and infrastructure needs. Any number of regulatory hurdles could affect MLPs' ability to grow.

**Environmental incidents and terrorism.** Many MLPs have assets that have been designated by the Department of Homeland Security as potential terrorist targets, such as pipelines and storage assets. A terrorist attack or environmental incident could disrupt the operations of an MLP, which could negatively affect cash flow and earnings in the near term.

**Conflicts of interest with the GP.** For certain MLPs, the General Partner (GP) and limited partnership are controlled and run by the same management teams. Some potential areas of conflict include (1) the price at which the MLP is acquiring assets from the GP, (2) the GP aggressively increasing the distribution to achieve the 50%/50% split level instead of managing distribution growth to maximize the long-term value of the underlying MLP, (3) the potential for management to place the interests of the parent corporation or the GP above the interests of the LP unitholders, and (4) underlying MLP equity issuances to fund growth initiatives benefit the GP regardless of whether the acquisition or project is accretive.

**Weather risk.** Some MLPs' cash flow, particularly those involved in the transportation (pipeline) and distribution of propane, are significantly affected by seasonal weather patterns. For example, if an MLP's operating region experiences unseasonably warm weather, propane demand, and therefore, volume, could be negatively affected. In addition, weather patterns can affect coal MLPs via electricity generation end-user demand. Finally, hurricanes particularly in the Gulf Coast can damage facilities, temporarily shut down production, and reduce demand.



## How To Build An Effective MLP Portfolio

In building a diversified MLP portfolio, we believe there are four primary factors that investors should take into consideration.

### Balance Risk And Growth

Like all investments, MLPs present risk/reward propositions. Investors should consider their risk-tolerance level and make investments accordingly. In general, a balanced portfolio, which includes lower risk, but potentially lower return MLPs and higher-risk MLPs with potentially higher returns, should be considered.

#### Exhibit 9. Risk And Growth

Risk	and	Growth
- Capital requirements		- Market position
- Leverage		- Organic versus acquisition dependent
- Stock liquidity		- Visibility
- Execution		- Track record
- Commodity exposure		- Size
- Weather		- Strength of sponsor

Source: Wells Fargo Securities, LLC

### Diversify Among MLP Sectors

Investors should diversify within the energy MLP sector. The *Asset Overview – Relative MLP Distribution Security* section describes the basic types of MLPs and fundamentals underlying each MLP sector that investors should consider when constructing an MLP portfolio. (Exhibit 108 displays MLPs based on their risk profile by sector.)

#### “Core Holdings”

Investing in core MLPs can be an effective way to build a solid foundation for an MLP portfolio. The anchor tenants are partnerships that offer investors the enviable mix of a top-flight asset base, stable cash flow stream, excellent track record of delivering consistent earnings, visible growth, a strong coverage ratio, and a conservative balance sheet and capital structure. In addition, these MLPs are typically larger entities that have grown and diversified their asset base to limit cash flow volatility during economic cycles and have investment grade credit ratings. We view EPD, MMP, and PAA as core holdings in any MLP portfolio. To note, our list of core holdings does not necessarily correspond to our current ratings, which are predicated on 12-month valuation ranges. However, these are stocks that we believe should be considered when constructing a long-term portfolio of MLP securities.

### Invest With Top Management

Prior to making any investment, individuals should evaluate the strength of the company’s management team. Investors should consider a management team’s (1) track record in successfully managing its business, (2) project management capabilities (i.e., ability to keep projects on time and on budget), (3) market insight (i.e., the ability to foresee customers’ needs), and (4) ownership interests (i.e., aligned with those of the limited partnership (LP) unitholders).

**The Basics**

**What Is An MLP?**

A master limited partnership is an entity that is structured as a limited partnership instead of as a C corporation (C corp.). Limited partnership interests (limited partner units) are traded on public exchanges (i.e., NYSE, NASDAQ, and AMEX) just like corporate stock (shares). However, unlike a C corp., MLPs do not pay corporate-level taxes. Instead, taxes are paid (on a partially deferred basis) by public limited partner unitholders (i.e., MLPs are pass-through entities).

**Exhibit 10. The MLP Versus A C Corp Structure**

<b>Structure comparison</b>	<b>Typical MLP</b>	<b>C corp.</b>
Corporate level tax	✘	✓
Unitholder / shareholder level tax	✓	✓
Tax shield on distributions / dividends	✓	✘
Tax reporting	K-1	1099
General partner	✓	✘
Incentive distribution rights	✓	✘
Voting rights	✘	✓

Source: Partnership reports and Wells Fargo Securities, LLC

**Who Are The Owners Of The MLP?**

MLPs consist of a general partner (GP) and limited partners (LP).

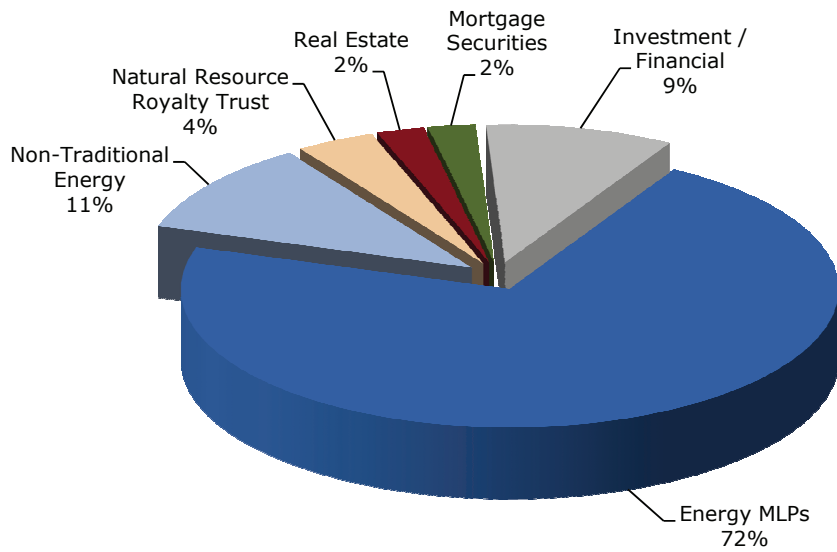
The general partner (1) manages the daily operations of the partnership, (2) typically holds a 2% equity ownership stake in the partnership, and (3) is usually entitled to receive incentive distribution payments.

The limited partners (or common unitholders) (1) provide capital, (2) have no role in the partnership's operations and management, and (3) receive quarterly cash distributions.

**What Qualifies As An MLP?**

To qualify as an MLP, a partnership must receive at least 90% of its income from qualifying sources, which include natural resource activities, interest, dividends, real estate rents, income from sale of real property, gain on sale of assets, and income and gain from commodities or commodity futures. Natural resource activities include exploration, development, mining or production, processing, refining, transportation, storage, and marketing of any mineral or natural resource. For practical purposes, most MLPs are involved in the energy markets.

**Exhibit 11. Types Of Publicly Traded Partnerships**



Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

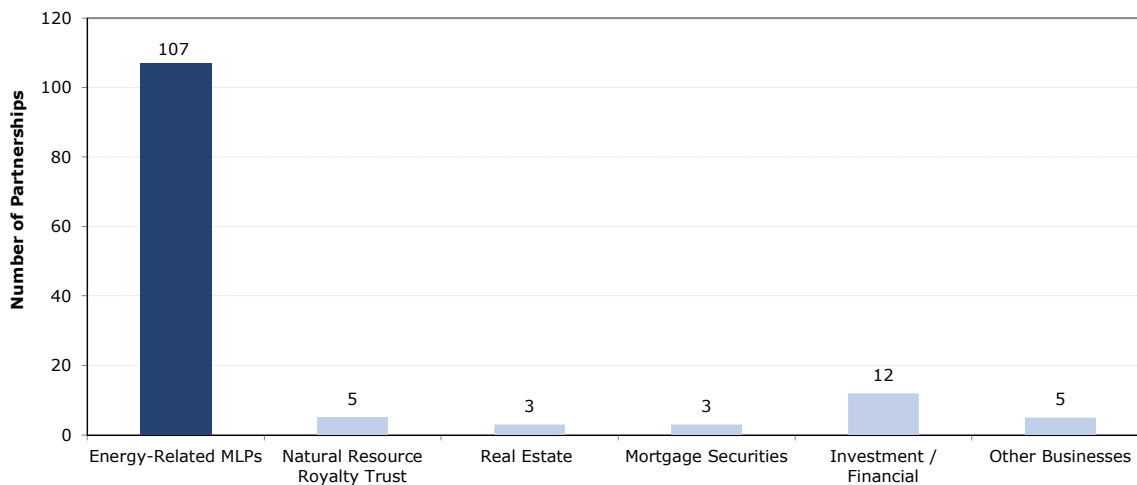
**What Are The Advantages Of The MLP Structure?**

MLPs generally do not pay entity-level income taxes, due to the partnership structure. Thus, unlike corporate investors, MLP investors are not subject to double taxation on dividends. This enhances the partnership's competitive position vis-à-vis corporations in the pursuit of expansion projects and acquisitions, in our view. In addition, MLPs are able to pay out a greater percentage of cash flow, resulting in higher distributions and income. Because MLPs are typically valued off of their (higher) yield, they tend to trade at premium valuations to C-corps. As a result, assets housed within the MLP structure tend to trade at higher valuations than those assets would trade housed within a C-corp structure.

**How Many MLPs Are There?**

Currently, there are 135 partnerships traded on public exchanges. Of those, 107 are energy-related MLPs.

**Exhibit 12. Number Of Publicly Traded Partnerships**



Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

**What Is The K-1 Statement?**

The K-1 form is the statement that an MLP investor receives each year from the partnership that shows his or her share of the partnership’s income, gain, loss, deductions, and credits. It is analogous to a Form 1099 received from a corporation. The investor pays tax on the portion of net income allocated to him or her (which is shielded by losses, deductions, and credits) at his or her ordinary income tax rate. If the partnership reports a net loss (after deductions), it is considered a “passive loss” under the tax code and may not be used to offset income from other sources (including other MLP investments). However, the loss can be carried forward and used to offset future income from the same MLP. K-1 forms are usually distributed in late February or early March, and many can be retrieved online (via the partnership’s website or at [www.taxpackagesupport.com](http://www.taxpackagesupport.com)).

**What Is The Difference Between An LP And An LLC?**

As of October 2013, there were 102 energy MLPs registered as limited partnerships (LP). Five entities (i.e., Constellation Energy Partners, Linn Energy, Niska Gas Storage Partners, NuStar GP Holdings, and Seadrill Partners) are registered as a limited liability company (LLC). LLCs have all the tax advantages of MLPs, including no corporate level of taxation and tax deferral for unitholders. The primary differences between LLCs and MLPs are that LLCs do not have a GP, but may have incentive distribution rights (IDR). In addition, LLC unitholders have broader voting rights, whereas MLP limited partner unitholders generally have only limited voting rights.

**Exhibit 13. Structure Comparison**

Structure comparison	LP	LLC	C corp.
Non-taxable entity	✓	✓	✗
Tax shield on distributions	✓	✓	✗
Tax reporting	K-1	K-1	1099
General partner	✓	✗	✗
Incentive distribution rights	✓	✗	✗
Management incentive interests	✗	✓	✗
Voting rights	✗	✓	✓

Source: Wells Fargo Securities, LLC

**MLPs Taxed As C-Corps.** There are five shipping MLPs (i.e., Capital Product Partners L.P., Golar LNG Partners LP, KNOT Offshore Partners LP, Navios Maritime Partners, L.P., and Teekay Offshore Partners, L.P.), which elect to be taxed as corporations for U.S. federal income tax purposes. Based on this election, U.S. unitholders are not directly be subject to U.S. federal income tax on the partnerships’ income, but are subject to U.S. federal income tax on distributions received from the MLPs and sale of the MLPs’ units. In addition, since these MLPs are structured as corporations, investors receive a Form 1099 instead of a K-1.

These MLPs also provide percentage estimates of total cash distributions made during a certain period that would be treated as “qualified dividend income.” (This is similar to the percent estimate of federal taxable income-to-distributions provided by standard MLPs.) The dividend income is taxable to the U.S. common unitholder at the qualified dividend tax rate versus the ordinary income tax rate. The remaining portion of this distribution is treated first as a nontaxable return of capital limited to the purchaser’s tax basis in its common units on a dollar-for-dollar basis. If this reduces the tax basis to zero, then the remaining distribution is taxed as a capital gain.

## What Is The Difference Between MLPs And U.S. Royalty Trusts?

U.S. royalty trusts are yield-oriented investments and have differentiated investment characteristics; however, they are not MLPs. A U.S. royalty trust is a type of corporate structure whereby a cash flow stream from a designated set of assets (typically oil and gas reserves) is paid to shareholders in the form of cash dividends (on either a monthly, or a quarterly basis). A trust's profit is not taxed at the corporate level provided that a certain percentage (e.g., 90%) of profit is distributed to shareholders as dividends. The dividends are then taxed as personal income.

Unlike MLPs, U.S. trusts are not actively managed entities. Thus, they do not make acquisitions or increase their asset base. In addition, U.S. royalty trusts typically have no debt, which also reflects the royalty nature of their business. The U.S. royalty trusts' cash flow is paid to investors as it is generated only until the underlying asset is depleted. As a result, dividends from trusts fluctuate with cash flow and should eventually dissipate. In contrast, MLPs are actively managed entities that can make acquisitions and investments to increase their asset base and sustain (and grow) cash flow. Over the long term, traditional MLP distributions are managed to be steady and sustainable (and often growing).

## What Are I-Shares?

In order to expand the universe of potential investors in MLPs to institutional investors and tax-advantaged accounts such as individual retirement accounts (IRA), an investment vehicle similar to LP units was created known as i-shares (the *i* stands for institutional). In May 2001, Kinder Morgan Management, LLC (KMR) was the first i-share created and mirrors Kinder Morgan Energy Partners (KMP). Currently, the only other i-share security is Enbridge Energy Management, LLC (EEQ), the i-share for Enbridge Energy Partners (EEP).

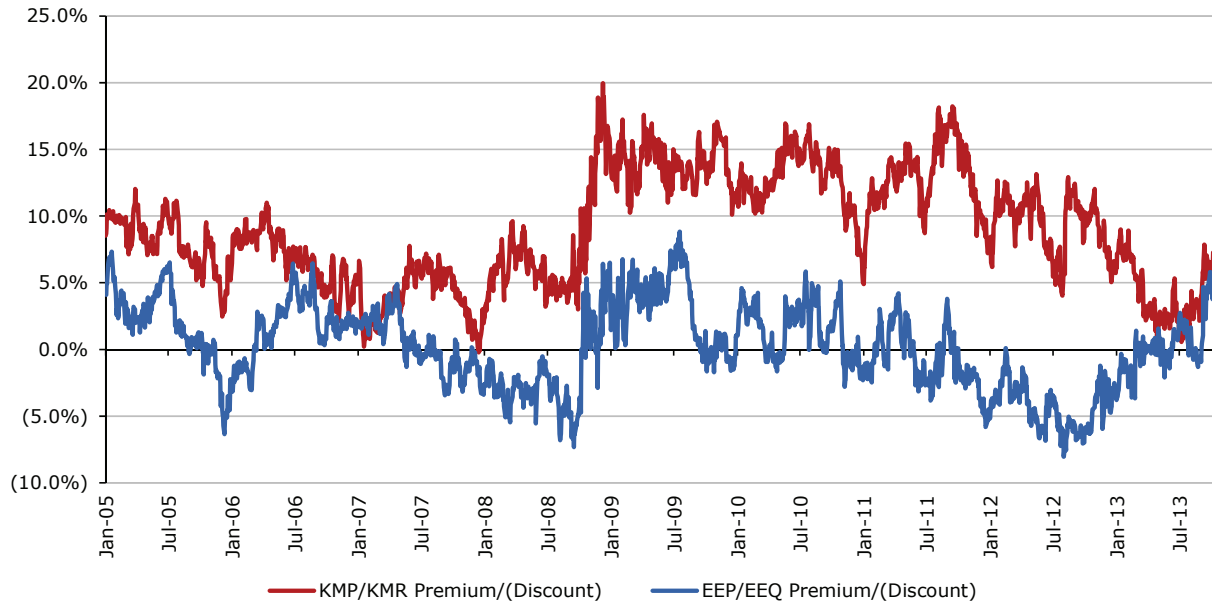
I-shares are equivalent to MLP units in most respects, except that distributions are paid in stock instead of cash. Distributions to i-shareholders are treated similarly to stock splits. The cost basis of the initial investment does not change, but instead, is spread among more shares. One year after purchase, all gains from disposition are treated as long-term capital gains. Unlike MLP securities, i-shares do not require the filing of K-1 statements and do not generate UBTI. Thus, i-shares can be owned in an IRA account without penalty. The i-share structure is analogous to an automatic dividend reinvestment plan, in our view. Thus, for investors who prefer to reinvest dividends, the i-share security could be an appropriate investment.

**I-share trading patterns.** I-shares (EEQ and KMR) have exhibited divergent trading patterns since their introduction to the market. KMR has typically traded at a discount to its MLP unit equivalent (KMP), while EEQ has traded at a premium to EEP at certain points in time. From 2008 to 2012, EEQ traded at an average premium of 0.5% to EEP, while KMR traded at an average discount of 11.3% to KMP.

The discount between KMR and KMP can be attributed to a number of factors, in our view, including the following:

- **“Cash is king.”** Investors generally prefer a cash distribution to stock dividends.
- **Liquidity.** From 2008 to 2012, KMR had average daily trading volume of 411,000, versus 747,000 for KMP.
- **No natural arbitrage.** MLP units are difficult to sell short. Thus, no natural arbitrage opportunity exists that would cause the units to trade more closely.
- **No conversion provision.** The ability to convert an i-share to a common unit was removed by the partnerships soon after the public offerings. Hence, the i-shares are not entirely *pari passu* with the MLP common units.
- **Market Actions.** The relationship between MLP units and their i-shares can be affected by the actions of market participants or company management. For example, a partnership might choose to raise equity by issuing additional i-shares and not MLP units, temporarily putting pressure on i-share prices relative to the MLP units.

**Exhibit 14. EEP And KMP Relative To The Underlying I-Shares**



As of October 22, 2013  
Source: FactSet and Wells Fargo Securities, LLC

**What Are The Tax Consequences Of Owning I-Shares?**

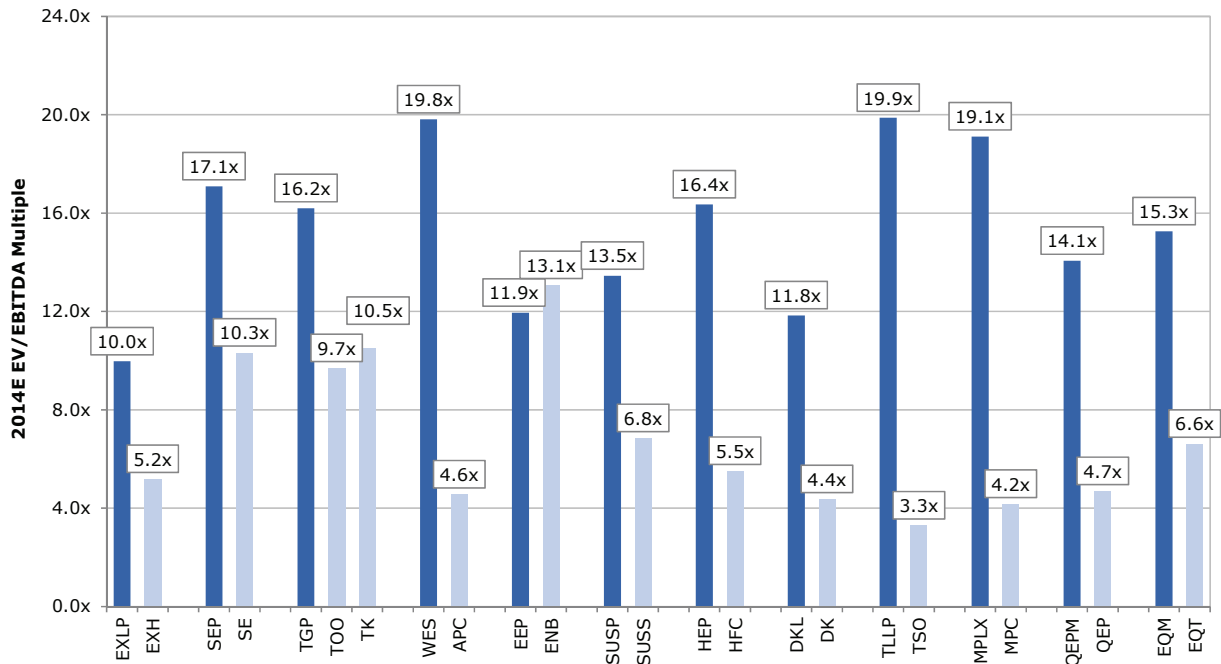
When a shareholder receives a quarterly distribution in the form of additional i-shares, this does not trigger a taxable event. A taxable event occurs only when a shareholder sells his or her shares. An i-share holder pays capital gains tax on the sale (long-term capital gains if the holding period is greater than one year). An investor’s tax basis is calculated as the initial amount paid for the shares divided by the total number of shares received both from the initial purchase and the subsequent quarterly distributions. (This is similar to the way a stock split is calculated.) If shares were acquired for different prices or at different times, the basis of each lot of shares can be used separately in the allocation. Otherwise, the first-in, first-out (FIFO) method is used. The holding period for shares received as distributions is marked to the date at which the original investment in the shares was made.

**Why Create An MLP? (Sponsor Perspective)**

An MLP provides a number of benefits to the sponsor, including the following:

- **A premium valuation.** Assets within the MLP structure typically trade at higher valuations in the market than those same assets within a C-corp. structure. For example, MLPs with C-corp. sponsors currently trade at an estimated median 2014 enterprise value-to-adjusted EBITDA multiple of 15.7x, versus 5.5x for the associated C-corp.

Exhibit 15. Valuation Variance Between MLP And C-Corp. Sponsor



Note: MLP multiples are enterprise value (EV)-to-adjusted EBITDA

As of October 22, 2013

Source: FactSet and Wells Fargo Securities, LLC estimates

- **A tax-advantaged structure with which to pursue growth opportunities.** MLPs typically enjoy a competitive advantage relative to corporations, due to their tax-advantaged status. In general, MLPs should be able to either (1) pay more for an acquisition than a corporation and realize the same cash flow accretion, or (2) realize more accretion from an acquisition given the same acquisition price. In addition, MLPs have traditionally enjoyed good access to capital, which enhances the sponsor's ability to finance acquisitions and organic projects.
- **The ability to maintain control of the assets (via the GP interest).** The general partner can retain control of the asset while maintaining just a 2% equity interest in the MLP.
- **The opportunity to capture potential upside from incentive distribution rights (IDR).** The incentive distribution schedule entitles the GP to an increasing percentage of total cash flow as the distribution surpasses certain tiers. As the distribution increases, the GP is entitled to a larger slice of the pie (i.e., percentage of cash flow generated by the partnership), creating significant leverage to growth.
- **GP valuation uplift.** The value of the GP IDRs could result in uplift to the sponsor's valuation. Pure-play publicly-traded GPs trade at a median price-to-DCF multiple of 22.8x. Further, the implied multiple for IDRs is even higher at 28.6x. Consequently, the creation of an MLP and the retention of the GP IDR interest could result in a higher valuation for the GP sponsor.

**Key Terms**

**What Are Distributions?**

Distributions are similar to dividends. MLPs typically pay cash distributions to unitholders on a quarterly basis.

**What Are Incentive Distribution Rights (IDR)?**

At inception, the partnership agreement outlines the percentage of total cash distributions that are to be allocated between the general partner (GP) and limited partner (LP) unitholders. The incentive distribution rights, which are typically owned by the general partner, entitle the GP to receive increasing percentages of the incremental cash flow as the MLP raises distributions to limited partners. Initially, the general partner receives only 2% of the partnership’s cash flow. However, as certain pre-determined distribution levels are met, the GP receives an incremental 15%, then 25%, and up to 50% of incremental cash flow. The purpose of the IDRs is to incentivize the general partner to raise the quarterly cash distribution to reach higher tiers, which benefits the LP unitholders, as well. Typically, the GP must increase the distribution by 50% from the initial public offering (IPO) to reach the 50% IDR tier. (Please see the Appendix for a list of energy MLPs and their incentive distribution tiers.)

**Calculating Incentive Distribution Payments**

In the following table we illustrate the mechanics of how cash flow is allocated between the limited partners and the general partner based on a hypothetical incentive distribution rights schedule. Tier 1 includes all distributions less than or equal to \$2.30 per unit, Tier 2 includes distributions greater than \$2.30 per unit but less than or equal to \$2.50 per unit, and Tier 3 includes distributions greater than \$2.50 per unit but less than or equal to \$3.00 per unit. Tier 4 (i.e., 50/50 splits), or the high-splits tier, is achieved when distributions are greater than \$3.00 per unit.

**Exhibit 16. MLP XYZ Distribution Calculation**

	LP%	GP%	LP distr. up to:
MQD	98%	2%	\$2.00
Tier 1	98%	2%	\$2.30
Tier 2	85%	15%	\$2.50
Tier 3	75%	25%	\$3.00
Tier 4	50%	50%	Above \$3.00

Source: Wells Fargo Securities, LLC estimates

In this example, we assume MLP XYZ declares a distribution of \$4.00 per LP unit. As outlined in the following Exhibit, at Tier 1, between \$0.00 and \$2.30, the LP receives \$2.30, which represents 98% of the distribution at that tier. The GP receives 2%, or \$0.05 per unit, of that distribution at Tier 1. This \$0.05 is derived by dividing the \$2.30 distribution to LP unitholders by 98% and then multiplying by 2% ( $[\$2.30 \div 98\%] \times 2\%$ ). In other words, the \$2.30 received by LP unitholders represents 98% of the total cash distribution paid to the GP and LP unitholders. This same formula is applied at the subsequent tiers.

At Tier 2, which is the incremental cash flow above \$2.30 and less than or equal to \$2.50, the LP receives \$0.20, which represents 85% of the distribution at that tier. The GP receives 15% of the incremental cash flow, which equates to \$0.04 per unit. At this level, the LP receives \$2.50 per unit and the GP receives \$0.09 per unit. In other words, the GP receives approximately 3% of the total distribution paid.

At Tier 3, which is the incremental cash flow above \$2.50 and less than or equal to \$3.00, the LP receives \$0.50, which represents 75% of the distribution at that tier. The GP receives 25% of the incremental cash flow, which equates to \$0.17 per unit, and \$0.25 in total (or approximately 8% of total distributions paid).

At Tier 4, which is the incremental cash flow above \$3.00, the LP receives \$1.00, which represents 50% of the distribution at that tier. The GP also receives 50% of the incremental cash flow, which equates to \$1.00 per unit. Thus, if the MLP wants to raise its distribution to limited partners by \$1.00, it actually needs \$2.00 in hand: one to pay the LPs and one to pay the GP.



At the declared distribution of \$4.00 in our example, the LP unitholders would receive 76% of total cash distributions, while the GP would receive 24%. As the cash distribution is increased above \$4.00, the GP would receive 50% of the incremental cash. Thus, if the distribution is increased to \$5.00 per limited unit, the formulas for Tiers 1-4 would apply, and for the incremental \$1.00 (to \$5.00 from \$4.00), the LP would receive \$1.00 and the GP would receive an additional \$1.00, as well.

MLP XYZ's yield of 8.0% reflects distributions made only to the LP unitholders (i.e.,  $\$4.00 \div \$50.00$  per unit). However, the adjusted yield of 10.5% reflects distribution payments to both the LP and GP (i.e.,  $\$4.00 + \$1.25 = \$5.25 \rightarrow \$5.25 \div \$50.00$ ).

**Exhibit 17. MLP XYZ Incentive Distribution Tiers**

MLP XYZ	Distribution	LP%	GP%	up to:	Distribution per unit			Cumulative distribution per unit			Cumulative allocation of cash flow (%)		
					LP	GP	Total	LP	GP	Total	LP	GP	
Stock price	\$50.00	Tier 1	98%	2%	\$2.30	\$2.30	\$0.05	\$2.35	\$2.30	\$0.05	\$2.35	98%	2%
Distribution to LPs	<b>\$4.00</b>	Tier 2	85%	15%	\$2.50	\$0.20	\$0.04	\$0.24	\$2.50	\$0.08	\$2.58	97%	3%
Yield	8.0%	Tier 3	75%	25%	\$3.00	\$0.50	\$0.17	\$0.67	\$3.00	\$0.25	\$3.25	92%	8%
Total distributions	<b>\$5.25</b>	Thereafter	50%	50%	Above \$3.00	\$1.00	\$1.00	\$2.00	<b>\$4.00</b>	\$1.25	<b>\$5.25</b>	76%	24%
Adjusted yield	10.5%												

Source: Wells Fargo Securities, LLC estimates

**What Is The Difference Between Available Cash Flow And Distributable Cash Flow?**

We define available cash flow as the cash flow that is available to the partnership to pay distributions to both LP unitholders and the GP. On the other hand, we calculate distributable cash flow as the cash flow available to the partnership to pay distributions to LP unitholders. Some partnerships refer to distributable cash flow as cash available for distribution (or CAD). Available and distributable cash flow are commonly calculated in the following ways:

**Exhibit 18. Available And Distributable Cash Flow Calculation**

Net income	<b>OR</b>	EBITDA
(+) depreciation and amortization		(-) interest expense
(-) maintenance capex		(-) maintenance capex
<b>Available cash flow</b>		<b>Available cash flow</b>
(-) Cash flow to general partner		(-) Cash flow to general partner
<b>Distributable cash flow to LP unitholders</b>		<b>Distributable cash flow to LP unitholders</b>

Source: Wells Fargo Securities, LLC estimates

Distributable cash flow can also include cash distributions received from equity interests and reflect adjustments for non-cash items such as mark-to-market gains/losses for derivative activity, and stock-based compensation.

**Are MLPs Required To Pay Out “All” Their Cash Flow?**

Under a typical partnership agreement, the MLP is required to pay out all “available cash” to unitholders in the form of distributions. However, the board of directors for an MLP has significant discretion in determining what is considered available cash flow. Generally, partnership agreements exclude cash reserves that (1) “provide for the proper conduct of the business,” which can include, for example, future capital expenditure and future debt service; (2) “comply with applicable law” and agreements, such as those related to debt instruments; and (3) provide for distributions over the next four quarters. MLP payout requirements are NOT the same as REITs’. By IRS rule, REITs are required to pass through at least 90% of taxable income to investors as dividends.

Some MLPs generate significant excess cash (or maintain higher distribution coverage ratios) for reinvestment in organic growth projects. Management’s rationale for withholding cash flow is that the current earnings may not be sustainable, e.g., wide commodity spreads (PAA). Thus, this “windfall” of cash is used to pay down debt or fund internal growth projects, thereby increasing the partnership’s base of sustainable earnings. Alternatively, some MLPs are able to increase distributions at rates that are competitive with peers while still generating excess cash flow. Paying out the vast majority of cash flow is a strong discipline that incentivizes management to operate the partnership efficiently and to take extra precautions when contemplating acquisitions and/or organic capital projects, in our view.

## **What Is The Distribution Coverage Ratio And Why Is It So Important?**

A partnership's distribution coverage ratio is the ratio of cash flow available to LP unitholders and the general partner to the cash paid to an MLP's LP unitholders and the general partner (i.e., available cash flow for the GP and LP divided by distributions paid to the GP and LP).

### **Exhibit 19. Distribution Coverage Ratio Calculation**

$$\text{Distribution coverage ratio} = \frac{\text{Available cash flow (to GP and LP)}}{\text{Distributions paid (to GP and LP)}}$$

Source: Wells Fargo Securities, LLC estimates

Coverage ratios vary depending on the type of MLP and the inherent cash flow volatility of the partnership's underlying assets. For example, propane MLPs have a cash flow stream sensitive to weather, typically target coverage ratios of 1.1x or higher. In contrast, most pipeline MLPs have coverage ratios in the 1.0-1.1x range, reflecting the stable, fee-based cash flow that underpins their businesses.

The distribution coverage ratio is significant for two reasons:

- Investors consider the coverage ratio to be representative of the cushion that a partnership has in paying its cash distribution. In this context, the higher the ratio, the more secure the distribution.
- All else being equal, a higher coverage ratio would give management increased flexibility to raise its distribution.

## **What Is The Difference Between Maintenance Capex And Growth Capex?**

There are many different ways to define maintenance capex. In general, maintenance capex is typically defined as an expenditure that is made to sustain existing assets. This is distinct from expenditure made to augment existing assets, which would be classified as growth capex. In other words, capital spent on an existing asset that preserves the asset's useful life or cash flow generating ability would be considered maintenance, while capital spent to increase an asset's life or cash flow would be considered growth capital.

**Well connects...maintenance or growth capex?** There is some discrepancy among gathering and processing MLPs on their classification of expenditure for new well connections. The more conservative approach is to classify well connects required to replace expected reductions in natural gas gathering volume as maintenance capex, in our view. However, there are some MLPs that classify new well connections as growth capital, as these partnerships consider well connects to be discreet investments with their own internal rate of return (IRR) (and not as replacements for the declining production of current wells). Assuming all else is equal, the use of the more conservative approach should result in lower distributable cash flow, whereas the classification of well connects as growth capital could potentially overstate an MLP's true sustainable distributable cash flow.

**Maintenance capex and upstream MLPs.** The definition and application of maintenance capital expenditure for upstream MLPs remains a challenging measure for the sector. The reason is primarily that the concept of maintenance capex is not easily defined when applied to the business of oil and gas production. In the midstream MLP world (from which the concept emanates), maintenance capex is a more easily defined term; namely, it represents the amount of capital invested to maintain the operating capacity, useful life of the asset (in most cases, the physical asset such as a pipeline or processing plant), and/or the partnership's operating income over the long term. For upstream MLPs, the application of maintenance capital expenditure to oil and gas assets is more difficult to define. Management teams employ different approaches to defining maintenance capex, and this ultimately leads to different decisions about capital allocation, distribution policy, and ultimately, valuations. On the whole, we believe most upstream MLPs are spending and/or allocating sufficient capital to maintain cash flow and production, but are dependent on the acquisition market over the long term (i.e., once drilling inventory depletes in five-plus years) to replace reserves.

**Maintenance capex spending varies dramatically among upstream MLPs.** Upstream MLP management teams are currently divided on their definition of maintenance capex. We believe there are effectively three prevailing definitions of maintenance capex:

- (1) Capex required to maintain cash flow (least stringent);
- (2) Capex required to maintain production (most common); or
- (3) Capex required to maintain production/cash flow and replace reserves (most stringent).

In our view, no one methodology can be utilized in isolation to define a partnership's maintenance capex policy as each definition has inherent drawbacks. Instead, we believe a combination of the aforementioned strategies should be considered when defining maintenance capex. Ultimately, the goal is to define maintenance capex in such a way as to provide a clear representation of sustainable distributable cash flow, in our view.

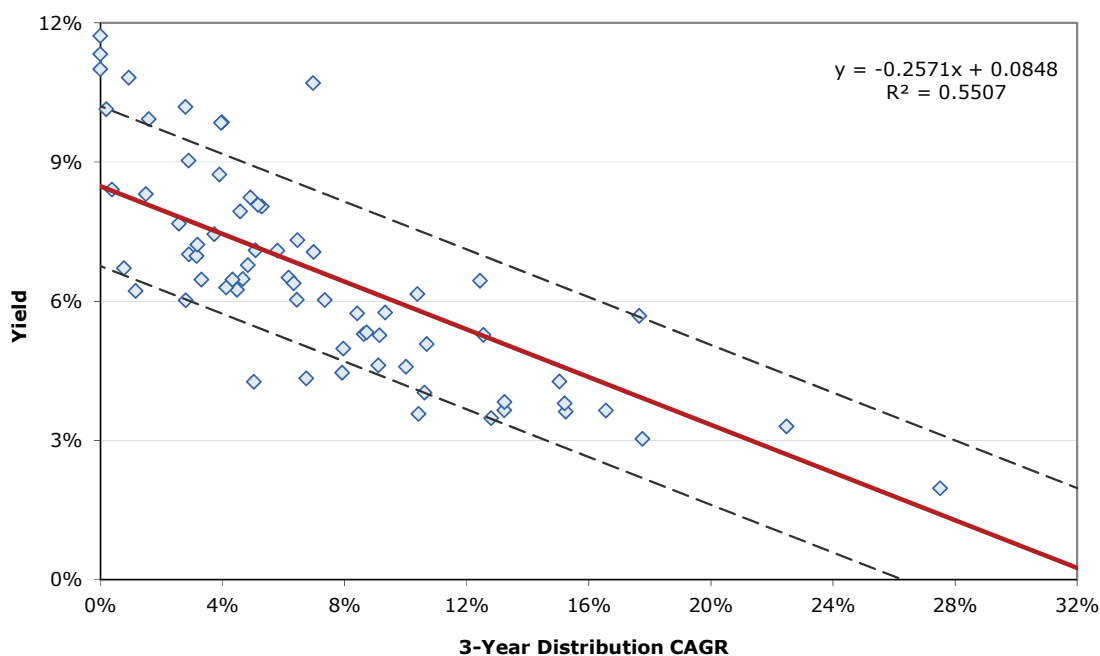
## Drivers Of Performance

### Distribution Growth

Distribution growth has been one of the primary drivers of MLP price performance. Empirical evidence suggests that there is an inverse relationship between anticipated distribution growth and MLP yield. Faster growing MLPs command lower yields, while slower growing MLPs have traded at higher yields. For example, publicly traded MLP GPs have an average estimated three-year distribution compound annual growth rate (CAGR) of 14.9% and consequently, trade at a lower than average yield of 3.8%. In comparison, upstream MLPs have a forecasted three-year distribution CAGR of 3.9% and trade at an above-average yield of 9.8%.

The following chart plots our three-year distribution growth CAGR estimates against current yields. An MLP that is able to increase its forecasted annual distribution growth rate by 1 percentage point via accretive acquisitions, organic growth projects, or cost-saving synergies should benefit from an approximate 0.26 percentage point reduction in yield, based on an estimated negative 0.74 correlation between the two variables (i.e., 55% of the variation is explained). This level of correlation does not preclude an MLP with a forecasted distribution growth rate of 8% from trading at a similar yield to an MLP with a forecasted distribution growth rate of 10%, as other factors such as risk profile of the underlying business, balance sheet strength, and distribution coverage also affect price. Of course, one potential flaw with this analysis is that our distribution growth forecasts could be incorrect. Alternatively, the market may be forecasting different growth assumptions for certain MLPs or factoring in different levels of risk.

#### Exhibit 20. Correlation Between Yield And Distribution Growth



Note: Dotted lines represent +/- one standard deviation  
As of October 22, 2013  
Source: FactSet and Wells Fargo Securities, LLC estimates

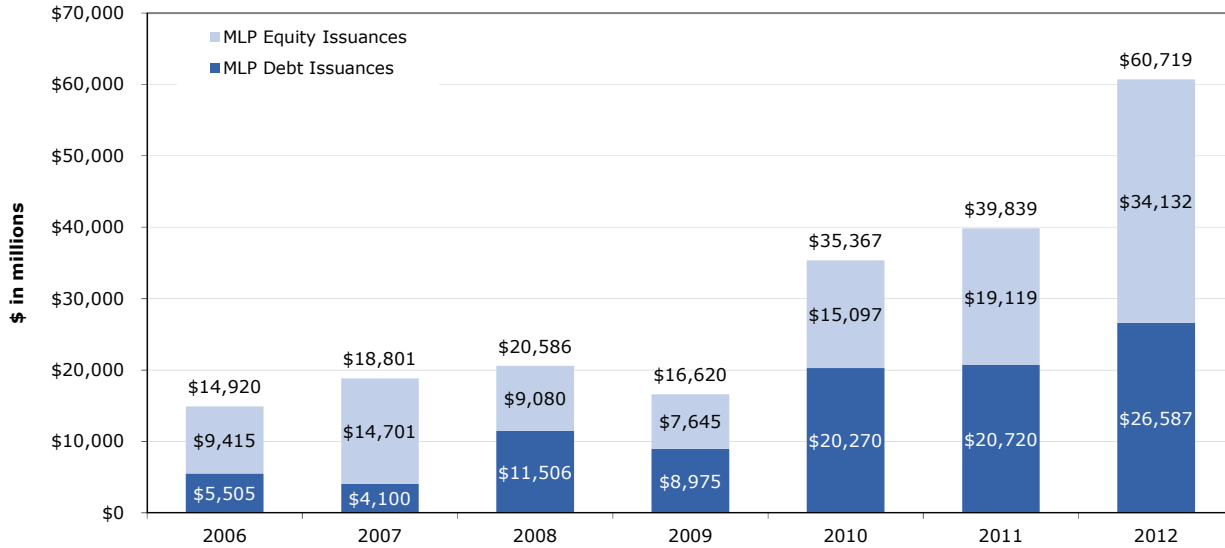
Drivers behind MLP distribution growth include (1) broader economic conditions, which govern access to and cost of capital, (2) commodity prices, (3) organic growth opportunities, and (4) acquisitions. We discuss the first two drivers in more detail in the text that follows.

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Access To Capital

Access to capital remains a key to MLP distribution growth as acquisitions and organic investments are mostly funded with external capital (i.e., new debt and equity). This is due to the fact that MLPs distribute the majority of their cash flow in the form of distributions each quarter. An MLP generates value for unitholders by investing in projects that generate returns in excess of the partnership’s cost of capital. MLPs with investment grade credit ratings generally enjoy better access to capital at a lower cost, all else being equal. However, most MLPs have historically enjoyed good access to the capital markets.

Exhibit 21. Historical Equity And Debt Issuances



Source: Partnership reports and Wells Fargo Securities, LLC

Commodity Prices

The influence of commodity prices on MLPs varies significantly by sub-sector. Near-term fluctuations in natural gas, natural gas liquids, and crude oil prices are unlikely to have a material impact on pipeline MLPs, but are likely to affect earnings (on the unhedged portion of production or volume processed) of upstream and gathering and processing MLPs. Longer term, a sustained reduction in natural gas, natural gas liquids, or crude oil prices could curtail drilling activity by producers. As a result, even long-haul pipeline MLPs could be affected from reduced transportation volume and/or fewer infrastructure investment opportunities. Although MLPs’ exposure to commodity price risk varies, historically it has been low relative to other companies in the energy industry, in our view. For a more detailed discussion of the impact of commodity prices, please see the “Asset Overview – Relative MLP Distribution Security” section.

Exhibit 22. Impact Of Commodity Prices On MLPs

	Short-Term Increase In Prices			Sustained Increase In Prices		
	Natural Gas	NGLs	Crude Oil	Natural Gas	NGLs	Crude Oil
Pipeline MLPs	None	None	None	Positive	Positive	Positive
Gathering & Processing MLPs <sup>1</sup>	Negative	Positive	Positive	Negative	Positive	Positive
Upstream MLPs	Positive	Positive	Positive	Positive	Positive	Positive

Note 1: For primarily keep-whole processing contracts

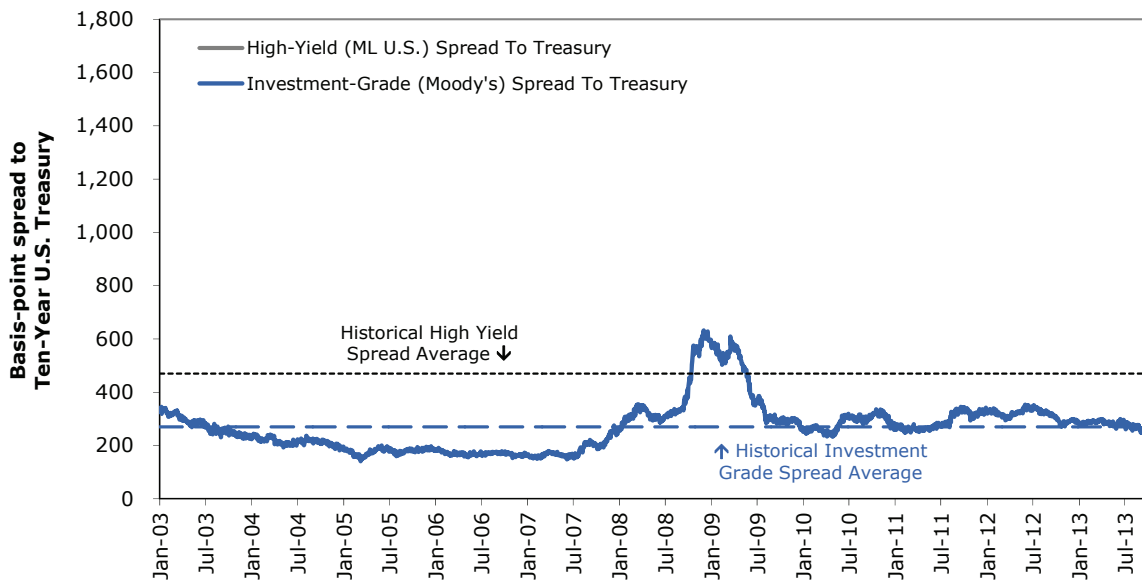
Source: Wells Fargo Securities, LLC

## Credit Spreads

A significant change in credit spreads (relative to the 10-year United States Treasury) typically signals that investors have begun to re-rate default expectations. Widening credit spreads typically put pressure on all yield-oriented securities as the market is pricing in a greater risk premium into equities. As a result, access to capital could become more challenging (i.e., more expensive), though still viable. In addition, widening spreads across the capital structure could cause investors to flock to alternative investments with more attractive yields or lower perceived risk profiles. Furthermore, during times of uncertainty, some investors may prefer to own the public bonds of specific MLPs instead of the equities, given their relative seniority in the capital structure and attractive yields. Currently, investment grade and high-yield spreads stand at 277 basis points (bps) and 319 bps, respectively, versus a ten-year historical average (2003-2012) of 270 bps and 470 bps. During the sub-prime credit crisis of 2008-09, the investment grade and high-yield credit spreads peaked at 1,622 bps and 614 bps, respectively.

Notably, the correlation between MLP performance (as measured by the Wells Fargo Securities MLP Index) and high yield credit spreads in 2013 year to date, over the past three and five years was negative 0.70, negative 0.50, and negative 0.66, respectively.

### Exhibit 23. High Yield And Investment Grade Credit Spreads To The 10-Year Treasury



As of October 22, 2013

Source: Bloomberg and Wells Fargo Securities, LLC

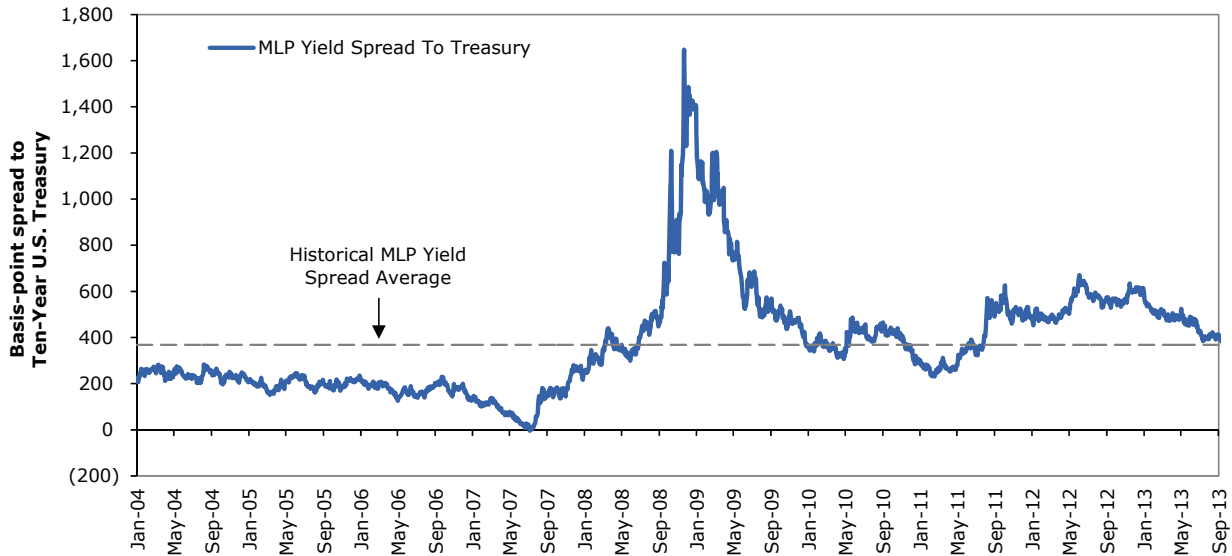
## Interest Rates

The movement of interest rates and investor anticipation of a rise in interest rates have historically been important drivers of MLP performance. This is due to the fact that MLPs are yield investments that were traditionally viewed as bond-like substitutes. MLPs have underperformed during certain periods of rapidly rising interest rates because as interest rates increase, investors are able to receive a higher risk-adjusted rate of return from government-backed debt or Treasury securities. For example, in 1999, the Fed increased the target rate three times, to 5.75% from 5.00%. Over that same period, our MLP Composite declined 20.5%, while the Composite yield increased to 10.6% from an average of 7.7%.

As MLPs have become more growth oriented, the impact of modest interest rate movements on MLP price performance has decreased. Between 2001 and 2007, MLPs accelerated distribution growth to approximately 11% in 2007 from 5% in 2001. Consequently, the spread between MLP yields and Treasury yields declined to an average of 119 bps in 2007 from an average of 302 bps in 2001. Over the past five years, the correlation between the 10-year Treasury yield and MLPs has been only negative 0.15. Notwithstanding, MLPs are likely to underperform during periods of rapidly rising interest rates. MLPs are now trading at a median yield of 6.5%, which represents approximately a 396 bp spread above the 10-year Treasury yield. MLPs have historically traded at an average spread of 368 bps to the 10-year U.S. Treasury, within a range of negative 4 bps to positive 1,648 bps (from 2003 to 2012).

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Exhibit 24. Historical MLP Yield Spread To The 10-Year Treasury

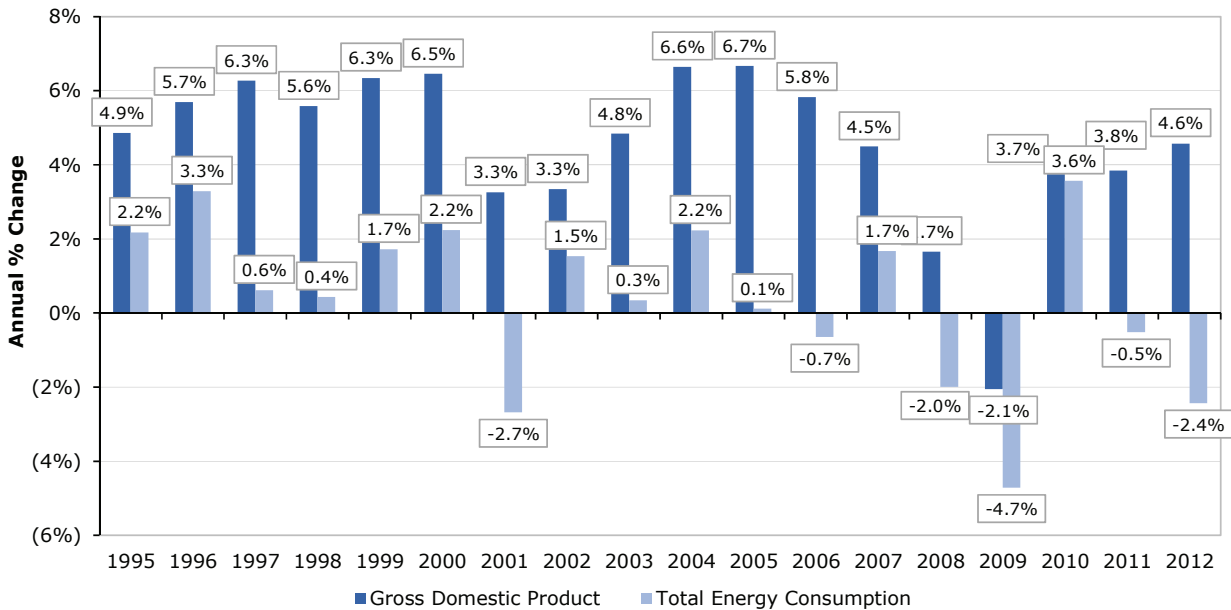


As of October 22, 2013  
Source: FactSet and Wells Fargo Securities, LLC

Economic Activity (GDP Growth)

The overall health of the U.S. economy is a determining factor in MLP performance, in our view. Historically, U.S. energy consumption has closely tracked overall economic activity levels. On a historical basis, the average correlation of U.S. GDP growth versus total energy consumption growth is about 0.65 between 1995 and 2012. An increase in energy consumption should lead to an increase in the production, handling, and transportation of energy commodities, which generally benefit MLPs.

Exhibit 25. Annual Percent Change In Energy Consumption And Gross Domestic Product



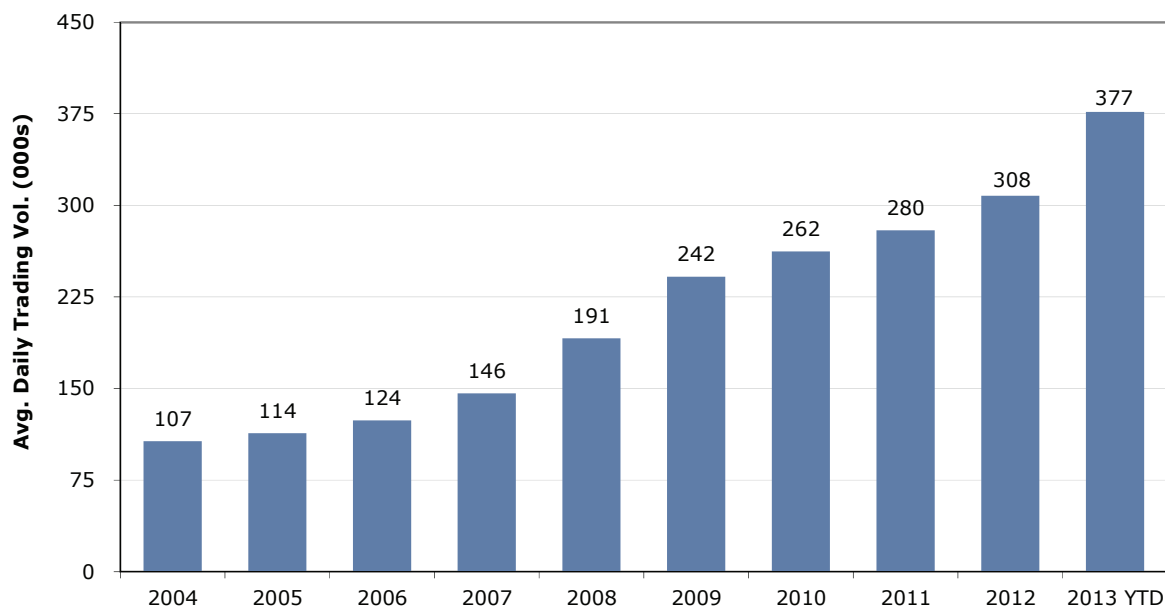
Note 1: Energy consumption in 2001 and 2008/9 was negatively affected by the downturn in economic activity  
Source: Bureau of Economic Analysis, EIA, and Wells Fargo Securities, LLC

## MLP Fund Flow And Liquidity

Liquidity in the MLP sector has steadily increased over time, but is still below that of the overall market. Notably, the market cap of the entire energy MLP sector is now around \$445 billion, compared with more than \$380 billion for Exxon Mobil. In addition, the average daily trading volume for MLPs is only about 377,000 units, versus 12 million shares for Exxon Mobil.

Rising institutional interest has led to new fund flow into the sector, which has resulted in increased overall trading liquidity. Institutional investors as a percentage of total MLP ownership increased to 30% in 2012 from 23% in 2005, according to data from PricewaterhouseCoopers.

### Exhibit 26. Average MLP Daily Trading Volume



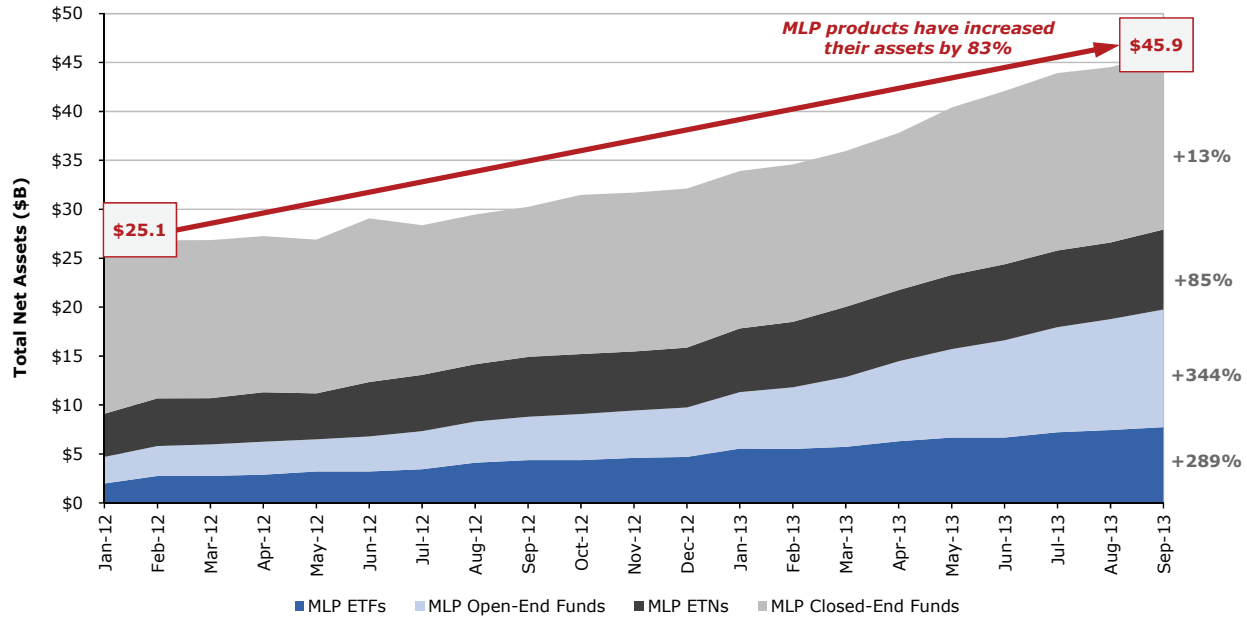
As of October 22, 2013

Source: FactSet and Wells Fargo Securities, LLC

While difficult to measure, we believe retail demand for MLPs remains strong. One indication could be the increase in assets flowing into MLP investment products such as ETFs, ETNs, and closed-end and open-end MLP-focused funds, as we believe these products are generally owned by retail investors. Between January 2012 and September 2013, these investment products have seen aggregate inflow of \$20.8 billion, or an increase of 83% for the period. Specifically, the MLP ETFs have seen inflow of \$5.8 billion for the period, open-end fund assets have increased \$9.3 billion, ETN assets have increased \$3.7 billion, and the closed-end funds have increased their assets by \$2.0 billion. Year to date for 2013, there have been 11 new MLP products announced. The total capital raised from these new products is more than \$3.0 billion.

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Exhibit 27. MLP Products Total Net Asset Growth



Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC



## How Did MLPs Fare During The Credit Crisis?

**Performance.** MLPs actually underperformed the broader stock market during the period from July 2007 to December 2008, which is characterized by the “credit crisis” that led to the global recession. For the period, the Wells Fargo MLP index decreased 49%, versus a loss of 41% for the S&P 500. On a total return basis, the Wells Fargo MLP index generated a loss of 43%, versus 39% for the S&P 500. At its peak, the Wells Fargo MLP index was yielding 5.3% as of July 13, 2007, while at its trough, the index yield was 14.3% at November 21, 2008.

**Exhibit 28. MLP Performance During The Credit Crisis**



Source: FactSet and Wells Fargo Securities, LLC

**What drove this performance?** A confluence of factors contributed to the overall volatility and steep decline in MLP valuations during this period. These factors can be separated into fundamental and technical reasons that explain the sector’s performance during this period.

### Fundamental Drivers

**Access to capital.** Since MLPs pay out the majority of their cash flow in the form of distributions but spend significant capital to grow, they are highly dependent on the debt and equity capital markets. During the credit crisis, many MLPs could not access the public debt or equity markets, nor could they access other forms of capital (i.e., bank debt, private equity, etc.) on reasonable terms. With many MLPs in the midst of capital projects, their ability to fund these projects became a source of concern for investors, which pressured valuations.

**Higher cost of capital.** As a result of the credit crisis and the subsequent decrease in equity valuations, the cost of incremental capital became very high. The growth projects of some MLPs already under way became breakeven to dilutive. In addition, the hurdle rate to justify new projects was very high, thereby reducing the amount of capital deployed and lowering future distribution growth expectations for MLPs.

**Widening credit spreads.** High-grade and high yield credit spreads widened to historic levels, causing most yield-based securities to widen in sympathy.

**Lower commodity prices.** From July 3, 2008 to December 22, 2008, crude oil prices declined to a low of \$31.41 per barrel from a high of \$145.29 per barrel. This price volatility caused many commodity-sensitive MLPs (e.g., upstream and gathering and processing) to experience significant volatility in cash flow. Some were forced to reduce or suspend distributions due to a decrease in cash flow or because of (potential) breaches debt covenants.

## Technical Drivers

In addition to the fundamental factors described in the preceding text, MLP equity valuations were affected by a number of technical factors, which exaggerated the downward movement in prices, in our view. These factors highlighted another fundamental risk to the sector, namely, the relative lack of liquidity for MLPs (see risks in section *Risks To Owning MLPs*). The period leading up to the credit crisis was marked by an inflow of institutional investor capital, including several general and MLP-dedicated hedge funds. This inflow of capital helped fuel the run-up in prices as MLPs enjoyed unprecedented access to large pools of capital. However, this rapid influx ultimately led to higher volatility to the downside when these institutional investors became forced sellers into a relatively illiquid market.

**PIPEs concentration.** From 2003 to 2007, the MLP industry experienced a rapid increase in private investment in public equity (PIPE) transactions as hedge funds and closed-end funds made significant direct investments in MLPs. In total, MLPs raised \$8.5 billion of PIPE equity in 2007, including two deals in excess of \$1 billion. While PIPEs enabled certain MLPs to finance large acquisitions and grow rapidly, the transactions created significant concentration risk as a small group of institutional investors held significant interests in MLPs, which represented multiple days of the MLPs' average trading volume.

**Total return swaps (TRS).** Certain funds began investing in the MLP sector via total return swaps for a number of reasons, including (1) to avoid the administrative burdens of receiving K-1s, (2) as a way for non-U.S. investors to gain exposure to the MLP sector, and (3) as a means of "masking" their positions to their competitors. While TRS increased fund flow into the MLP sector, they were ultimately another form of leverage for institutional investors as the investment banks that offered swap products typically required only 10-20% of collateral.

**What is a total return swap?** Investors can gain exposure to an MLP without direct ownership via a total return swap agreement. In a total return swap, an investor receives a synthetic security that mimics the performance of the underlying security. This includes any distributions generated by the underlying MLP and the benefit of the MLP's price appreciation over the life of the swap. However, if the price of the MLP decreases over the swap's life, the holder of the TRS will be required to pay the counterparty (usually a brokerage firm) the amount by which the asset has declined in price. The counterparty owns the underlying MLP security and receives payments from the investor over the life of the swap based on a set rate.

**Forced selling by leveraged funds.** In retrospect, many of the institutional funds that invested in the sector did so with significant leverage. As the credit crisis worsened, both the cost of lending and stock performance were negatively affected. As a result, these funds experienced redemptions and forced deleveraging, which, in turn, caused the forced selling of MLP securities into a relatively illiquid market.

**Lack of sector liquidity.** While MLPs are a relatively illiquid sector, the overall market experienced reduced liquidity during the credit crisis, which was even more impactful for MLPs. Thus, a lack of liquidity contributed to exaggerated movements in price as institutional investors were forced to sell positions into a weak market.

**The credit crisis, the ultimate test of MLP durability?** While MLPs underperformed the overall market during the credit crisis on a price-performance basis; the sector performed relatively well from a fundamental perspective. Specifically, all 20 pipeline MLPs maintained or increased distributions during the period, demonstrating the sustainability and durability of their underlying cash flow and business model, in our view. In total, only 16 out of 74 MLPs were forced to reduce or suspend distributions (or 23%). In contrast, 85% of REITs (or 104 out of 122 U.S. equity REITs) reduced or suspended dividends during the credit crisis, according to Wells Fargo Securities' REIT Equity Research Team. The MLPs that did reduce or eliminate distributions were involved in more cyclical or commodity-sensitive businesses, including upstream, gathering and processing, and marine transportation.

## Exhibit 29. MLP Distribution Reductions And Suspensions During The Most Recent Credit Crisis

Ticker	Quarterly Distributions Declared							Date Of Final Distrib. Cut/Suspension
	Q1'08A	Q2'08A	Q3'08A	Q4'08A	Q1'09A	Q2'09A	Q3'09A	
CLMT <sup>1</sup>	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	Q1'08
BKEP	\$0.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Q2'08
USS	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Q2'08
QELP	\$0.41	\$0.43	\$0.40	\$0.00	\$0.00	\$0.00	\$0.00	Q4'08
AHD	\$0.43	\$0.51	\$0.51	\$0.06	\$0.00	\$0.00	\$0.00	Q1'09
CEP	\$0.56	\$0.56	\$0.56	\$0.13	\$0.00	\$0.00	\$0.00	Q1'09
XTXI	\$0.36	\$0.38	\$0.32	\$0.09	\$0.00	\$0.00	\$0.00	Q1'09
HPGP	\$0.28	\$0.31	\$0.32	\$0.10	\$0.00	\$0.00	\$0.00	Q1'09
XTEX	\$0.62	\$0.63	\$0.50	\$0.25	\$0.00	\$0.00	\$0.00	Q1'09
HLND	\$0.83	\$0.86	\$0.88	\$0.45	\$0.00	\$0.00	\$0.00	Q1'09
EROC	\$0.40	\$0.41	\$0.41	\$0.41	\$0.03	\$0.03	\$0.03	Q1'09
BBEP	\$0.50	\$0.52	\$0.52	\$0.52	\$0.00	\$0.00	\$0.00	Q1'09
ATN	\$0.59	\$0.61	\$0.61	\$0.61	\$0.00	\$0.00	\$0.00	Q1'09
APL	\$0.94	\$0.96	\$0.96	\$0.38	\$0.15	\$0.00	\$0.00	Q2'09
KSP	\$0.76	\$0.77	\$0.77	\$0.77	\$0.77	\$0.77	\$0.45	Q3'09
OSP	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	\$0.38	\$0.00	Q3'09

Note 1: CLMT's Q4 2007 distribution per unit was \$0.63.

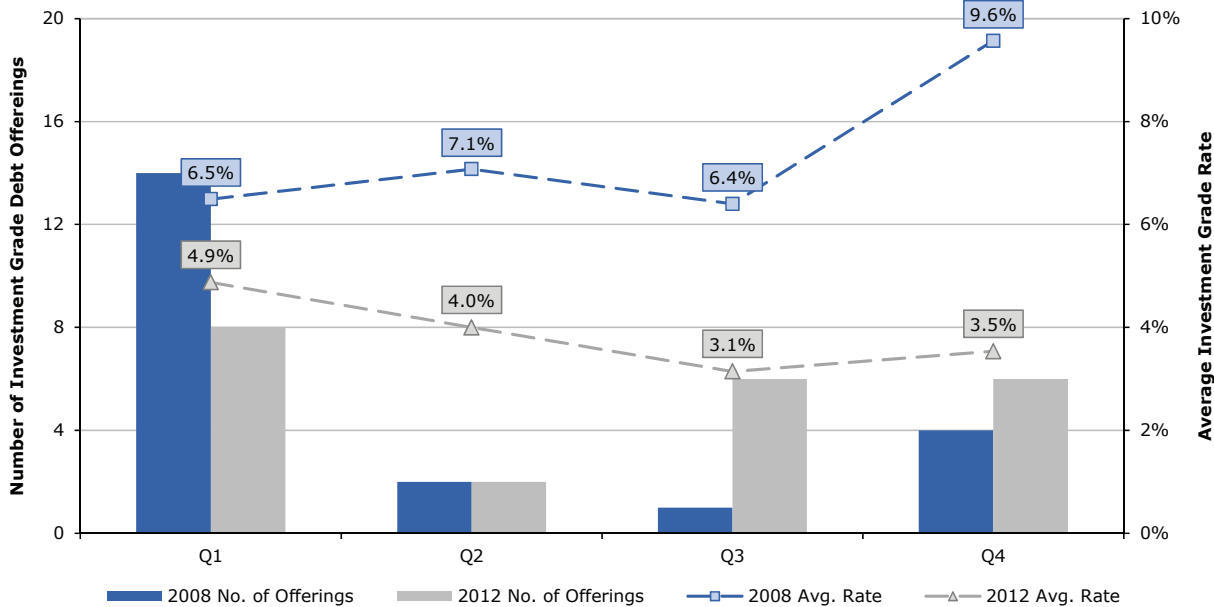
Source: Partnership reports and Wells Fargo Securities, LLC

**Sidebar: Credit Crisis Highlighted The Value Of An Investment Grade Credit Rating.** The credit crisis highlighted the dichotomy in access to capital between investment grade and non-investment grade. All 13 investment-grade rated MLPs were able to maintain (and even increase distributions) during the credit crisis. These MLPs enjoyed access to public debt and equity markets throughout the period, though at a higher cost of issuance. In contrast, non-investment grade MLPs were largely shut out of public markets for a larger portion of the credit crisis. Non-investment grade MLPs were forced to pare back capital spending, fund growth capital on revolving credit facilities, and enter into joint ventures to access necessary capital (often not on ideal terms) to meet their capital obligations for certain projects.

During the credit crunch, investment grade credit rated MLPs continued to enjoy access to capital as the high-grade debt market remained open, though at higher rates (especially in late 2008). In 2008, investment grade MLPs raised almost \$9.2 billion via 21 issuances at an average interest rate of 7.3%. Notably, the rates on these issuances trended considerably higher (in the 9-10% range) in December 2008 as the weak economic environment intensified. Beginning in H2 2009, debt markets improved with a stabilizing economy and MLPs were able to issue long-term debt at more "normalized" rates. In 2012, investment grade MLPs raised approximately \$12.6 billion via 22 issuances at an average rate of 4.1%.

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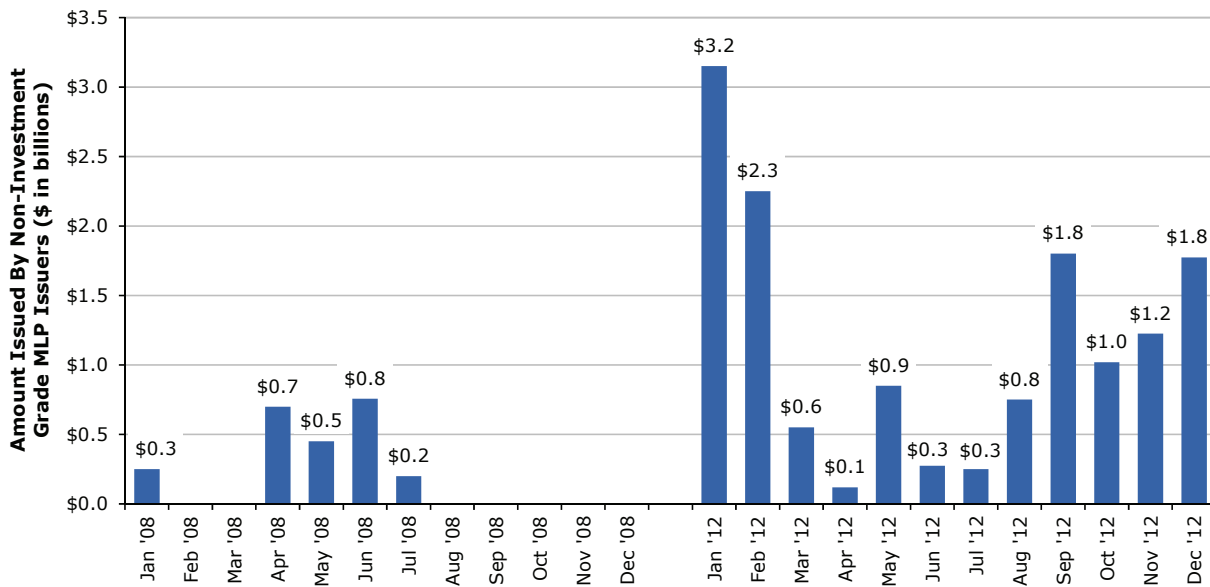
Exhibit 30. Investment Grade Debt Offerings: 2008 Versus 2012



Source: Partnership reports and Wells Fargo Securities, LLC

During the credit crisis, non-investment grade MLPs relied mostly on revolving credit facilities to fund their capital obligations as the high yield and term loan B credit markets were volatile and expensive. Investment grade MLPs were still able to raise debt during a turbulent environment in late 2008 (i.e., December 2008). On the other hand, there were no high yield offerings in H2 2008, as the debt markets were closed (i.e., too expensive) for non-investment grade MLPs. In 2008, non-investment grade MLPs raised about \$2.4 billion in nine offerings at an average interest rate of 8.8%, with all of the offerings occurring during the first seven months of the year. In 2012, by comparison, there were 33 issuances by high yield MLPs, raising approximately \$14 billion at an average rate of 6.5%.

Exhibit 31. High Yield Debt Offerings: 2008 Versus 2012



Source: Partnership reports and Wells Fargo Securities, LLC

## Tax And Legislative Issues

### Who Pays Taxes? Flow through Of Taxable Income To Investors

An MLP that meets the “Qualifying Income Exception” of Section 7704 of the Internal Revenue Code is treated as a partnership and not a corporation for federal income tax purposes (For details, see section *Tax And Legislative Issues*). Consequently, an MLP incurs no federal income tax liability and does not pay corporate-level federal income taxes. However, there is some tax leakage at the MLP level if the partnership owns foreign assets and/or operates in a state with franchise (margin) taxes. For example, an MLP chartered or organized in Texas, or doing business in Texas is required to pay franchise (margin) taxes. The tax is assessed at a rate (e.g., 0.5-1.0% for 2013) on Texas-sourced taxable margin (e.g., defined as the lesser of (i) 70% of total revenue or (ii) total revenue less (a) cost of goods sold or (b) compensation and benefits for 2013). Notably, several changes to the Texas franchise (margin) were approved and are to be effective January 1, 2014.

Partners in an MLP, i.e., the limited partner (LP) unitholders and the general partner (GP), are required to take into account their allocable share of the partnership’s income, gains, losses, and deductions, including accelerated depreciation and amortization deductions in computing their federal income tax liability. However, distributions by an MLP are generally not taxable to a unitholder (i.e., 100% return of capital) unless the amount of cash distributed is in excess of his or her adjusted tax basis. In general, the ratio of taxable income to distributions for an MLP is approximately 20% (the median). The amount of taxes a LP unitholder pays is determined by several factors, including the unitholder’s percentage ownership in the partnership, when the investment was made, and unit price at the time of purchase.

### Tax Reporting Forms For LP Unitholders -- Schedule K-1 Versus Form 1099

MLPs that have elected to be treated as a partnership for tax purposes (i.e., the majority) issue a Schedule K-1 to each investor that details his or her share of the partnership’s income, losses, deductions, and credits each year. Notably, there are a handful of MLPs (mainly in the marine transportation subsector) that have elected to be treated as a C-corporation for tax purposes. Investors of these MLPs receive a standard Form 1099 instead of a K-1.

### Tax Treatment Of Distributions For U.S. Unitholders

As previously noted, distributions by an MLP to a partner are generally not taxable. Instead, a distribution is treated as return of capital and reduces the unitholder’s cost basis in the MLP, all else being equal. For the few MLPs that have elected to be treated as a C-corporation for tax purposes, a distribution paid to a unitholder is treated as a dividend to the extent the distribution comes from earnings and profit. The excess is treated as a non-dividend distribution or return of capital. Notably, the determination of whether payments constitute a dividend or a nondividend distribution is typically not made until the end of the year.

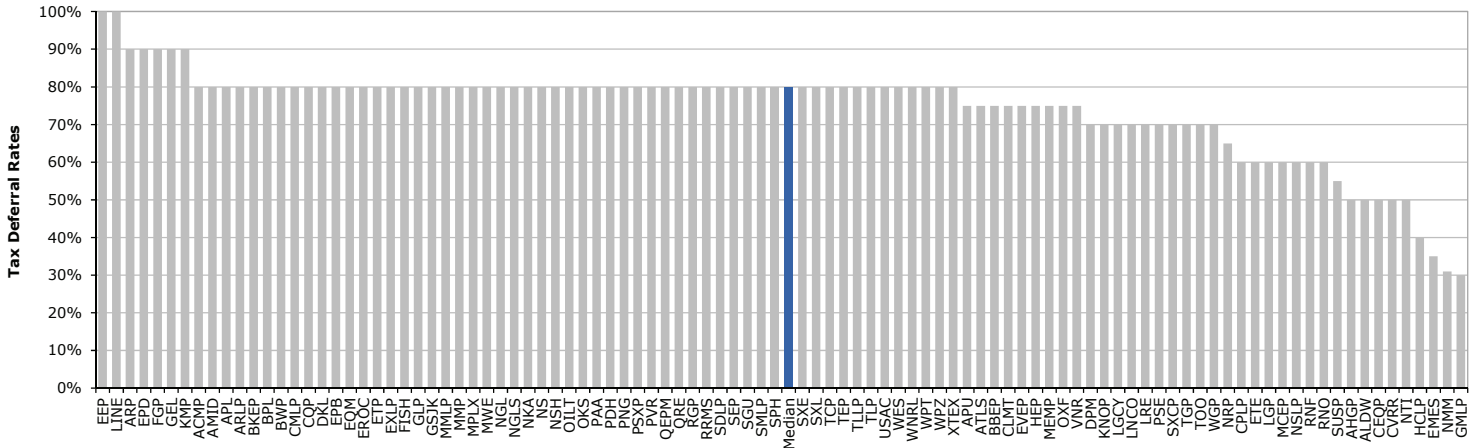
### What Are The Tax Advantages For The LP Unitholder (The Investor)?

#### Taxed-Deferred Income

In general, the ratio of taxable income to distributions for an MLP is approximately 20% (the median). In other words, the MLP distributions received by a limited partner (i.e., the investor) are approximately 80% tax deferred (on a median basis) in a given year. Thus, the investor would pay ordinary income tax only on the income allocated to him or her, which roughly equates to 20% of the distributions received in that year. The tax-deferred portion of the distribution is not taxable until the investor sells the security. The tax deferral rates (or ratios of non-taxable income to distributions) differ for each MLP and are listed in the following Exhibit.

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Exhibit 32. MLP Estimated Tax-Deferral Rates



As of October 22, 2013  
Note: Chart is not intended to be a comprehensive list  
Source: Partnership reports and Wells Fargo Securities, LLC

**Tax Deferral Can Go Below 80%**

The ratio of allocable taxable income to distributions for an MLP depends on multiple factors, including the partnership’s capital expenditure. If an MLP does not make continual investments, the tax shield created by depreciation and other deductions could decrease. In that case, the amount of distributions in a given year that would be tax deferred would decrease over time below the typical 80% level. Since most MLPs in recent years have been growing via acquisitions and expansion projects, this has not yet become an issue.

**Technical termination.** Another circumstance in which an investor’s tax shield could go below 80% is a technical termination of the partnership. A termination of the partnership for federal income tax purposes occurs if there is a sale or exchange of 50% or more of the partnership’s capital and profit interests during any 12-month period. Implications of a technical termination include (1) the closing of the MLP’s taxable year for all unitholders. The MLP would file two tax returns for the fiscal year in which the technical termination occurred and unitholders would receive two Schedule K-1s for that year unless the IRS grants a special relief; (2) the MLP would be treated as a new partnership for tax purposes; (3) a significant deferral of depreciation deductions allowable in computing the MLP’s taxable income could occur, which could result in a higher ratio of taxable income-to-distributions (i.e., a lower tax-deferral rate) for the partnership; and (4) the event would not affect the MLP’s classification as a partnership for federal income tax purposes. In general, the tax deferral for the MLP (median of 80%) would be restored for the following year.

**Some Tax Considerations And Disadvantages For The LP Unitholder**

**Timing of K-1 availability.** Because MLPs are partnerships, investors receive Schedule K-1s instead of 1099s for tax reporting. The K-1 tax form is the statement that an MLP investor receives each year from the partnership that shows his or her share of the partnership’s income, gain, loss, deductions, and credits. K-1 forms are usually distributed in late February or early March, which can make it difficult for investors to meet the April 15 Federal and State tax filing deadline. Most K-1s can be retrieved online (via the partnership’s website and at [www.taxpackagesupport.com](http://www.taxpackagesupport.com)), and many popular tax software programs (e.g., Turbo Tax) have easy-to-use forms for K-1 reporting.

**Potential for multiple filings.** In addition to federal income taxes, LP unitholders may be subject to other taxes including state, local, and foreign income taxes, unincorporated business taxes, and estate, inheritance, or intangible taxes imposed by some or all of the various jurisdictions in which an MLP conducts business or owns property. Investors may be required to file a return and/or pay income taxes in these jurisdictions (in most cases, depending on whether income from the MLP exceeds the filing and/or payment requirements). Investors may be subject to taxes and return filing requirements even if they do not live in any of those jurisdictions. Please refer to the Appendix for a list of MLPs and the states in which they own assets/operate.

**Potential for tax liability even if distributions are eliminated.** An MLP may allocate taxable income to unitholders even during periods when it does not pay a distribution. Accordingly, a unitholder may be required to pay tax on his or her share of allocated income, regardless of whether he or she receives a distribution from the MLP.

**Potential for tax liability when distributions exceed tax basis.** In general, MLP distributions are not taxable to the unitholders for federal income tax purposes. However, if a cash distribution exceeds a unitholder's tax basis immediately before the distribution (e.g., would reduce the cost basis to zero), the excess is typically treated as a gain from the sale of the unit and is taxed accordingly.

**Limitations on deductibility of losses.** The deduction of a unitholder of his or her share of an MLP's losses is limited to the investor's tax basis and the amount for which the unitholder is considered to be "at risk" with respect to the MLP's activities. In addition, there are passive loss limitations. The passive loss limitations are applied separately with respect to each publicly traded partnership. Specifically, if the partnership generates a net loss (after deductions), it is considered a "passive loss" under the tax code and may not be used to offset income from other passive activities or investments. However, the loss can be carried forward and used to offset future income from the same MLP.

**Inclusion in alternative minimum tax calculation.** In calculating the potential liability for the alternative minimum tax, a unitholder is required to take into account his or her share of the MLP's income, gain, loss, or deduction.

**Equitable apportionment applies to partial disposition of MLP investment.** According to IRS rules, an investor must maintain a single adjusted tax basis and combine all interests in an MLP acquired through separate transactions. If the investor sells or disposes of less than 100% of those interests, then the "equitable apportionment" method is used to allocate a portion of the tax basis to the interests being sold or disposed of. In general, the ratio of the tax basis allocated to the interests sold relative to the investor's combined basis in the MLP equals to the ratio of the value of the interests sold relative to the entire value of the investor's interests in the MLP.

**The Mechanics Of A Purchase And Sale Of MLP Units And The Tax Consequences**

We provide a simplified example illustrating the mechanics of a purchase and sale of an MLP unit and the associated tax consequences. In our example, we assume one MLP unit is (1) purchased for \$20.00 per unit, (2) held for five years, and (3) sold at the end of year five for \$25.00 per unit (i.e., a \$1.00 per unit increase in the unit price each year). We also assume no distribution increases over the five-year period and an ordinary income tax and long-term capital gains tax rates of 35% and 15%, respectively.

**Exhibit 33. Simplified MLP Purchase And Sale Mechanics**

	Unit Purchase Price	Year 1	Year 2	Year 3	Year 4	Year 5 Sell Unit At The End Of	
MLP XYZ unit price	\$20	\$21	\$22	\$23	\$24	\$25	
Annual distribution per unit	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Distribution yield	5.0%	4.8%	4.6%	4.4%	4.2%	4.0%	
% of distribution tax deferred (tax shield)	80%						
Ordinary (personal) income tax rate	35%						
Capital gains tax rate	15%						
Tax deferred portion of distribution		\$0.80	\$0.80	\$0.80	\$0.80	\$0.80	The tax deferred portion of the distribution is considered a "return of capital," which reduces the investor's cost basis
Income Allocated		\$0.20	\$0.20	\$0.20	\$0.20	\$0.20	
Tax paid at the end of each year on distributions received (at 35%)		\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	
Cost basis in MLP XYZ	\$20.00	\$19.20	\$18.40	\$17.60	\$16.80	\$16.00	
<b>Tax paid when units are sold at the end of year 5:</b>							
Capital gains tax paid (on unit price increase to \$25 from \$20)	\$0.75	← Taxed at long-term capital gains tax rate of 15%					
Ordinary income tax paid (on "return of capital" - reduction in investor's cost basis from \$20 to \$16)	\$1.40	← This is also equivalent to the tax deferred portion of the distributions over the 5-year period (i.e. \$0.80/unit per year × 5 years = \$4.00),					
Tax paid on year 5 income allocated	\$0.07						
<b>Total tax paid at the end of year 5</b>	<b>\$2.22</b>						

Source: Wells Fargo Securities, LLC estimates

Each year the MLP pays a cash distribution of \$1.00 per unit, but also allocates taxable income equal to 20% of the distribution to the investor. As a result, the investor pays tax on income of \$0.20 per unit. The investor pays tax of \$0.07 per unit, which is based on the ordinary income tax rate (of 35%) multiplied by the taxable income allocated (\$0.20 per unit or 20% of the distribution received).

**Master Limited Partnerships**

**Exhibit 34. Tax-Deferral Calculation**

Annual distribution	\$1.00	
Ratio of taxable income to distributions	× 80%	
Tax deferred portion of distribution	\$0.80	
Income Allocated	\$0.20	
Ordinary income tax rate	× 35%	
Tax due on year 1 distribution received	<b>\$0.07</b>	

Source: Wells Fargo Securities, LLC estimates

The investor’s tax basis in the unit is reduced by \$0.80 per year (i.e., the distribution of \$1.00 per unit reduces the tax basis and the income allocated of \$0.20 per unit increases the tax basis, which nets to \$0.80 per unit, or the tax-deferred portion of the distribution). For example, at the end of year 1, the investor’s tax basis is reduced to \$19.20 from \$20.00. At the end of five years, the investor’s tax basis in the security is \$16.00 per unit (i.e., \$20.00 less the annual tax-deferred portion of the distribution of \$0.80 x five years).

To summarize, the adjusted basis of a common unit is equal to the greater of \$0 or:

- The initial cost basis (i.e., amount paid for the common unit plus share of the MLP’s nonrecourse liabilities);
- Plus share of MLP’s income allocated to the investor;
- Plus increases in share of MLP’s nonrecourse liabilities;
- Less distributions received from the MLP;
- Less share of MLP’s losses allocated to the investor;
- Less decreases in share of MLP’s nonrecourse liabilities; and
- Less share of MLP’s expenditure that is not deductible in computing taxable income and is not required to be capitalized.

**Exhibit 35. Adjustment In Investor’s Tax Basis**

<i>\$ per unit</i>	Year 1	Year 2	Year 3	Year 4	Year 5
Cost basis - start period	\$20.00	\$19.20	\$18.40	\$17.60	\$16.80
Tax deferred portion of distribution	\$0.80	\$0.80	\$0.80	\$0.80	\$0.80
Cost basis - end period	\$19.20	\$18.40	\$17.60	\$16.80	\$16.00

Source: Wells Fargo Securities, LLC estimates

At the end of years 2-4, the unitholder pays the same tax of only \$0.07, as we assume the distribution of \$1.00 is maintained. Since we assume the unitholder sells the MLP unit at the end of year five, the unitholder not only pays the \$0.07 tax on the distribution of \$1.00, but also a capital gains tax of \$0.75 ( $[\$25-20] \times 15\%$ ) and recapture of the deferred tax related to distributions in years 1-5 of \$1.40 ( $\$0.80 \times 5 \times 35\%$ ). The total related taxes paid at the end of year 5 is \$2.22 (i.e., capital gains tax of \$0.75 + recapture of deferred taxes on prior-year distributions of \$1.40 + tax due on year five distribution of \$0.07).



**Exhibit 36. Taxes Paid At The End Of Year Five (The Sale)**

Total deferred portion of distribution (years 1-5)	\$4.00	
Ordinary income tax rate	× 35%	
Recapture of deferred tax related to year 1-5 distributions	\$1.40	
Unit price at the end of year 5	\$25	
Unit price at the start of year 1	\$20	
Unit price appreciation	\$5	
Capital gains tax rate	× 15%	
Capital gains tax paid on unit price appreciation	\$0.75	
Recapture and capital gains related taxes due	\$2.15	
Tax due on income allocated in year 5	\$0.07	
Total taxes paid at the end of year 5	<b>\$2.22</b>	

Source: Wells Fargo Securities, LLC estimates

The tax ramifications are as follows. The investor would book a capital gain of \$5.00 per unit (the gain to \$25 from \$20 and pay tax at the long-term capital gains rate (\$5.00 x 15% = \$0.75). The gain of \$20.00 per unit from \$16.00 per unit is referred to as “re-capture” and represents the tax-deferred income received throughout the five years of ownership. Thus, the \$4.00 gain is considered ordinary income and taxed at the ordinary income rate (\$4.00 x 35% = \$1.40).

**Return Of Capital Versus Return On Capital**

As illustrated in Exhibit 33, the tax-deferred portion of the distribution received by an investor is considered a “return of capital” as it reduces the investor’s cost basis in the MLP security. In our example, we assume an investor purchases a unit of MLP XYZ for \$20, which pays a distribution of \$1.00 per unit. Based on an 80% tax-deferral rate, \$0.80 of the distribution is tax deferred, which reduces the investor’s cost basis in MLP XYZ to \$19.20 from \$20.00 at the end of year one. Specifically, the distribution of \$1.00 per unit reduces the investor’s cost basis and the allocation of \$0.20 per unit increases the cost basis, which nets to a decrease of \$0.80 per unit. After five years and assuming no change to MLP XYZ’s tax-deferral rate, the investor’s return of capital would be \$4.00 (i.e., \$0.80 per unit per year x five years = \$4.00), which reduces the investor’s cost basis to \$16.00 from \$20.00. The return of capital is taxed at the investor’s ordinary income tax rate upon sale of the investment.

If we also assume the investor sells MLP XYZ at the end of year five and that MLP XYZ’s unit price has appreciated to \$25, the investor would realize a “return on capital” of 25% before taxes (i.e., [ $\$25 - 20$ ] ÷ \$20 = 25%).

**Foreign Investor Ownership**

A non-resident alien and foreign corporation, trust, or estate that own MLP units will be considered to be engaged in business in the United States. Consequently, a foreign investor will be required to file a federal tax return to report the individual’s share of an MLP’s income, gain, loss, or deduction and pay federal income tax at regular rates on its share of the MLP’s net income or gain. In addition, the MLP will reduce quarterly distributions to a foreign unitholder by withholding taxes (at the highest applicable effective tax rate). The foreign unitholder could obtain credit for the withholding taxes by securing a taxpayer identification number from the IRS and submitting Form W-8BEN to the MLP’s transfer agent. A foreign corporation that owns MLP units could also be subject to additional tax liability and reporting requirements (e.g., U.S. branch profit tax at a rate of 30%, federal income tax on gain from the sale of MLP units, etc.).

**Treatment Of Short Sales**

If an investor lends his or her MLP units to a “short seller” to cover a short sale of units, the transaction may be considered as a sale and trigger a taxable gain or loss from the disposition. During the loan period, any cash distributions received by the unitholder could be fully taxable as ordinary income. Since the investor would not be considered a partner, the MLP would not allocate any income, gain, loss, or deduction to the unitholder during the loan period.

**Can MLPs Be Held By Tax-Exempt Organizations (i.e., Retirement Accounts)?**

Technically, yes. MLPs can be held in organizations that are exempt from federal income tax including individual retirement accounts (IRA). However, there could be potential tax consequences in doing so. Employee benefit plans and most other organizations exempt from federal income tax, including IRAs, 401Ks, foundations, endowments, and other corporate retirement plans, are subject to federal income tax on unrelated business taxable income (UBTI). In general, all income allocated to investors from MLPs is considered UBTI. (To note, state and public pension plans are generally not considered to be subject to the tax code and would therefore not pay tax on MLP holdings.)

**UBTI Example.** If an IRA earns more than \$1,000 of UBTI annually from all MLPs held and other sources of UBTI, the excess income (above \$1,000) is subject to tax. The custodian of the IRA would file IRS Form 990-T and pay the tax on UBTI in excess of \$1,000 from funds in the account. In addition, it would pay estimated tax if it expects the tax for the year will be \$500 or more. Consequently, it may not be tax efficient to own MLPs in an IRA given that the excess UBTI may be taxed twice (i.e., the IRA would be taxed on UBTI above \$1,000 and the owner or beneficiary could also be taxed on distributions of that income). We recommend placing MLP units in traditional brokerage accounts to avoid this issue and to ensure that the investor receives the full tax advantages of the security.

However, if an investor wanted to hold MLPs in a tax-exempt account, we have provided a simplified example calculating the maximum number of units in one MLP security that an investor can hold (in such an account) without triggering adverse tax consequences. In our example, we assume (1) an MLP XYZ unit price of \$30.00, (2) total distribution payments of \$2.10 per unit (implying a yield of 7.0%), (3) a tax-deferral rate of 80%, (4) MLP XYZ maintains its distribution rate, (5) MLP XYZ does not experience any material gains from asset sales (which would otherwise be applied to an investor’s UBTI limit and lower the number of MLP XYZ units that can be held in a tax-exempt account), and (6) the investor has no other sources of UBTI.

On the basis of these assumptions, the MLP income (UBTI) allocated to the investor would equal \$0.42 per unit (i.e., the ratio of income to distributions of 20% multiplied by the total distribution of \$2.10 per unit). Since the threshold for UBTI is \$1,000 per year, we divide the UBTI threshold by the amount of income allocated (i.e., \$0.42 per unit) to calculate the maximum number of units that an investor can own of MLP XYZ. This equals 2,381 MLP XYZ units. Based on this number of units and the amount of income allocated by the MLP of \$0.42 per unit, the investor’s tax-exempt account would receive income of \$1,000 for the year.

**Exhibit 37. Maximum MLP Holding Number Of Units Before Exceeding UBTI Limit**

MLP XYZ unit price	\$30.00
Annualized distribution per unit	\$2.10
Distribution yield	7.0%
Tax deferral rate	80%
Taxable portion of distribution (20%)	\$0.42
<b>UBTI threshold</b>	<b>\$1,000</b>
<b>Max. ownership number of MLP XYZ units</b>	<b>2,381</b>
Market value of MLP XYZ units	\$71,429
<b>MLP XYZ income received in one year</b>	<b>\$1,000</b>
Adverse tax consequences triggered?	<b>No</b>

Source: Wells Fargo Securities, LLC estimates

However, since most MLPs are likely to increase their distributions over time, an investor’s UBTI limit could be easily exceeded. In our example, if we assume MLP XYZ raises its distribution by 5% (see Period 2 in Exhibit 38) to \$2.21 from \$2.10 in the prior period, while holding all else equal, the investor’s annual UBTI would approximate \$1,050, triggering adverse tax consequences for the investor since the income has exceeded the \$1,000 limit.

**Exhibit 38. UBTI Limit Could Be Easily Exceeded**

	<b>Period 1</b>	<b>Period 2</b>
MLP XYZ unit price	\$30.00	\$30.00
Annualized distribution per unit	<b>\$2.10</b>	<b>\$2.21</b>
Distribution yield	7.0%	7.4%
Tax deferral rate	80%	80%
Taxable portion of distribution (20%)	\$0.42	\$0.44
<b>UBTI threshold</b>	<b>\$1,000</b>	<b>\$1,000</b>
<b>Max. ownership number of MLP XYZ units</b>	<b>2,381</b>	<b>2,381</b>
Market value of MLP XYZ units	\$71,429	\$71,429
<b>MLP XYZ income received in one year</b>	<b>\$1,000</b>	<b>\$1,050</b>
Adverse tax consequences triggered?	<b>No</b>	<b>Yes</b>

Source: Wells Fargo Securities, LLC estimates

**MLPs As An Estate Planning Tool**

MLPs can be used as a tax-efficient means of transferring wealth. When an individual who owns an MLP dies, the individual’s MLP investments can be transferred to an heir. When doing so, the cost basis of the MLP is reset to the fair market value (e.g., price of the unit) at date of death. Thus, the tax liability created by the reduction of the original unitholder’s cost basis is eliminated.

**Unitholder Certification Of Taxpayer Status**

The Federal Energy Regulatory Commission (FERC) currently allows MLPs to include an income tax allowance when determining their cost-of-service (maximum rates that may be charged by their pipelines). Since MLPs do not pay U.S. federal income taxes, the partnerships may be required to provide evidence to the FERC that their unitholders are subject to federal income taxation. Accordingly, an MLP may require its unitholders to recertify their status as being subject to U.S. federal income taxation on the income generated by the partnership.

**Current Tax And Legislative Issues**

**What Is The National Association Of Publicly Traded Partnerships (NAPTP)?**

The NAPTP is a trade association formed in 1983 that represents the interests of publicly traded partnerships (including publicly traded LLCs taxed as partnerships) and their respective employees on legislative and regulatory issues in Washington, D.C. and in all states. The association currently represents the interests of 135 publicly traded partnerships (PTPs). The NAPTP hosts an annual conference that allows its PTP members to provide company presentations to current and prospective investors.

Additional information regarding the association can be found at [www.naptp.org](http://www.naptp.org).

**What Is The Risk Of MLPs' Losing Their Tax-Advantaged Status?**

There has been some concern among investors that MLPs could be at risk of losing their tax benefits as Congress could use this potential tax revenue to reduce current and future deficits. In addition, the idea of comprehensive tax reform has gained momentum in Washington given the growing U.S. fiscal deficit and lackluster economic growth. Although there appears to be bipartisan support for change, how tax reform will happen, what it will entail, and when it will be enacted all remain in question at this juncture. There is always a risk that tax reform legislation could affect energy MLPs if elimination of tax expenditure and taxation of non-corporate entities come into play. ***However, the risk of MLPs losing their tax-advantaged status is low, in our view.*** At this juncture, while many options for tax reform have been proposed, there has been no definitive movement on the direction that tax reform could take.

There appears to be considerable support for energy MLPs, particularly in the House and among Senate Republicans. Thus, while a potential change in the tax treatment of MLPs is always a risk, MLPs' role in the energy and investor markets (e.g., significant sponsors of U.S. infrastructure, stable income-oriented securities owned primarily by retail/retirees, etc.) are compelling reasons to preserve their tax status, in our view.

The advantages of the MLP tax structure were originally developed by Congress in the mid- to late 1980s, through the passage of the *Tax Reform Act of 1986* and the *Revenue Act of 1987*. These bills exempted MLPs from corporate taxation as long as at least 90% of their income is derived from natural resource or mineral activities (including exploration, development, mining, processing, refining, transportation, or marketing, etc.). MLPs' role in the energy and investor markets makes it unlikely that Congress would take actions to harm the MLP structure, in our view.

- **U.S. energy infrastructure investment.** Congress established the MLPs' favored tax status, in part, to encourage investment in U.S. energy infrastructure. This has largely proven successful as MLPs have been a major participant in the recent buildout of energy infrastructure (e.g., pipelines, storage, processing plants, etc.) across multiple commodities (e.g., natural gas, crude oil, refined products, natural gas liquids, etc.). From 2008 to 2012, MLPs (Wells Fargo Securities' MLP coverage universe) invested approximately \$75 billion in organic growth capital spending, largely in support of the aforementioned infrastructure projects. In addition, MLPs are expected to continue to invest significant amounts of capital in the foreseeable future.
- **MLPs are predominantly retail owned.** Despite an increase in institutional ownership, the MLP investor base is still predominantly retail. According to PricewaterhouseCoopers, approximately 65% of MLP securities are held by retail investors. Many of these investors own MLPs because of their tax advantages and high yields. Some, particularly retirees, rely on MLP yields for income. Thus, any action to remove the MLPs' tax status or otherwise would likely directly affect many U.S. citizens (in particular, retirees).
- **Lessons from Canadian trusts demonstrate ramifications of tax status modifications.** In late 2006, the Canadian government announced plans to begin taxing Canadian trusts at a tax rate ranging from 31% to 35% starting in 2011. The impetus for the change in tax law was the potential for significant lost tax revenue as many companies in Canada (in sectors beyond energy and real estate) had converted, or were contemplating conversion, to the trust structure. Canadian trusts were off about 20%, on average, in response. Given the ramification, as demonstrated in Canada, we suspect Congress would think twice before changing the tax status of MLPs, which would likely result in a similar decline in valuation in the U.S. MLP sector. Further, the U.S. government already addressed these issues with the passage of the *Tax Reform Act of 1986* and the *Revenue Act of 1987*, which essentially limited the types of assets that qualify for the MLP structure (i.e., natural resource or mineral activities including exploration, development, mining, processing, refining, transportation, or marketing, etc.).
- **MLP tax expenditure estimate has increased, but is still low.** Since 2008, energy and natural resource MLPs have been included as tax expenditure in the list issued annually by the Congress Joint Committee on Taxation (JCT). "Tax expenditure" refers to exemptions in the tax code that effectively reduce tax revenue. Thus, eliminating tax expenditure is the most obvious way to raise tax revenue. In 2013, the JCT estimated the tax expenditure from energy-related PTPs for five years at \$6.7 billion (2013-17). This is a significant increase from the estimate provided in 2012 of \$1.2 billion. The committee does not provide details on how it arrives at these calculations. While the estimate has increased, the tax expenditure attributed to MLPs is still relatively insignificant. For reference, tax expenditure for the mortgage interest deduction is \$379 billion, non-taxed employer provided health insurance is \$760 billion, and income deferral for controlled foreign corporations is \$266 billion.
- **Finally, MLP unitholders do pay taxes; however, MLP unitholders are not subject to double taxation as the partnership is not taxed at the entity level.**

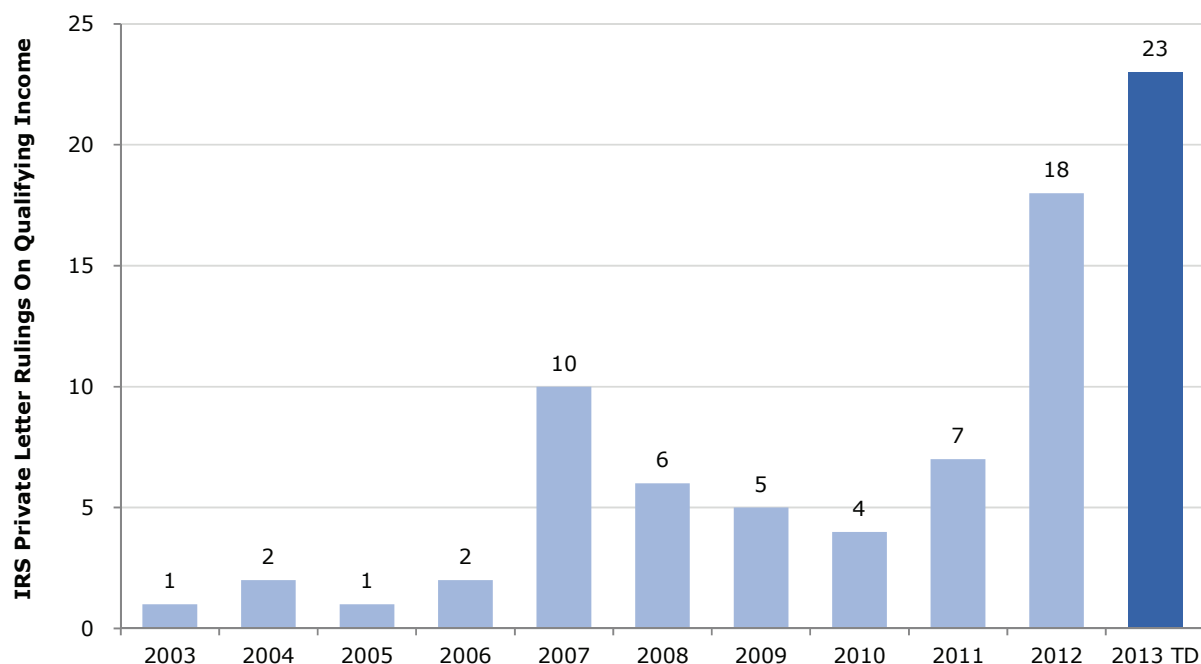
### Private Letter Rulings (PLR) Have Increased

A private letter ruling (PLR) issued by the IRS provides guidance on the definition of qualifying income and is applicable only to the taxpayer requesting it and cannot be used as precedent. Over the past couple of years, there has been a notable increase in the number of PLRs issued for the MLP sector. Specifically, there were 18 PLRs in 2012, compared to 7 in 2011. Year to date, there have been 23 PLRs issued. The increase in PLRs in recent years is attributable to the following:

- (1) Changes in the oil and gas industry with enhanced fracking and other technologies requiring clarification around qualifying income;
- (2) That a number of oil and gas services, which have traditionally been performed by oil and gas companies, are now being done by specialized companies;
- (3) The growth in the MLP market and investors' increased appetite for MLPs having spurred the creation of new MLPs; and
- (4) Similarly, the fact that an increased appetite for non-traditional and variable rate MLPs has driven additional PLR requests as companies explore different types of energy-related businesses that can be placed into the MLP structure.

Recent PLRs have included fertilizer, atypical natural gas processing, and petrochemical companies. The next wave of "new" MLPs appears to be providers of ancillary services to the oil and gas sector (e.g., oilfield services, refinery services, etc.).

### Exhibit 39. Number Of IRS Private Letter Rulings On Qualifying Income



Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

**MLP Parity Act Could Potentially Broaden The Scope Of MLP Qualification**

On June 7, 2012, the *MLP Parity Act* was introduced by U.S. Senators Chris Coons (D-Del.) and Jerry Moran (R-Kan.) to expand MLP eligibility to renewable energy and electric transmission projects. The bill had the support of five co-sponsoring senators and the endorsement by several alternative energy organizations. In 2013, the *MLP Parity Act* was re-introduced. The bill seeks to expand MLP eligibility to renewable energy and “level the playing field” for all energy companies. As a result of an effective lobbying effort, the bill is now part of the discussion around broader tax reform and could be tied to its passage. We view the potential legislation as a net positive for the MLP sector as it highlights the effective role MLPs have played in the expansion of U.S. energy infrastructure and the structure’s success in accessing the capital markets to facilitate these investments. The bill would also broaden the potential supporters for the MLP structure, which could have favorable implications during future tax reform discussions, in our view (i.e., both oil and gas and environmental interests).

If passed, the *MLP Parity Act* is expected to stimulate renewable energy development and investments. Proponents argue that the MLP structure would provide certain benefits to investors in renewable energy projects including (1) tax advantages as a pass-through structure (no double taxation for investors), and (2) access to capital at lower cost and from a larger pool of potential investors. According to a white paper published by the Maguire Energy Institute at Southern Methodist University, “expanding the MLP structure to renewables could result in an additional \$3.2-5.6 billion of capital inflow into the industry between now and 2021, depending upon economic and market conditions.” Like all investments, potential MLPs with renewable energy assets present risk/reward propositions, in our view. Potential investors would need to assess certain factors including the company’s quality/stability of cash flow (e.g., contracts in place), growth outlook, capital structure, risks (e.g., technology), etc.

The *MLP Parity Act* would amend the Internal Revenue Code of 1986 to expand the definition of MLP qualifying sources of income to include clean energy resources and infrastructure projects. To qualify as an MLP, a partnership must receive at least 90% of its income from qualifying sources. *The 2008 Emergency Economic Stabilization Act* serves as a precedent in the expansion of the MLP structure. The legislation changed the definition of qualifying income to include transportation and storage of certain renewable and alternative fuels (ethanol, biodiesel, and a series of liquefied fuels), as well as industrial-source carbon dioxide.

**Carried Interest Legislation Should Not Pose A Concern For Energy MLPs**

The PTP structure came under increased scrutiny following the initial public offering (IPO) of a number of private equity and hedge fund managers structured as PTPs. Some members of Congress took issue with the fund managers’ form of compensation, which is in part treated as a form of carried interest, which is taxed as capital gains (taxed at 15%), as opposed to ordinary income (i.e., 35%). Energy MLPs were initially concerned about the carried interest legislation because incentive distributions are classified as a form of carried interest.

At this juncture, proposed carried interest legislation should not affect energy MLPs or their public unitholders. Managers of private equity and hedge fund managers continue to be the targets of carried interest provisions. This is supported by language contained in the *American Jobs Act* and Rep. Levin’s “*The Carried Interest Fairness Act of 2012*” bill, both of which include a narrower definition of investment services partnership interest (ISPI) and require investment management to be the primary business of the partnership in question. An ISPI is a carried interest in an investment partnership that is held by a person who provides services to a partnership. To note, while every budget introduced by the Obama Administration has included a carried interest provision, it does not appear that the House would be supportive of a bill. However, carried interest is a revenue raiser, so it will likely be in play in any tax reform legislation.

## MLP Accounting Nuances

### How Can MLPs Pay Out More Than They Earn?

In analyzing MLPs, we typically do not focus on earnings per share or earnings per unit (EPS/EPU), as we believe the focus for MLPs should be on cash flow. This is due to the fact that cash flow determines how much can be paid out to unitholders in the form of distributions. We believe that earnings may misrepresent true economic value because of accounting conventions for non-cash items such as depreciation and amortization and non-cash market-to-market adjustments for commodity and interest rate hedges. As such, we tend to focus on cash flow metrics, in particular, distributable cash flow, as this determines how much cash flow can be paid out in the form of distributions.

The primary non-cash items that explain the differences between earnings and distributable cash flow are as follows:

- **Depreciation and amortization expense versus maintenance capital expenditure.** Per accounting rules, assets are depreciated over their useful lives as defined by GAAP. For example, pipeline assets are generally depreciated over 35 years. In reality, many pipelines are able to operate well beyond their depreciable lives with proper maintenance spending. Consequently, distributable cash flow (which deducts maintenance capex) should be higher than earnings (which deduct depreciation expense).
- **Non-cash mark-to-market adjustments for future derivative positions.** MLPs with future hedges in place must mark these positions to market every quarter even though there is no cash flow impact to the partnership until the hedge settles in the future. Consequently, a movement in the shape of the NYMEX future curve affects earnings, but has no bearing on the current quarter's cash flow.
- **Cash versus GAAP interest expense.** Interest expense on the income statement can contain certain non-cash items such as the amortization of certain financing charges. The DCF calculation excludes these non-cash expenses.
- **Non-cash general and administrative expense.** G&A expense often includes non-cash compensation expense tied to the movement of the partnership's unit price during the quarter. Since this has no cash impact, this expense is excluded from DCF.
- **Equity income versus cash distributions from unconsolidated affiliates.** MLPs with ownership in joint ventures or other non-controlling subsidiaries report equity income on their income statements. However, cash distributions received from affiliates/subsidiaries often differ from equity income. As a result, the DCF calculation deducts equity income, but adds back distributions received from affiliates, resulting in a discrepancy between the two metrics.

In Exhibit 40, we provide a simplified example illustrating how an MLP is able to pay out more in distributions than what the partnership reports on its income statement in the form of earnings per unit. The following example assumes the following:

- Revenue of \$500 million;
- Operating expense of \$350 million;
- Depreciation expense of \$50 million;
- G&A expense of \$20 million;
- Interest expense of \$10 million;
- Maintenance capex of \$25 million;
- Distribution coverage ratio of 1.0x (or excess cash flow of \$0 million);
- 25 million units outstanding;
- Distribution of \$3.00 per unit; and
- MLP is in the 50/50 distribution tier.

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On the basis of these assumptions, the MLP's earnings per unit (EPU) is \$2.02 versus DCF per unit and a distribution per unit of \$3.00. The main variance between these two calculations is how depreciation expense (a non-cash charge) is used in calculating net income and distributable cash flow. On the income statement, depreciation expense is subtracted in determining net income, while it is added back to determine DCF. To note, DCF takes into account maintenance capex, which reduces available cash flow for distributions.

**Exhibit 40. Comparison Of Earnings Versus Cash Flow**

*\$ in millions, except per unit data*

Simplified Income Statement		Distributable Cash Flow Calculation	
Revenue	\$500.0	Net income	\$70.0
(-) Operating expense	\$350.0	(+) Depreciation expense	\$50.0
<b>Gross margin</b>	<b>\$150.0</b>	(+) Interest expense	\$10.0
(-) Depreciation expense	\$50.0	<b>EBITDA</b>	<b>\$130.0</b>
(-) G&A expense	\$20.0	(-) Interest expense	\$10.0
<b>Operating income</b>	<b>\$80.0</b>	(-) Maintenance capex	\$25.0
(-) Interest expense	\$10.0	<b>Available cash flow</b>	<b>\$95.0</b>
<b>Net income</b>	<b>\$70.0</b>	Cash paid to GP	\$20.0
General partner (GP) interest	\$19.5	<b>Distributable cash flow (DCF)</b>	<b>\$75.0</b>
<b>Limited partner (LP) interest</b>	<b>\$50.5</b>	<b>DCF per unit</b>	<b>\$3.00</b>
<b>Earnings per unit (EPU)</b>	<b>\$2.02</b>	<b>Distribution per unit</b>	<b>\$3.00</b>
Units outstanding (MM)	25.0	Units outstanding (MM)	25.0
Net income	\$70.0	Distribution coverage ratio	1.00x
(+) Depreciation expense	\$50.0	Excess cash flow	\$0.0
(+) Interest expense	\$10.0		
<b>EBITDA</b>	<b>\$130.0</b>		

Source: Wells Fargo Securities, LLC estimates

**Mark-To-Market Hedge Accounting**

Mark-to-market hedge accounting can obscure the ongoing cash flow generating capability of the MLP and could result in significant earnings' volatility; however, a majority of the volatility is usually non-cash. To note, we do not focus on earnings per unit (EPU) because we believe the focus for MLPs should be on cash flow instead of earnings.

Mark-to-market hedge accounting affects MLPs that maintain future hedge positions, principally to mitigate exposure to commodity price volatility. Per accounting rules, the MLP must assign a value to its derivatives positions based on the current market prices for those future derivative instruments. For example, the value of a futures contract with an expiration date of one year from today is not known until it expires. However, if the contract is marked-to-market, the futures contract is assigned a value based on current market prices.

The impact of marking-to-market accounting affects different parts of a company's financial statements, depending on whether the derivative is classified as "trading" or "other than trading." Derivatives classified as trading are recognized as assets or liabilities with the corresponding loss or gain recognized in the income statement. Derivatives classified as other than trading are also measured at fair value and recognized as assets or liabilities, with the changes in value included as a component of stockholders' equity until realized. Realized gains and losses would be included in earnings. In order to offset the mark-to-market movement of derivatives, some companies may employ hedge accounting (i.e., if the hedges qualifies as effective hedges).



## Hedge Accounting

Financial Accounting Standards Board (FASB) Statement No. 133 requires companies to recognize all derivatives as either assets, or liabilities and measure those respective instruments at fair value. To qualify for FAS 133 hedge accounting, the hedge must be deemed as “highly effective” (i.e., the hedged item and its hedging instrument should have a correlation ratio between 80% and 125%). If hedge accounting cannot be applied, the timing of the gains and losses of hedged items may not match the hedging derivatives, which could lead to significant volatility in a company’s earnings. There are three different categories of hedges:

- **Fair value hedges.** A fair value hedge attempts to mitigate the exposure to changes in the fair value of a recognized asset, liability, or unrecognized firm commitment. The gain or loss is recognized in earnings in the period of change, together with the offsetting loss or gain on the hedged item attributable to the risk being hedged. (Source: FASB)
- **Cash flow hedges.** A cash flow hedge attempts to mitigate the exposure to changes in cash flow of a balance sheet item or forecasted transaction. The effective portion of the derivative’s gain or loss is initially reported in other comprehensive income (outside earnings) and subsequently reclassified into earnings (as either gains, or losses in operating revenue) as the forecasted transactions occur. The ineffective portion of the gain or loss is reported in earnings for the period in which the ineffectiveness occurs. (Source: FASB)
- **Net investment hedges.** A net investment hedge attempts to mitigate foreign currency exposure of a net investment in a foreign operation. The gain or loss of a derivative designated as hedging the foreign currency exposure of a net investment in a foreign operation is reported in other comprehensive income (outside earnings) as part of the cumulative translation adjustment.

## Partners’ Capital -- Implications For Debt-To-Capital Ratio

Because MLPs generally pay out more in distributions than they earn (on an accounting basis), partners’ capital (akin to shareholders’ equity) on the balance sheet will tend to decrease each quarter, absent any new issuance of equity units. Specifically, net income increases partners’ capital, while distributions paid reduce the balance. As a result, an MLP’s debt-to-capital ratio may often seem very high (as the denominator, i.e., partners’ capital, is decreasing). For this reason, MLP investors and the credit rating agencies tend to focus on the MLP’s debt-to-EBITDA and EBITDA-to-interest expense ratios when monitoring the credit health of the partnership. These metrics measure the MLP’s ability to service debt obligations with operating cash flow.

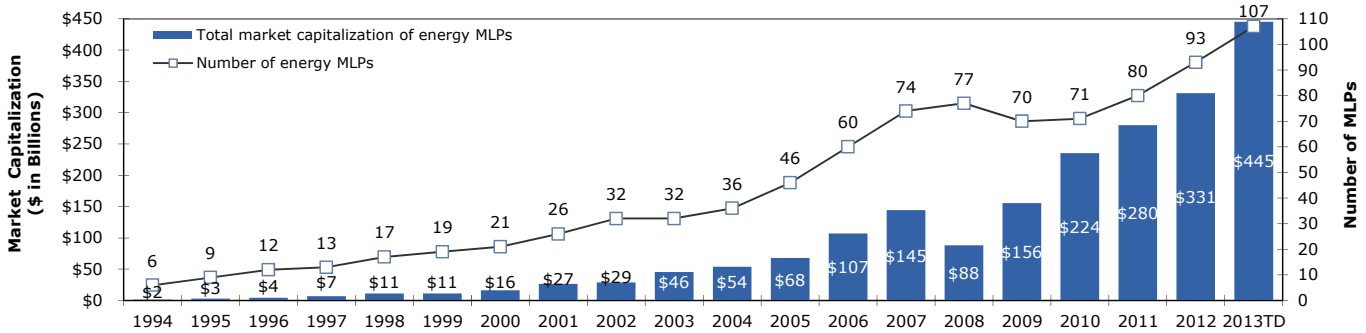
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Sector Trends

Dramatic Growth Of MLPs

Over the past two decades, the MLP universe has grown by any measure. The number of energy MLPs has increased to 107 in 2013 (to date) from 6 in 1994. In addition, the total market capitalization of the energy MLP universe has grown to roughly \$445 billion in 2013 from approximately \$2 billion in 1994. Over that time period, the average market cap of a publicly traded MLP has increased to \$4.2 billion from \$297 million.

Exhibit 41. Number Of MLPs And Market Capitalization



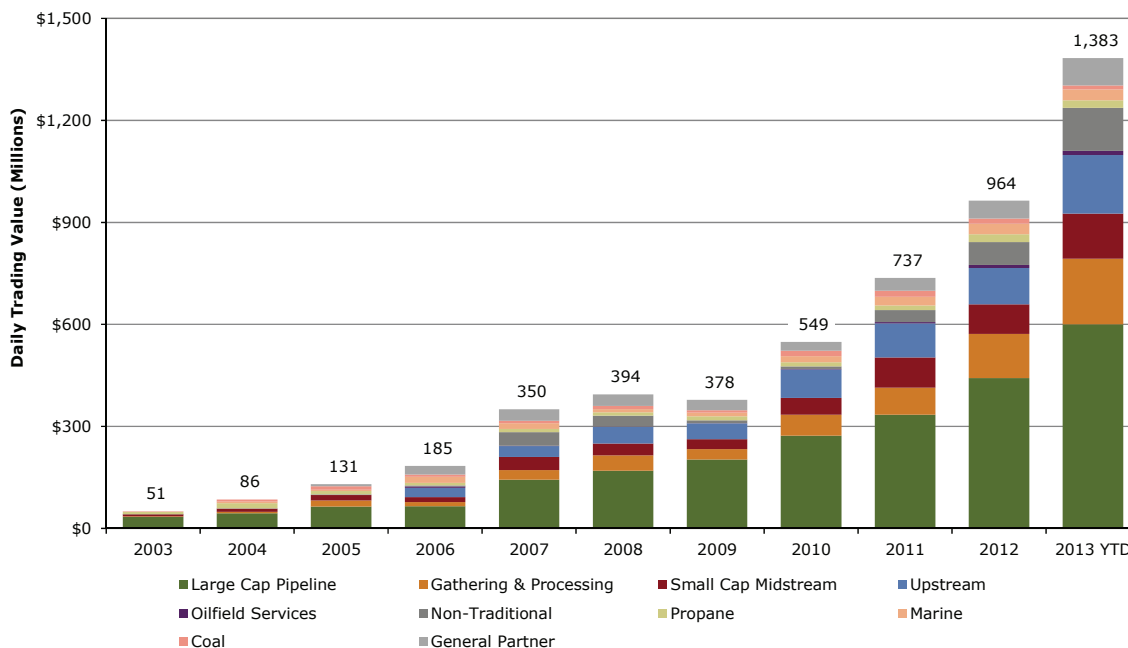
As of October 22, 2013

Source: FactSet, National Association of Publicly Traded Partnerships, and Wells Fargo Securities, LLC

MLP Average Trading Volume Continues To Grow

Liquidity has improved dramatically for the MLP universe, increasing to 379,000 units per day to date in 2013 from an average volume of 35,500 units per day in 1994. Since 2003, the average daily trading volume for energy MLPs has increased to \$1.4 billion from \$51 million, or a 36% CAGR. This is likely due to the significant positive fund flow by MLP products, as well as increased interest by institutional investors. Year to date, large-cap pipeline MLPs made up 43.4% of the total daily traded value, followed by gathering and processing MLPs, 13.9%; upstream MLPs, 12.5%; and small cap and midstream MLPs, 9.6%. The average daily trading value represents the average daily price for each year multiplied by the average daily trading volume that year for each MLP.

Exhibit 42. Average Daily Trading Value By MLP Sub-Sector



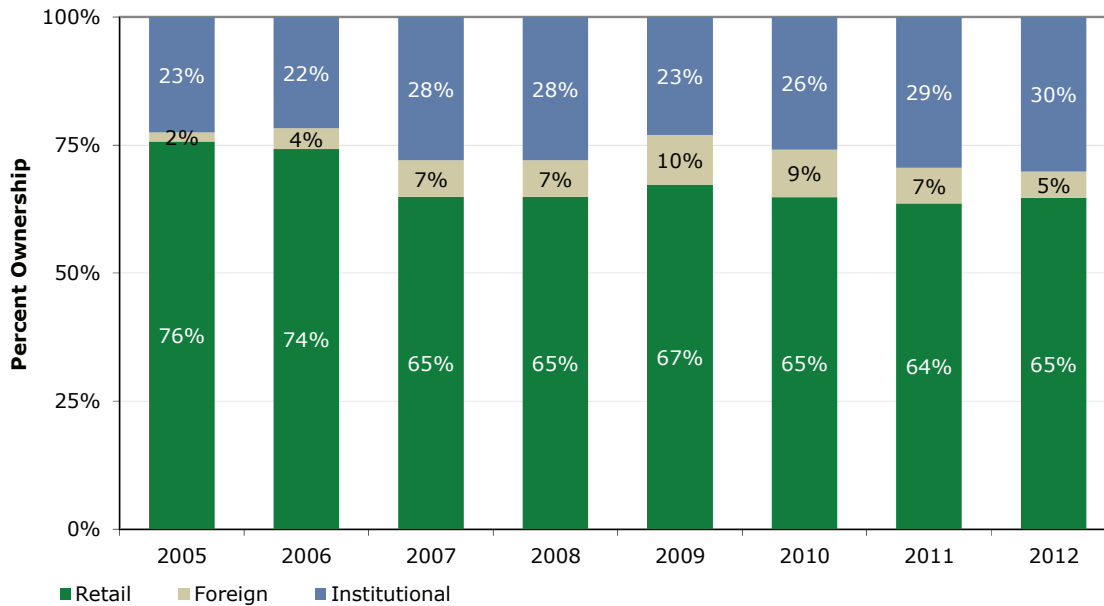
As of October 22, 2013

Source: FactSet and Wells Fargo Securities

## MLP Investor Base Has Been Evolving

MLPs are still predominantly owned by retail investors. However, institutional investor interest in the sector has increased. The level of institutional interest has ebbed and flowed over time. In the 2006-08 time frame, there was a significant increase in institutional ownership primarily by hedge funds, a few traditional mutual funds, and newly created closed-end funds. These investors participated in the MLP sector via direct investments, private investment in public equity (PIPE), and total return swaps. However, many of these funds suffered significant losses during mid- to late 2008. Subsequently, MLP ownership swung back to its traditional retail investor base. Institutional ownership ticked higher in 2011-12, likely due to strong fund flow from new MLP-linked products (see following section).

### Exhibit 43. Breakdown By MLP Ownership Type



Source: PricewaterhouseCoopers LLP and Wells Fargo Securities, LLC

### Institutional Investor Interest Growing

In 2011 and 2012, the MLP sector experienced another uptick in institutional interest, primarily due to MLPs' attractive yield characteristics relative to alternatives. In some ways, the nature of the capital flowing to the sector is different. A combination of newly formed closed-end funds, family wealth offices, and additional inflow to MLP-dedicated funds can be mostly characterized as investors with long-term investment horizons. However, a portion of the new capital has come from newly created MLP products (i.e., ETNs, ETFs, open-ended mutual funds) and traditional hedge fund investors. For a more detailed discussion of MLP products, please see *Growth In MLP Product Offerings*.

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Exhibit 44. Portfolio Composition Of Top 20 MLP Institutional Investors

(\$ in millions)	Capital Invested	# Of Positions	Portfolio By Sector (Excludes PIPes and total return swaps)								Non-Traditional	General Partners
			Large-Cap Pipelines	Small-Cap Pipelines	Oilfield Services	Gathering & Processing	Upstream	Propane	Marine	Coal		
Tortoise Capital Advisors LLC	\$10,146	42	62%	9%	0%	24%	1%	0%	0%	0%	0%	4%
Kayne Anderson, LLC	\$9,560	48	47%	6%	1%	33%	2%	1%	5%	0%	0%	4%
ALPS Advisors, Inc.	\$7,123	25	71%	5%	0%	24%	0%	0%	0%	0%	0%	0%
OppenheimerFunds, Inc.	\$6,791	53	45%	21%	2%	20%	0%	1%	4%	0%	0%	6%
ClearBridge Investments LLC	\$6,106	54	49%	10%	1%	31%	0%	1%	3%	0%	0%	5%
Neuberger Berman LLC	\$5,433	45	26%	9%	0%	25%	0%	10%	10%	0%	0%	19%
Goldman Sachs Asset Management LP	\$5,252	54	51%	11%	0%	22%	1%	1%	4%	0%	1%	7%
OFI Steelpath, Inc.	\$4,971	54	45%	21%	2%	20%	0%	1%	4%	0%	0%	6%
Advisory Research, Inc.	\$3,455	41	39%	16%	1%	23%	4%	4%	3%	1%	0%	11%
UBS Global Asset Management	\$2,531	81	63%	6%	0%	17%	4%	2%	3%	0%	1%	3%
Energy Income Partners LLC	\$2,290	30	57%	11%	0%	3%	0%	10%	6%	6%	0%	7%
Center Coast Capital Advisors LP	\$2,094	22	66%	11%	0%	23%	0%	0%	0%	0%	0%	0%
Harvest Fund Advisors LLC	\$1,983	35	53%	11%	2%	15%	3%	0%	9%	0%	0%	7%
Cushing MLP Asset Management LP	\$1,812	58	29%	12%	0%	28%	12%	8%	1%	1%	1%	8%
Miller/Howard Investments, Inc.	\$1,683	17	69%	5%	0%	10%	5%	1%	0%	0%	0%	9%
Eagle Global Advisors LLC	\$1,657	35	55%	9%	0%	19%	0%	1%	6%	0%	0%	10%
Atlantic Trust / Invesco Advisors, Inc.	\$1,500	55	60%	3%	0%	18%	4%	3%	0%	0%	0%	10%
Sallient Capital Advisors LLC	\$1,350	36	42%	10%	0%	23%	7%	2%	6%	0%	0%	10%
Pennsylvania Public School Employees Retirement System	\$1,145	45	52%	9%	1%	18%	5%	2%	4%	0%	0%	9%
Deutsche Asset Management Investmentgesellschaft mbH	\$1,122	15	70%	0%	0%	19%	0%	0%	6%	0%	0%	5%
Fayez Sarofim & Co.	\$1,098	4	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Fidelity Management & Research Co.	\$1,001	18	10%	17%	0%	53%	12%	0%	0%	0%	3%	4%
First Trust Advisors LP	\$999	34	57%	11%	0%	2%	2%	10%	6%	5%	0%	6%
Chickasaw Capital Management LLC	\$944	20	48%	26%	0%	19%	0%	0%	0%	0%	0%	7%
Omega Advisors, Inc.	\$659	4	0%	0%	0%	25%	45%	0%	0%	0%	0%	30%
Janus Capital Management LLC	\$651	3	76%	10%	0%	15%	0%	0%	0%	0%	0%	0%
Cohen & Steers Capital Management, Inc.	\$647	32	39%	14%	1%	31%	0%	3%	6%	0%	1%	6%
Dividend Assets Capital LLC	\$646	23	70%	6%	0%	8%	5%	0%	0%	1%	3%	6%
<b>Sub-total</b>	<b>\$84,648</b>	<b>35</b>	<b>52%</b>	<b>10%</b>	<b>0%</b>	<b>20%</b>	<b>4%</b>	<b>2%</b>	<b>3%</b>	<b>1%</b>	<b>0%</b>	<b>7%</b>

Note: Data as of June 30, 2013

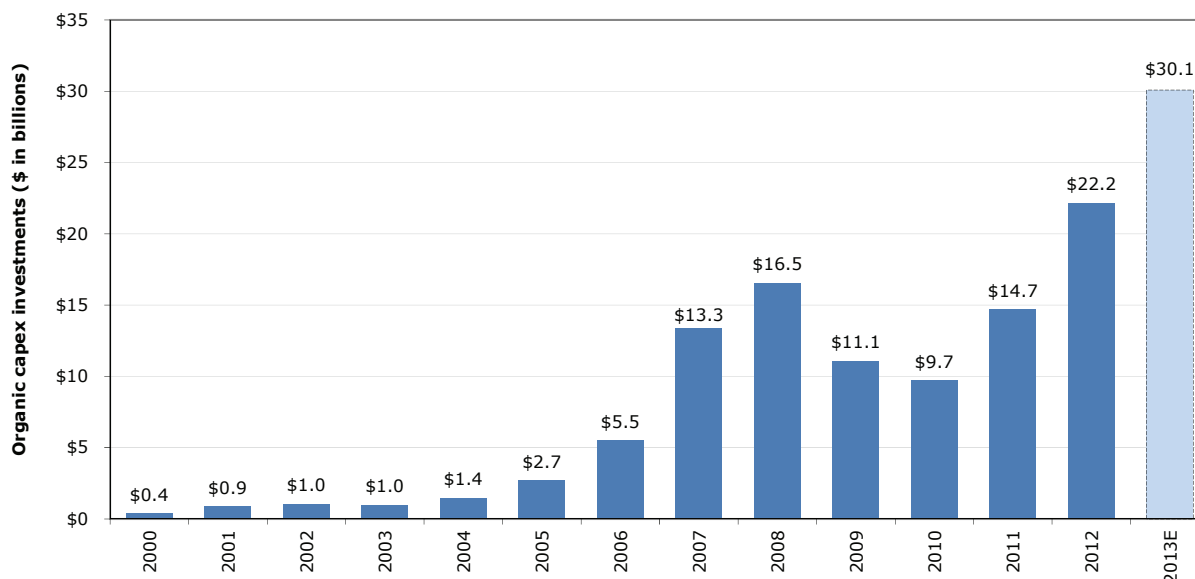
Source: FactSet and Wells Fargo Securities, LLC

Shift In Supply Resources Is Driving Energy Infrastructure Investment

Recent shifts in the supply sources of crude oil and natural gas have created the need for significant energy infrastructure. New resource plays have altered the flow of volume across the country. This, in turn, has increased demand for infrastructure to transport supply from these new areas to traditional consuming markets and storage capacity to mitigate supply and demand imbalances created by new transportation routes.

- **Crude Oil.** The development of shale oil resources is causing a resurgence in domestic crude oil production growth. The rapid increase in U.S. crude oil supply is resulting in higher utilization of existing crude oil infrastructure assets and providing midstream companies with robust expansion opportunities. In basins where takeaway capacity is limited, producers are increasingly turning to rail as a viable transportation option.
- **Natural Gas.** In the natural gas infrastructure market, capital spending has decreased from historical levels given (1) the robust buildout of gas pipeline capacity during the 2007-08 time frame, (2) changing pipeline flow, and (3) slowing natural gas production growth. In the interim, midstream companies are converting underutilized natural gas pipelines to crude/NGL service and/or reconfiguring assets to serve new markets. Longer term, we believe spending on natural gas infrastructure could increase as demand improves. Specifically, several midstream companies have already agreed to invest billions of dollars in new LNG export facilities that are scheduled to be placed into service in the 2017-19 time frame.
- **Natural Gas Liquids (NGL).** The market for natural gas liquids (and associated infrastructure) has expanded rapidly over the past several years and is poised to continue. Growth in the NGL sector has been driven primarily by a divergence in crude oil and natural gas prices, which has incentivized producers to shift capital away from dry natural gas plays (i.e., low in liquids content) in favor of wet natural gas plays (i.e., high-in-liquids content) or crude oil plays that generate associated gas with a high liquids cut.

Over the past five years (2008-12), MLPs invested approximately \$74.2 billion on organic expansion projects. We forecast that the MLP sector could invest \$75.4 billion of capital on growth projects over the next three years.

**Exhibit 45. Historical Organic Capex Investments**

Note: Data based on companies under coverage only

Source: Partnership reports and Wells Fargo Securities, LLC estimates

In the following section, we have provided a high-level overview of MLP-relevant trends occurring in the (1) crude oil, (2) natural gas, (3) natural gas liquids, and (4) the renewable energy sector. In addition, we have included a table showing gathering, processing, and transportation exposure by region for midstream MLPs under coverage (see *Appendix*).

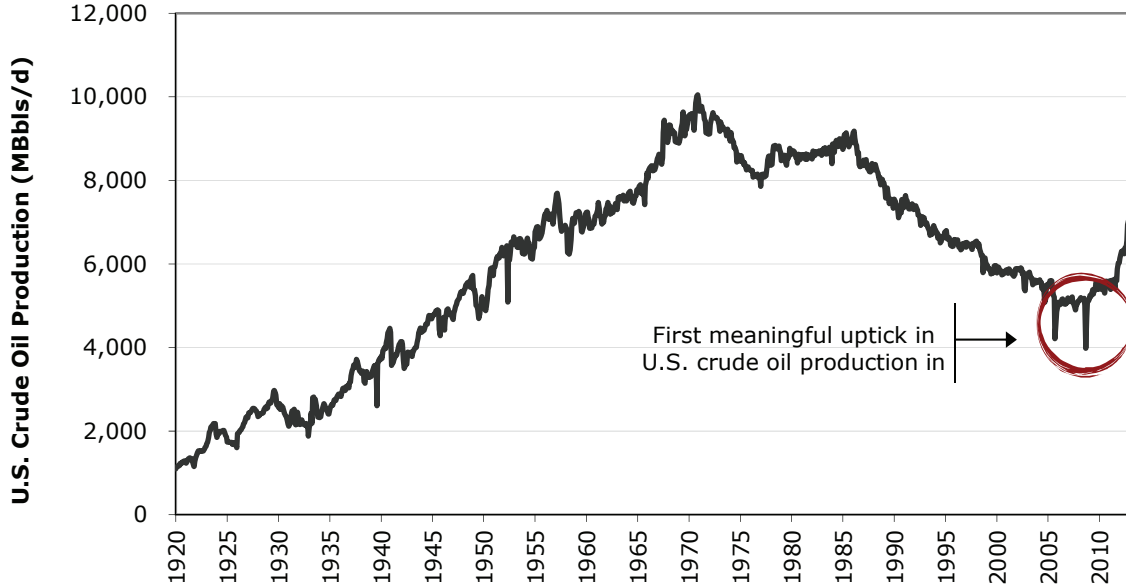
**Crude Oil**

**Shale development has spurred the next wave of investment.** Recent advancements in drilling technology have made commercial production of crude oil from shale plays economic. Specifically, the success of horizontal drilling and fracturing efforts in unconventional natural gas shale plays is prompting a reevaluation of earlier assessments of technically recoverable reserve potential in crude oil shale plays. For example, in 1995, the United States Geological Survey (USGS) performed a study on the Bakken Shale. The agency indicated that resources within the play were large, but only 151 million barrels (the midpoint of the range) were technically recoverable. In contrast, the USGS updated its assessment of the Bakken Shale in 2013 and increased its technically recoverable reserve estimate to 3,650 million barrels (the midpoint of the range), which represents a nearly twenty-five-fold increase in recoverable reserves.

After declining for more than two decades, U.S. crude oil production increased in 2009 and has since grown at a compounded annual growth rate of approximately 8-9%. With crude oil prices firmly above \$80 per barrel and significant advancements in drilling technology, commercial production of crude oil from unconventional sources has become economic. Specifically, E&P companies have focused their development efforts on crude oil plays including the Bakken Shale, the Eagle Ford Shale, the Niobrara, the Permian Basin, the Uinta Basin, the Utica Shale, and the Williston Basin. In addition, fundamentals for Canadian oil sands projects remain strong.

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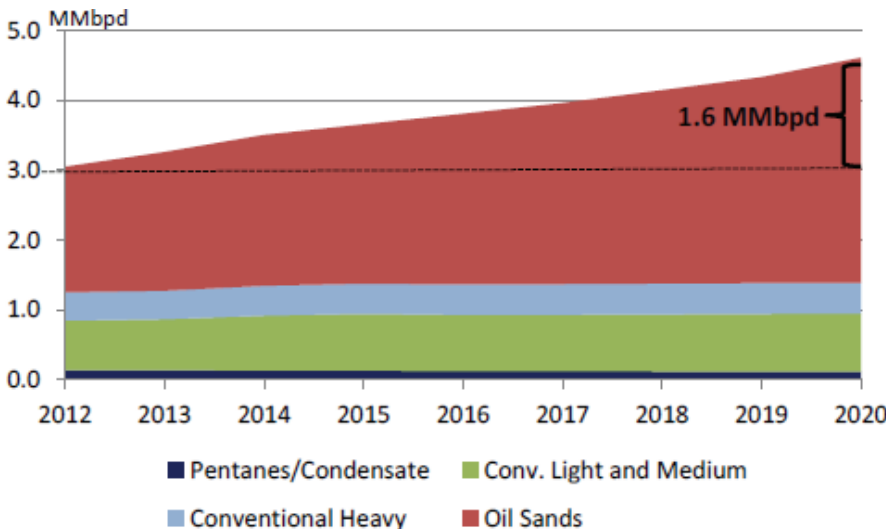
Exhibit 46. Historical U.S. Crude Oil Production



Source: Energy Information Administration and Wells Fargo Securities, LLC

**Production growth outlook for Western Canada.** With the stabilization of crude oil prices above \$80 per barrel (Bbl), a lower-cost environment, and improved access to capital, the fundamental outlook for Canadian oil sands projects remains strong, in our view. Western Canadian Sedimentary Basin (WCSB) production is expected to increase by 1.6 MMBbls/d (or at a 5% CAGR) over the next eight years, which should support continued volume growth on pipeline systems designed to transport Canadian heavy oil production into the United States. This would include Enbridge Energy Partners (EEP)’s Lakehead system, Kinder Morgan (KMP)’s Express and Trans Mountain pipelines, and TransCanada’s Keystone pipeline.

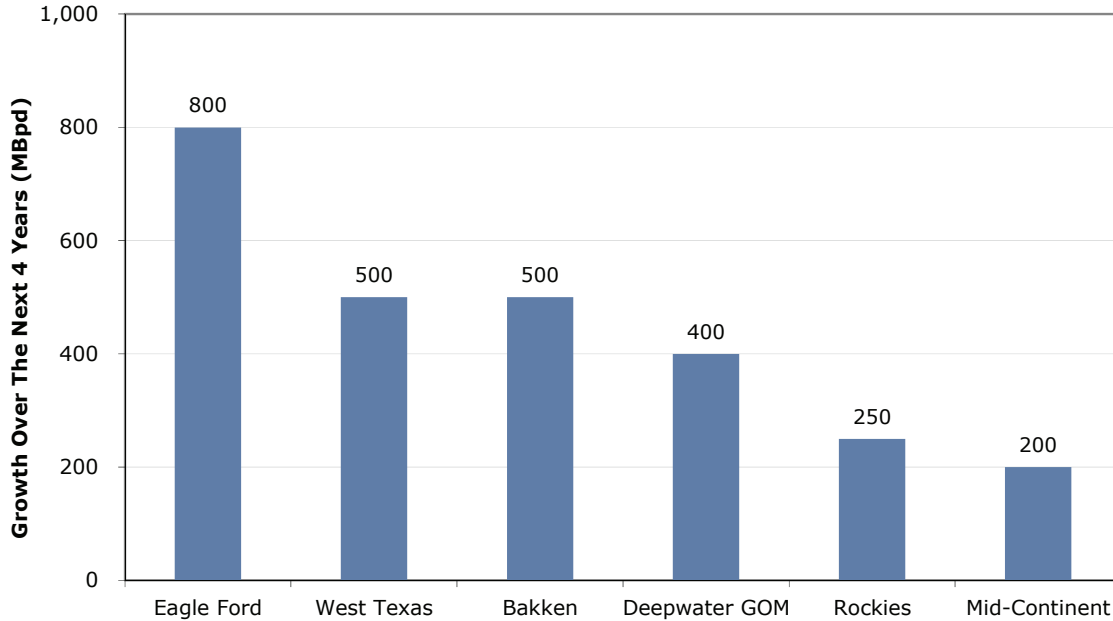
Exhibit 47. Projected WCSB Production Supply



Source: Enbridge Inc. and CAPP 2013 Forecast

**Production growth outlook for domestic shale plays.** According to estimates provided by Plains All American Pipeline (PAA), domestic crude oil production could increase by 2.7 MMBbls/d over the next four years (i.e., 2016 versus the 2012 exit rate), which could result in quality imbalances and infrastructure bottlenecks in certain producing regions. Over the next four years, PAA estimates that U.S. crude oil production could increase by 800 MBbls/d in the Eagle Ford, 500 MBbls/d in the Permian Basin, 500 MBbls/d in the Bakken, 400 MBbls/d in the Gulf of Mexico, 250 MBbls/d in the Rockies, and 200 MBbls/d in the Mid-Continent region.

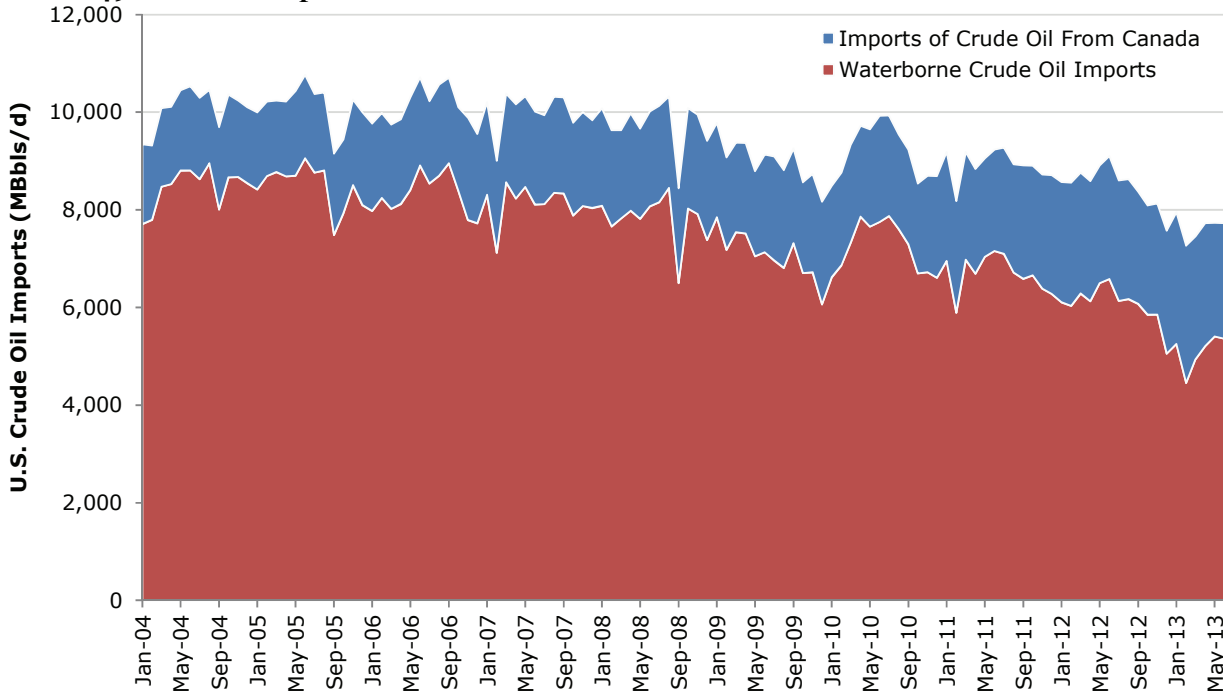
Exhibit 48. Crude Oil Production Growth Over The Next Four Years



Source: Plains All American Pipeline and Wells Fargo Securities, LLC

**The United States is becoming less dependent on waterborne imports.** Imports of light and medium grade crude oil will likely be backed out of the market by 2018-2020 as a result of robust production growth from U.S. shale plays. As shown in the following Exhibit, U.S. waterborne imports of crude oil have decreased to approximately 5.5 MMBbls/d from more than 8.4 MMBbls/d a decade ago.

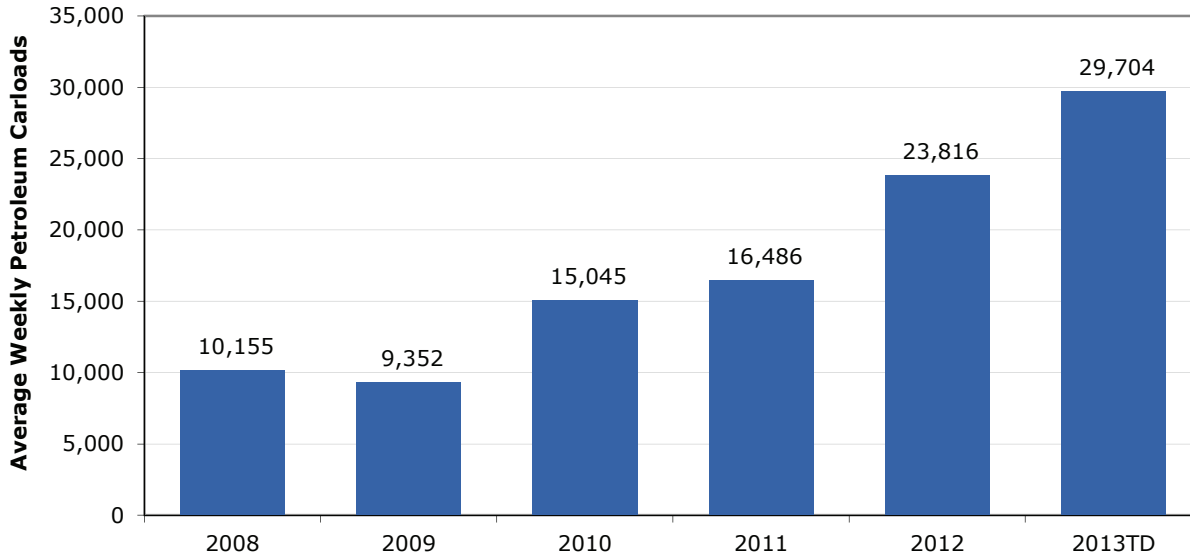
Exhibit 49. Domestic Imports Of Crude Oil



Source: EIA and Wells Fargo Securities, LLC

**Rail is likely to play an important role in transporting crude for the next several years.** Crude shipments via rail have started to increase dramatically in recent years, driven primarily by widening oil differentials across the country. Although transporting crude by rail is generally more expensive than transporting product by pipeline over the same distance, producers in certain basins opt to utilize rail over pipeline if railroads can transport their crude barrels to premium-priced markets that are underserved by pipelines (i.e., a result of wide oil differentials). In addition, producers are turning to rail as a takeaway solution in basins where pipeline takeaway capacity is fully utilized. Finally, rail offers several strategic benefits, including the following: (1) short-term contracts (versus ten-year take-or-pay arrangements on new crude oil pipelines); (2) market flexibility (versus typically 1-2 end markets on pipelines); and (3) speed to start-up (several months versus 1-2 years for new pipelines). Currently, the Bakken Shale is experiencing significant crude via rail shipments, due to a combination of the aforementioned factors.

**Exhibit 50. Growth In Crude By Rail Volume**

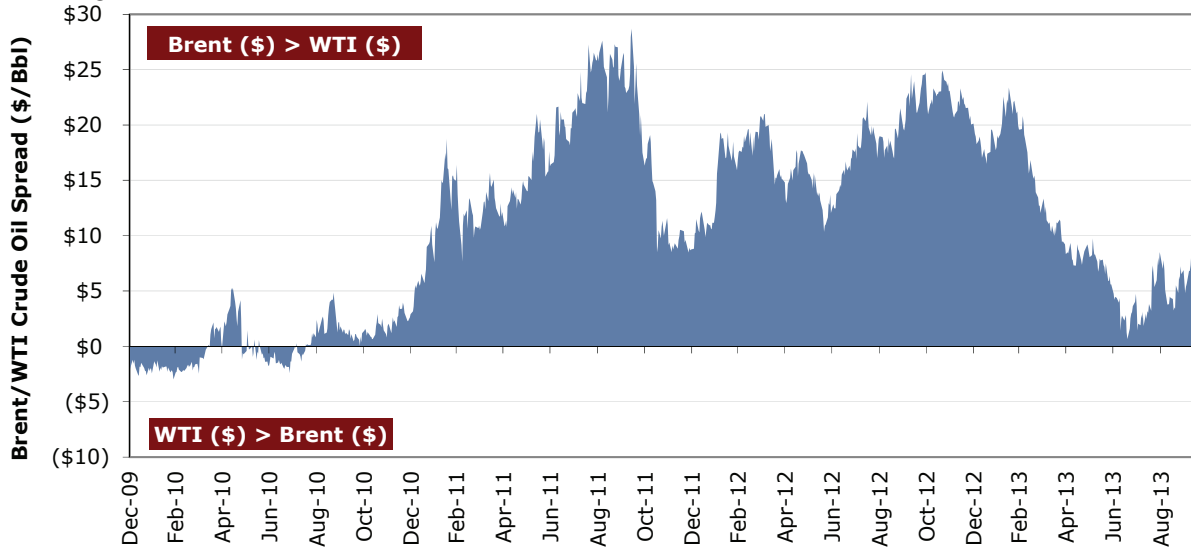


As of October 22, 2013  
Source: Association of American Railroads and Wells Fargo Securities, LLC

Long-term outlook for crude via rail activity. On the whole, we expect rail activity to remain strong in the near-term, but decrease within 3-5 years as new market access pipelines are placed into service. As shown in the following Exhibit, the spread between Brent and WTI crude oil prices (a proxy for oil differentials) has decreased to less than \$10 per Bbl from a high of roughly \$25 per Bbl in mid-2011. Compared to pipelines, rail requires higher crude oil differentials in order to remain profitable (i.e., \$10-20 per Bbl for rail, versus \$5-8 per Bbl for pipeline). As crude oil differentials in the United States decrease as a result of new pipeline construction, rail transportation between certain crude oil hubs could become unprofitable. Notwithstanding, we believe crude oil could continue to move via rail to markets in the East (e.g., Philadelphia) and West (e.g., Washington and California). Notably, these markets are currently underserved by pipelines and will likely continue to be inaccessible by pipe, due to regulatory and physical hurdles, which make it more challenging to construct new pipelines into these urban regions.



Exhibit 51. WTI-To-Brent Crude Differential



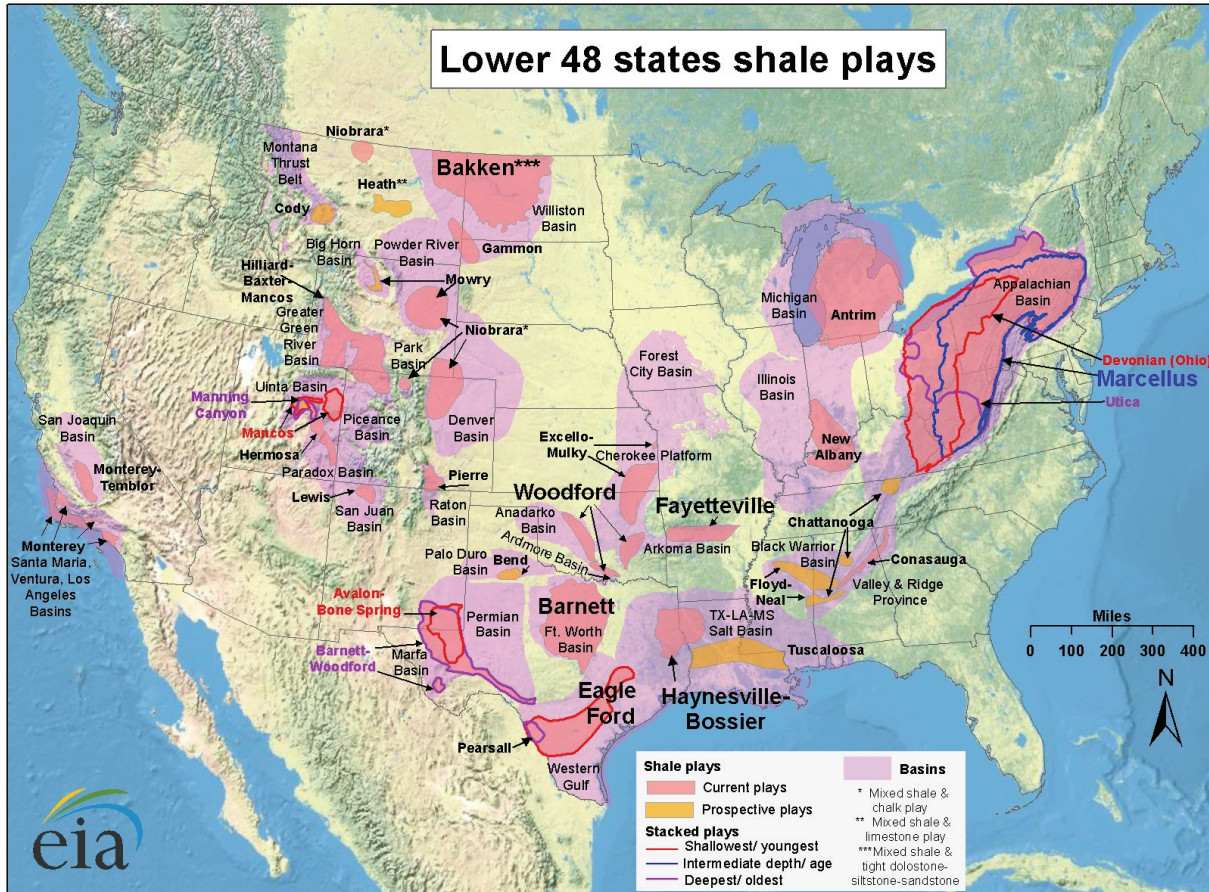
Source: FactSet and Wells Fargo Securities, LLC

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Natural Gas

Over the past decade, the midstream industry has benefited along with producers in the development of unconventional natural gas shale plays by building infrastructure to deliver this new supply to markets (e.g., pipelines, storage, processing, and fractionation capacity). The U.S. pipeline system has historically been designed to transport natural gas and crude oil production from the Gulf Coast to markets in the Northeast, Midwest, and West. However, the development of new resource plays has shifted flows of natural gas across the country, which, in turn, has provided midstream companies with new infrastructure opportunities.

Exhibit 52. Major U.S. Shale Plays

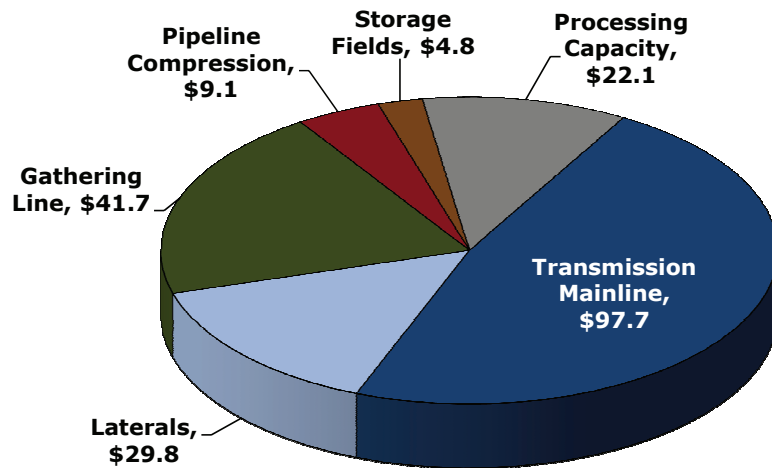


Source: Energy Information Administration based on data from various published studies. Updated: May 9, 2011

Source: Energy Information Administration

**Buildout of U.S. energy infrastructure projected to continue.** Between 2011 and 2035, \$205.2 billion is projected to be spent on U.S. natural gas infrastructure, according to ICF International. Gas transmission mainlines are predicted to account for 48% of the capital requirement. Based on ICF International estimates, natural gas infrastructure investment represents a sizeable portion of total 2011-35 U.S. energy infrastructure investment (i.e., 61%).

## Exhibit 53. Projected U.S. Natural Gas Pipeline Infrastructure Investments 2011-2035

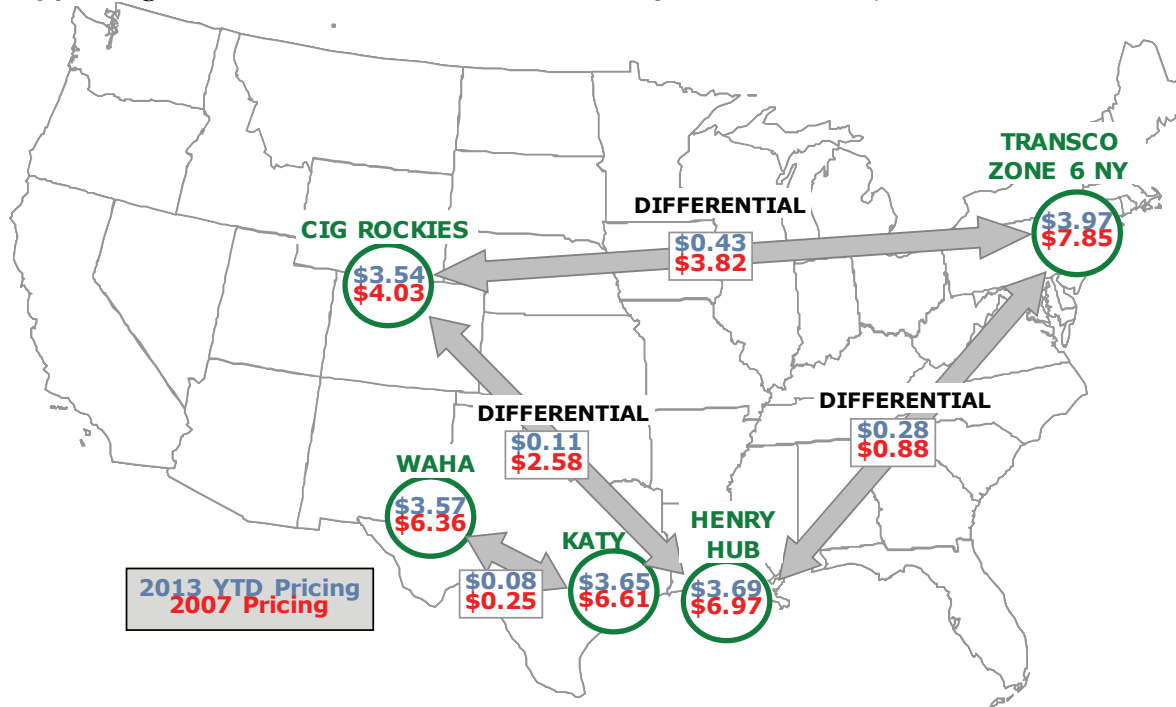


Note: Dollar amounts are in billions, adjusted for inflation using 2010 dollars  
Source: ICF International, INGAA Foundation, and Wells Fargo Securities, LLC

## Natural Gas Pipeline/Storage Operators Face Several Challenges In The Near Term

- **Shifting pipeline flow.** As noted, the emergence of shale plays has altered the flow of natural gas in the country. This, in turn, has increased/decreased the value of certain interstate natural gas pipelines.
- **Collapse in basis differentials.** The combination of ample pipeline takeaway capacity and low natural gas prices has resulted in a sharp contraction in basis differentials. Basis differentials represent the difference in natural gas prices between major hubs and are representative of the spot cost of transporting natural gas via pipeline. The collapse in basis differentials across the country has put some pipelines at risk of lower rates longer term as contracts expire and are renewed at prevailing spot prices. The following Exhibit shows the change in basis differentials for key hubs across the country between 2007 and 2013 year to date.

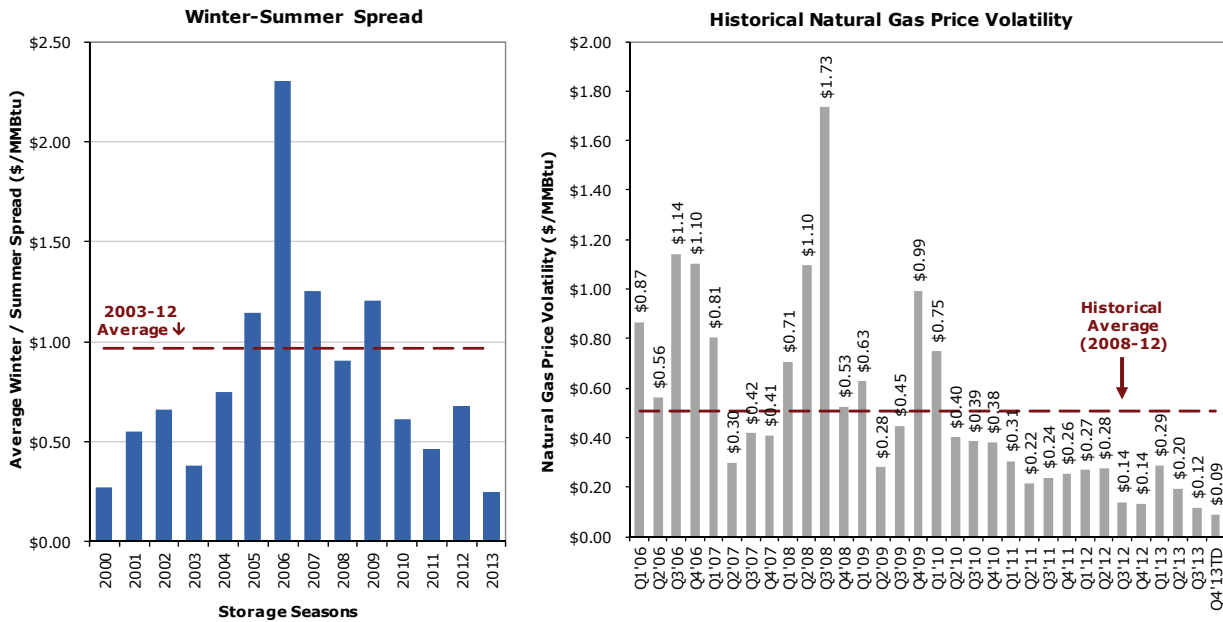
Exhibit 54. Change In Natural Gas Basis Differentials (2013 YTD Versus 2007)



Source: Bloomberg and Wells Fargo Securities, LLC

- Regulatory environment.** The current regulatory environment could lead to cost and earnings pressure tied to FERC return on equity (ROE) challenges (certain pipelines could be at risk of over-earning based on historical FERC financial filings) and pipeline integrity spending.
- Weak storage fundamentals.** Similar to the natural gas pipeline sector, an overbuild of storage capacity in the United States and low natural gas prices due to abundant supply have reduced seasonal storage spreads. The following Exhibit shows historical winter-summer spread and natural gas price volatility data, which are key measures for the natural gas storage industry. The winter-summer spread approximates the basic margin that storage operators can earn (or charge to third-party customers) by buying gas at a discount in the summer when demand is low (and injecting into storage) and selling gas at a premium in the winter when demand is high (and withdrawing from storage). Natural gas price volatility is also a key measure for the storage industry given that higher gas price volatility increases the value of storage, which can be used to capture the volatile swings in gas prices.

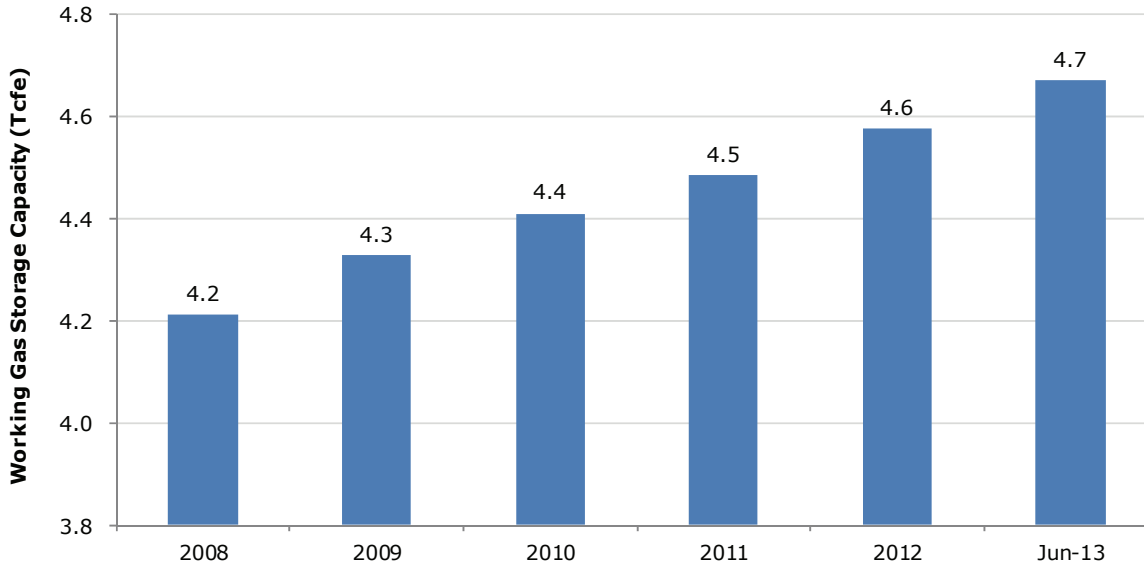
**Exhibit 55. Historical Winter-Summer Spread And Natural Gas Price Volatility**



Source for both charts: Bloomberg, FactSet, and Wells Fargo Securities, LLC

In aggregate, there is approximately 4.7 trillion cubic feet (Tcf) of working gas storage capacity in the United States, according to the EIA. The sharp contraction in storage spreads resulted in the cancellation of a number of planned greenfield storage facilities along the Gulf Coast in 2010-11. However, incremental storage capacity expansions at a number of existing storage caverns remain economic even under the weak pricing environment. Accordingly, total U.S. working gas storage capacity continues to increase despite softening fundamentals. Notably, working gas storage capacity has increased at a 2.1% CAGR over the past five years.

**Exhibit 56. U.S. Total Working Gas Storage Capacity (Salt + Depleted Reservoirs + Aquifers)**



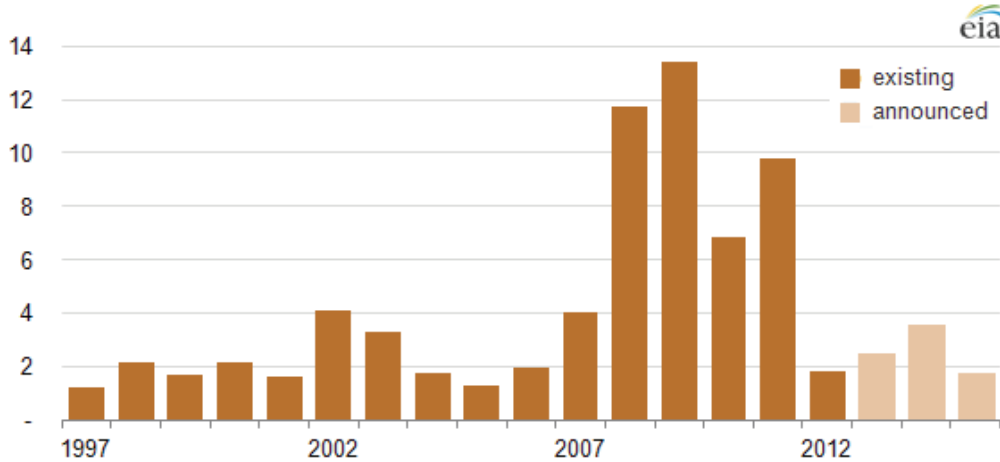
(MMcf)	2008	2009	2010	2011	2012	Jun-13
Working gas storage capacity	4.211	4.328	4.410	4.484	4.576	4.670
Year/year increase (%)	-	2.8%	1.9%	1.7%	2.1%	2.0%

Source: Energy Information Administration and Wells Fargo Securities, LLC

**Reviewing Potential Growth Opportunities For Natural Gas Infrastructure Players**

*Continued investment required in certain markets.* As shown in the following Exhibit, a large portion of the infrastructure capital required to debottleneck shale-driven supply shifts has already been invested (i.e., during the 2007-09 time frame). While we believe natural gas infrastructure spending could decrease in the coming years (relative to highs experienced in 2007-09), we anticipate that opportunities in certain markets could remain significant. In the Northeast, we believe midstream companies will continue to invest capital to provide natural gas producers with takeaway solutions for growing Marcellus and Utica production. According to the EIA, more than half of the capital invested in natural gas pipelines in 2012 was tied to expansions in the Northeast. In the Southeast, we believe new natural gas pipelines could be constructed to provide increased shale supply to utility companies operating natural gas-fired power plants.

**Exhibit 57. Spending On Natural Gas Pipelines**



Note: Scale reflects \$ in billions  
Source: EIA

*Natural gas pipeline conversions.* Another source of growth in the natural gas infrastructure market is from pipeline conversions. With domestic crude production rising in various parts of the country and several natural gas pipelines operating significantly below capacity, some gas pipeline operators are evaluating the possibility of converting underutilized pipelines to crude or NGL service. The conversion of existing natural gas pipelines to liquids service is generally more cost effective and faster to market than constructing newbuild pipelines.

*LNG export projects.* Longer term, we believe spending on natural gas infrastructure could increase meaningfully tied to the buildout of new LNG export facilities. There are 32 announced natural gas liquefaction projects located across the United States (most notably, in and around the U.S. Gulf Coast). So far (i.e., as of the date of this report), only four of these projects have received approval from the Department of Energy (DOE) to export natural gas to countries that do not have a free-trade agreement (FTA) with the United States. Capital investments tied to the four announced LNG export projects could approximate \$31 billion based on our calculations. The construction of announced (and potential) LNG export facilities should stimulate new demand for natural gas and could require additional infrastructure to deliver gas supplies to these facilities.

## Exhibit 58. List Of Announced And Proposed LNG Export Projects

Facility Name	Company	Capacity Bcf/d	Status Of DOE Approval	
			FTA	Non-FTA
1 Sabine Pass Liquefaction, LLC	CQP / LNG	2.200	Approved	Approved
2 Freeport LNG (Phase I)	50% COP / 50% private	1.400	Approved	Approved
3 Lake Charles Exports, LLC	60% ETE / 40% ETP	2.000	Approved	Approved
4 Dominion Cove Point LNG, LP	DOM	0.77-1.0	Approved	Approved
5 Carib Energy (USA) LLC	Private	0.01-0.03	Approved	Under Review
6 Jordan Cove Energy Project, L.P.	VSN-TSE	0.8-1.2	Approved	Under Review
7 Cameron LNG, LLC	SRE	1.700	Approved	Under Review
8 Freeport LNG (Phase II)	50% COP / 50% private	1.400	Approved	Under Review
9 Gulf Coast LNG Export, LLC	Private	2.800	Approved	Under Review
10 Gulf LNG Liquefaction Company, LLC	Kinder Morgan (EPB)	1.500	Approved	Under Review
11 LNG Development Company, LLC	Oregon LNG (Priv.)	1.250	Approved	Under Review
12 SB Power Solutions Inc.	Private	0.070	Approved	N/A
13 Southern LNG Company, L.L.C.	Kinder Morgan (EPB)	0.500	Approved	Under Review
14 Excelerate Liquefaction Solutions	Excelerate Energy (Priv.)	1.380	Approved	Under Review
15 Golden Pass Products LLC	XOM / Qatar Petrol.	2.600	Approved	Under Review
16 Cheniere Marketing, LLC	CQP / LNG	2.100	Approved	Under Review
17 Main Pass Energy Hub, LLC	Private (FME)	3.220	Approved	N/A
18 CE FLNG, LLC	Cambridge Energy (Priv.)	1.070	Approved	Under Review
19 Waller LNG Services, LLC	Waller Marine (Priv.)	0.160	Approved	N/A
20 Pangea LNG, LLC	Private	1.090	Approved	Under Review
21 Magnolia LNG, LLC	Private	0.540	Approved	N/A
22 Trunkline LNG	60% ETE / 40% ETP	*	Approved	Under Review
23 Gasfin Development, LLC	Private	0.200	Approved	N/A
24 Freeport-McMoRan Energy, LLC	Private (FME)	**	Approved	Under Review
25 Sabine Pass Liquefaction, LLC	CQP / LNG	0.280	Approved	Under Review
26 Sabine Pass Liquefaction, LLC	CQP / LNG	0.240	Approved	Under Review
27 Venture Global LNG, LLC	Private	0.670	Pending	Under Review
28 Advanced Energy Solutions, LLC	Private	0.020	Pending	N/A
29 Argent Marine Management, Inc.	Private	0.003	Pending	N/A
30 Eos LNG LLC	Private	1.600	Pending	Under Review
31 Barca LNG LLC	Private	1.600	Pending	Under Review
32 Sabine Pass Liquefaction, LLC	CQP / LNG	0.860	Pending	Under Review
<b>Total of all applications received (Bcf/d):</b>			<b>34.680</b>	<b>33.040</b>

Note \*: Lake Charles Exports, LLC (LCE) and Trunkline LNG Export, LLC (TLNG), the owner of the Lake Charles Terminal, have both filed an application to export up to 2.0 Bcf/d of LNG from the Lake Charles Terminal. The total quantity of combined exports requested between LCE and TLNG does not exceed 2.0 Bcf/d (i.e., both requests are not additive and only 2 Bcf/d is included in the bottom-line total of applications received).

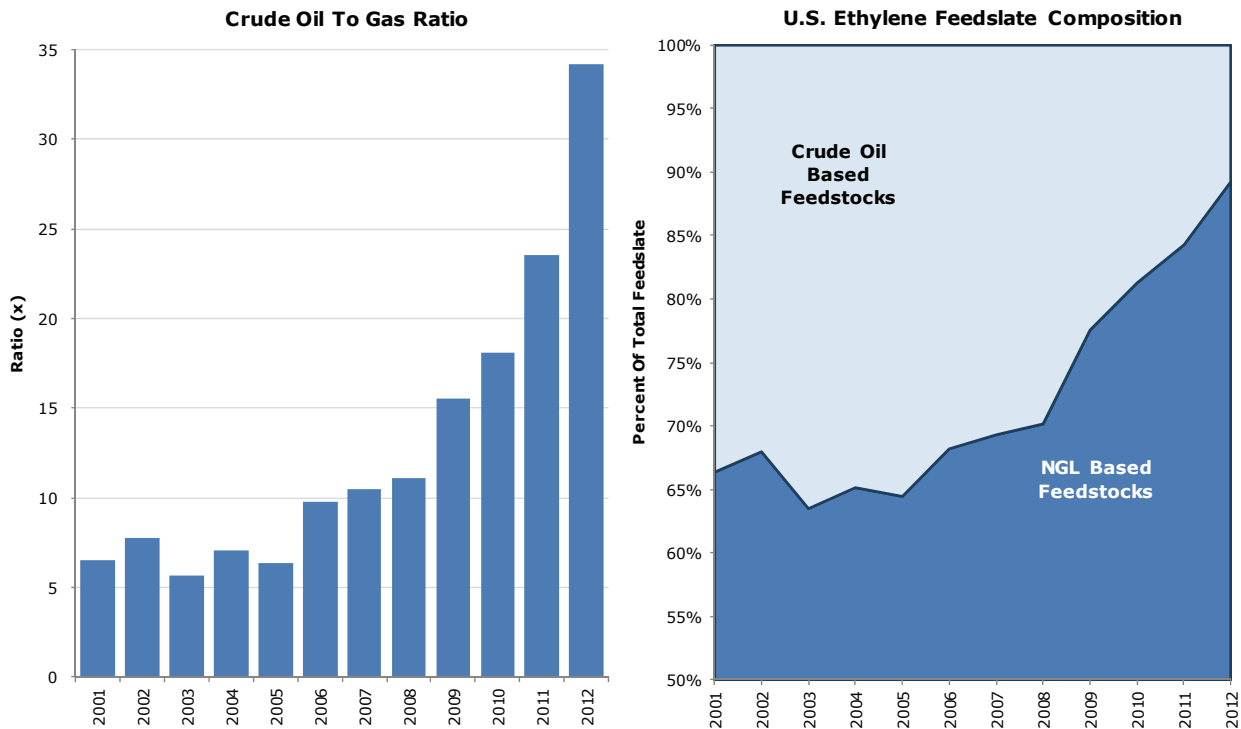
Note \*\*: Main Pass Energy Hub, LLC (MPEH) and Freeport McMoRan Energy LLC (FME), have both filed an application to export up to 3.22 Bcf/d of LNG from the Main Pass Energy Hub. (The existing Main Pass Energy Hub structures are owned by FME). The total quantity of combined FTA exports requested between MPEH and FME does not exceed 3.22 Bcf/d (i.e., both requests are not additive and only 3.22 Bcf/d is included in the bottom-line total of FTA applications received). FME's application includes exports of 3.22 Bcf/d to non-FTA countries and is included in the bottom line total of non-FTA applications received, while MPEH has not submitted an application to export LNG to non-FTA countries.

Source: DOE and Wells Fargo Securities, LLC

Natural Gas Liquids

**Wide crude oil to natural gas ratio is supporting an expansion of the NGL market.** The growing divergence between crude oil and natural gas prices has resulted in an overall expansion of the market for natural gas liquids. On the supply side, the wide crude to gas ratio has incentivized E&P producers to focus capital and drilling efforts on liquids-rich gas plays. In turn, this has resulted in gathering, processing, and fractionation expansion opportunities for midstream companies. On the demand side, the high ratio between crude oil and natural gas is incentivizing petrochemical producers to utilize NGL-based feedstocks (ethane, propane, and normal butane) over crude oil-based feedstocks (naphtha and gas oil).

**Exhibit 59. Rising Oil To Gas Ratio Is Incentivizing Petrochemical Producers To Consume More NGLs**

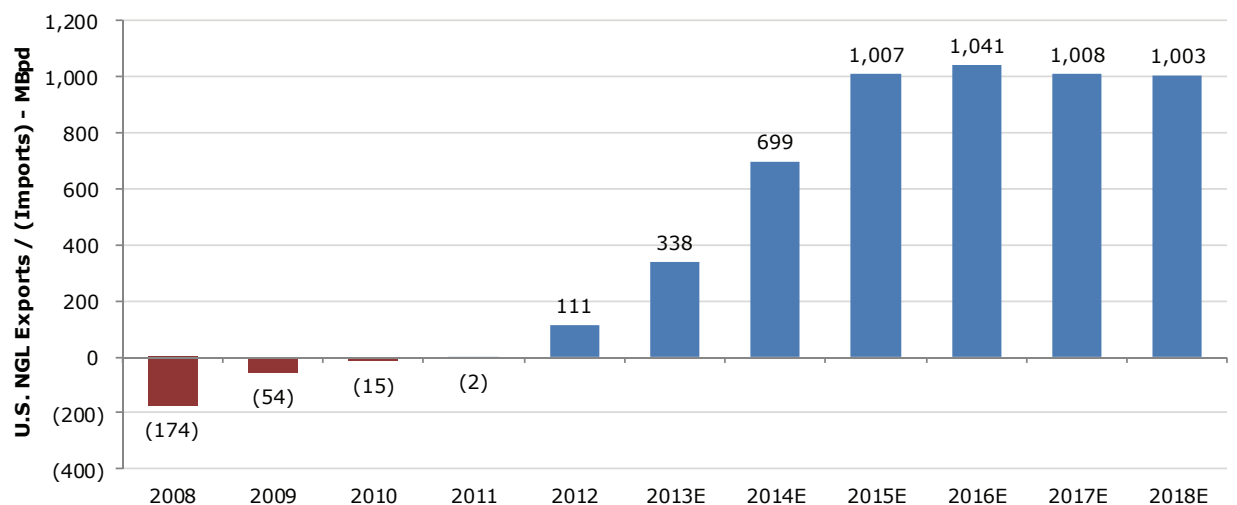


Source for both charts: Bloomberg, Jacobs Consultancy; The Hodson Report, and Wells Fargo Securities, LLC

**U.S. poised to become a significant exporter of NGLs.** Over the next five years, we project U.S. NGL supply to exceed domestic demand (e.g., ethylene capacity expansions, new propane dehydrogenation projects, and increased penetration into the gasoline pool). Exports will likely play a key role in keeping the NGL market in balance, in our view. The United States has historically been a net importer of NGLs. However, in 2012, U.S. NGL exports exceeded imports by roughly 110 MBbls/d. Over the next five years, we project net exports of NGLs to increase significantly, to slightly more than 1,000 MBbls/d by 2015E from roughly 110 MBbls/d in 2012.



## Exhibit 60. U.S. NGL Exports

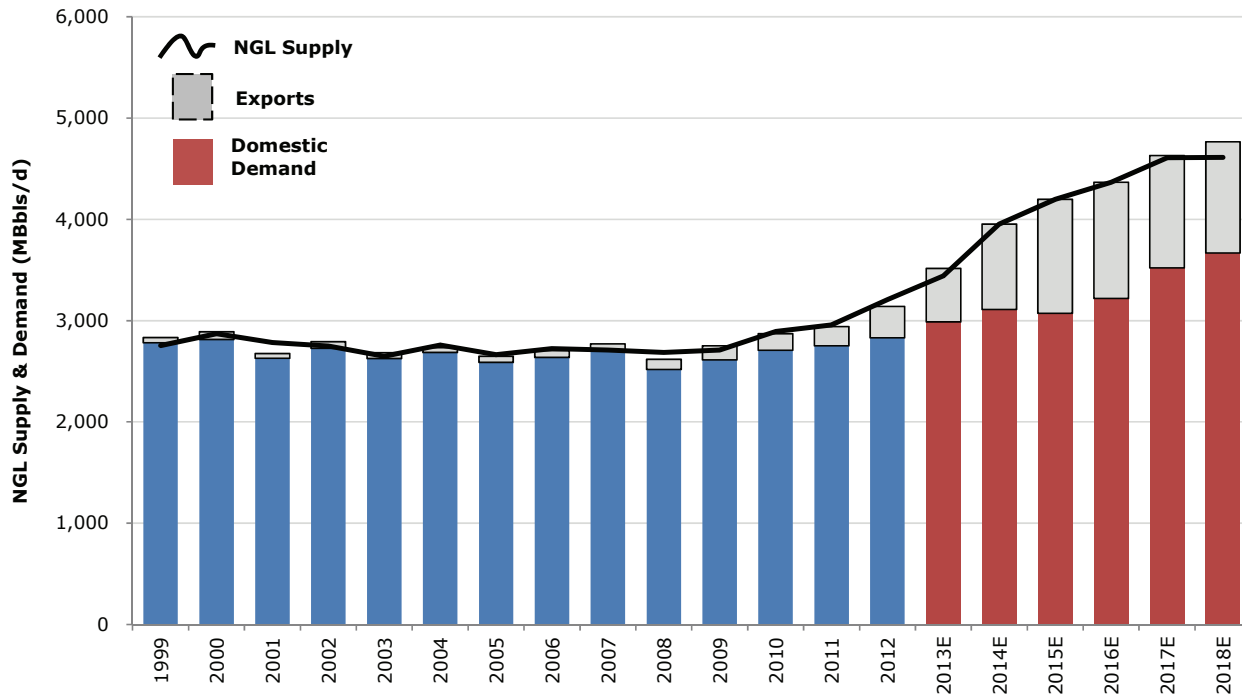


(MBbls/d)	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E
NGL Imports	275	194	179	251	199	189	143	117	108	101	94
NGL Exports	101	139	164	249	310	527	841	1,124	1,149	1,109	1,097
<b>Net U.S. Exports / (Imports)</b>	<b>(174)</b>	<b>(54)</b>	<b>(15)</b>	<b>(2)</b>	<b>111</b>	<b>338</b>	<b>699</b>	<b>1,007</b>	<b>1,041</b>	<b>1,008</b>	<b>1,003</b>

Source: EIA and Wells Fargo Securities, LLC estimates

**The NGL market is rapidly expanding.** As noted, the wide crude/gas ratio is supporting a rapid expansion in the overall size of the NGL market in the United States. Between 1999 and 2011, total supply and demand in the NGL market approximated 2,800-3,000 MBbls/d. By 2018, we project the size of the market could increase to approximately 4,800 MBbls/d. Each incremental barrel of NGLs produced requires a commensurate amount of investments in gathering, processing, fractionation, and transportation capacity on the supply side and investments in ethylene capacity, LPG export capacity, and diluent pipeline capacity on the demand side. Accordingly, growth in the NGL market is providing midstream MLPs with numerous investment opportunities (see following section).

Exhibit 61. Exports Likely To Make Up A Greater Portion Of NGL Supply/Demand Equation



Source: EIA, Jacobs Consultancy; The Hodson Report, and Wells Fargo Securities, LLC estimates

**NGL infrastructure spending boom is ongoing.** Infrastructure spending within the NGL sector has accelerated over the past few years. Between 2012 and 2015, midstream companies are poised to spend more than \$7 billion on 14 new announced NGL pipeline projects and expansions, and more than \$4 billion on 17 new NGL fractionation expansions. In addition, the petrochemical industry is likely to construct at least five new worldscale ethane crackers in the Gulf Coast, which could entail more than \$13 billion of total capital investment.

Exhibit 62. New NGL Pipeline Additions (Announced Projects Only)

NGL Pipeline	Capacity (MBbls/d)	Timing	Cost (\$MM)
Eagle Ford NGL Pipeline (EPD)	150	Q1'12	-
Arbuckle Expansion (OKS)	80	Q2'12	\$220
Justice NGL Pipeline (ETP)	140	Q3'12	\$365
Sand Hills - Eagle Ford (DCP-M/SEP/PSX)	200	Q3'12	\$571
Skelly Belvieu Expansion (EPD)	20	Q4'12	-
W. Texas Gateway (ETP/RGP)	200	Q1'13	\$917
Sand Hills - West Texas (DCP-M/SEP/PSX)	150	Q2'13	\$429
Texas Express (EPD/EEP/APC)	280	Q2'13	\$1,100
Overland Pass Expansion (OKS/WPZ)	60	Q2'13	\$75
Southern Hills (DCP-M/SEP/PSX)	175	Q3'13	\$1,000
Frontrange NGL pipeline (EPD/APC/DCP)	150	Q4'13	\$544
Hutchinson-Medford Pipeline (OKS)	-	Q1'15	\$140
<b>New NGL pipeline additions</b>	<b>1,605</b>		<b>\$5,361</b>
ATEX Pipeline - Ethane (EPD)	190	Q1'14	\$1,400
Sterling III (OKS)	193	Q1'14	\$710
<b>Purity NGL pipeline additions</b>	<b>383</b>		<b>\$2,110</b>

Source: Company data and Wells Fargo Securities, LLC

**Renewable Energy**

In addition to providing midstream services around traditional hydrocarbons, many MLPs are involved with the transportation and blending of renewable fuels (e.g., ethanol). MLPs that own refined products pipelines and/or liquids terminals are typically able to modify existing assets to handle ethanol at only modest incremental costs. MLPs involved with the transportation and blending of ethanol include BPL, EPD, DKL, KMP, MMP, NS, PAA, SXL, and TLLP.

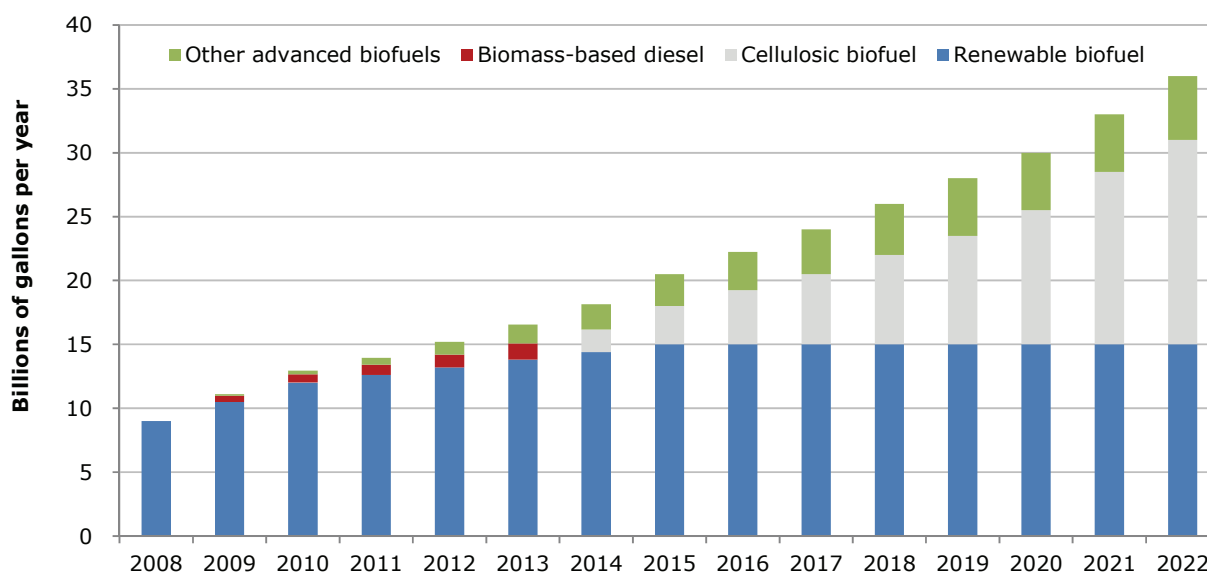
**Exhibit 63. MLPs With Ethanol Exposure**

	<b>Storage of Ethanol - Gasoline Blends</b>	<b>Ethanol Blending</b>	<b>Ethanol Transportation</b>
BPL	Yes	Yes	
EPD	Yes	Yes	
DKL	Yes	Yes	
KMP	Yes	Yes	Yes
MMP	Yes	Yes	
NS	Yes	Yes	
PAA	Yes		
SXL	Yes	Yes	
TLLP	Yes	Yes	

Source: Partnership reports and Wells Fargo Securities, LLC

**Government Mandates Provide Visible Long-Term Demand For Biofuels**

In 2007, the Renewable Fuel Standard (RFS) was expanded and extended under the *Energy Independence and Security Act (EISA)*, which increased the mandated amount of renewable fuel to be blended into gasoline in 2012, to 15.2 billion gallons (from 7.5 billion gallons) and set a target of 36 billion gallons by 2022. In addition to these revisions (i.e., expanded volume and extended date), amended RFS separated the total renewable fuel requirement into four categories (i.e., total renewable fuels, advanced biofuels, biomass-based diesel, and cellulosic biofuels), with each component having its own volume requirements. RFS also required the biofuels qualifying under each category to meet certain minimum levels of greenhouse gas (GHG) emission reductions and all of the renewable fuel to be made from feedstocks that met the revised definition of renewable biomass.

**Exhibit 64. EISA 2007 RFS Mandates By Renewable Fuel**

Note: The EPA plans to determine the biomass-based diesel mandate for 2014-2022 via a future rulemaking. It is not expected to be less than 1.0 billion gallons per year

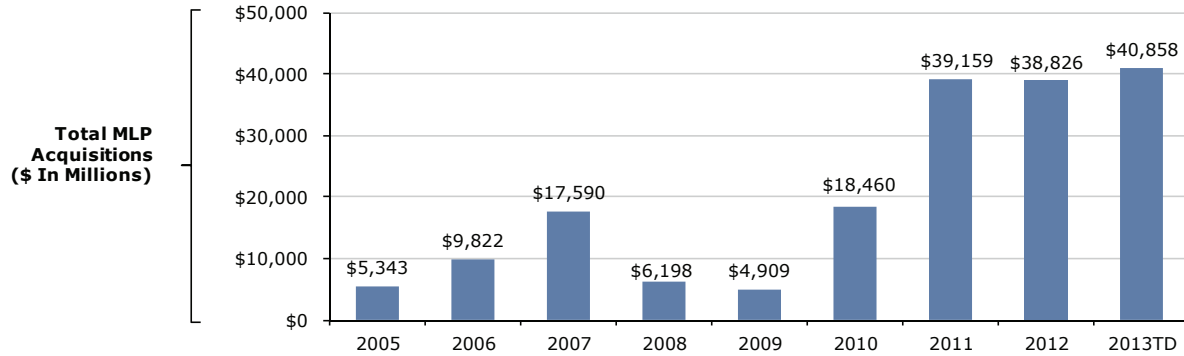
Source: Energy Independence and Security Act of 2007 and Wells Fargo Securities, LLC

Master Limited Partnerships

Acquisition Capital Deployed Has Been Rapidly Rising

From 2008 to 2012, total aggregate MLP acquisition capital deployed totaled \$108 billion. Although the total amount of acquisitions declined in 2008 and 2009 as a result of the credit crisis, acquisition activity resumed in 2010 and reached a record level in 2011. In 2012, MLPs announced 95 acquisitions totaling \$39 billion, which is essentially flat with 2011 levels. Acquisition activity for 2012 was focused around pipelines, 38%; gathering and processing assets, 22%; and oil and gas reserves, 15%. The largest transactions in 2012 included (1) KMP's \$6.2 billion drop down acquisition of natural gas pipeline assets (i.e., Tennessee Gas Pipeline and a 50% interest in El Paso Natural Gas Pipeline) from KMI and (2) ETP's \$4.7 billion acquisition of Sunoco, Inc. Year to date in 2013, MLPs have already exceeded the 2012 total and are on pace for a record year, having already announced more than \$40 billion of acquisitions.

Exhibit 65. Historical Acquisition Capex

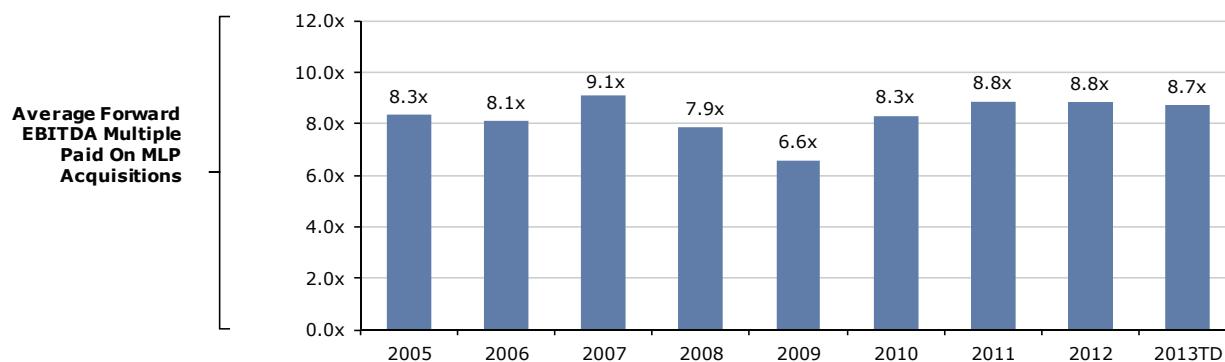


\$ in millions	2005	2006	2007	2008	2009	2010	2011	2012	2013TD
Pipelines	\$1,633	\$3,072	\$1,722	\$2,668	\$1,373	\$4,713	\$18,064	\$14,625	\$14,751
Storage	\$1,562	\$637	\$1,663	\$706	\$597	\$3,676	\$4,408	\$2,058	\$95
Gathering/Processing/Fractionation	\$1,744	\$4,218	\$4,803	\$781	\$1,040	\$6,000	\$6,243	\$8,678	\$15,463
Upstream	\$0	\$900	\$7,283	\$563	\$967	\$2,418	\$4,370	\$5,996	\$7,381
Marine Transportation	\$106	\$106	\$418	\$1,413	\$135	\$850	\$1,819	\$736	\$1,591
Coal	\$71	\$334	\$223	\$25	\$399	\$170	\$253	\$139	\$0
Propane	\$228	\$550	\$48	\$42	\$276	\$49	\$3,116	\$1,927	\$0
Other	\$0	\$5	\$1,431	\$0	\$123	\$585	\$888	\$4,669	\$1,577
<b>Total</b>	<b>\$5,343</b>	<b>\$9,822</b>	<b>\$17,590</b>	<b>\$6,198</b>	<b>\$4,909</b>	<b>\$18,460</b>	<b>\$39,159</b>	<b>\$38,826</b>	<b>\$40,858</b>

Source: Partnership reports and Wells Fargo Securities, LLC estimates

Year to date in 2013, the average acquisition multiple has remained essentially flat at 8.7x versus 8.8x in 2012. Acquisition multiples declined to as low as 6.6x during the crisis in 2009. The increase in acquisition multiples since 2009 reflects the healthier capital markets and more competitive acquisition landscape, in our view. Further, MLPs' lower cost of capital positions the partnerships to pay more for acquisitions, all else equal.

## Exhibit 66. Estimated Acquisition Multiples Paid



	2005	2006	2007	2008	2009	2010	2011	2012	2013TD
Pipelines	8.3x	8.4x	13.9x	9.3x	8.2x	9.5x	10.9x	11.0x	10.7x
Storage	11.6x	9.2x	10.0x	8.3x	8.8x	9.9x	11.3x	8.9x	-
Gathering/Processing/Fractionation	9.7x	9.2x	9.9x	10.0x	6.7x	9.1x	10.6x	11.7x	10.2x
Upstream	-	5.0x	6.5x	5.0x	5.4x	6.8x	6.0x	6.9x	6.3x
Marine Transportation	-	9.1x	9.0x	9.1x	6.0x	7.1x	7.8x	6.7x	8.5x
Coal	4.6x	-	7.3x	-	5.8x	-	7.3x	-	-
Propane	7.4x	7.5x	6.3x	5.5x	6.4x	-	7.8x	7.5x	-
Other	-	-	9.6x	-	5.3x	7.3x	9.1x	9.0x	7.8x
<b>Total</b>	<b>8.3x</b>	<b>8.1x</b>	<b>9.1x</b>	<b>7.9x</b>	<b>6.6x</b>	<b>8.3x</b>	<b>8.8x</b>	<b>8.8x</b>	<b>8.7x</b>

Source: Partnership reports and Wells Fargo Securities, LLC estimates

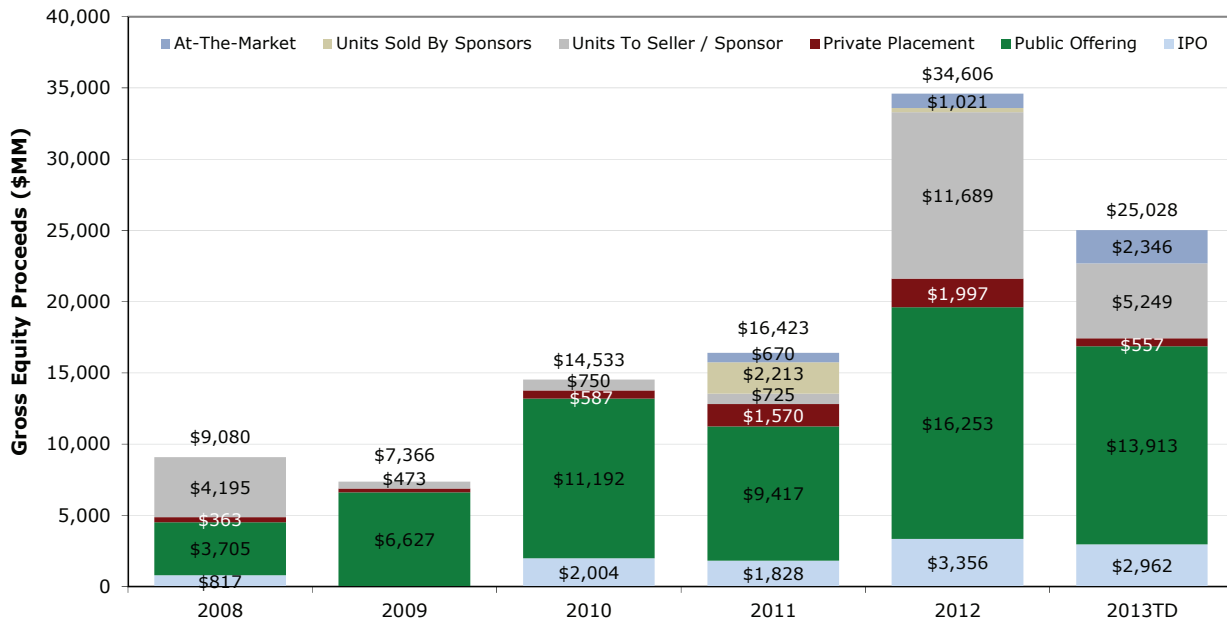
## MLPs Continue To Enjoy Good Access To Capital

The number, size, and total amount of capital raised by MLPs continue to increase. In 2012, MLPs raised a record \$61.2 billion of capital consisting of \$34.6 billion of equity and \$26.6 billion of debt. This compares to average annual equity issuance of \$16.4 billion over the past five years and average annual debt issuance of \$17.8 billion over the same time period.

Year to date, MLPs have raised total equity of \$25.0 billion. This includes \$13.9 billion for secondary offerings, \$3.0 billion for IPOs, \$5.2 billion for units sold to sponsors or sellers of assets acquired by MLPs, and \$557 million via direct placement of equity from institutional investors (PIPEs), and \$2.3 via at-the-market (ATM) programs. The number of MLP equity offerings steadily increased, to 117 in 2012 from 49 in 2008. In addition, the median size of equity deals has increased to approximately \$292 million in 2012 from \$185 million in 2008. Growing familiarity with the asset class, institutional interest, yield-seeking investors, MLPs' favorable relative price performance, and the current low interest rate environment explain, in part, the increasing strong demand for MLP capital, in our view.

Master Limited Partnerships

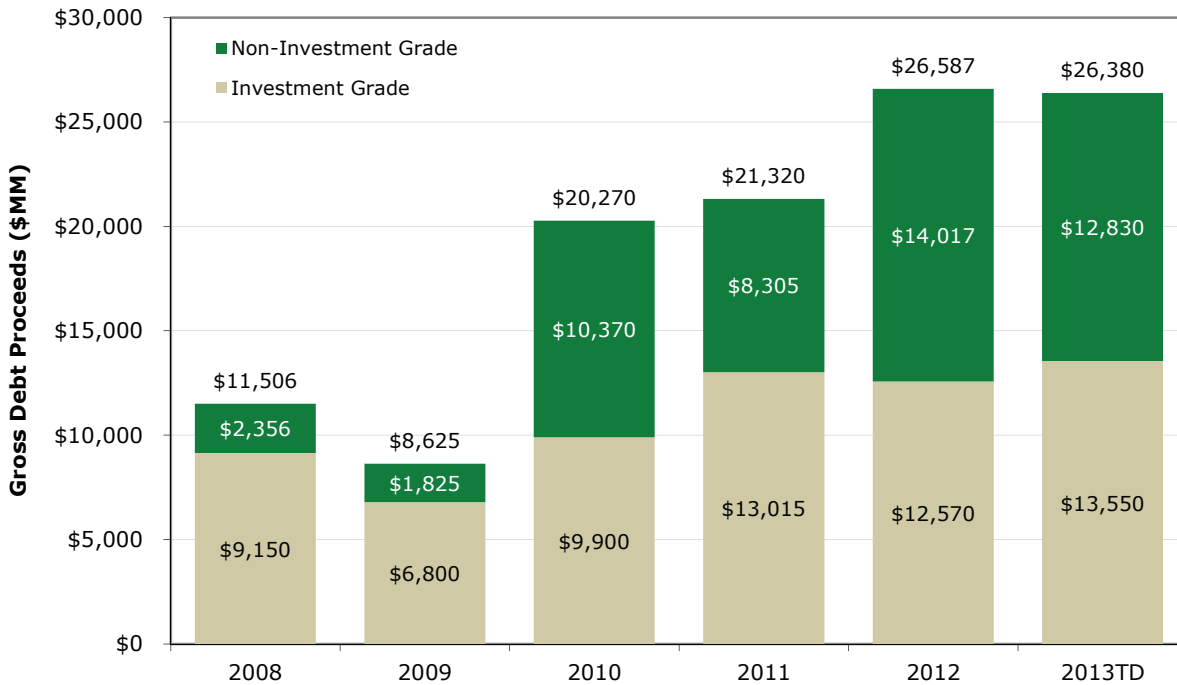
Exhibit 67. Historical MLP Equity Offerings



Source: Partnership reports and Wells Fargo Securities, LLC

In the credit markets, MLPs have issued \$26.4 billion of debt year to date, which is made up of investment grade and non-investment grade debt issuances of approximately \$13.6 billion and \$12.8 billion, respectively.

Exhibit 68. Historical MLP Debt Offerings



Source: Partnership reports and Wells Fargo Securities, LLC

## MLPs Have Employed Creative Financing Solutions To Fund Growth

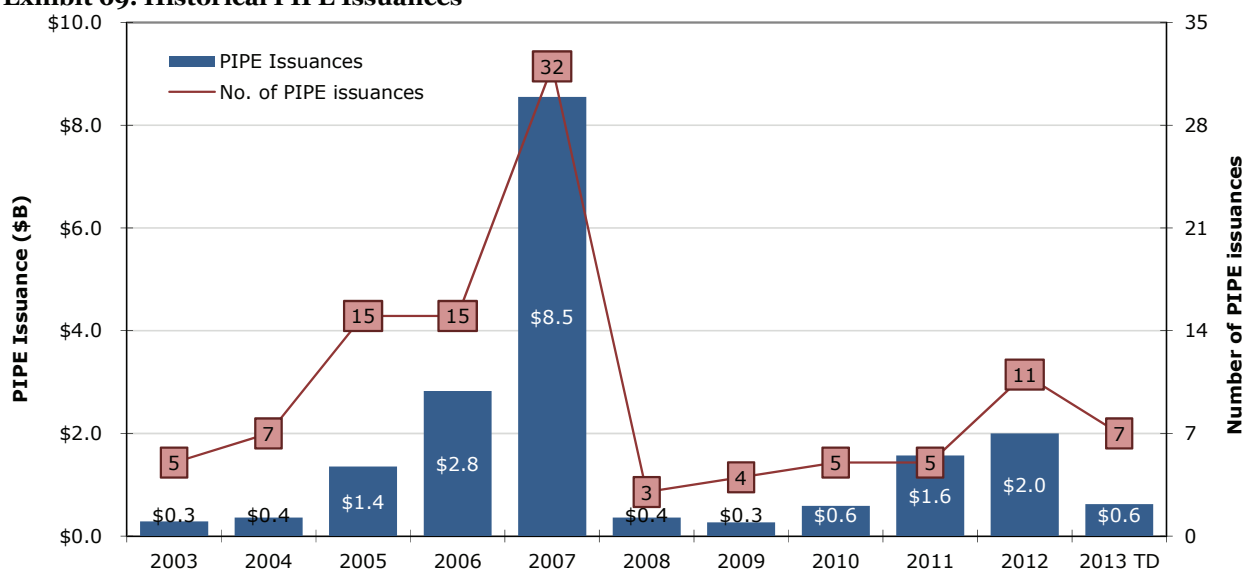
### Private Investments In Public Equity (PIPE)

A PIPE is a financing tool used by MLPs to help fund growth capital investments. A PIPE is a direct equity investment in publicly traded equity. PIPEs can be an effective way to raise capital as they are typically more time efficient (e.g., have fewer regulatory issues) and less costly than secondary offerings. The amount of equity raised from institutional investors participating in private investments in public equity grew over time and reached an all-time high in 2007. Since then, PIPEs have fallen out of favor (see below for an explanation), totaling just \$2.0 billion in 2012 and \$0.6 billion year to date.

In 2007, PIPEs became a preferred method for MLPs to finance (the equity portion of) expansion projects and acquisitions, due to the easy access to large pools of capital, relatively attractive pricing (discounts of 6-7%), and the opportunity to forego the process of filing and marketing a secondary offering, which sometimes resulted in stock price erosion during the marketing period for the deal. Investors in many of the early PIPEs outperformed because the equity placements were typically tied to an event (acquisition or investment). The MLP benefited by pre-funding an acquisition and thereby eliminated any potential overhang or erosion in the stock price as the market would normally anticipate an equity offering to fund the transaction. Investors (in the PIPEs) benefited by purchasing the stock at a discount that was based on the preview price of the units. After the announcement of the event, the stock typically responded favorably (assuming the deal was accretive, strategic, etc.), which provided the investors with additional return.

Since 2007, the number of PIPEs has decreased, which is likely due to a combination of the credit crisis (institutional investors had less available liquidity) and MLP management teams' more cautious approach in using PIPEs for financing. While PIPEs afforded quick and relatively inexpensive access to capital, they also created concentration risk for the issuer as a small group of institutional investors owned a significant percentage of the public float. Thus, an MLP announcing a PIPE to finance a capital investment could inadvertently create an overhang on their units as it could cause investors to focus on the expiration date of the lock-up period as a future point for potential selling pressure.

### Exhibit 69. Historical PIPE Issuances



Source: Partnership reports and Wells Fargo Securities, LLC

### Hybrid Securities

A hybrid security is an investment vehicle that has characteristics of both a debt and equity security. In the case of MLPs, the partnerships' hybrid securities (i.e., junior subordinated notes) pay a fixed coupon rate for a stipulated period of time and then a floating coupon rate for the balance of the term of the note (i.e., typically at LIBOR + bps premium). In 2006, EPD became the first MLP to issue junior subordinated (i.e., hybrid) securities, raising \$550 million via three tranches (i.e., \$300 million in July 2006, \$200 million in August 2006, and \$50 million in September 2006). Hybrid securities are typically given partial equity credit by the rating agencies (i.e., 50% equity credit by Moody's Investor Services and Standard & Poor's, and 75% by Fitch Ratings).

**Master Limited Partnerships**

**Exhibit 70. MLP Hybrid Securities**

Ticker	Notes	Fixed	Floating	Obligation	Maturity Date	Credit Rating		Equity
		Coupon Rate	Coupon Rate	(MM)		S&P	Moody's	Credit
EPD	Junior Subordinated Notes A	8.38%	LIBOR + 3.71%	\$550	August 2066	BBB-	Baa2	50%
EPD	Junior Subordinated Notes B	7.03%	LIBOR + 2.68%	\$683	January 2068	BBB-	Baa2	50%
EPD	Junior Subordinated Notes C	7.00%	LIBOR + 2.78%	\$286	June 2067	BBB-	Baa2	50%
EEP	Junior Subordinated Notes	8.05%	LIBOR + 3.80%	\$400	October 2067	BB+	Baa3	50%
NS	Junior Subordinated Notes	7.63%	LIBOR + 6.73%	\$403	January 2043	B+	Ba2	100%

Source: Partnership reports and Wells Fargo Securities, LLC

**Preferred Equity**

Convertible Preferred Equity

Convertible preferred equity provides unitholders with the option to convert their preferred units into common units. The preferred unitholder can convert the units to common any time after a predetermined date, while the company or issuer can force a conversion if certain conditions are met. In most cases, the holders of the preferred units receive a distribution payment that is either equal to the partnership's quarterly distribution, or set at a fixed rate that is above the MLP's current distribution. The preferred distribution is paid in either cash, or in-kind (i.e., additional MLP units). The preferred units are senior (in the capital structure) to common stock, but are subordinate to bonds. MLPs have typically issued preferred equity in order to strengthen their balance sheets (i.e., deleverage), finance an acquisition or capital expansion plan (i.e., removes interim funding needs), reinvest cash flow (i.e., defer distribution payments), and/or add a strategic partner.

**Exhibit 71. MLP Convertible Preferred Equity Issuances**

Date	MLP	Ticker	Quarterly LP Unitholder		Amount (\$MM)	Preferred	Distribution Type
			Distribution	Investor		Quarterly Unitholder Distribution	
Jul-07	Kinder Morgan, Inc. Class P	KMI	\$0.8500	Not disclosed	\$100	\$20.8250	Cash
Jan-10	Crosstex Energy, L.P.	XTEX	\$0.0000	The Blackstone Group	\$125	\$0.2125	Cash or PIK
May-10	Energy Transfer Equity, L.P.	ETE	\$0.5400	GE Energy Financial Services, Inc.	\$300	\$2.0000	Cash
Jul-10	Copano Energy L.L.C.	CPNO	\$0.5750	TPG Capital	\$300	\$0.7263	PIK
Sep-10	K Sea Transn Partners Lp Com	KSP	\$0.0000	KA First Reserve, LLC	\$100	\$0.1833	PIK
Oct-10	Blueknight Energy Partners, L.P.	BKEP	\$0.0000	Vitol and Charlesbank	\$140	\$0.5525	Cash
Sep-11	QR Energy, LP	QRE	\$0.4125	Quantum Resources Fund	\$350	\$0.2100+	Cash
Jul-12	Atlas Resource Partners, L.P.	ARP	\$0.4300	Titan Operating, L.L.C.	\$96	\$0.4300	Cash
Apr-13	American Midstream Partners, LP	AMID	\$0.4325	ArcLight Capital Partners	\$90	\$0.2500	Cash and PIK
Apr-13	Southcross Energy Partners, L.P.	SXE	\$0.4000	Charlesbank	\$40	\$0.4000	PIK
Apr-13	Atlas Pipeline Partners, L.P.	APL	\$0.6200	Not disclosed	\$350	Yield + 50-200 bps	PIK
Apr-13	Teekay Offshore Partners L.P.	TOO	\$0.5253	Not disclosed	\$150	\$0.4531	Cash
May-13	Enbridge Energy Partners, L.P. Class A	EEP	\$0.5435	Enbridge, Inc.	\$1,200	Yield: 7.5%	Cash deferred
Jul-13	Atlas Resource Partners, L.P.	ARP	\$0.5400	EP Energy E&P Company, L.P.	\$87	\$0.5400	Cash

Note: ETE distribution based on preferred stock issuance of \$100 per share; KMI distribution based on preferred stock issuance of \$1,000 per share

Note: Quarterly LP unitholder distribution represents MLP's distribution at the time of the announced transaction.

Source: Partnership reports and Wells Fargo Securities, LLC

Publicly Traded Preferred Equity

Publicly traded perpetual preferred equity is traded on a stock exchange and pays a fixed coupon into perpetuity. The preferred units are senior (in the capital structure) to common stock, but are subordinate to bonds. MLPs have issued preferred equity in order to strengthen their balance sheets (i.e., deleverage), finance an acquisition or capital expansion plan (i.e., removes interim funding needs), reinvest cash flow (i.e., defer distribution payments), and add a strategic partner.

To date, only one MLP has issued publicly traded preferred stock. On June 19, 2013, VNR issued 2.2 million of Series A public preferred units (which trade under the symbol VNRAP) at a price of \$25.00 per unit (\$60.8 million of proceeds). At the time of issuance, the preferred units carried a substantial cost of equity advantage over VNR's common units. VNR's lenders count preferred capital as 100% equity when determining the partnership's leverage metrics.



**Paid-In-Kind (PIK) Equity**

Paid-in-kind equity is an LP unit that receives distributions in the form of additional stock (i.e., similar to i-shares). The additional stock received by the unitholder can be either equal to the value of the partnership's current quarterly distribution paid to common unitholders, or set at a fixed rate that is at a premium to the MLP's distribution. Paid-in-kind equity is typically eligible to convert into common units after a certain period. A MLP that raises capital through the issuance of PIK equity (1) minimizes cash outflow that helps bridge the time until a project or acquisition starts to generate meaningful cash flow and (2) removes any overhang related to potential equity offerings.

**C-Corp Financing Vehicle**

On October 11, 2012, Linn Energy took public LinnCo, LLC (LNCO), which, at the time, represented a new concept in the MLP market. LNCO was conceived as an alternative C-Corp financing vehicle for Linn Energy to potentially tap a larger pool of equity capital that cannot (or does not) want to own LINE units due to the tax complexities of holding MLPs. LNCO is a C-Corp and therefore, generates a 1099 instead of a K-1. LinnCo is structured so that it can own only LINE units. Accordingly, LNCO's only assets are its LINE units. The company cannot own any physical assets and cannot incur any debt. In the future, LNCO plans to raise capital by issuing shares and then subsequently use the proceeds to buy an equal number of newly issued MLP units from LINE. LNCO distributes 100% of the LINE distributions it receives in the form of a dividend, net of a 2-5% reserve for alternative minimum tax (AMT).

**Exhibit 72. LNCO Versus LINE, MLPs, And Other C-Corps**

	LINE	Typical MLP	LNCO	Typical C-Corp
Non-Taxable Entity	✓	✓	●	✗
Tax Deferral On Distributions	100%	80%	60-100%	Usually none
Payout	Distribution	Distribution	Dividend	Dividend
Tax Reporting	K-1	K-1	1099	1099
General Partner	✗	✓	✗	✗
IDRs	✗	✓	✗	✗
Voting Rights	✓	✗	✓	✓
UBTI Implications	✓	✓	✗	✗
State Filing Requirements	✓	✓	✗	✗

Note ●: While technically LNCO is subject to corporate taxes, actual cash tax payments are minimal due to LINE's 100% tax deferral shield  
Source: Company data and Wells Fargo Securities, LLC estimates

On the whole, the LNCO structure has worked. After trading at a discount to LINE for several weeks following its IPO, LNCO began to trade at a premium to LINE on December 5, 2012, and has continued to trade at a premium since. As of October 22, 2013, LNCO was trading at a 9.9% premium to LINE, or 90 bps on a yield basis.

To date, no other MLP has completed an LNCO-like financing structure. However, on September 20, 2013, Cheniere Energy announced that the company had filed an S-1 with the SEC to take public an entity called Cheniere Energy Partners LP Holdings, which appears to be structured in the same manner as LNCO. Notably, the holding company's only assets are to be limited partner units in Cheniere Energy Partners (CQP).

**Warrants**

A warrant grants an investor the right to purchase a security from the issuing company at a particular price (i.e., exercise price) within a specified time period (i.e., prior to expiration). As part of its merger with El Paso Corp (EP), Kinder Morgan issued 0.640 KMI warrants per share of EP common stock. The warrants have an exercise price of \$40 and expire after a five-year period (i.e. 2017).

## **Growth In MLP Product Offerings**

### **MLP Indices**

Due to the growth and prominence of the MLP sector over the past few years, eleven financial institutions (i.e., Wells Fargo Securities, Alerian, Atlantic Trust, Barclays, Citi, Chicago Board of Option Exchange, Miller/Howard, Solactive AG, Standard & Poor's, Swank Capital, and Tortoise) have introduced MLP indices that allow investors to track the price and total return performance of the MLP sector. The first and most widely followed and benchmarked index is the Alerian MLP Index (AMZ). The following chart outlines the differences between the indices.

Exhibit 73. MLP Index Comparison

Index name	Index launch date	Ticker: price / total return	Market capitalization weighting	Minimum market cap (\$ in MM)	Timing of rebalance	Max. index constituent weighting	Index base	Index base date	Index sub sectors	Current index members	Constituent types	Calculation
Wells Fargo MLP Index	Dec-06	WMPLP / WMPLPT	Float-adjusted	\$200	Quarterly	None	100	Dec-89	Yes	93	MLPs, GPs, LLCs	S&P
Citi MLP Index	Jul-06	CITMLP / CITMLPT	Full market cap	\$500	Quarterly	None	100	Dec-99	No	N/A	MLPs	DJ
S&P MLP Index	Sep-07	SPMLP / SPMLPT	Float-adjusted	\$300	Annual	15.0%	1,000	Jul-01	No	56	MLPs, GPs, LLCs	S&P
Cushing 30 MLP Index	Jan-10	MLPX / MLPXTR	Equal-weighted	\$500	Quarterly	Equal	100	Aug-01	No	30 (max.)	MLPs, GPs, LLCs	S&P
Tortoise MLP Index	Jan-10	TMLP / TMLPT	Float-adjusted	\$200	Quarterly	10.0%	100	Dec-99	Yes	94	MLPs, GPs, LLCs	S&P
Tortoise North American (NA) Pipeline Index	Jun-11	TNAP / TNAPT	Float-adjusted	\$200	Quarterly	7.5%	100	Dec-99	Yes	86	MLPs, C-Corps, LLCs	S&P
Tortoise NA Oil & Gas Producers Index	Jan-13	TNEP / TNEPT	Float-adjusted	\$1,000	Quarterly	5.0%	100	Dec-99	Yes	78	MLPs, C-Corps, LLCs	S&P
Alerian MLP Index	Jun-06	AMZ / AMZX	Float-adjusted	\$500	Quarterly	None	100	Dec-95	No	50 (max.)	MLPs, GPs, LLCs	S&P
Alerian MLP Infrastructure Index	Mar-08	AMZI / AMZIX	Float-adjusted	\$500	Quarterly	9.5%	100	Dec-95	No	25 (max.)	MLPs, LLCs	S&P
Alerian Natural Gas MLP Index	Jan-10	ANGI / ANGIX	Equal-weighted	\$500	Quarterly	Equal	100	Dec-99	No	20 (max.)	MLPs, LLCs	S&P
Alerian Large Cap MLP Index	Mar-10	ALCI / ALCIX	Equal-weighted	No	Quarterly	Equal	100	Dec-99	No	15 (max.)	MLPs, LLCs	S&P
Alerian MLP Equal Weight Index	Apr-13	AMZE / AMZEX	Equal-weighted	\$500	Quarterly	Equal	500	Dec-12	No	50 (max.)	MLPs, GPs, LLCs	S&P
Alerian Energy Infrastructure Index	Apr-13	AMEI / AMEX	Equal-weighted	N/A	Quarterly	Equal	500	Dec-12	No	30 (max.)	MLPs, C-Corps	S&P
Miller/Howard MLP Fundamental Index	Aug-13	MLPMP / MLPMPH	Equal-weighted	\$500	Quarterly	Equal	100	Aug-13	No	25 (max.)	MLPs, GPs, LLCs	S&P
Solactive Junior MLP Composite Index	Nov-12	SOLMLPJ (TR)	Float-adjusted	\$250	Semi-Annual	9.0%	100	Nov-12	No	25 (30 max.)	MLPs, LLCs	Solactive AG
Solactive MLP Composite Index	Sep-12	SOLMLPAP / SOLMLPA	Float-adjusted	\$1,000	Annual	5.0%	100	Sep-12	No	33 (40 max.)	MLPs	Solactive AG
Solactive High Income Index	Mar-07	YMLP / YMLPTR	Equal-weighted	\$400	Annual	Equal	100	Mar-07	No	25 (max.)	MLPs, LLCs	Solactive AG
Solactive high Income Infrastructure Index	Mar-07	YMLI / YMLITR	Equal-weighted	\$1,000	Annual	Equal	100	Mar-07	No	25 (max.)	MLPs, LLCs	Solactive AG
Solactive MLP & Energy Infrastructure Index	May-13	SOLMLPX (TR)	Float-adjusted	\$1,000	Quarterly	9.0%	100	May-13	No	35	MLPs, LLCs, C-Corps	Solactive AG
Atlantic Trust Select MLP Index	Feb-13	BXIIATMP	Float-adjusted	\$300	Quarterly	8.0%	100	Jul-11	No	23 (100 max.)	MLPs, LLCs, C-Corps	Barclays

Note: CBOE = Chicago Board of Option Exchange; DJ = Dow Jones; S&P = Standard & Poor's  
Source: Alerian, Atlantic Trust, Barclays, Chicago Board of Option Exchange, Citi, Miller/Howard Investments, Solactive AG, Standard & Poor's, Swank Capital, Tortoise Capital Advisors, and Wells Fargo Securities

**The Wells Fargo Securities MLP Index**

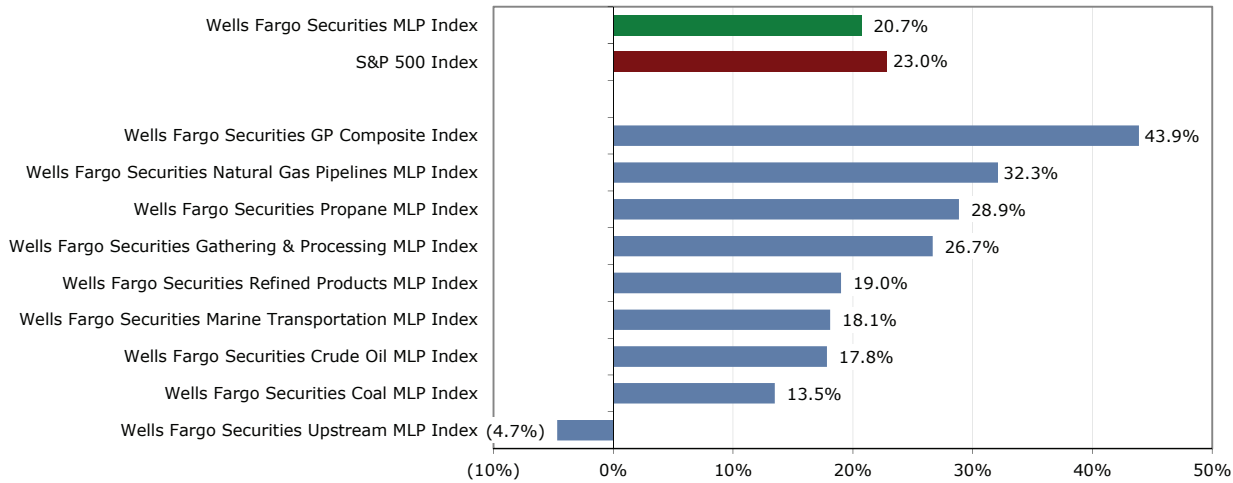
We gauge energy master limited partnerships' performance using the Wells Fargo Securities MLP Composite Index, which was introduced in December 2006. The index is designed to give investors and industry participants the ability to track both price and total return performance for energy MLPs. The Index comprises energy master limited partnerships that are listed on the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX) or NASDAQ, and that meet market capitalization and other requirements.

The Wells Fargo Securities MLP Composite Index currently consists of 98 energy MLPs, including 6 general partnerships (GP), and is also subdivided into 14 subsectors. To be eligible for the index, a company must be structured as a limited partnership or limited-liability company and have a market capitalization greater than \$200 million. The Index composition is determined by Wells Fargo Securities' Strategic Indexing Team, and the Index is independently calculated by Standard & Poor's using a float-adjusted market capitalization methodology.

The Index is reviewed quarterly, with changes effective after the close of trading on the third Friday of March, June, September, and December. For each review date, securities are evaluated based on the close of the last trading day (the evaluation date) of the month preceding the review (February, May, August, and November). Following a review, all securities already included in the Index that continue to meet the eligibility criteria remain in the Index. All other securities that meet all eligibility criteria are added to the Index and all securities previously included in the Index that do not continue to meet the eligibility requirements are removed from the Index.

Real-time price quotes for the index are available on Bloomberg and Reuters under the symbol WMLP (and WMLPT for total return) and on FactSet Marquee under the symbol WML-CME. For further information and historical performance data from 1990 (downloadable), please visit [www.wellsfargoresearch.com](http://www.wellsfargoresearch.com).

**Exhibit 74. Wells Fargo Securities MLP Index Returns By Subsector – 2013 Price Performance**



Note: 2013 price performance data is through October 22, 2013  
 Source: Standard & Poor's and Wells Fargo Securities, LLC

Please see Exhibit 154 in the Appendix for a list of the current constituents of the Wells Fargo Securities MLP Index, as well as the energy MLPs included within each of the MLP sub-indices. As of our last quarterly update in September 2013, the Wells Fargo Securities MLP Index was comprised of 98 constituents.

## Exhibit 75. Wells Fargo Securities MLP Sub-Indices And Related Bloomberg Tickers

Wells Fargo Securities MLP Sub-Indices	Bloomberg Index Tickers	
	Price Performance	Total Return
Wells Fargo Securities MLP Index	<b>WMLP</b>	WCHWMLPT
1. Wells Fargo Securities GP Composite Index	WCHWGPS	WCHWGPST
2. Wells Fargo Securities Coal MLP Index	WCHWCOA	WCHWCOAT
3. Wells Fargo Securities Oil & Gas MLP Index	WCHWEXP	WCHWEXPT
4. Wells Fargo Securities Marine Transportation MLP Index	WCHWMAR	WCHWMART
5. Wells Fargo Securities Propane MLP Index	WCHWPRO	WCHWPROT
6. Wells Fargo Securities Midstream MLP Index	WCHWMID	WCHWMIDT
A. Wells Fargo Securities Natural Gas MLP Index	WCHWGAS	WCHWGAST
<i>i. Wells Fargo Securities Gathering &amp; Processing MLP Index</i>	WCHWGNP	WCHWGNPT
<i>ii. Wells Fargo Securities Natural Gas Pipelines MLP Index</i>	WCHWNGP	WCHWNGPT
B. Wells Fargo Securities Petroleum MLP Index	WCHWPET	WCHWPETT
<i>i. Wells Fargo Securities Crude Oil MLP Index</i>	WCHWCRD	WCHWCRDT
<i>ii. Wells Fargo Securities Refined Products MLP Index</i>	WCHWRFP	WCHWRFPT
7. Wells Fargo Securities Oilfield Services MLP Index	NA	NA
8. Wells Fargo Securities Storage MLP Index	NA	NA
Wells Fargo Securities Non-GP Composite Index	WCHWLPS	WCHWLPST

Note: **WMLP** index quotes are real-time and all other index quotes are end of day.

Note: WMLP index price performance quotes are real-time and all other subsector index quotes are end of day.

Source: Standard and Poor's and Wells Fargo Securities, LLC

### Financial Products Facilitate Participation In MLPs

Since 2004, numerous financial products have been created to facilitate investment in the MLP sector. The introduction of new MLP investment vehicles could signal a natural evolution as the MLP sector matures to encompass more investable products. It is also more likely that these investment vehicles could broaden the ownership pool for the MLP sector and increase overall liquidity for MLPs. However, these vehicles are also likely to increase sector volatility, in our view.

**Master Limited Partnerships**

**Exhibit 76. MLP Products Introduced Since 2011**

<b>Date</b>	<b>Product Name</b>	<b>Ticker(s)</b>	<b>Product Type</b>
Feb-11	Nuveen Energy MLP Total Return Fund	JMF	CEF
Mar-11	Morgan Stanley Cushing High Income Index ETN	MLPY	ETN
Mar-11	MainGate MLP Fund	AMLPX, IMLPX	Open-End
May-11	Salient MLP and Energy Infrastructure Fund	SMF	CEF
Jun-11	Tortoise MLP & Pipeline Fund	TORTX, TORIX	Open-End
Jun-11	ClearBridge Energy MLP Opportunity Fund Inc.	EMO	CEF
Jul-11	Duff & Phelps Global Utility Income Fund	DPG	CEF
Sep-11	First Trust Energy Infrastructure Fund	FIF	CEF
Oct-11	Tortoise Pipeline & Energy Fund, Inc.	TTP	CEF
Dec-11	Oppenheimer SteelPath MLP Alpha Plus Fund	MLPLX, MLPMX, MLPNX	Open-End
Dec-11	Brown Advisory Equity Income Fund	BIADX, BADAX	Open-End
Feb-12	Cushing Royalty & Income Fund	SRF	CEF
Mar-12	Yorkville High Income MLP ETF	YMLP	ETF
Apr-12	Global X MLP ETF	MLPA	ETF
May-12	Salient Midstream & MLP Fund	SMM	CEF
Jun-12	First Trust North American Energy Infrastructure Fund	EMLP	ETF
Jun-12	ClearBridge Energy MLP Total Return Fund Inc.	CTR	CEF
Jul-12	Cushing Royalty Energy Income Fund	CURAX, CURCX, CURZX	Open-End
Jul-12	UBS ETRACS Alerian MLP Index	AMU	ETN
Jul-12	Tortoise Energy Independence Fund	NDP	CEF
Sep-12	Eagle MLP Strategy	EGLAX, EGLIX, EGLCX	Open-End
Sep-12	Salient MLP & Energy Infrastructure Fund II	SMAPX, SMFPX, SMLPX	Open-End
Sep-12	Cushing Renaissance Fund	SZC	CEF
Nov-12	First Trust MLP and Energy Income Fund	FEI	CEF
Dec-12	The ALPS   Alerian MLP Infrastructure Index Fund	ALERX, ALRCX, ALRIX	Open-End
Jan-13	iPath S&P MLP ETN	IMLP	ETN
Jan-13	Global X Junior MLP ETF	MLPJ	ETF
Feb-13	Yorkville High Income Infrastructure ETF	YMLI	ETF
Mar-13	Barclays ETN+ Select MLP ETN	ATMP	ETN
Mar-13	Neuberger Berman MLP Income Fund Inc.	NML	CEF
Mar-13	Cohen & Steers MLP Income and Energy Opportunity Fund, Inc.	MIE	CEF
Apr-13	Cushing Renaissance Advantage Fund	CRZAX, CRZCX, CRZZX	Open-End
Apr-13	Goldman Sachs MLP Energy Infrastructure Fund	GLPAX, GLPCX, GMLPX, GLPIX, GLPRX	Open-End
Jun-13	ClearBridge American Energy MLP Fund Inc.	CBA	CEF
Sep-13	Center Coast MLP & Infrastructure Fund	CEN	CEF
Sep-13	C-Tracks M/H MLP ETN	MLPC	ETN

Source: Bloomberg, FactSet, Standard & Poor's, and Wells Fargo Securities, LLC

In addition to closed-end funds (CEF), the advent of MLP exchange-traded notes (ETN), open-end funds, and exchange-traded funds (ETF) provide diversification for investors and are administratively less burdensome than direct ownership in MLPs (e.g., receive 1099s and not K-1 statements). Since 2011, the industry has seen the emergence of 16 CEFs, 5 ETNs, 10 open-end funds, and 5 ETFs. We expect additional structured products around the MLP market to be created over time, which should support additional investment in the sector. Exhibit 77 provides a brief overview of MLP-focused products.

## Exhibit 77. Summary Of MLP Financial Products

	Direct Investment	CEFs	ETNs	Open-End Funds	ETFs
<b>Pros</b>	<ul style="list-style-type: none"> <li>• Tax deferral</li> <li>• Tax efficient means to transfer wealth</li> <li>• No management fees</li> <li>• Real-time pricing</li> <li>• Distribution increases</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution yield mirrors direct investment</li> <li>• Professional management</li> <li>• Qualifying dividend</li> <li>• Participation in PIPEs</li> <li>• Form 1099 / No K-1s</li> <li>• Diversification</li> <li>• Suitable for retirement accounts</li> </ul>	<ul style="list-style-type: none"> <li>• Performance mirrors MLP basket</li> <li>• Lower management fee than CEF</li> <li>• Form 1099 / No K-1s</li> <li>• Diversification</li> <li>• Suitable for retirement accounts</li> <li>• Real-time pricing</li> </ul>	<ul style="list-style-type: none"> <li>• Professional management</li> <li>• Form 1099 / No K-1s</li> <li>• Diversification</li> <li>• No limit on number of shares issued</li> <li>• Suitable for retirement accounts</li> </ul>	<ul style="list-style-type: none"> <li>• No credit risk to issuer</li> <li>• Form 1099 / No K-1s</li> <li>• Diversification</li> <li>• Suitable for retirement accounts</li> <li>• Real-time pricing</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• K-1s</li> <li>• Equity only exposure</li> <li>• Not suitable for retirement accounts</li> </ul>	<ul style="list-style-type: none"> <li>• Management fee</li> <li>• CEF pays corporate tax</li> <li>• No tax deferral</li> <li>• Leverage</li> <li>• Delayed pricing causes premium/discount</li> <li>• Set number of shares issued</li> </ul>	<ul style="list-style-type: none"> <li>• Management fee</li> <li>• No tax deferral</li> <li>• Credit risk to ETN issuer</li> <li>• Leverage</li> <li>• Coupon is fixed</li> </ul>	<ul style="list-style-type: none"> <li>• Management fee</li> <li>• Leverage</li> <li>• Delayed pricing causes premium/discount</li> <li>• Fund pays corporate tax if it does not qualify as a RIC</li> <li>• Potential tracking error</li> </ul>	<ul style="list-style-type: none"> <li>• Potential tracking error</li> <li>• Management fee</li> </ul>

Source: Wells Fargo Securities, LLC

## MLP Closed-End Funds

Tortoise Energy Infrastructure Corporation (TYG) was the first MLP-focused closed-end fund created in 2004. There are now 17 closed-end funds that invest solely in MLPs and 12 with 25% invested in MLPs. Closed-end funds are organized as corporations (as opposed to regulated investment companies, tax-exempt entities, etc.) and thus, are not subject to the restrictions related to qualifying income and UBTI. CEFs pay a dividend that is meant to generate a yield on par with the MLP investments themselves. Notably, CEFs are subject to federal income tax and typically use varying degrees of leverage to compensate for this disadvantage. Benefits to investing in an MLP closed-end fund include the following:

- Portfolios are professionally managed and provide diversification for investors;
- Investments are not subject to UBTI and can be made within IRA accounts;
- Investors receive simplified tax reporting through a single 1099 instead of multiple K-1s; and
- Closed-end funds can engage in private market transactions that are not readily available to the public.

MLP closed-end funds are playing an increasingly prominent role in the MLP sector, in our view. MLP dedicated closed-end funds represent approximately \$16.1 billion of capital invested in the MLP sector in comparison to the group's total market cap of \$445 billion. The funds often provide private funding for MLPs to supplement public equity offerings to finance growth initiatives. Currently there is one closed-end fund that invests in privately held MLPs that could ultimately become public entities when they mature. Finally, when MLPs experience periods of weakness, some funds may use the weakness as a buying opportunity, thereby lending stability to MLP valuations. Notably, there have been two funds that have raised in excess of \$1.0 billion each in 2013: the ClearBridge American Energy MLP Fund Inc. (raised almost \$1.2 billion in June 2013) and the Neuberger Berman MLP Income Fund Inc. (raised slightly more than \$1.0 billion in March 2013).

Master Limited Partnerships

Exhibit 78. MLP Closed-End Funds

<i>\$ in millions, except per share data</i>										
	Ticker	Price 10/22/13	3-Month Avg Vol	Market Value	Dividend Yield	NAV / Share	Premium / (Discount) To NAV	YTD Return	IPO / Inception	
MLP Closed-End Funds	Center Coast MLP & Infrastructure Fund	CEN	\$20.09	106,463	\$291.8	6.2%	\$19.44	3.3%	0.5%	9/26/13
	ClearBridge Energy MLP Fund Inc.	CEM	\$27.23	128,036	\$1,848.9	5.9%	\$26.90	1.2%	23.4%	6/25/10
	ClearBridge Energy MLP Opportunity Fund Inc.	EMO	\$22.93	61,918	\$704.0	6.0%	\$23.80	(3.7%)	15.4%	6/10/11
	ClearBridge Energy MLP Total Return Fund Inc.	CTR	\$22.47	108,316	\$786.5	5.9%	\$23.01	(2.3%)	23.2%	6/27/12
	ClearBridge American Energy MLP Fund Inc.	CBA	\$19.35	153,077	\$1,015.9	6.2%	\$19.14	1.1%	(1.8%)	6/26/13
	Cohen & Steers MLP Income and Energy Opportunity Fund,	MIE	\$17.58	66,976	\$421.9	7.2%	\$19.34	(9.1%)	(9.1%)	3/26/13
	Cushing MLP Total Return Fund	SRV	\$8.03	114,208	\$268.0	11.2%	\$7.18	11.8%	21.8%	8/27/07
	Energy Income & Growth Fund	FEN	\$32.89	60,889	\$636.2	6.4%	\$32.95	(0.2%)	14.0%	6/24/04
	Fiduciary/Claymore MLP Opportunity Fund	FMO	\$24.67	111,893	\$801.5	6.7%	\$24.38	1.2%	18.7%	12/22/04
	First Trust MLP and Energy Income Fund	FEI	\$19.78	104,018	\$820.9	6.7%	\$20.92	(5.4%)	0.4%	11/28/12
	Kayne Anderson MLP Investment Co.	KYN	\$36.22	332,851	\$3,605.3	6.6%	\$34.22	5.8%	29.0%	9/27/04
	Neuberger Berman MLP Income Fund Inc.	NML	\$18.43	128,270	\$926.1	6.8%	\$19.70	(6.4%)	(5.5%)	3/26/13
	Nuveen Energy MLP Total Return Fund	JMF	\$18.75	101,786	\$736.4	6.7%	\$20.08	(6.6%)	12.9%	2/24/11
	Tortoise Energy Capital Corp.	TYE	\$32.76	44,932	\$655.8	5.2%	\$32.18	1.8%	19.5%	5/26/05
	Tortoise Energy Infrastructure Corp.	TYG	\$46.67	54,041	\$1,329.2	4.9%	\$42.55	9.7%	27.8%	2/24/04
	Tortoise MLP Fund, Inc.	NTG	\$27.87	87,706	\$1,306.0	6.0%	\$27.93	(0.2%)	18.9%	7/27/10
	Tortoise North American Energy	TYN	\$28.03	16,463	\$176.6	5.7%	\$28.66	(2.2%)	14.7%	10/27/05
<b>MLP Closed-End Fund Mean</b>			<b>104,814</b>	<b>\$960.6</b>	<b>6.5%</b>		<b>(0.0%)</b>	<b>13.2%</b>		
<b>MLP Closed-End Fund Median</b>			<b>104,018</b>	<b>\$786.5</b>	<b>6.2%</b>		<b>(0.2%)</b>	<b>15.4%</b>		
MLP -Related Closed-End Funds	Cushing Renaissance Fund	SZC	\$23.75	17,055	\$143.8	6.9%	\$27.13	(12.5%)	10.1%	9/25/12
	Cushing Royalty & Income Fund	SRF	\$17.82	32,057	\$170.9	11.2%	\$18.66	(4.5%)	1.1%	2/28/12
	Duff & Phelps Global Utility Income Fund	DPG	\$19.53	96,987	\$740.8	7.2%	\$22.00	(11.2%)	22.5%	7/27/11
	First Trust Energy Infrastructure Fund	FIF	\$23.19	51,607	\$407.0	5.7%	\$24.63	(5.8%)	14.4%	9/27/11
	Kayne Anderson Energy Development Co.	KED	\$29.40	29,794	\$306.7	6.2%	\$27.73	6.0%	28.6%	9/21/06
	Kayne Anderson Energy Total Return Fund	KYE	\$29.21	62,217	\$1,040.7	6.6%	\$29.00	0.7%	24.8%	6/27/05
	Kayne Anderson Midstream Energy	KMF	\$32.59	62,780	\$175.0	5.6%	\$35.70	(8.7%)	18.0%	11/23/10
	Salient MLP & Energy Infrastructure Fund	SMF	\$26.71	16,377	\$191.8	7.0%	\$28.55	(6.4%)	11.6%	5/26/11
	Salient Midstream & MLP Fund	SMM	\$22.65	22,552	\$214.9	6.1%	\$23.34	(3.0%)	26.6%	5/29/12
	Tortoise Energy Independence Fund, Inc.	NDP	\$25.44	46,723	\$369.0	6.9%	\$28.33	(10.2%)	24.7%	7/26/12
	Tortoise Power and Energy Infrastructure	TPZ	\$24.67	15,958	\$171.5	6.1%	\$27.89	(11.5%)	2.8%	7/29/09
	Tortoise Pipeline & Energy Fund, Inc.	TTP	\$29.30	24,531	\$293.1	5.6%	\$30.76	(4.7%)	25.5%	10/31/11
	<b>MLP-Related Closed-End Funds Mean</b>			<b>39,887</b>	<b>\$397.1</b>	<b>6.7%</b>		<b>(6.0%)</b>	<b>17.5%</b>	
<b>MLP-Related Closed-End Funds Median</b>			<b>30,925</b>	<b>\$299.9</b>	<b>6.4%</b>		<b>(6.1%)</b>	<b>20.2%</b>		
<b>All Closed-End Funds Mean</b>			<b>77,948</b>	<b>\$727.4</b>	<b>6.6%</b>		<b>(2.5%)</b>	<b>15.0%</b>		
<b>All Closed-End Funds Median</b>			<b>62,217</b>	<b>\$655.8</b>	<b>6.2%</b>		<b>(3.0%)</b>	<b>18.0%</b>		

Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC

MLP Exchange-Traded Notes

There are currently 12 ETNs that track the performance of specific MLP indices. ETNs work as an alternative to ETFs and investors receive an IRS Form 1099 in lieu of a K-1 for tax purposes. Unlike ETFs and CEFs, ETNs are a form of senior unsecured debt and, therefore, carry credit risk associated with the issuer. ETNs are designed to provide investors with returns that are tied to the performance of a particular market index or strategy, less an applicable tracking fee. In other words, the ETN investor will receive variable quarterly coupons (from the underwriting bank) tied to the cash distributions paid on the MLPs in the index. Similar to other debt securities, ETNs have a maturity date and are backed by the credit rating of the issuer. The cash settlement amount at maturity equals the principal amount multiplied by an index ratio based on the performance of the underlying MLP Index, net of fees. No principal protection on the ETN exists. Since ETNs are backed by the credit of the underwriting bank(s) (the issuers), the value of the ETN could decline if the issuer's credit rating is downgraded. ETNs are traded on major stock exchanges, e.g., the New York Stock Exchange (NYSE).



Exhibit 79. MLP Exchange-Traded Notes

MLP Exchange Traded Notes (ETNs)		Ticker	Price 10/22/13	Market Value (MM)	Dividend Yield	YTD Return	NAV / Share	Total Net Assets (MM)	Issuer
MLP ETNs	Barclays ETN+ Select MLP ETN	ATMP	\$26.93	\$165.8	3.8%	7.7%	\$27.03	\$166.4	Barclays
	Credit Suisse Cushing 30 MLP Index ETN	MLPN	\$31.10	\$623.2	4.1%	28.8%	\$23.30	\$584.8	Credit Suisse
	E-TRACS Alerian Natural Gas MLP Index	MLPG	\$36.72	\$33.0	5.0%	28.6%	\$28.08	\$32.2	UBS
	iPath S&P MLP ETN	IMLP	\$29.03	\$50.9	4.5%	16.1%	\$29.07	\$51.0	Barclays
	JPMorgan Alerian MLP ETN	AMJ	\$46.03	\$5,822.8	4.9%	19.7%	\$46.22	\$5,846.8	JPM
	C-Tracks M/H MLP ETN	MLPC	\$25.97	\$26.0	NA	3.9%	NA	NA	NA
	Morgan Stanley Cushing High Income Index ETN	MLPY	\$18.00	\$48.2	7.8%	15.7%	\$15.22	\$46.8	MS
	UBS E-TRACS 1xMonthly Short Alerian MLP Index	MLPS	\$12.53	\$5.0	NA	(26.0%)	\$19.90	\$5.2	UBS
	UBS E-TRACS 2x Leveraged Long Alerian	MLPL	\$55.30	\$188.5	9.9%	43.5%	\$34.98	\$183.8	UBS
	UBS ETRACS Alerian MLP Index	AMU	\$29.02	\$158.0	4.9%	19.7%	NA	\$139.1	UBS
	UBS E-TRACS Alerian MLP Infrastructure	MLPI	\$39.44	\$1,366.1	4.6%	21.2%	NA	\$1,307.1	UBS
	UBS E-TRACS Wells Fargo MLP Index	MLPW	\$33.06	\$13.2	4.8%	19.1%	\$25.66	\$13.0	UBS
	<b>MLP ETN Mean / Total</b>				<b>\$708.4</b>	<b>5.4%</b>	<b>16.5%</b>	<b>\$27.72</b>	<b>\$8,376.1</b>
<b>MLP ETN Median</b>				<b>\$104.5</b>	<b>4.8%</b>	<b>19.4%</b>	<b>\$27.03</b>	<b>\$139.1</b>	

Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC

Open-End Funds

On March 31, 2010, SteelPath Funds launched a series of three open-end funds (i.e., the SteelPath MLP Select 40 Fund, the SteelPath MLP Alpha Fund, and the SteelPath MLP Income Fund) focused on the energy MLP sector (Note: On July 17, 2012, Oppenheimer Funds agreed to acquire SteelPath Capital Management and SteelPath Fund Advisors). Since the inception of these funds, there have been a total of 14 additional open-end funds introduced to the market, with 11 having a similar structure to the SteelPath Funds (see Exhibit 81 for a list of open-end funds). These types of open-end funds are registered investment companies and submit regular filings like other mutual funds; however, they are categorized as corporations for IRS taxation purposes. This enables these open-end funds to invest more than 25% of their assets in MLPs. Consequently, this type of open-end fund does not receive the tax-free benefits that most mutual funds enjoy. Since these open-end funds pay corporate income taxes, the funds' performance may not directly track the underlying basket of stocks owned by the fund.

The remaining three open-end funds have elected to be treated as regulated investment companies (RIC) from a tax perspective (i.e., like a traditional mutual fund), which limits a fund's ability to invest in MLPs to up to 25% of its managed assets in MLPs. Although funds that are structured as RICs are restricted in their ability to invest in MLPs, these funds are not subject to U.S. federal income tax (assuming the fund satisfies the requirements to qualify as an RIC). The three funds include the Brown Advisory Equity Income, Cushing Renaissance Advantage, and Tortoise MLP & Pipeline Funds.

Benefits of these open-end funds include the following:

- The funds are professionally managed;
- Provide daily liquidity at net asset value (NAV);
- Investors receive a single 1099 instead of a K-1; and
- The fund's structure eliminates UBTI issues, which allows the investor to hold the fund in tax-exempt accounts.

Exhibit 80. Open-End MLP Funds Compared To A Typical Mutual Fund

	MLP Open-End Funds	Typical Mutual Fund
<b>Structure</b>	Registered Investment Company under the Investment Company Act of 1940	
<i>What does it mean?</i>	<ul style="list-style-type: none"> <li>• Law focuses on Fund disclosure to the investing public</li> <li>• Requires companies to disclose financial condition and investment policies</li> </ul>	
<b>Tax Selection with the IRS</b>	Corporation ("C-Corp")	Regulated Investment Company
<i>What does it mean?</i>	<ul style="list-style-type: none"> <li>• Pays corporate income tax (~35%)</li> <li>• No limit on MLP investments</li> </ul>	<ul style="list-style-type: none"> <li>• Tax benefits</li> <li>• 25% limit on MLP investments</li> </ul>

Source: Fund reports and Wells Fargo Securities, LLC

Master Limited Partnerships

Exhibit 81. MLP Open-End Funds (Mutual Funds)

MLP Open-End Fund	Ticker	NAV 10/22/13	Total Assets (\$ in MM)	Current Annualized Dividend	Implied Yield	Minimum Investment	YTD Total Return	Front Load	Mgmt Fee
The ALPS   Alerian MLP Infrastr. Index Fund Class A	ALERX	\$11.15	\$6.5	\$0.67	6.0%	\$2,500	16.0%	1.3%	1.3%
The ALPS   Alerian MLP Infrastr. Index Fund Class C	ALRCX	\$11.12	\$1.7	\$0.67	6.0%	\$2,500	15.6%	1.9%	1.9%
The ALPS   Alerian MLP Infrastr. Index Fund Class I	ALRIX	\$11.17	\$2.6	\$0.67	6.0%	\$1,000,000	16.2%	0.9%	0.9%
Brown Advisory Equity Income Fund*	BIADX	\$13.13	\$187.1	\$0.25	1.9%	\$250,000	24.3%	0.0%	1.0%
Brown Advisory Equity Income Fund*	BADAX	\$13.11	\$2.8	\$0.22	1.7%	\$2,000	24.1%	0.0%	1.0%
Center Coast MLP Focus Fund - Retail	CCCAX	\$11.20	\$789.7	\$0.67	6.0%	\$2,500	17.4%	5.8%	1.0%
Center Coast MLP Focus Fund - Retail	CCCCX	\$10.91	\$737.4	\$0.67	6.2%	\$2,500	16.7%	0.0%	1.0%
Center Coast MLP Focus Fund - Institutional	CCCNX	\$11.24	\$624.6	\$0.67	6.0%	\$1,000,000	17.7%	0.0%	1.0%
Cushing Royalty Energy Income Fund Class A*	CURAX	\$18.43	\$44.2	\$1.60	8.7%	\$2,000	5.0%	5.8%	1.4%
Cushing Royalty Energy Income Fund Class C*	CURCX	\$18.25	\$7.3	\$1.60	8.8%	\$2,000	4.4%	0.0%	1.4%
Cushing Royalty Energy Income Fund Class I*	CURZX	\$18.50	\$1.6	\$1.60	8.6%	\$250,000	5.2%	0.0%	1.4%
Cushing Renaissance Advantage Fund Class A*	CRZAX	\$22.67	\$5.6	\$0.16	0.7%	\$2,000	15.0%	5.8%	1.3%
Cushing Renaissance Advantage Fund Class C*	CRZCX	\$22.60	\$1.8	\$0.16	0.7%	\$2,000	14.7%	1.0%	1.3%
Cushing Renaissance Advantage Fund Class I*	CRZZX	\$22.67	\$9.4	\$0.16	0.7%	\$250,000	15.0%	0.0%	1.3%
Eagle MLP Strategy Class A	EGLAX	\$12.41	\$40.1	\$0.31	2.5%	\$2,500	27.3%	0.0%	0.0%
Eagle MLP Strategy Class C	EGLCX	\$12.39	\$9.9	\$0.25	2.0%	\$100,000	14.0%	0.0%	0.0%
Eagle MLP Strategy Class I	EGLIX	\$12.42	\$337.4	\$0.34	2.7%	\$2,500	27.6%	0.0%	0.0%
FAMCO MLP & Energy Income Fund - Retail	INFRX	\$12.53	\$32.0	\$0.59	4.7%	\$2,500	15.4%	5.5%	1.0%
FAMCO MLP & Energy Income Fund - Institutional	INFIX	\$12.35	\$340.9	\$0.66	5.3%	\$1,000,000	15.7%	0.0%	1.0%
FAMCO MLP & Energy Infrastructure Fund	MLPPX	\$12.57	\$32.0	\$0.66	5.2%	\$1,000,000	16.5%	0.0%	0.8%
Goldman Sachs MLP Energy Infrastructure Fund Class A	GLPAX	\$10.72	\$13.3	\$0.48	4.5%	\$1,000	10.0%	5.5%	1.0%
Goldman Sachs MLP Energy Infrastructure Fund Class C	GLPCX	\$10.69	\$7.1	\$0.48	4.5%	\$1,000	9.7%	0.0%	1.0%
Goldman Sachs MLP Energy Infrastructure Fund Class I	GMLPX	\$10.75	\$115.4	\$0.48	4.5%	\$1,000,000	10.3%	0.0%	1.0%
Goldman Sachs MLP Energy Infrastructure Fund Class R	GLPIX	\$10.74	\$4.3	\$0.48	4.5%	\$0	10.2%	0.0%	1.0%
Goldman Sachs MLP Energy Infrastructure Fund Class IR	GLPRX	\$10.71	\$0.0	\$0.48	4.5%	\$0	9.9%	0.0%	1.0%
MainGate MLP Fund - Retail	AMLPX	\$12.11	\$130.5	\$0.63	5.2%	\$2,500	20.9%	5.8%	1.3%
MainGate MLP Fund - Institutional	IMLPX	\$12.21	\$322.9	\$0.63	5.2%	\$1,000,000	21.2%	0.0%	1.3%
Salient MLP & Energy Infrastructure II Class A	SMAPX	\$12.19	\$84.2	\$0.52	4.2%	\$2,500	25.7%	5.5%	1.0%
Salient MLP & Energy Infrastructure II Class C	SMFPX	\$12.13	\$19.3	\$0.45	3.7%	\$2,500	20.4%	0.0%	1.0%
Salient MLP & Energy Infrastructure II Class I	SMLPX	\$12.17	\$182.8	\$0.54	4.4%	\$1,000,000	26.0%	0.0%	1.0%
Oppenheimer SteelPath MLP Alpha Fund Class A	MLPAX	\$12.14	\$1,066.9	\$0.69	5.7%	\$3,000	20.0%	5.8%	1.1%
Oppenheimer SteelPath MLP Alpha Fund Class C	MLPGX	\$11.99	NA	\$0.69	5.7%	\$3,000	19.3%	1.0%	1.1%
Oppenheimer SteelPath MLP Alpha Fund Class I	MLPOX	\$12.26	\$1,163.0	\$0.69	5.6%	\$1,000,000	20.2%	0.0%	1.1%
Oppenheimer SteelPath MLP Select 40 Fund Class A	MLPFX	\$12.09	\$634.6	\$0.71	5.8%	\$3,000	19.6%	5.8%	0.7%
Oppenheimer SteelPath MLP Select 40 Fund Class C	MLPEX	\$11.97	NA	\$0.71	5.9%	\$3,000	19.0%	1.0%	0.7%
Oppenheimer SteelPath MLP Select 40 Fund Class I	MLPTX	\$12.23	\$1,363.0	\$0.71	5.8%	\$1,000,000	19.9%	0.0%	0.7%
Oppenheimer SteelPath MLP Select 40 Fund Class Y	MLPYX	\$12.23	\$58.6	\$0.71	5.8%	\$1,000,000	19.9%	0.0%	0.7%
Oppenheimer SteelPath MLP Income Fund Class A	MLPDX	\$11.04	\$1,348.1	\$0.78	7.0%	\$3,000	21.5%	5.8%	1.0%
Oppenheimer SteelPath MLP Income Fund Class C	MLPRX	\$10.87	NA	\$0.78	7.1%	\$3,000	20.7%	0.0%	1.0%
Oppenheimer SteelPath MLP Income Fund Class I	MLPZX	\$11.15	\$498.4	\$0.78	7.0%	\$1,000,000	21.7%	0.0%	1.0%
Oppenheimer SteelPath MLP Alpha Plus Fund Class A	MLPLX	\$11.82	\$100.5	\$0.66	5.6%	\$3,000	26.5%	5.8%	1.3%
Oppenheimer SteelPath MLP Alpha Plus Fund Class C	MLPMX	\$11.71	\$14.1	\$0.66	5.6%	\$3,000	25.7%	0.0%	1.3%
Oppenheimer SteelPath MLP Alpha Plus Fund Class I	MLPNX	\$11.89	\$46.4	\$0.66	5.5%	\$1,000,000	26.8%	0.0%	1.3%
The Cushing MLP Premier Fund - Retail	CSHAX	\$21.14	\$474.8	\$1.34	6.3%	\$2,000	17.6%	5.8%	1.1%
The Cushing MLP Premier Fund - Retail	CSHCX	\$20.60	\$544.4	\$1.34	6.5%	\$2,000	16.8%	0.0%	1.1%
The Cushing MLP Premier Fund - Institutional	CSHGX	\$21.31	\$207.2	\$1.34	6.3%	\$250,000	17.9%	0.0%	1.1%
Tortoise MLP & Pipeline Fund - Investor Class	TORTX	\$15.25	\$189.3	\$0.07	0.5%	\$2,500	23.3%	5.8%	0.9%
Tortoise MLP & Pipeline Fund - C Class	TORCX	\$15.13	\$26.0	\$0.07	0.5%	\$2,500	22.5%	0.0%	0.0%
Tortoise MLP & Pipeline Fund - Institutional Class	TORIX	\$15.34	\$845.1	\$0.09	0.6%	\$1,000,000	23.6%	0.0%	1.1%
<b>MLP Open-End Fund Total / Median</b>			<b>\$12,674.8</b>		<b>5.5%</b>	<b>\$3,000</b>	<b>19.0%</b>	<b>0.0%</b>	<b>1.0%</b>

\*Not a MLP dedicated fund

Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC

Exchange-Traded Funds

On August 25, 2010, Alerian launched the first-ever MLP ETF, the Alerian MLP ETF (NYSE Arca: AMLP). Since then, there have been six additional MLP ETFs introduced into the market, which include First Trust North American Energy Infrastructure Fund ETF (EMLP), Global X Junior MLP ETF (MLPJ), Global X MLP ETF (MLPA), Global X MLP & Energy Infrastructure ETF (MLPX), Yorkville High Income MLP ETF (YMLP), and Yorkville High Income Infrastructure ETF (YMLI). Similar to ETNs, ETFs are designed to track the price and yield performance of an underlying MLP Index (see the following exhibit for a list of MLP indices). Benefits of an ETF include (1) investors receive a single Form 1099 instead of a K-1, (2) investors have the potential to receive quarterly dividends, and (3) unlike ETNs, there is no credit risk associated with an ETF. ETFs charge a management fee that ranges from 0.45% to 0.95%. A drawback of the ETF structure is that it is less tax efficient because it is structured as a corporation (i.e., there is double taxation). Thus, the performance of the ETF may not track the underlying index. Investing in an MLP ETF does not allow the investor to receive the tax benefits associated with direct ownership of MLPs. For tax reporting purposes, ETFs will generate a Form 1099 and not a K-1. Thus, this product can be held in retirement accounts, such as IRAs and 401-Ks.

**Exhibit 82. MLP Exchange-Traded Funds**

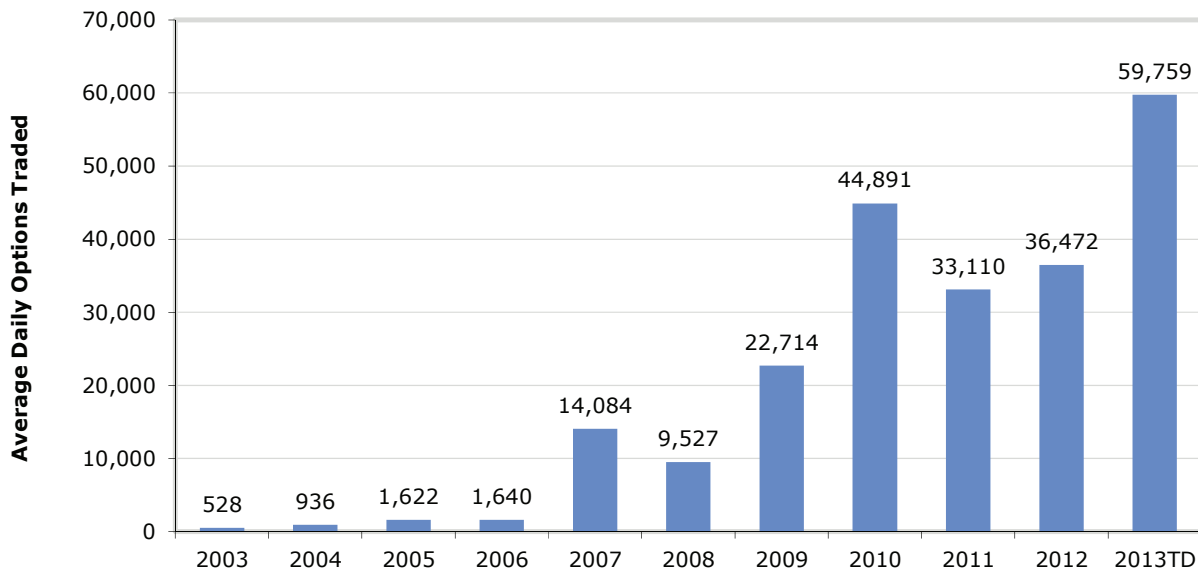
MLP Exchange Traded Funds (ETFs)		Price	Market	Dividend	YTD	NAV /	Total Net		
		10/22/13	Value (MM)	Yield	Return	Share	Assets (MM)	Issuer	
MLP ETFs	Alerian MLP ETF	AMLP	\$17.93	\$7,233.9	6.0%	12.4%	\$17.97	\$6,977.7	NA
	First Trust North American Energy Infrastructure Fund ETF	EMLP	\$23.59	\$436.5	3.4%	13.3%	\$23.62	\$437.0	NA
	Global X Junior MLP ETF	MLPJ	\$15.99	\$12.0	6.4%	5.6%	\$15.93	\$11.9	NA
	Global X MLP ETF	MLPA	\$16.31	\$64.4	5.5%	12.3%	\$16.31	\$64.4	NA
	Global X MLP & Energy Infrastructure ETF	MLPX-USA	\$15.83	NA	NA	5.5%	NA	NA	NA
	Yorkville High Income MLP ETF	YMPL	\$18.61	\$250.3	8.8%	6.8%	\$18.53	\$237.1	NA
	Yorkville High Income Infrastructure ETF	YMLI	\$21.13	\$31.7	6.3%	5.7%	\$21.10	\$31.6	NA
	<b>MLP ETF Mean / Total</b>			<b>\$1,338.1</b>	<b>6.1%</b>	<b>8.8%</b>	<b>\$18.91</b>	<b>\$7,759.9</b>	
	<b>MLP ETF Median</b>			<b>\$157.4</b>	<b>6.1%</b>	<b>6.8%</b>	<b>\$18.25</b>	<b>\$150.8</b>	

Source: Bloomberg, FactSet, and Wells Fargo Securities, LLC

**Options**

With more institutional investors involved in the sector, MLPs have experienced an increase in option trading volume. Option contracts give investors the right (not the obligation) to buy or sell an underlying asset at a specific price. Options allow investors to (1) hedge their position or (2) speculate on the movement of a stock. From 2003 to 2006, 1,182 MLP options were traded per day on average. With the start of the credit crisis, the amount of MLP options traded increased to average 14,084 per day in 2007, compared to 1,640 per day in 2006, representing a 759% increase. Since 2009, the number of MLP options has increased along with the industry’s public profile. For 2013 year to date (through October 22, 2013), almost 60,000 MLP put or call options have traded each day.

**Exhibit 83. MLP Average Daily Option Volume**



Note: As of October 22, 2013

Source: Bloomberg and Wells Fargo Securities, LLC

**Total Return Swaps**

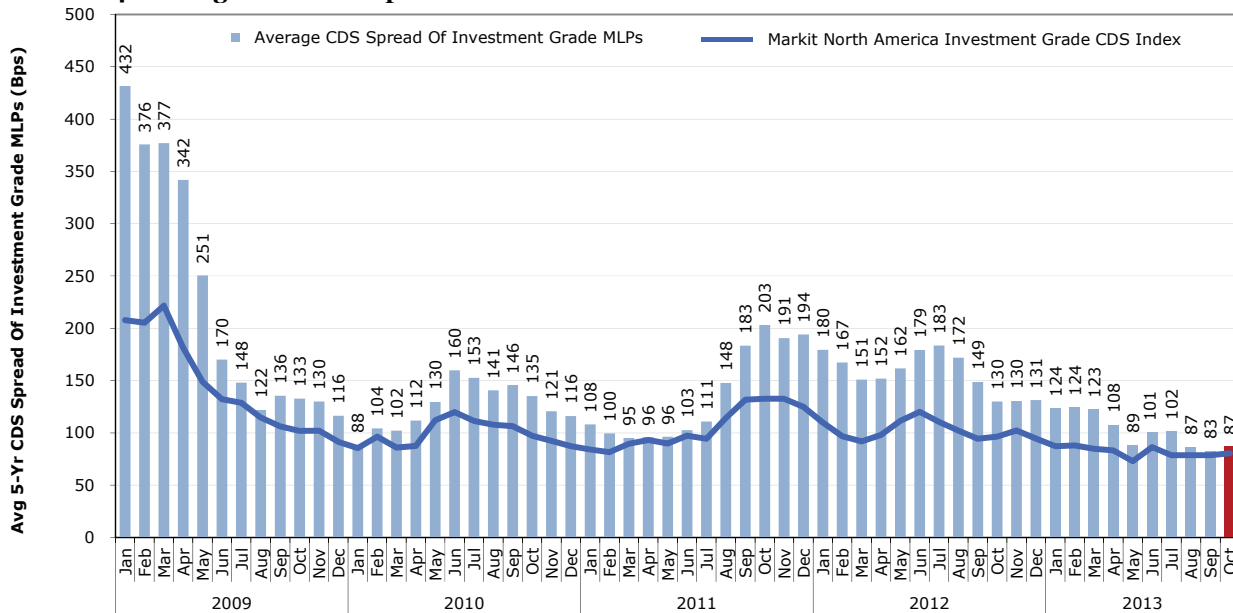
Institutional investors can also gain exposure to an MLP without direct ownership via a total return swap agreement. In a total return swap, an investor receives a synthetic security, which mimics the performance of the underlying security. This includes any distributions generated by the underlying MLP and the benefit of the MLP’s price appreciation over the life of the swap. However, if the price of the MLP decreases over the swap’s life, the total return receiver will be required to pay the counterparty (usually a brokerage firm) the amount by which the asset has fallen in price. The counterparty owns the underlying MLP and receives payments from the investor over the life of the swap based on a set rate.

Master Limited Partnerships

Credit Default Swaps

Investors can receive credit protection against public, MLP debt by entering into credit default swaps (CDS). Typically, a CDS represents a bilateral contract between a buyer of bonds and a seller of protection on these bonds. These swaps transfer the risk of default from the holder of the note to the seller of the swap. The spread represents the cost (or premium) of insuring bonds against a potential default. A wider CDS spread implies that bond investors are more concerned about an underlying company’s financial position. Conversely, a narrower CDS spread implies that bondholders are confident in a company’s ability to meet its bond payment obligations. Since 2008, MLP CDS spreads have averaged approximately 155 bps (through October 2013), versus 115 bps for the Markit North America Investment Grade CDS Index (i.e., a CDS index composed of 125 equally weighted CDS on investment grade entities). In 2012 and 2013 year to date, MLP CDS spreads have averaged approximately 157 bps and 102 bps, respectively, which compares to a three-year (2010-12) average of 139 bps and 443 bps in December 2008, during the height of the credit crisis.

Exhibit 84. Average MLP CDS Spreads



Note: Large-cap pipeline MLP group consists of: BPL, EEP, EPD, ETP, KMP, MMP, OKS, and PAA  
Source: FactSet and Bloomberg

## Valuation Of MLPs

### Distribution Yield

MLPs can be valued using a number of techniques. The most common valuation method typically focuses on yield due to the fact that MLPs are income-oriented securities. Some investors look at yield to determine relative value. Others project a distribution one year forward and then apply a target yield to their estimate to determine a fair value for the security.

From 2000 to 2012, MLPs had a median yield of 7.2%, ranging from a high of 19.7% (November 21, 2008) as a result of the credit crisis to a low of 5.1% (July 10, 2007). The disparity in yield among MLPs can be explained by several factors, including risk profile (financial and operational), growth prospects, and the interest rate environment.

**Risk profile.** MLPs with profiles that are perceived to be riskier (e.g., assets subject to commodity price risk, weather risk, higher leverage, or more variability in cash flow) typically trade at a higher yield in the market as investors require a greater return to compensate for the increased risk.

**Growth prospects.** We believe the disparity in yield can also be partially explained by the growth profile of various MLPs. For example, faster growing MLPs should command a lower yield because it is assumed that the growth in cash flow would generate distribution increases that, in turn, would translate into greater appreciation of the underlying security, thus resulting in a higher total return. See “Drivers of Performance – Distribution Growth” for additional information.

### Three-Stage Distribution (Dividend) Discount Model

Our primary tool for valuing MLPs is a three-stage distribution (dividend) discount model (DDM). For our DDM, we project a distribution growth rate over five years. For years 6-10, we start with an average distribution growth rate based on years 3, 4, and 5 (i.e., year 6), and ratably adjust the subsequent years toward our long-term growth rate. For our long-term growth assumption, we apply a rate of 0.0-3.0% (depending upon the individual MLP’s outlook, asset mix, and management team). Our DDM assumes a required rate of return (ROR) of 7.5-11.5%.

### Price-To-Distributable Cash Flow

To determine relative value, we focus on price-to-distributable cash flow (DCF) multiples. We believe the focus for MLPs should be on cash flow instead of earnings (or P/E). Distributable cash flow is defined as the cash available to be distributed to limited unitholders after payments are made for sustaining capital expenditure, other cash obligations, and cash distributions to the GP.

### Enterprise Value-To-Adjusted EBITDA

When comparing MLPs’ value on the basis of an EV-to-EBITDA multiple, we use adjusted EBITDA rather than adjusted enterprise value. EBITDA generated by the partnership is used to support the cash distributions to both the limited and general partners. However, enterprise value reflects only the interest of the limited partners. Therefore, in order to produce an “apples-to-apples” comparison, we deduct the cash flow accruing to the general partner from EBITDA. For example, if a partnership has an enterprise value of \$200 million and is generating EBITDA of \$20 million with 10% of its cash flow going to the general partner, we would deduct approximately \$2.0 million from EBITDA in calculating our EV-to-adjusted EBITDA multiple. We believe this is the most appropriate way to adjust EBITDA when comparing it to enterprise value.

#### Exhibit 85. Enterprise Value-To-Adjusted EBITDA Calculation

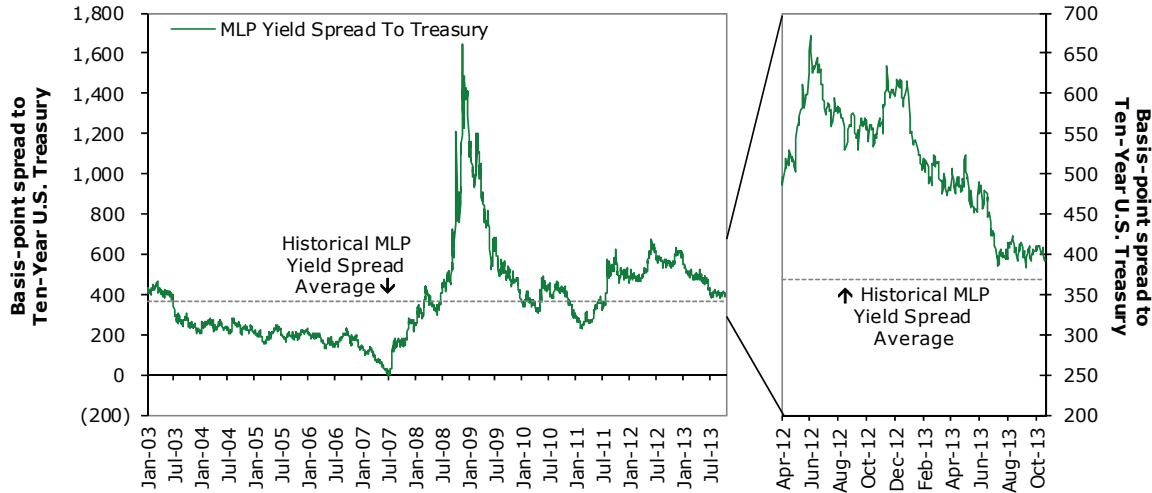
1. 
$$\frac{\text{EV-to-adjusted EBITDA}}{\text{EBITDA}} = \text{EV} \div \text{adjusted EBITDA}$$
2. 
$$\frac{\text{EV-to-adjusted EBITDA}}{\text{EBITDA}} = \text{EV} \div \text{EBITDA} - (\text{EBITDA} \times \% \text{ cash flow to GP})$$

Source: Wells Fargo Securities, LLC

**Historical MLP Median Yield To 10-Year U.S. Treasury Spreads**

Yields on MLPs have maintained spreads over the 10-year Treasury as wide as 1,650 bps and as narrow as negative 4 bps, with an average of 368 bps over the ten-year period from January 2003 to December 2012. We view the spread versus the Treasury as a good measure of investors' appetite for assuming risk over time as it relates to owning MLPs. However, we caution that measuring current spreads versus a historical average may not be valid as the number, size, and growth orientation of MLP investments have changed over time.

**Exhibit 86. MLP Spread To The 10-Year Treasury (2000-2013 Year To Date)**



Note: As of October 22, 2013  
Source: FactSet and Wells Fargo Securities, LLC

## Publicly Traded General Partners -- Recognizing The Value Of The GP

Understanding the general partner interest is a key to understanding the MLP sector, in our view. As noted, the general partner manages an MLP's operations and typically owns a 2% equity interest in the MLP. The GP also owns the incentive distribution rights (IDR), which entitles it to receive an incrementally larger percentage of total cash flow as it raises distributions to limited partners. GP interests are held in a variety of structures including (1) private entities, (2) within publicly traded C corporations, and (3) as stand-alone holding companies that are structured as either publicly traded partnerships, or C-Corps. (Please see Exhibit 95 for a list of all general partners.)

### An Overview Of The GP - What Makes The Structure So Valuable?

The value of the GP is threefold, in our view:

- (1) IDR "Leverage."** The GP owns the incentive distribution rights, which entitle it to receive a disproportionate amount of the incremental cash flow of the partnership. In most partnerships, this agreement can reach a level where the GP is receiving 50% of every incremental dollar paid to the LP unitholders. This creates significant "leverage" for GP cash flow and enables cash flow growth at the GP to be roughly 2.0-2.5x the rate of the underlying MLP (common referred to as the GP multiplier).
- (2) Minimum investment, maximum control.** The GP controls the underlying MLP and its assets, but typically owns just a 2% equity interest. This is especially useful for a company that owns significant mature assets suitable for an MLP structure. The company can place these assets into the MLP structure, potentially receive a higher market value for the assets, and own an investment vehicle with a lower cost of capital with which to access the capital markets. Finally, the company can sell additional assets to the MLP over time (the so-called dropdown model), which benefits both entities. With dropdowns, the MLP has visible distribution growth that should enhance the partnership's valuation. The GP owner benefits by monetizing assets at attractive valuations and realizing increase cash flow through its ownership of the IDRs as the MLP increases distributions.
- (3) Increased financial flexibility.** A publicly traded GP also creates additional financial flexibility for management and can potentially benefit the MLP. Management can effectively use the GP to (1) complete M&A activity (and drop the acquired assets down to the MLP) and/or (2) help fund attractive growth opportunities at the underlying MLP (e.g., by purchasing LP units to fund the equity portion of a growth project or acquisition).

### Power Of The IDRs

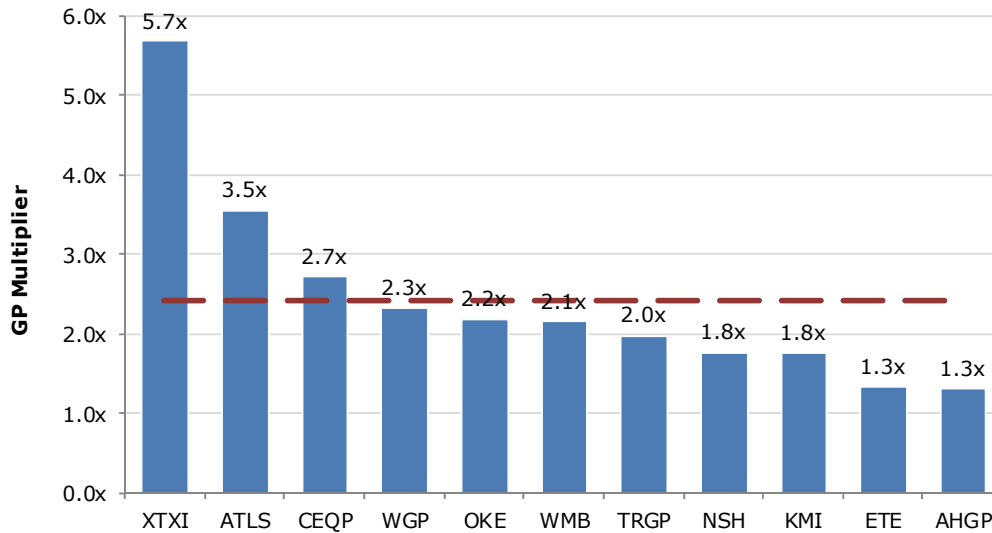
The value of the GP lies in the fact that the GP receives a disproportionate amount of the incremental cash flow of the underlying partnership as LP distributions are increased (i.e., due to the GP's ownership of the MLP's IDRs). Hence, distribution growth for GPs is typically significantly higher than that of LPs. For example, we estimate GPs to increase their distributions at a median three-year CAGR of 17.9% (2014-16E), versus 7.5% for the underlying MLPs.

### The Multiplier

The multiplier represents the rate of cash flow growth of the GP relative to LP growth. The multiplier is determined by a number of structural characteristics related to the assets owned by the GP. For example, a GP's ownership of incentive distribution rights with a 50% tier creates the leverage that enables the GP to increase its distribution at a faster rate than the underlying MLP.

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Exhibit 87. Pure-play GP Multiplier Estimates



Underlying MLP	Hypothetical 2014 Distrib. Increase	General Partner	Implied 2014 Distrib. Increase	Estimated GP/LP Multiplier
APL/ARP	10%	ATLS	35%	3.5x
ARLP	10%	AHGP	13%	1.3x
CMLP	10%	CEQP	27%	2.7x
ETP/RGP/SXL	10%	ETE	13%	1.3x
KMP/EPB	10%	KMI	18%	1.8x
NGLS	10%	TRGP	20%	2.0x
NS	10%	NSH	18%	1.8x
OKS <sup>1</sup>	10%	OKE	22%	2.2x
WES	10%	WGP	23%	2.3x
WPZ/ACMP	10%	WMB	21%	2.1x
XTEX <sup>2</sup>	10%	XTXI	57%	5.7x
		<b>Average</b>	<b>24%</b>	<b>2.4x</b>

Note 1: Based on 2015 metrics since 2014 metrics include uplift from OGS spinoff

Note 2: Calculated by taking average growth in GP distributions over LP distributions between 2015 and 2018, and excluding equity offerings. These adjustments were made to help normalize for the impact of the pending DVN transaction

Source: Wells Fargo Securities, LLC estimates

**How the math works.** The GP's leverage to the underlying MLP's distribution growth can be defined as the ratio of the pure-play GP's distribution growth rate relative to that of the underlying MLP. As an example, we have highlighted the mechanics of the GP multiplier effect between Targa Resources, LP (NGLS; an MLP) and Targa Resources Corp. (TRGP; a C-Corp pure-play GP). Our example assumes the following at NGLS:

- An 11% estimated distribution increase at NGLS in 2014, or an estimated 2014 distribution of \$3.22 per unit;
- High splits level (i.e., 50/50 tier); and
- Distribution tiers from the following Exhibit.



**Exhibit 88. Distribution Tiers For GP Multiplier Example**

	LP%	GP%	Annualized LP distrib. up to:
Tier 1	98%	2%	\$1.55
Tier 2	85%	15%	\$1.69
Tier 3	75%	25%	\$2.03
Tier 4	50%	50%	Above \$2.03

Note: (\$ per unit)

Source: Company data and Wells Fargo Securities, LLC

And the following assumptions at TRGP:

- \$10 million of incremental SG&A expenses;
- Cash taxes of \$45 million; and
- 12.9 million underlying MLP units owned by the GP.

**Exhibit 89. Mechanics Behind GP Multiplier**

(\$ in millions)	2013E	Pro forma 2014E	Percent growth (%)	Absolute change (\$)
<b>NGLS Assumptions:</b>				
NGLS distribution per unit	\$2.90	\$3.22	11%	\$0.32
NGLS equity issuance (\$MM)	\$515	\$200	(61%)	(\$315)
<b>TRGP Estimates:</b>				
NGLS LP units owned (MM)	12.9	12.9	0%	0.0
(x) NGLS distribution per unit	\$2.90	\$3.22	11%	\$0.32
Cash flow from LP units	\$38	\$42	11%	\$4
Cash flow from GP interest	\$112	\$155	38%	\$43
(-) Incremental SG&A expense	\$9	\$10	11%	\$1
(-) Interest expense	\$4	\$4	16%	\$1
(-) Cash taxes	\$25	\$45	82%	\$20
<b>Distributable cash flow (DCF)</b>	<b>\$113</b>	<b>\$137</b>	<b>22%</b>	<b>\$25</b>
<b>Implied multiplier</b>	<b>2.0x</b>			

Source: Wells Fargo Securities, LLC estimates

On the basis of these assumptions, an 11% distribution increase at the MLP would enable the GP to raise its dividend by approximately 22%. Hence, the multiplier effect is approximately 2.0x (i.e., the GP's growth rate of 22% divided by the underlying MLP's distribution growth of 11%).

Since the underlying MLP is at the "high-splits" level, the 2% GP interest and IDRs entitle the GP to receive a disproportionate amount of the MLP's incremental cash flow (i.e., 50%). Thus, if the MLP raises its distribution per unit by 11%, the partnership would need to pay incremental distributions of \$43 million each to LP unitholders and the GP.

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**The Power Of Equity Issuance**

The GP benefits when the MLP issues common equity even without any increase in the distribution rate. A GP's leverage to equity issued at its underlying MLP increases over time as the proportion of cash flow paid to the general partner increases. The increase in leverage is rooted in the way IDRs are structured.

In understanding why equity issuance at the MLP is a driver of IDR growth, it is important to recognize that an MLP pays out distributions to its general partner for every *common* LP unit outstanding. For example, although NGLS is forecasted to pay a distribution of \$3.22 per unit in 2014 to its common unitholders, the partnership is also estimated to pay \$1.36 per LP unit to its general partner (TRGP) in 2014. The reason is that TRGP receives 30% of total distributions paid in 2014 based on Targa's IDR tier schedule. Hence, if NGLS pays a distribution of \$3.22 per unit to common unitholders, this represents only 70% of total distributions paid (i.e., GP receives the remaining 30% of total distributions). Therefore the total distribution paid by NGLS is \$4.58 per unit (i.e., \$3.22 divided by 70%), or \$3.22 per unit to LP unitholders and \$1.36 per LP unit to its GP. Given that TRGP receives \$1.36 per LP unit outstanding, it is clear that the GP will benefit from incremental cash flow if NGLS issues additional common units. For example, if NGLS issues \$100 million of incremental equity in 2014 (i.e., a 1.9 million unit offering based on NGLS's unit price as of October 22, 2013), this would result in \$2.5 million of incremental annual cash flow at TRGP (1.9 million \* \$1.36). After adjusting for taxes, we calculate every \$100 million of equity issued at NGLS in 2014 could support an incremental 1.4% dividend growth at TRGP (2014E).

**Exhibit 90. Calculating GP IDRs Paid Per LP Unit And Sensitivity To Equity Issuance At NGLS**

<b>GP distributions paid per LP unit:</b>		<b>TRGP DCF sensitivity to equity issuance at NGLS:</b>	
Distribution per LP unit (2014E)	\$3.22	Assumed size of equity offering at NGLS (\$MM):	\$100
(/) Percent of total distributions paid to LP	70%	(/) NGLS stock price (10/22/13) (\$/unit)	\$53.70
Total distributions paid per LP unit at underlying MLP	\$4.58	New LP units issued from an NGLS equity offering (MM)	1.9
(-) Distributions per LP unit	\$3.22	<b>(x) GP distributions per LP unit</b>	<b>\$1.36</b>
<b>GP distributions per LP unit</b>	<b>\$1.36</b>	Total distributions paid to GP from a \$100MM equity offering (\$MM)	\$2.5
		(-) Incremental taxes on new IDR payments	\$0.6
		Incremental DCF at TRGP	\$2.0
		(/) Total DCF at TRGP (2014E)	\$137.4
		<b>% growth in TRGP's dividend from \$100MM equity offering at NGLS</b>	<b>1.4%</b>

Source: Wells Fargo Securities, LLC estimates

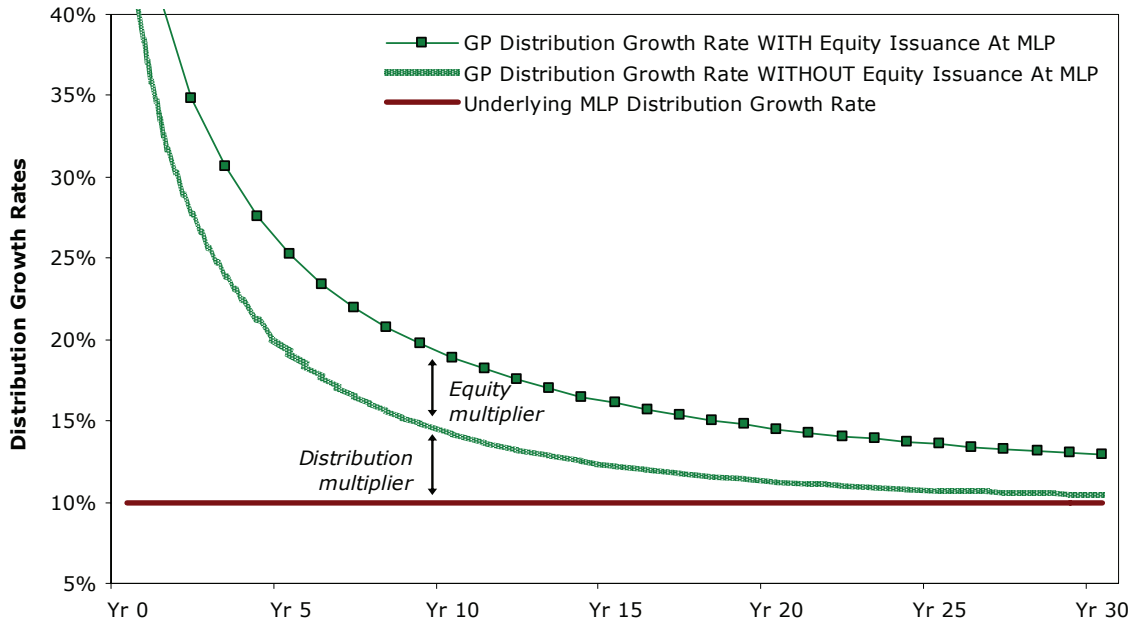
### Tracking The GP Multiplier Over Time

In general, the distribution GP multiplier tends to decrease over time due to the way in which the IDRs are designed (for MLPs with a 50% IDR). Once the MLP reaches the 50% IDR tier, the amount of incremental cash flow being distributed to the GP and MLP are the same (i.e., they are split 50/50). Thus, mathematically, the growth rates of the MLP and GP have to ultimately converge as the percentage of **total** cash flow accruing to the MLP and GP reach 50% each (i.e., the distribution GP multiplier approaches 1.0x asymptotically).

However, assuming the underlying MLP continues to invest growth capital, the *blended* GP multiplier should always remain above 1.0x. Since MLPs pay out the majority of cash flow in the form of distributions each quarter, they must fund growth capital investments (i.e., acquisitions and organic projects) with third-party debt and equity. Thus, even if the distribution multiplier reaches 1.0x, the blended GP multiplier should exceed 1.0x as the GP benefits from incremental IDRs tied to equity issued at the MLP (see following Exhibit).

The following hypothetical scenario illustrates the GP multiplier with and without equity issuance at the underlying MLP. Without issuing equity, the GP multiplier does converge close to 1.0x within 15-20 years, assuming 10% annual distribution growth at the underlying MLP. However, in reality, an MLP that is growing its distribution will likely have to issue increasingly higher amounts of equity. Assuming the MLP issues \$100 million of equity in year 1 and about 10% more equity every subsequent year (i.e., \$1.6 billion by year 30), the GP multiplier remains above 1.3x over the 30-year life of the partnership.

**Exhibit 91. Hypothetical Convergence Of MLP And GP Growth Rates Assuming Equity**



Note: Analysis assumes \$100 million equity offering in year 1 with a 10% increase in the size of equity issued every subsequent year (i.e., \$1.6 billion by year 30).  
Source: Wells Fargo Securities, LLC estimates

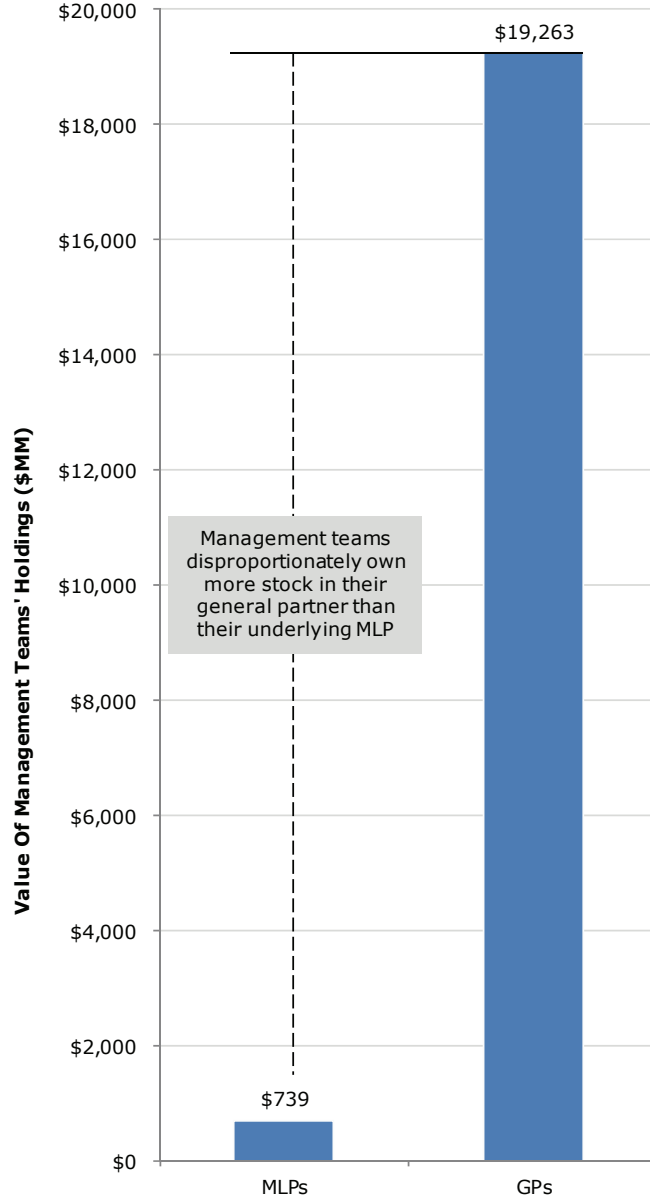
### Owning The GPs Better Aligns Investors With Management

In general, management teams have a greater amount of their personal wealth invested in the GP rather than the underlying MLP. In total, the value of management's holdings in publicly traded pure-play GPs is approximately \$19.3 billion, versus a value of \$0.7 billion for holdings in their respective underlying MLPs. To note, most public GPs own a significant stake of LP units. Thus, management would also own an indirect interest in the MLP.

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Exhibit 92. Comparison Of Management Teams' Ownership In GPs Versus Underlying MLPs

	Insider Ownership	
	% of shares	Value (\$MM)
(+) APL (MLP)	1.7%	\$50
(+) ARP (MLP)	2.5%	\$31
<b>Atlas Companies (MLP)</b>		<b>\$81</b>
<b>ATLS (GP)</b>	<b>2.7%</b>	<b>\$70</b>
<b>ARLP (MLP)</b>	<b>1.8%</b>	<b>\$49</b>
<b>AHGP (GP)</b>	<b>72.6%</b>	<b>\$2,635</b>
<b>CMLP (MLP)</b>	<b>11.5%</b>	<b>\$240</b>
<b>CEQP (GP)</b>	<b>15.6%</b>	<b>\$386</b>
(+) ETP (MLP)	0.4%	\$72
(+) RGP (MLP)	0.1%	\$3
(+) SXL (MLP)	0.2%	\$16
<b>Energy Transfer (MLP)</b>		<b>\$92</b>
<b>ETE (GP)</b>	<b>25.1%</b>	<b>\$4,587</b>
(+) EPB (MLP)	0.1%	\$10
(+) KMP (MLP)	0.1%	\$35
<b>Kinder Companies (MLP)</b>		<b>\$45</b>
<b>KMI (GP)</b>	<b>29.7%</b>	<b>\$10,780</b>
<b>NGLS (MLP)</b>	<b>0.4%</b>	<b>\$20</b>
<b>TRGP (GP)</b>	<b>11.0%</b>	<b>\$349</b>
<b>NS (MLP)</b>	<b>3.3%</b>	<b>\$103</b>
<b>NSH (GP)</b>	<b>19.8%</b>	<b>\$193</b>
<b>OKS (MLP)</b>	<b>0.1%</b>	<b>\$7</b>
<b>OKE (GP)</b>	<b>0.7%</b>	<b>\$82</b>
<b>WES (MLP)</b>	<b>0.8%</b>	<b>\$56</b>
<b>WGP (GP)</b>	<b>0.5%</b>	<b>\$44</b>
(+) ACMP (MLP)	0.1%	\$5
(+) WPZ (MLP)	0.1%	\$16
<b>Williams Entities (MLP)</b>		<b>\$21</b>
<b>WMB (GP)</b>	<b>0.2%</b>	<b>\$41</b>
<b>XTEX (MLP)</b>	<b>1.4%</b>	<b>\$25</b>
<b>XTXI (GP)</b>	<b>10.0%</b>	<b>\$97</b>



Note: Ownership interests and market value of holdings is based on most recently updated data provided by FactSet for insiders of public MLPs and GPs

Source: FactSet and Wells Fargo Securities, LLC

IDRs Currently Trade At A Significant Premium – Especially Within The C-Corp Structure

We estimate that 2014E incentive distributions to the GP are trading at an average multiple of 28.6x. This is notably higher than the median 2014 price-to-DCF multiple of 22.8x for pure-play GPs. The average 2014 IDR multiple of 29.9x for GPs structured as C-Corps is also higher than the average multiple of 27.5x for companies structured as MLPs. Accordingly, the market appears to be placing a premium on GP assets within the C-Corp structure, versus the same assets within the MLP structure. We believe C-Corp GPs attract a broader set of investors seeking to gain exposure to midstream assets. Notably, certain larger, traditional institutional investors have historically avoided the MLP space due to K-1 and liquidity issues.

In the following Exhibit, we have attempted to value the multiple the market has assigned to GP IDRs for our coverage universe of pure-play GPs. Specifically, we isolated the implied valuation multiple for the incentive distribution payments paid to the GP versus the cash flow multiple assumed for the GP's other assets (e.g., LP units, midstream assets, etc.).

## Exhibit 93. Pure-Play GP Metrics

	2014E		Distrib./Div. Growth CAGRs			P/DCF to Growth
	P/DCF Multiple	P/IDR Multiple	1-Year (2014E)	3-Year (2014-16E)	5-Year (2014-18E)	
AHGP	16.9x	17.5x	11%	9%	-	1.9x
ATLS	19.5x	32.5x	43%	36%	26%	0.5x
CEQP	24.0x	34.1x	15%	17%	16%	1.4x
ETE	24.9x	20.0x	6%	13%	11%	1.9x
NSH	11.9x	13.2x	0%	0%	2%	NM
WGP	35.3x	47.9x	38%	28%	22%	1.3x
<b>MLP Avg.</b>	<b>22.1x</b>	<b>27.5x</b>	<b>19%</b>	<b>17%</b>	<b>15%</b>	<b>1.4x</b>
KMI	20.2x	25.3x	11%	7%	6%	2.9x
OKE	30.9x	26.2x	22%	21%	16%	1.5x
TRGP	24.2x	26.8x	27%	19%	15%	1.3x
WMB	16.5x	21.3x	21%	16%	11%	1.0x
XTXI	26.6x	>50.0x	57%	31%	23%	0.9x
<b>C-Corp Avg.</b>	<b>23.7x</b>	<b>29.9x</b>	<b>28%</b>	<b>19%</b>	<b>14%</b>	<b>1.5x</b>
<b>All GP Avg.</b>	<b>22.8x</b>	<b>28.6x</b>	<b>23%</b>	<b>18%</b>	<b>15%</b>	<b>1.5x</b>

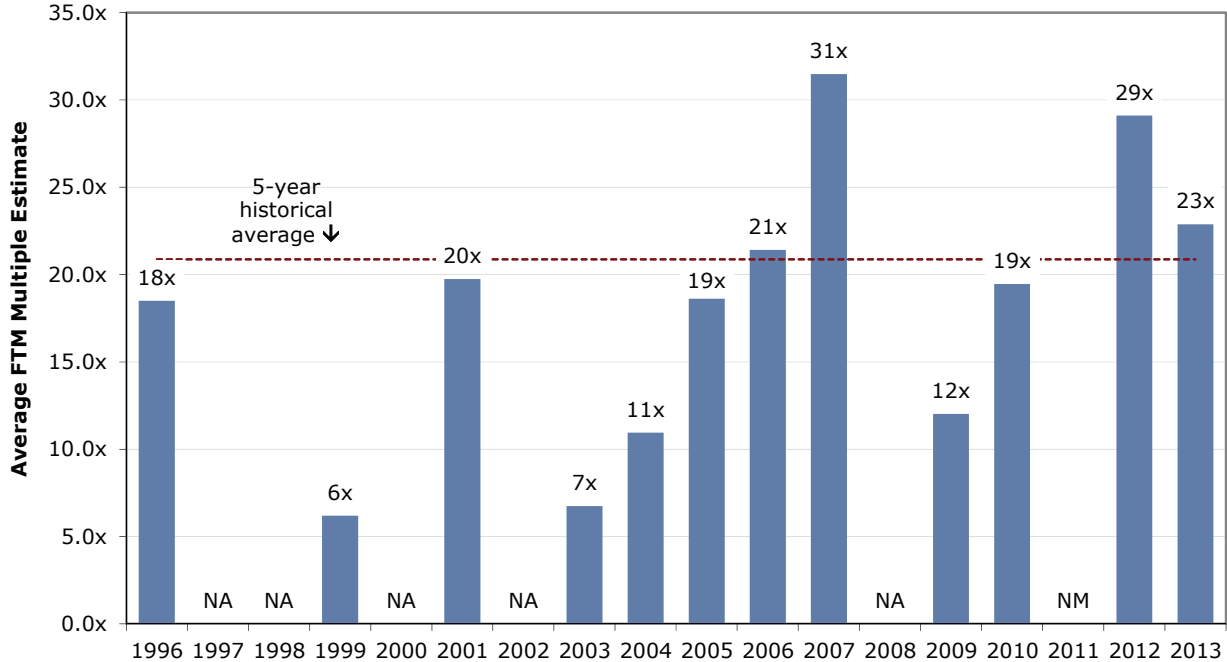
Note: All data as of October 22, 2013

Source: FactSet and Wells Fargo Securities, LLC estimates

## A Brief History Of GPs

General Partner entities were originally either privately held or held within larger public C-corporations. Early GP transactions were mostly private negotiations; however, the cash flow multiples paid for GP entities increased over time as more investors recognized the inherent value of the GP entity. By our count, there have been 52 transactions involving the sale or partial sale of the General Partner interest from 1996 to 2013. The multiples paid for GPs have varied significantly, ranging from as low as 3x to as high as 58x forward-12-months (FTM) cash flow, by our calculations. Over the past five years, general partner interests have been valued at an average FTM cash flow multiple of approximately 21x in public and private market transactions.

Exhibit 94. Historical Average GP Transaction Multiples By Year



Note: FTM is forward 12 months

Source: Company reports and Wells Fargo Securities, LLC estimates

There are 38 publicly traded companies that own GP and IDR interests in underlying MLPs, of which 31 companies are structured as C-Corps (or treated as C-Corps for tax purposes) and 7 are structured as MLPs. There are 12 publicly traded pure-play GPs, of which 5 are structured as C-Corps (or treated as C-Corps for tax purposes) and 7 are structured as MLPs. Companies that own GP and IDR interests within a C-Corp structure pay corporate income tax on distributions received. Specifically, IDR distributions and the income allocated from LP unit ownership (not tax deferred) are typically taxed at a 35% rate. In addition, dividends from these entities are also taxed at the individual investor level. The corporate structure of the GP mitigates some of the tax advantages of MLP cash flow. However, this double tax burden could be offset by interest expense or sheltered by net operating losses (NOL) at the GP level. To varying degrees, the companies' valuations reflect a partial recognition of the value of the general partner. Arguably, these companies could receive a greater market value for their GP interests if held as a stand-alone entity.

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Exhibit 95. GPs And Their Underlying MLPs

	Underlying MLP	MLP	Owner Of GP IDRs	GP →	Public?	C-Corp?	Pure Play?
Large Cap Pipeline MLPs	Buckeye Partners, L.P.	BFL	No IDRs	No IDRs			
	Boardwalk Pipeline Partners, LP	BWP	Loews Corporation	LTR	✓	✓	
	Enbridge Energy Partners, L.P.	EEP	Enbridge Inc.	ENB	✓	✓	
	El Paso Pipeline Partners, L.P.	EPB	Kinder Morgan Inc.	KMI	✓	✓	✓
	Enterprise Products Partners L.P.	EPD	No IDRs	No IDRs			
	Energy Transfer Partners, L.P.	ETP	Energy Transfer Equity	ETE	✓		✓
	Kinder Morgan Energy Partners, L.P.	KMP	Kinder Morgan Inc.	KMI	✓	✓	✓
	Magellan Midstream Partners, L.P.	MMP	No IDRs	No IDRs			
	NuStar Energy L.P.	NS	NuStar GP Holdings	NSH	✓		✓
	ONEOK Partners, L.P.	OKS	ONEOK, Inc.	OKE	✓	✓	✓
	Plains All American Pipeline, L.P.	PAA	Plains GP Holdings	PAGP	✓	✓	✓
	Spectra Energy Partners, LP	SEP	Spectra Energy	SE	✓	✓	✓
	Sunoco Logistics Partners L.P.	SXL	Energy Transfer Partners / Equity	ETP/ETE	✓		✓
	Williams Partners L.P.	WPZ	Williams Companies	WMB	✓	✓	✓
Small & Mid Cap.	Blueknight Energy Partners, L.P.	BKEP	Vitol & Charlesbank Capital	Private			
	Crestwood Midstream Partners LP	CMLP	Crestwood Equity Partners, LP	CEQP	✓		✓
	Cheniere Energy Partners, L.P.	CQP	Cheniere Energy	LNG	✓	✓	
	Delek Logistics Partners LP	DKL	Delek U.S. Holdings, Inc.	DK	✓	✓	
	Exterran Partners, L.P.	EXLP	Exterran Holdings	EXH	✓	✓	
	Genesis Energy, L.P.	GEL	No IDRs	No IDRs			
	Global Partners LP	GLP	Global GP (Slifka family)	Private			
	Compressco Partners, L.P.	GSJK	TETRA Technologies, Inc.	TTI	✓	✓	
	Hi-Crush Partners, LP	HCLP	Hi-Crush Proppants	Private			
	Holly Energy Partners, L.P.	HEP	Holly Corporation	HOC	✓	✓	
	Lehigh Gas Partners LP	LGP	Lehigh Gas GP (Topper Group)	Private			
	Martin Midstream Partners L.P.	MMLP	Martin Resource Mgmt / Alinda Capital	Private			
	MLX LP	MLX	Marathon Petroleum	MPC	✓	✓	
	NGL Energy Partners LP	NGL	NGL Energy Holdings, LLC	Private			
	Niska Gas Storage Partners LLC	NKA	Carlyle Riverstone	Private			
	Oiltanking Partners, L.P.	OLT	OTLP GP, LLC	Private			
	PAA Natural Gas Storage, L.P.	PNG	Plains All American Pipeline	PAA	✓		
	Phillips 66 Partners LP	PSXP	Phillips 66	PSX	✓	✓	
	Rose Rock Midstream, L.P.	RRMS	SemGroup Corporation	SEMG	✓	✓	
	Susser Petroleum Partners LP	SUSP	Susser Holdings Corp.	SUSS	✓	✓	
TC PipeLines, LP	TCP	TransCanada Corp	TRP	✓	✓		
TransMontaigne Partners L.P.	TLP	Morgan Stanley	MS	✓	✓		
Tesoro Logistics LP	TLLP	Tesoro Corporation	TSO	✓	✓		
USA Compression Partners LP	USAC	Riverstone Holdings, LLC	Private				
Western Refining Logistics, LP	WNRL	Western Refining, Inc.	WNR	✓	✓		
World Point Terminals LP	WPT	WPT GP, LLC	Private				
Gathering & Processing MLPs	Access Midstream Partners, L.P.	ACMP	Williams Cos. / Global Infrastructure	WMB / Private	✓	✓	✓
	American Midstream Partners, LP	AMID	ArcLight Capital	Private			
	Atlas Pipeline Partners, L.P.	APL	Atlas Energy, LP	ATLS	✓		✓
	DCP Midstream Partners, LP	DPM	DCP Midstream (Phillips 66 / Spectra)	PSX	✓	✓	
	EQT Midstream Partners LP	EQM	EQT Corporation	EQT	✓	✓	
	Marin Midstream Partners LP	FISH	Marin Midstream GP, LLC	Private			
	MarkWest Energy Partners, L.P.	MWE	No IDRs	No IDRs			
	Targa Resources Partners LP	NGLS	Targa Resources Corp.	TRGP	✓	✓	✓
	PVR Partners, L.P.	PVR	No IDRs	No IDRs			
	QEP Midstream Partners LP	QEPM	QEP Resources	QEP	✓	✓	
	Regency Energy Partners LP	RGP	Energy Transfer Equity	ETE	✓	✓	✓
	Summit Midstream Partners LP	SMLP	Energy Capital Partners & GE EFS	Private / GE			
	Southcross Energy Partners, L.P.	SXE	Charlesbank, management, and other	Private			
	Talgrass Energy Partners, LP	TEP	Kelso & Energy Minerals Group	Private			
Western Gas Partners, LP	WES	Western Gas Equity Partners	WGP	✓		✓	
Crosstex Energy, L.P.	XTEX	Crosstex Energy	XTXI	✓	✓	✓	
Upstream MLPs	Atlas Resource Partners, L.P.	ARP	Atlas Energy, LP	ATLS	✓		✓
	BreitBurn Energy Partners L.P.	BBEP	No IDRs	No IDRs			
	Eagle Rock Energy Partners, L.P.	EROC	No IDRs	No IDRs			
	EV Energy Partners, L.P.	EVEP	Envest and EnCap	Private			
	Legacy Reserves LP	LGCY	No IDRs	No IDRs			
	Linn Energy, LLC	LINE	No IDRs	No IDRs			
	LRR Energy, L.P.	LRE	Lime Rock Partners	Private			
	Mid-Con Energy Partners, LP	MCEP	No IDRs (Yorktown Partners)	No IDRs			
	Memorial Production Partners LP	MEMP	Natural Gas Partners	Private			
	New Source Energy Partners LP	NSLP	New Source Energy GP, LLC	Private			
	Pioneer South west Energy L.P.	PSE	No IDRs (Pioneer - PXD)	No IDRs			
	QR Energy, LP	QRE	Quantum Energy Partners	Private			
	Vanguard Natural Resources, LLC	VNR	No IDRs	No IDRs			
Prop.	AmeriGas Partners, L.P.	AFU	UGI Corporation	UGI	✓	✓	
	Ferrellgas Partners, L.P.	FGP	Ferrell Companies, Inc.	Private			
	Star Gas Partners, L.P.	SGU	No IDRs	No IDRs			
	Suburban Propane Partners, L.P.	SPH	No IDRs	No IDRs			
Marine	Capital Product Partners LP	CPLP	Capital Maritime & Trading Corp.	Private			
	Golar LNG Partners LP	GMLP	Golar LNG	GLNG	✓	✓	
	Navios Maritime Partners LP	NVMP	Navios Maritime Holdings, Inc.	NM	✓	✓	
	Seadrill Partners LLC	SDLP	Seadrill Limited	SDRL	✓	✓	
	Teekay LNG Partners L.P.	TGP	Teekay Shipping Corp.	TK	✓	✓	
Teekay Offshore Partners L.P.	TOO	Teekay Shipping Corp.	TK	✓	✓		
Coal	Alliance Resource Partners, L.P.	ARLP	Alliance GP Holdings	AHGP	✓		✓
	Natural Resource Partners L.P.	NRP	No IDRs	No IDRs			
	Oxford Resource Partners, LP	OXF	Oxford Resources GP, LLC	Private			
	Rhino Resource Partners LP	RNO	Wexford Capital LP	Private			

Count : 38 31 12

Note 1: Excludes duplicates  
Source: Company reports and Wells Fargo Securities, LLC

**Master Limited Partnerships**

**A Wave Of Pure-Play GPs Were Taken Public As Stand-Alone Entities**

Beginning in 2001 with the IPO of Kanab Services LLC, GPs were taken public as standalone pure-play publicly traded entities as a means to achieve the following:

- (1) Highlight the intrinsic value of the incentive distribution rights;
- (2) Monetize an investment as private equity sponsors and others used the IPO as a partial exit strategy; and
- (3) Facilitate growth at the MLP and/or consolidation opportunities for the entity.

**Exhibit 96. Current GP Valuation Metrics Versus IPO Metrics**

<b>GP Name</b>	<b>Ticker</b>	<b>IPO Date</b>	<b>IPO Price</b>	<b>IPO Distrib. <sup>1</sup> (\$/unit)</b>	<b>IPO Yield</b>	<b>Current Price</b>	<b>Current Distrib. (\$/unit)</b>	<b>Current Yield</b>
Crosstex Energy Inc.	XTXI	1/13/2004	\$6.50	\$0.40	6.2%	\$20.82	\$0.48	2.3%
Inergy Holdings, LP	NRGP	6/21/2005	\$22.50	\$0.90	4.0%	<i>Bought out - no longer trading</i>		
Enterprise GP Holdings, LP	EPE	8/24/2005	\$28.00	\$1.00	3.6%	<i>Bought out - no longer trading</i>		
Energy Transfer Equity, LP	ETE	2/3/2006	\$21.00	\$0.70	3.3%	\$66.59	\$2.62	3.9%
Magellan Midstream Holdings	MGG	2/10/2006	\$24.50	\$0.78	3.2%	<i>Bought out - no longer trading</i>		
Alliance Holdings GP, LP	AHGP	5/10/2006	\$25.00	\$0.74	3.0%	\$60.81	\$3.14	5.2%
NuSTAR GP Holdings, LLC	NSH	7/14/2006	\$22.00	\$1.20	5.5%	\$23.33	\$2.18	9.3%
Atlas Pipeline Holdings, LP	ATLS	7/21/2006	\$23.00	\$0.96	4.2%	\$50.79	\$1.76	3.5%
Buckeye GP Holdings, LP	BGH	8/4/2006	\$17.00	\$0.82	4.8%	<i>Bought out - no longer trading</i>		
Penn Virginia GP Holdings, LP	PVG	12/5/2006	\$18.50	\$0.94	5.1%	<i>Bought out - no longer trading</i>		
Targa Resources Corp.	TRGP	12/6/2010	\$22.00	\$1.03	4.7%	\$74.41	\$2.13	2.9%
Kinder Morgan, Inc	KMI	2/11/2011	\$30.00	\$1.16	3.9%	\$35.14	\$1.59	4.5%
Western Gas Equity Partners,	WGP	12/10/2012	\$22.00	\$0.66	3.0%	\$36.79	\$0.79	2.1%
Plains GP Holdings, LP	PAGP	10/16/2013	\$22.00	\$0.60	2.7%	\$21.51	\$0.60	2.8%

Note: Prices have been adjusted to reflect stock splits

Note 1: Reflects annualized distribution

Source: FactSet, Partnership reports, and Wells Fargo Securities, LLC estimates

**Cost Of Capital Drives GP Consolidation In 2009-2010**

Beginning in 2002 with Enterprise Products Partners, several MLPs took steps to reduce their cost of capital by reducing or eliminating the incentive distribution rights. (For a detailed discussion of MLP cost of capital, please see *Understanding An MLP's Cost Of Capital*.) In 2002, Enterprise Products Partners revised the top tier of its IDR structure to 25% from 50% to reduce the total cash flow being paid to the general partner and thereby lower its cost of equity. The partnership subsequently eliminated its IDRs altogether in 2010. Since then, Buckeye Partners, Eagle Rock Energy, Genesis Energy, NuStar Energy LP, Magellan Midstream, MarkWest Energy Partners, Natural Resource Partners, PVR Partners, Suburban Propane Partners, TC PipeLines LP, and TEPPCO Partners (before being acquired by EPD) have taken steps to reduce or eliminate their IDRs in order to lower their cost of capital structure and compete more effectively for acquisitions and incremental investments.

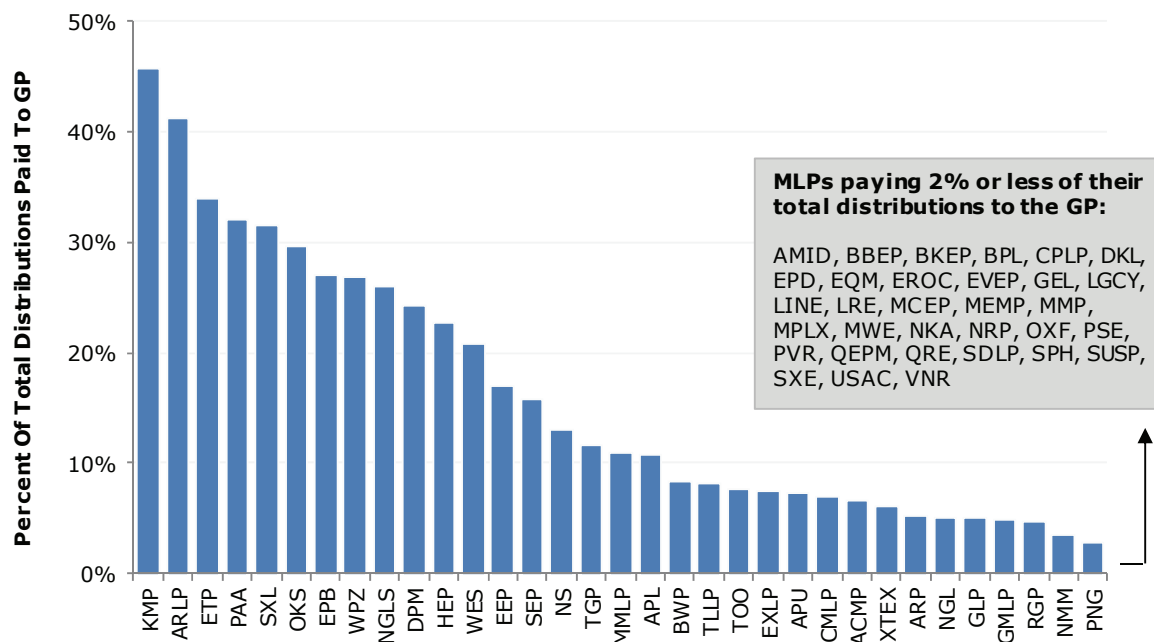


**Exhibit 97. List Of MLPs That Have Reduced Or Eliminated Their IDRs**

<b>MLP Name</b>	<b>Ticker</b>	<b>Action Taken</b>	<b>Date Of Announcement</b>
Enterprise Products Partners L.P.	EPD	IDRs reduced to 25%	Dec-02
NuStar Energy L.P.	NS	IDRs reduced to 25%	Mar-04
Teppco Partners L P Ut Ltd Partner	TPP	IDRs reduced to 25%	Apr-06
Suburban Propane Partners, L.P.	SPH	IDRs eliminated	Jul-06
MarkWest Energy Partners, L.P.	MWE	IDRs eliminated	Sep-07
Magellan Midstream Partners, L.P.	MMP	IDRs eliminated	Mar-09
TC PipeLines, LP	TCP	IDRs reduced to 25%	May-09
Eagle Rock Energy Partners, L.P.	EROC	IDRs eliminated	Dec-09
Buckeye Partners, L.P.	BPL	IDRs eliminated	Jun-10
Enterprise Products Partners L.P.	EPD	IDRs eliminated	Sep-10
Natural Resource Partners L.P.	NRP	IDRs eliminated	Sep-10
PVR Partners, L.P.	PVR	IDRs eliminated	Dec-10
Genesis Energy, L.P.	GEL	IDRs eliminated	Dec-10

Source: Company reports and Wells Fargo Securities, LLC

There are currently 12 MLPs that are paying 20% or more of their total cash flow to the GP (based on our MLP coverage universe). As these MLPs increase distributions, they will be paying an increasing percentage of their total cash flow to the GP. This "GP tax" is a burden that could impede the long-term growth and viability of the MLP, in our view.

**Exhibit 98. Percent GP Cash Flow To MLPs**

Note: Percentages are as of Q2 2013; only includes MLPs under coverage.

Source: Partnership reports and Wells Fargo Securities, LLC estimates

**Master Limited Partnerships**

**Transactions In 2012-13 Suggest Flexibility And Value Of Owning IDRs Outweigh Cost Of Capital Drag**

While the trend in 2009 and 2010 had been to consolidate GP interests and eliminate IDRs (mostly due to potential carried interest legislation, but secondarily, to reduce the cost of capital IDR burden), this has reversed in recent years, as evidenced by the creation of two new pure-play GP MLPs (i.e., WGP in 2012 and PAGP in 2013) and corporate restructurings (i.e., OKE's plan to spin off its utility business to transform into a pure-play GP). We believe that pure-play GPs are being taken public as stand-alone entities as a means to achieve the following:

- Highlight the intrinsic value of the IDRs and thereby increase stock price valuations;
- Monetize an investment as private equity sponsors and other owners use the IPO as a partial exit strategy or as a means to create a public market for its ownership interest; and/or
- Create another currency to facilitate growth at the underlying MLP and/or M&A opportunities for the entity.

The value of IDRs is evident in recent IPO structures. Since the beginning of 2012, 19 of the 24 MLPs that have completed IPOs (excluding pure-play GPs) have a maximum IDR tier in their structure (either 50% IDR tier or 15-25% for upstream MLPs). Further, all midstream (traditional) MLP IPOs have included a 50% IDR tier. The MLPs formed without IDRs have been non-traditional businesses with variable cash flow streams. Thus, the value inherent in owning IDRs appears to outweigh the challenges of a higher cost of equity for GP owners.

**Exhibit 99. Max IDR Splits For New MLP IPOs (2012-13)**

IPO Date	Ticker	Max IDR	
		Tier	MLP Type
May-12	PDH	None	Non-Traditional
Jun-12	EQM	50%	Midstream
Jul-12	NTI	None	Non-Traditional
Aug-12	HCLP	50%	Non-Traditional
Sep-12	SUSP	50%	Midstream
Sep-12	SMLP	50%	Midstream
Oct-12	SDLP	50%	Marine
Oct-12	LGP	50%	Midstream
Oct-12	MPLX	50%	Midstream
Nov-12	SXE	50%	Midstream
Nov-12	DKL	50%	Midstream
Nov-12	ALDW	None	Non-Traditional
Jan-13	USAC	50%	Compression
Jan-13	CVRR	None	Non-Traditional
Jan-13	SXCP	50%	Non-Traditional
Feb-13	NSLP	25%	Upstream
Apr-13	KNOP	50%	Marine
May-13	EMES	None	Non-Traditional
May-13	TEP	50%	Midstream
Jul-13	PSXP	50%	Midstream
Jul-13	FISH	50%	Midstream
Aug-13	QEPM	50%	Midstream
Aug-13	WPT	50%	Midstream
Oct-13	WNRL	50%	Midstream

Source: Partnership reports and Wells Fargo Securities, LLC estimates

**General Partner Nuances -- Not All GPs Are Created Equally**

Significant differences exist among the GPs, including the following: (1) structure, (2) amount of distribution leverage (i.e., the multiplier effect), and (3) characteristics of the underlying MLPs, all of which ultimately determine the distribution growth potential of the GP and drive valuation, in our view. When considering relative valuations for publicly traded general partners, we think the following factors should be considered:

- **Maximum IDR level.** A GP's potential leverage to the underlying MLP's growth is based on the maximum incentive distribution level that is stipulated in the partnership agreement. Most IDRs are capped at 48%, meaning the GP can reach a level where it can receive 50% of the incremental cash flow (48% for the IDRs plus 2% for the GP interest). Some have IDRs capped at 23%. Management's decision to cap the IDRs may benefit the GP in the long run, in our view. The underlying partnership should have a lower cost of capital (relative to MLPs with maximum IDRs of 48%), which should enable it to compete more effectively for acquisitions and realize higher returns on all investments (acquisitions and expansion projects). Thus, the underlying MLP should be able to increase its distributions at a faster rate and sustain its growth rate for a longer period of time, all else being equal.
- **Percentage of GP's cash flow attributable to LP units held.** Publicly traded pure-play GPs typically own limited partnership units of the underlying MLP. The greater the number of LP units held at the GP, the slower the growth, all else being equal. The reason is that the growth of distributions to LP unit holders is slower than the growth rate achieved by the IDRs. Over time, as the cumulative percentage of distributions to the GP increases, its growth rate will slow and converge with the growth rate of the underlying MLP. Taken to the extreme, if the GP is receiving 50% of the distributions of the underlying MLP, its growth rate should equal the growth rate of the MLP. Put another way, the higher the percentage of cash flow accruing to the GP, the slower the growth rate at the GP, all else being equal.
- **Percentage of cash flow accruing to IDRs.** Over time, the cumulative percentage of distributions attributable to IDRs should increase. Taken to the extreme, if the GP is receiving 50% of the distributions of the underlying MLP, its growth rate should equal the growth rate of the MLP. Thus, as the cumulative percentage of distributions to the GP increases, its growth rate should slow and converge with the growth rate of the underlying MLP.
- **Growth profile of the underlying MLP.** A GP's cash flow is based solely on distributions declared by the underlying MLPs. Hence, the distribution growth of a GP associated with a fast-growing underlying MLP should be higher than that of a GP and supported by one with modest growth prospects, all else being equal.
- **Incremental cost at the GP level (i.e., Interest and SG&A expense and taxes).** All of the publicly traded pure-play GPs incur incremental SG&A expense. The incremental expense at the GP reduces the cash available to pay the GP's unitholders.
- **Structure of the GP (i.e., C-Corp versus MLP).** Corporate taxes, all else being equal, reduce the cash available to pay dividends.
- **Assets owned directly by the GP.** In addition to their ownership interests in underlying MLPs, some GPs also own physical assets (e.g., pipelines). Most GPs that own physical assets have communicated plans to drop these assets down to their respective MLPs over time, thereby returning to pure-play GP status.

**Master Limited Partnerships**

**Exhibit 100. Summary Of Factors Separating Pure-Play GPs**

GP	Structure	% Of Total		Max IDR	% Of MLP Distributions Paid To GP			Est. 3-Year Distrib. CAGR		
		GP Multiplier <sup>1</sup>	GP Margin From IDRs <sup>2</sup>		Split At MLP	MLP #1	MLP #2	MLP #3	MLP #1	MLP #2
AHGP	MLP	1.3x	42%	50%	ARLP: 41%			ARLP: 7%		
ATLS	MLP	3.5x	41%	50%	APL: 11%	ARP: 5%		APL: 12%	ARP: 7%	
CEQP	MLP	2.7x	33%	50%	CMLP: 7%			CMLP: 6%		
ETE	MLP	1.3x	76%	50%	ETP: 24%	RGP: 5%	SXL: 32%	ETP: 5%	RGP: 6%	SXL: 13%
KMI	C-Corp	1.8x	83%	50%	KMP: 46%	EPB: 27%		KMP: 4%	EPB: 3%	
NSH	MLP	1.8x	53%	25%	NS: 13%			NS: 0%		
OKE	C-Corp	2.2x	55%	50%	OKS: 30%			OKS: 9%		
TRGP	C-Corp	2.0x	79%	50%	NGLS: 26%			NGLS: 9%		
WGP	MLP	2.3x	48%	50%	WES: 21%			WES: 13%		
WMB	C-Corp	2.1x	36%	50%	WPZ: 27%	ACMP: 7%		WPZ: 5%	ACMP: 15%	
XTXI	C-Corp	5.7x	12%	50%	XTEX: 6%			XTEX: 8%		

Note: Reflects GPs under coverage only

Note 1: Assumes 10% distribution growth in 2014 for underlying MLPs and then calculates the resulting impact to the GP

Note 2: Based on our 2014 estimates

Source: Company data and Wells Fargo Securities, LLC estimates

**Other Nuances -- GP Subsidies**

A general partner has the ability to subsidize a transaction with its limited partnership and temporarily reduce the cost of equity for the IDRs. In these instances, the GP temporarily forgoes incentive distribution right payments in order to make an acquisition immediately and sufficiently accretive to limited partner unitholders. This could be an indication of a high up-front price being paid for an asset. In addition, it demonstrates the beneficial impact to the GP when the MLP makes an acquisition. Because acquisitions are typically so accretive to GP owners, the GP can afford to temporarily subsidize an acquisition to improve the near-term accretion for the LP unitholder.

**Exhibit 101. Summary Of GP Subsidized Transactions**

<b>MLP Beneficiary</b>	<b>Announce Date</b>	<b>Annual Cash Subsidy</b>	<b>Length Of Subsidy</b>	<b>Reason For Subsidy</b>
MMP	Nov-04	\$4.8MM	2 yrs	Help finance \$530MM acq. from Shell
NRGY	Aug-05	~\$1.5MM	2 yrs	Help finance \$230MM Stagecoach acquisition
PAA (1)	Jun-06	\$20-15-15-10-5MM	5 yrs	Help finance \$2.4B acq. of PPX
APL	Jun-07	up to \$20MM / \$15MM	2 yrs - forever	Help finance \$1.85B acq. from Anadarko
PAA (2)	Apr-08	~\$6.7MM	1.5 yrs	Help finance \$689MM Rainbow acquisition
SXL (1)	Apr-08	~\$1.4MM	4 yrs	Help finance \$200MM acq. from ExxonMobil
WPZ	Apr-09	\$29MM	1 yr	Support distribution
WPZ	Apr-09	up to \$10MM <sup>1</sup>	1 yr	Support distribution
NGLS	Jul-09	up to \$32MM <sup>2</sup>	2.1 yrs	Support \$530MM downstream acq. from TRI
NRP	Sep-09	\$14.7MM	0.5 yrs	Support Deer Run Mine acquisition
KMP	Apr-10	~\$31MM	1.5 yrs	Support \$875MM KinderHawk joint venture
EPD	Sep-10	\$70-60-55-52-41MM <sup>3</sup>	5 yrs	Support EPD / EPE merger
ETP	Jul-11	\$55MM <sup>4</sup>	4 yrs	Support Citrus drop down
PAA	Dec-11	\$10-15MM	2 yrs - forever	Support BP NGL acquisition
WPZ	Mar-12	\$26-42MM	2 yrs	Support Caiman acquisition
ETP	Apr-12	\$70MM <sup>4</sup>	3 yrs	Support SUN merger
HEP	Jul-12	\$5MM	3-4 yrs	Support UNEV Pipeline drop down
MMLP	Oct-12	\$15-20MM	2 yrs	Support Redbird Gas Storage acquisition
WPZ	Oct-12	\$64MM	1.25 yrs	Support Geismar drop down
KMP	Jan-13	\$0-120MM	24 yrs	Support CPNO merger
RGP	Feb-13	\$55-65MM	2 yrs	Support SUGS drop down
ETP	Mar-13	\$60-110MM <sup>4</sup>	2-4 yrs	Support HoldCo drop down
WPZ	May-13	\$200	1 yr	Support various growth projects
PAA	Oct-13	\$5-12MM	3 yrs - forever	Support PNG merger

Note 1: This is a G&A expense subsidy to support distribution

Note 2: This is a G&A expense subsidy to support distribution

Note 3: This is based on EPD's current annualized distribution of \$2.30 per unit

Note 4: ETP subsidies were subsequently lowered as part of ETE's acquisition of a 50% economic interest in SXL's GP

Source: Partnership reports and Wells Fargo Securities, LLC

**IDR Reset Option Enables Management To Better Control Cost Of Capital**

The reset option gives management better control of the partnership's cost of capital over the long term and allows the MLP to better compete for acquisitions and/or invest in organic projects that would otherwise not be accretive to cash distributions when the partnership is "deep in the splits," in our view. As stipulated by an MLP's partnership agreement, the general partner holds the right to reset, at higher levels, the minimum quarterly distribution and incentive distribution levels. The cumulative cash flow accruing to the GP would not be altered, but instead, the future cash flow stream would be affected.

Specifically, the GP would receive a lower percentage of incremental cash flow at the reset (higher) MQD than the 50% of incremental cash flow that it would receive under the initial distribution schedule. Hence, by resetting the incentive distribution tiers, the MLP's cost of equity is effectively reduced. In exchange for "resetting" the incentive distribution levels, the GP would receive a certain number of underlying MLP common units and additional general partner units.

**GP/LP Conflicts Of Interest**

Several potential conflicts of interest exist for GP and MLP investors, in our view. With only a 2% equity interest (limited risk), but the greatest potential upside, GP owners could drive MLPs to make riskier investments (acquisitions) in order to increase distributions. This is especially true as more private equity owners have made investments in GPs. The private equity GP owners' investment time horizon may not always be in sync with the LP investor. For example, an MLP (controlled by the same management team as the GP) could hypothetically make a \$1 billion acquisition that is nominally accretive to LP unitholders or even slightly dilutive. However, if the MLP financed the acquisition with 50% equity, the transaction would likely be highly accretive to the GP, even without any increase in the distribution rate.

The counter argument to the preceding assertion is that the GP would not make poor investment decisions that could jeopardize the partnership's distribution, commonly referred to as the theory of "don't kill the golden goose." Notably, at the 50% incentive tier, the GP would share equally in the pain if the distribution was reduced. The best alignment of interest is when the owner of the GP also owns a significant stake in limited partner units, in our view.

**Hypothetical acquisition where GP/LP interests are not aligned.** In the following example, we illustrate a scenario whereby an acquisition is dilutive to the LP unitholders, but accretive to the GP.

Our examples will illustrate two main points:

- (1) General Partners are incentivized to seek increasingly riskier investments due to the higher returns relative to risk that they can receive, especially at the 50/50 splits. This is regardless of whether these investments are accretive for LP unitholders.
- (2) General Partners receive a disproportionate return relative to their modest 2% equity investment in the partnership. LP unitholders receive lower returns while bearing a greater proportion of the risk (through a greater investment).

Our example looks at a hypothetical MLP trading at \$25 per unit with a \$2.50 distribution (or a 10% yield). We assume the partnership completes a \$100 million acquisition at an EBITDA multiple of 9.0x EBITDA and finances the transaction with 50% debt (at an interest rate of 8.5%) and 50% equity (2 million units at \$25 per unit). In this case, the GP would also make a \$1 million investment to maintain its 2% equity stake in the partnership (i.e., the portion of financing related to equity  $\times$  GP interest  $\rightarrow$  \$50 million  $\times$  2% = \$1 million).

To calculate the potential accretion from the transaction, we first deduct (from EBITDA of \$11 million  $\rightarrow$  \$100 million acquisition  $\div$  9.0x transaction multiple) approximately \$1 million for sustaining capex (assume maintenance capex is 10% of EBITDA). Since we are financing the acquisition with 50% debt, we deduct interest expense of \$4 million (\$50 million of new debt at an 8.5% interest rate). The new units (i.e., 2 million) issued to finance the balance of the transaction are entitled to the current distribution (even assuming there was no incremental cash flow from the acquisition). Thus, we deduct an additional \$8 million to account for distributions to the new equity LP unitholders and the GP. The \$8 million consists of \$5 million to the new LP unitholders (2 million units  $\times$  \$2.50 distribution) and \$3 million to the GP (since the GP gets 40% of the cash flow  $\rightarrow$  2 million  $\times$  \$2.50  $\div$  60%). In this scenario, the acquisition would actually be dilutive to the overall partnership by \$2 million (or \$0.02 per LP unit).

However, as the following Exhibit illustrates, it would still be in the GP's interest to complete the acquisition as the GP would receive \$2 million of incremental cash flow from its \$1 million investment, a 206% cash return on investment. The reason is that as long as the MLP issues new equity, the GP receives incremental cash flow, regardless of the accretion to the LP unitholders. In this way, the interest of the GP and LP unitholders is not always aligned. What makes the GP's position so advantageous is the fact that while the GP receives 50% of the incremental cash flow, the GP has only a 2% equity investment.

In contrast, the new investors who invested \$49 million to finance the acquisition receive a 10% return on their investment in the form of \$5 million in distributions based on the pre-acquisition distribution of \$2.50 per unit (10% yield), which is partially offset by the dilution of the transaction.

**Exhibit 102. Dilutive Acquisition With GP At 50% Incentive Distribution Level***\$ in millions, except per unit data*

<b>MLP Pre-Acquisition Assumptions</b>		<b>Acquisition Assumptions</b>	
Units outstanding	50.0	Acquisition price (\$ in millions)	\$100.0
Current price	\$25.00	Financing arrangement:	
Current annualized distribution	\$2.50	Debt	50%
Current yield	10.0%	Equity	50%
Current split level:		Transaction unit issuance	2.0
Limited partners	50%	EBITDA multiple	9.0x
General partner	50%	EBITDA	\$11.1
Cost of debt	8.5%	Sustaining capex	\$1.1
% of cash distributions to:		Interest expense	\$4.3
Limited partners	60%	Incremental distributions from	\$8.2
General partner	40%	additional units outstanding	
Cost of equity	16.3%	<b>Excess cash flow</b>	<b>(\$2.4)</b>
Cost of capital	12.4%	Cash flow to general partner	(\$1.2)
		Cash flow to LP unitholders	(\$1.2)
		Pro-forma units outstanding	52.0
		<b>Incremental CF / LP Unit</b>	<b>(\$0.02)</b>

<b>Return On Investment Analysis</b>	<b>Investment</b>	<b>Cash Flow</b>	<b>Return On Investment</b>
<b>General partner</b>	<b>\$1.0</b>	<b>\$2.1</b>	<b>206%</b>
Existing (pre-acquisition) LP unitholders	\$0.0	(\$1.2)	(1%)
New LP unitholders (investors)	\$49.0	\$4.9	10%
<b>Total</b>	<b>\$50.0</b>	<b>\$5.8</b>	<b>12%</b>

Source: Wells Fargo Securities, LLC estimates

## Understanding An MLP's Cost Of Capital

MLPs are generally thought to have a lower cost of capital than C-corporations, all else being equal, due to their tax-advantaged partnership structure and initial low (i.e., 2%) cash flow outlay to the general partner. However, this cost-of-capital benefit is temporary and exists only when the MLP is at the lower incentive distribution level. This advantage erodes over time, due to the incentive distribution rights. As the MLP increases its distribution, it must pay a greater percentage of its total cash flow to the GP. Thus, paradoxically, as the MLP is more successful in raising distributions, its cost of capital increases and this advantage erodes away.

For an MLP, we believe the cost of equity is best defined as adjusted yield (forward yield adjusted for GP's share of cash flow) plus distribution growth. The conventional methodology used to calculate an MLP's cost of equity is flawed, in our view, as it incorrectly equates an MLP's cash yield as the partnership's cost of equity.

### Exhibit 103. Defining Cost Of Equity

<u>Conventional Thinking On Cost Of Equity</u>	<u>Our Cost Of Equity Definition</u>
$\text{Cost of equity} = \frac{\text{Cash yield}}{\text{Percentage cash flow to LP}}$ <p style="text-align: center;">↓</p> $\text{Cost of equity} = \frac{\text{Current yield}}{\text{Percentage cash flow to LP}}$	$\text{Cost of equity} = \text{Forward adjusted cash yield} + \text{Growth}$ <p style="text-align: center;">↓</p> $\text{Cost of equity} = \frac{\text{Forward yield}^{(1)}}{\text{Percentage cash flow to LP}} + \text{Growth}$

Note (1): Forward yield = next four quarterly distributions divided by current unit price  
Source: Wells Fargo Securities, LLC

Equity owners are entitled not only to the current distribution, but also to future distributions that will presumably be higher. In fact, we argue that today's yield (the unit price) reflects some underlying distribution growth assumption. By ignoring the growth component, the cost of equity is understated and transactions that are initially accretive could become dilutive in later years as the partnership pays incremental distributions on the original units issued to finance the transaction. Properly defining and forecasting cost of equity has important ramifications for (1) making investment decisions, (2) setting distributions, and (3) choosing among financing alternatives.

### There Are Three Components To An MLP's Cost Of Capital

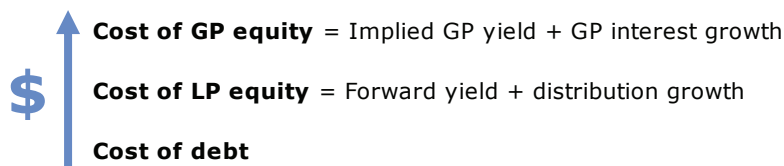
MLPs have three principal sources of capital: LP equity, GP equity, and debt. An MLP's hurdle rate for new investments should therefore be greater than the weighted average cost of these three capital sources.

**Cost of LP equity.** The cost of LP equity is the forward yield (distributions paid to LP unitholders over the next four quarters) plus expected distribution growth. This represents an LP unitholder's expected return for the risk undertaken in owning LP units of an MLP (i.e., an investor's required rate of return).

**Cost of GP equity.** The cost of GP equity is the forward GP yield (cash flow being paid to the GP over the next four quarters) plus the expected growth in cash flow payments to the GP as the MLP raises its distribution over time. The general partner typically has just a 2% interest in the assets of the MLP, but could be entitled to 50% of the MLP's cash flow through IDRs. Because of this high degree of leverage, GP equity is substantially more expensive than LP equity.

An MLP's total cost of equity is the weighted cost of LP equity plus the weighted cost of GP equity, or the forward cash yield (distributions paid to LP unitholders over the next four quarters, adjusted for the GP cut) plus total distribution growth. Cost of capital is therefore the weighted average cost of GP equity, LP equity, and debt.



**Exhibit 104. MLPs Have Three Main Sources Of Capital**

Source: Wells Fargo Securities, LLC

Intuitively, cost of equity should be higher than the cost of debt because creditors get paid before equity owners. In other words, equity owners demand a higher return because of the higher incremental risk that they carry. Again, we believe it is a mistake to think of cost of equity for an MLP as just the yield. If that were the case, in many instances, the cost of equity would be less than the cost of debt.

**Incentive Distributions Increase Cost Of Capital**

IDRs create an increasingly large disconnect between an investors' required rate of return (LP cost of equity) and an MLP's total cost of equity. For two MLPs targeting an equal rate of return to unitholders, the partnership with IDRs has a higher cost of equity than an MLP without IDRs. As a result, an MLP with IDRs needs to make increasingly larger (or more accretive) investments in order to prevent erosion in investor returns. Assuming a yield of 7%, a cost of debt of 7%, IDRs capped at 25%, and distribution growth of 3%, we estimate that an MLP would need to make investments at a 10x EBITDA multiple or lower in order for the investments to stay accretive over the life of the MLP. Alternatively, MLPs not burdened by incentive distributions would be able to pay up to an 11-12x multiple while supporting 3% distribution growth (or pay a lower multiple and support a faster growth rate).

**Exhibit 105. IDRs Affect Maximum Purchase Multiples**

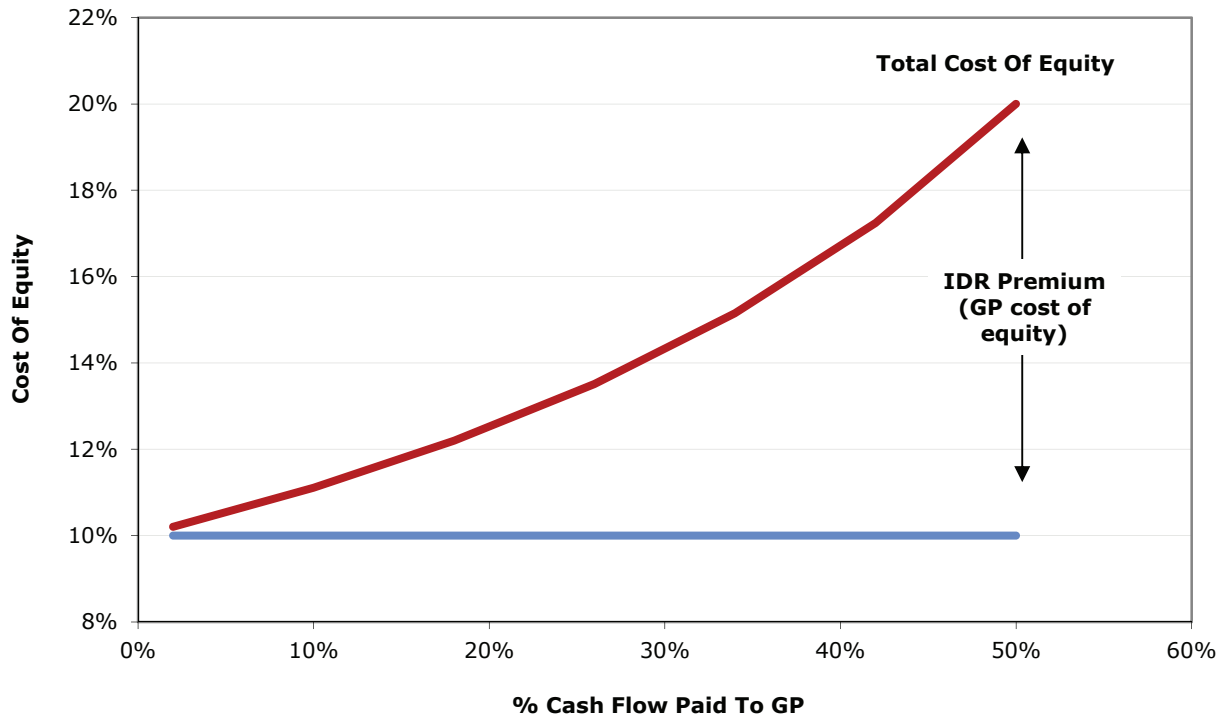
<b>Maximum IDR Tier</b>	<b>Maximum EBITDA multiple<sup>1</sup></b>
50%	7-8x
25%	10x
2%	11-12x

Note 1: Represents the maximum EBITDA multiple that can be paid on an investment for the transaction to remain accretive over the life of the MLP

Source: Wells Fargo Securities, LLC

Exhibit 106 illustrates the lifecycle of a hypothetical MLP, with IDR tiers capped at 50% of cash flow. For simplicity, we assume the MLP targets a 10% return to investors (7% forward yield + 3% distribution growth) over the life of the partnership. At year 0, when the MLP is first created, 2% of cash flow accrues to the general partner. As the partnership increases its distribution and triggers higher IDR tiers, the percentage of cash flow accruing to the general partner increases, which, in turn, increases the partnership's cost of equity. When 15% of cash flow is accruing to the GP, the partnership should have a cost of equity of approximately 12%, representing a 2% premium over the 10% targeted return to investors. In other words, if the partnership wanted to continue returning 10% to investors, it would have to make investments in excess of this 12% equity hurdle rate. At the extreme, the GP commands 50% of available cash flow, implying that the partnership would need to target investments with returns in excess of approximately 20% in order to sustain a 10% return to investors. Alternatively, an MLP without IDRs targeting a 10% return to investors would have a cost of equity approximately equal to 10% over the life of the partnership.

Exhibit 106. Lifecycle Of MLP With 50/50 Splits--IDR Premium



Source: Wells Fargo Securities, LLC

**CAPM Understates The Cost Of Equity**

As it relates to MLPs, we believe cost of equity under the capital asset pricing model (CAPM) does not capture the cost related to the GP and IDRs. In other words, the calculation is not calibrated to capture the increasingly higher percentage of cash flow that accrues to an MLP’s general partner over time; instead, we believe it provides a better guide for LP cost of equity (i.e., an investor’s required rate of return).

For MLPs under coverage, the average cost of equity as defined by CAPM is about 7.6% (assuming a risk-free rate of 4%, a market-risk premium of 6%, and an average beta of 0.6). In comparison, our MLP index has delivered a historical ten-year average (2003-2012) total return of approximately 16.4% (versus 7.1% for the S&P 500), which is significantly higher than the required rate of return as defined by CAPM methodology.

One explanation for the disparity between required rate of return and actual return is that investors could be underestimating future distribution growth. An investor requiring a 10% annual return might purchase an MLP yielding 6% under the assumption that the MLP will be able to grow its distribution at 4%. If the MLP increases its distribution at a greater rate, it equates to excess returns for the investor, in our view.

**Is An MLP’s Cost-Of-Capital Advantage Overstated? Yes And No**

An MLP’s cost-of-capital advantage over a C-Corp could be exaggerated, in our view, as a good portion of its perceived advantage is offset after factoring in distribution growth expectations set by investors and the effect of increasingly higher payments to the GP through IDRs. However, the fact remains that MLPs are tax-efficient vehicles to pass cash flow to unitholders and ultimately, it is this tax-advantaged structure that allows MLPs to trade at a premium to C-Corps, in our view.

## Types Of Assets In Energy MLPs And Associated Commodity Exposure

### A Brief Review Of The Evolution Of The MLP Sector

In the 1980s, MLPs were involved in various businesses including exploration and production (E&P) of oil and natural gas, restaurants, sports teams, and other consumer activities. These businesses were more cyclical in nature, or in the case of E&P companies, were affected by low commodity prices, a volatile natural gas market, and a depleting reserve base, which relied on exploratory drilling to sustain cash flow (current upstream MLPs own longer life reserves and employ a lower risk, more factory-like, exploitation and production operation). Without reinvestment, the predecessor upstream MLPs were essentially self-liquidating partnerships and were unable to sustain their distributions.

In the late 1980s, MLPs were reincarnated as entities that generally own midstream assets that are used to transport, process, and store natural gas, natural gas liquids (NGL), crude oil, and refined petroleum products and have limited exposure to commodity price risk. These assets were typically spun out of larger entities that could realize a higher value from these assets when placed into publicly traded MLPs. The early MLPs consisted primarily of refined-product pipelines that were characterized as mature assets that required modest maintenance capital and generated stable cash flow that was distributed to unitholders with very modest growth expectations. MLPs were basically bond-like substitutes with high yields and very modest growth.

The modern day MLP got its start in 1986-87, when Congress passed the *Tax Reform Act of 1986* and the *Revenue Act of 1987*. The new laws stated that to qualify as a master limited partnership, an entity had to earn at least 90% of its income from “qualified sources.” These sources were generally limited to natural resources or mineral activities including exploration, development, mining, processing, refining, transportation, or marketing. Other qualifying income includes interest, dividend, real property rents, income from the sale of property, gain from the sale of assets, income from the sale of stock, and gains from commodities, futures, (commodity related) forwards, and options (with certain limitations).

The industry has seen a progression of different types of assets placed into the MLP structure, beginning with refined products pipeline assets in 1986 (Buckeye Partners, L.P.). Some asset types such as refining, and oil and gas reserves (introduced in the 1980s) were re-introduced to the MLP structure in 2006. Other MLPs, involved in the plastics and fertilizer industry did not survive as partnerships, due, in part, to the cyclical nature of their businesses. These partnerships were dissolved, merged, or restructured. Nevertheless, the majority of energy assets introduced into the MLP structure since 1986 have evolved from more stable pipelines to increasingly more volatile cash flow businesses with greater risk, in our view. In a sense, the MLP structure has evolved to include assets that operate progressively closer to the wellhead, the prototypical energy asset with the greatest degree of commodity, drilling, reserve, and reinvestment risk.

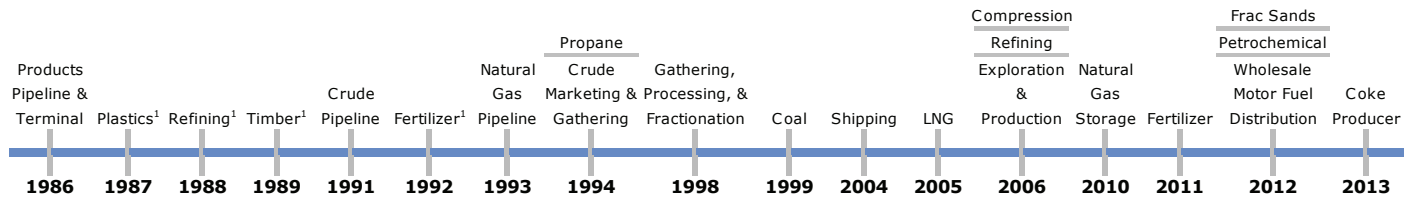
Beginning in the late 1990s, MLPs began reorienting their focus toward growth, making significant acquisitions, pursuing internal growth projects, and aggressively raising distributions. This change in focus was partially due to the sudden availability of midstream assets on the market. For example, majors and large diversified energy players decided to monetize their mature assets with the intent of redeploying proceeds from the sales into higher return investments. The meltdown of Enron and the independent power producer (IPP) sector created an opportunity for MLPs to acquire pipeline assets at relatively attractive valuations. MLPs were able to take advantage of their differentiated tax-exempt structure and lower cost of capital to achieve returns superior to those of corporations.

Non-traditional MLPs represent an emerging trend within the MLP sector. There are now eight MLPs with a variable-rate distribution payment policy (i.e., ALDW, CVRR, EMES, NTI, PDH, RNF, TNH, and UAN), and we expect to see additional variable-rate MLP IPOs in the future. Sponsors in non-traditional MLP businesses such as refining, fertilizer, chemicals, etc. can typically garner a higher valuation by spinning off assets to the MLP structure compared to the C-corp. structure.

We view variable-rate MLPs as distinct from traditional, steadily paying distribution MLPs and believe the investor base that seeks to own these non-traditional structures could be quite different. Traditional MLP investors (particularly retail investors) typically own MLP securities primarily for their stable and growing income stream. In contrast, variable-rate MLP investors might be attracted to the fundamentals of the business (e.g., as a way to play the chemicals cycle or if the investor has a bullish outlook on fertilizer prices), with the added benefit of a robust yield to boost overall returns. We believe both types of MLPs have a place within the investment landscape provided that investors understand the relative risk/reward, the nature of the distribution, and that the MLPs are priced appropriately to reflect these characteristics.

Master Limited Partnerships

Exhibit 107. Evolution Of The MLP Sector



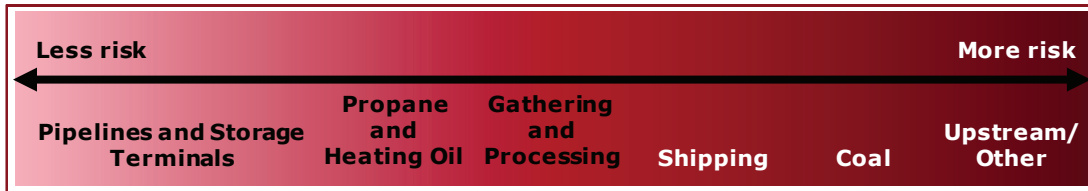
Note: The Plastics, Refining, Timber, and Fertilizer MLPs introduced in the above time line were either dissolved or converted into another entity

Source: Partnership reports, Vinson & Elkins, LLP, and Wells Fargo Securities, LLC

Asset Overview – Relative MLP Distribution Security

In aggregate, the master limited partnership universe is made up of approximately 135 companies that are classified as publicly traded partnerships, with 107 being energy related. The MLP structure has evolved from stable cash flow generating assets (e.g., pipelines and storage) to more commodity-sensitive businesses (e.g., oil and natural gas assets, asphalt, refining, etc.) with higher risk, in our view. Currently, MLPs are engaged in every aspect of the energy value chain. Thus, the impact of commodity prices on MLP cash flow varies according to asset class.

Exhibit 108. Energy MLP Risk Profiles



Note: Classification does not take into account hedging activities or parent/sponsor relationships

Source: Wells Fargo Securities, LLC

**Most MLPs offer stable distributions.** Absent a significant deterioration in economic conditions from current levels, we believe certain subsets of the MLP sector offer investors a compelling value, with secure distributions and attractive yields. These MLP subsets offer “secure” to “solid” distributions, in our view, with predominantly fee-based cash flow and direct commodity exposure that ranges from modest to minimal (or none).

Exhibit 109. Relative MLP Distribution Security

<b>Median Yield</b>	<b>"Solid" Distributions</b>	<p>These MLPs have predominantly fee-based cash flows, minimal (or no) direct commodity exposure, and ample coverage ratios, in our view.</p> <p>These MLPs have moderate commodity exposure and/or other non-fee based activities (marketing, volumetric risk, etc).</p> <p>These MLPs have meaningful commodity exposure/other non-fee based activities and/or a projected '13 coverage ratio less than 1x.</p>
4.6%	<p>EPB, EPD, HEP, MMP, MPLX, PAA, SEP, SXL, TGP</p>	
<b>Median Yield</b>	<b>"Secure" Distributions</b>	
6.5%	<p>ACMP, APU, BWP, CMLP, CPLP, DKL, EEP/EEQ, EQM, EXLP, ETP, GEL, GMLP, KMP/KMR, OKS, QEPM, RGP, SDLP, SPH, TLLP, TOO, WES, WGP, WPZ, XTEX</p>	
<b>Median Yield</b>	<b>All Other MLPs</b>	
8.0%	<p>AMID, APL, ARP, ARLP, BBEP, BKEP, BPL, DPM, EROC, EVEP, GLP, LGCY, LINE/LNCO, LRE, MCEP, MEMP, MMLP, MWE, NGL, NGLS, NKA, NMM, NRP, NS, OXF, PNG, PSE, PVR, QRE, SUSP, SXE, USAC, VNR</p>	

Note 1: To note, the preceding list does NOT reflect our investment ratings and/or valuation ranges.

Note 2: Excludes GPs and i-units, which would share the same risk profile as their underlying MLP.

Note 3: Based on our coverage universe only

Source: Wells Fargo Securities, LLC estimates

The types of assets in energy MLPs include the following:

- Midstream
  - Gathering and Processing
  - Compression
  - Pipelines
  - Fractionation
  - Storage and Terminals
  - Trucking
- Propane
- Shipping (marine transportation)
- Coal and aggregates (operators and royalty model)
- Upstream (exploration and production)
- Refining
- Asphalt
- Liquefied natural gas (LNG)
- Fertilizer
- Frac sand
- Petrochemical
- Wholesale motor fuel distribution
- Metallurgical coke production

### **Midstream**

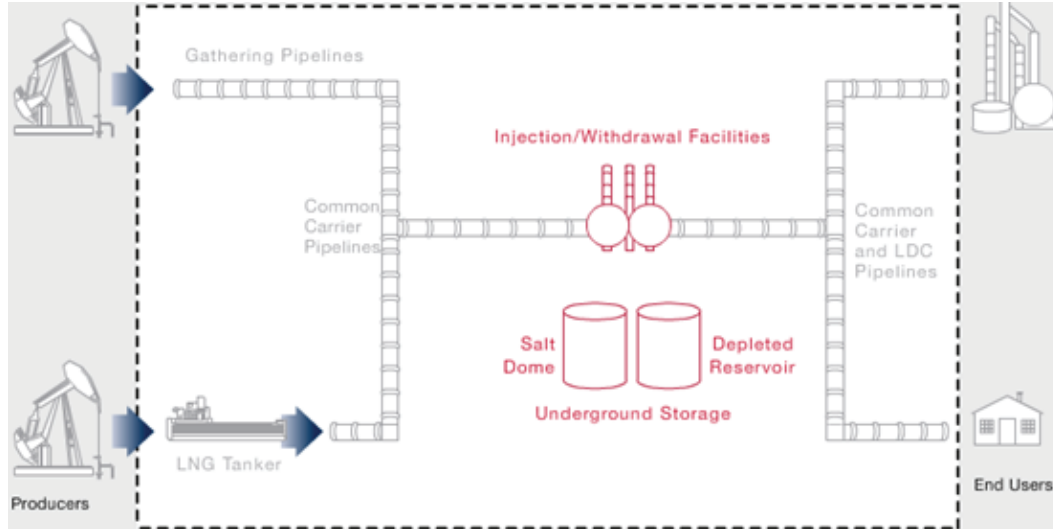
Midstream is a broad term that encompasses all aspects of the energy value chain except the production of oil and gas, and the distribution of energy products to end markets (i.e. the function of electric and gas utility companies). Midstream includes all types of commodities and encompasses the gathering and processing, transportation, and/or storage of crude oil, natural gas, natural gas liquids (NGLs), and/or refined petroleum products.

In the following sections, we have provided a summary of each of these asset classes. We have organized the assets by each energy value chain for natural gas, natural gas liquids, and crude oil and petroleum. For each of these asset types, we have provided a general subsector overview, as well as a discussion on industry and sector drivers, revenue drivers, risks, and commodity price sensitivity for each subsector.

## The Natural Gas Value Chain

The natural gas value chain includes the production, treating, gathering, transportation, and storage of natural gas. Notably, it is highly integrated with the natural gas liquids (NGL) value chain as NGLs are primarily produced through natural gas processing.

### Exhibit 110. Natural Gas Value Chain



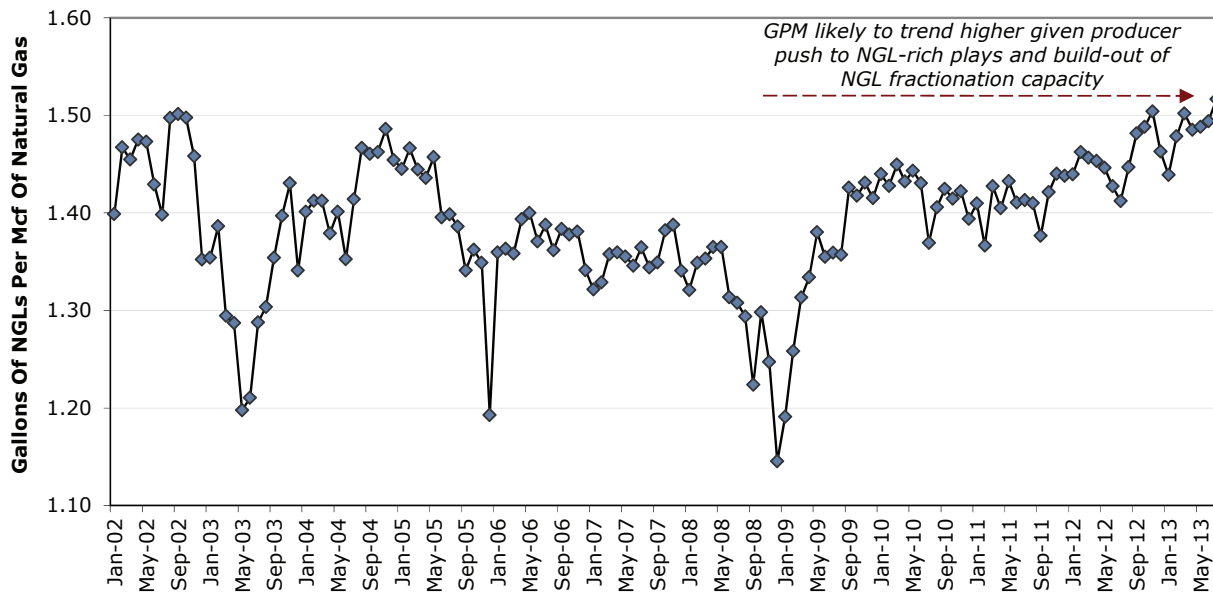
Source: Plains All American Pipeline, L.P.

### Natural Gas Production

Raw natural gas produced at the wellhead comes in many different types of forms and classifications, including the following:

- Dry and wet natural gas:** Natural gas is classified as “dry” or “wet” depending on the amount of NGLs present. Dry or lean natural gas contains less than 1 gallon of recoverable NGLs per Mcf of gas (GPM) and is composed primarily of methane. Wet or rich natural gas contains a higher GPM (e.g., 3+). The amount of NGLs contained in the natural gas stream can vary depending upon the region, depth of wells, proximity to crude oil, and other factors. For example, natural gas production in the Permian Basin, and Marcellus and Eagle Ford Shales typically contains in excess of 5 GPM. In comparison, gas produced along the continental shelf areas of the Gulf of Mexico contains 1.0-1.5 GPM. We expect the average GPM content of natural gas produced in the U.S. to continue to increase given the more attractive drilling economics in the wet plays relative to dry producing regions.

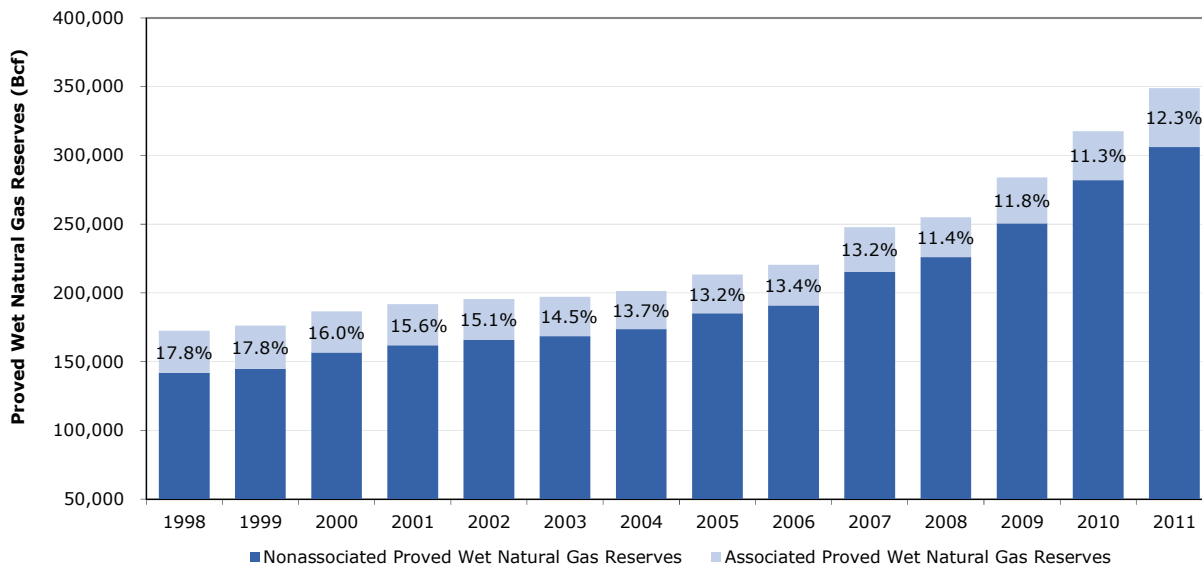
Exhibit 111. Historical NGL Yield From Natural Gas Processing (Data As Of July 2013)



Source: EIA and Wells Fargo Securities, LLC

- Associated and non-associated gas:** Associated or casing head gas is raw natural gas that has become dissolved in oil accumulations and is produced as a by-product along with crude oil. If the gas is in contact but not in solution with crude oil, it is known as associated free gas. Associated gas is typically rich, with heavier NGLs. Alternatively, non-associated gas is natural gas that is free from contact with crude oil (ex. “dry” natural gas is non-associated gas). In 2011, approximately 12% of total proved wet natural gas reserves in the United States were considered “associated.”

Exhibit 112. Non-associated Versus Associated Domestic Natural Gas Reserves



Source: EIA and Wells Fargo Securities, LLC

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**Natural Gas Gathering**

Natural gas gathering systems consist of a network of small diameter (4-6”) pipelines that collect and transport raw natural gas (from producing natural gas wells) to a central delivery point for transport to a processing and treating facility or directly to the interstate pipeline system (if the gas does not require processing). Gathering systems are designed to be flexible in order to gather natural gas at different pressures, transport gas to different plants, and connect new wells to accommodate additional production (without the need for significant incremental capital expenditure).

**Exhibit 113. MLPs With Natural Gas Gathering Assets**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Access Midstream Partners, L.P.	ACMP	Kinder Morgan Energy Partners L.P.	KMP
American Midstream Partners, L.P.	AMID	Markwest Energy Partners L.P.	MWE
Atlas Pipeline Partners L.P.	APL	Marlin Midstream Partners, L.P.	FISH
Boardwalk Pipeline Partners, L.P.	BWP	ONEOK Partners L.P.	OKS
Crestwood Midstream Partners L.P.	CMLP	PVR Partners, L.P.	PVR
Crosstex Energy L.P.	XTEX	QEP Midstream Partners, L.P.	QEPM
DCP Midstream Partners L.P.	DPM	Regency Energy Partners L.P.	RGP
Eagle Rock Energy Partners L.P.	EROC	Southcross Energy Partners, L.P.	SXE
Enbridge Energy Partners L.P.	EEP	Summit Midstream Partners, L.P.	SMLP
Energy Transfer Partners L.P.	ETP	Tallgrass Energy Partners, L.P.	TEP
EQT Midstream Partners, L.P.	EQM	Targa Resources Partners L.P.	NGLS
Enterprise Products Partners L.P.	EPD	Western Gas Partners L.P.	WES
EV Energy Partners L.P.	EVEP	Williams Partners L.P.	WPZ

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry/sector drivers.** Throughput on natural gas gathering systems is dependent on regional drilling activity by E&P producers. While gathering volume is not directly influenced by fluctuations in natural gas prices, volume could move commensurately with pricing over the long term as producers right-size drilling budgets in response to drilling economics. In the current commodity price environment, producers have shifted their drilling programs from dry natural gas producing areas to wet natural gas (i.e., with high natural gas liquids content) producing regions in order to capitalize on more favorable economics (i.e., higher returns). This, in turn, has resulted in a need to develop additional gathering infrastructure in these new supply regions.

**Revenue drivers.** Natural gas gathering is a fee-based activity as revenue is generated based on a fee per unit (Mcf) of natural gas gathered. However, since this activity is volume based, revenue is dependent upon the pace of drilling activity within a partnership’s gathering footprint and the ability to connect new producing wells to gathering systems. To note, some gathering systems are supported by acreage dedications, which commit the producer to utilize the partnership’s gathering system for all current and future production for a predetermined period (which can sometimes be for the life of the producer’s reservoir lease). In some instances, the producer guarantees a minimum level of volume to the gatherer.

**Risks.** The primary risk for MLPs with gathering assets is declining natural gas prices. Other risks include rising raw material and labor costs, a material change in regulatory requirements or standards for the system’s geographic location, and an overbuild of U.S. energy infrastructure.

**Commodity price sensitivity.** MLPs with gathering assets do not take title to the natural gas they handle and do not have direct exposure to the price of natural gas. However, changes in commodity prices can ultimately affect the partnership’s system volume. A declining natural gas price environment can cause producers to suspend their drilling operations or shut-in wells. A decline in producer drilling activity would likely lower gathering volume, resulting in lower cash flow, all else being equal.



**Treating And Dehydration**

Following the gathering process, various contaminants in the natural gas stream must be removed before transportation on intrastate or interstate pipelines. Contaminants typically found within the natural gas stream include water vapor, carbon dioxide (CO<sub>2</sub>), and hydrogen sulfide (H<sub>2</sub>S).

In order to comply with downstream pipeline and end-user quality specifications, natural gas is dehydrated (to remove saturated water) and chemically treated to extract contaminants (e.g., CO<sub>2</sub> and H<sub>2</sub>S). Natural gas that is saturated with water can form ice that can obstruct parts of a pipeline system. In addition, water can cause pipeline corrosion when combined with CO<sub>2</sub> and H<sub>2</sub>S. Natural gas with high levels of CO<sub>2</sub> and H<sub>2</sub>S can also harm pipelines and could result in a failure to meet end-user requirements. The amine treating process involves a continuous circulation of amines as the chemical is attracted to CO<sub>2</sub> and H<sub>2</sub>S. The impurities are absorbed from the natural gas stream by the amines as they come into contact with each other. The amines are then removed from the natural gas stream, resulting in pipeline quality gas. To note, the amines are recycled after the impurities have been removed via a heating process.

**Exhibit 114. MLPs With Treating And Dehydration Businesses**

<b>MLP</b>	<b>Ticker</b>
Access Midstream Partners, L.P.	ACMP
Boardwalk Pipeline Partners, L.P.	BWP
Crestwood Midstream Partners L.P.	CMLP
Crosstex Energy L.P.	XTEX
Enbridge Energy Partners L.P.	EEP
Energy Transfer Partners, L.P.	ETP
Kinder Morgan Energy Partners L.P.	KMP
Regency Energy Partners L.P.	RGP
Southcross Energy Partners, L.P.	SXE
Western Gas Partners, L.P.	WES
Williams Partners L.P.	WPZ

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Similar to gathering, the main drivers for treating include a higher natural gas price environment (to spur drilling activity). However, unlike gathering assets, which are immobile and dependent on production growth within a particular region, treating assets are mobile and can be moved in response to shifts in drilling activity. Hence, while broader fluctuations in natural gas supply and demand affect demand for treating, regional exposure is mitigated given the mobility of treating assets. To note, the aforementioned drivers assumes that the natural gas produced requires treating and dehydration to meet pipeline specifications.

**Revenue drivers.** Treating businesses generate 100% fee-based revenue. MLPs typically utilize three types of contracts in the treating business, which include (1) a volumetric fee-based contract based on the amount of gas treated, (2) a fixed monthly operating fee, or (3) a fixed monthly rental fee. Meaningful revenue growth could likely come from acquisitions or the addition of third-party treating contracts.

**Risks.** The primary risk for MLPs with treating assets is a declining natural gas price environment, lower pipeline quality specifications, and the development of supply basins with low CO<sub>2</sub> levels.

**Commodity price sensitivity.** MLPs with treating assets typically do not have direct exposure to commodity prices. However, changes in commodity prices can ultimately affect the partnership’s treating volume. A declining natural gas price environment can cause producers to suspend their drilling operations and/or shut-in wells. A decline in producer drilling activity would likely lower the MLP’s treating volume, resulting in lower cash flow.

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Compression

A compressor is used to compress a volume of product at an existing pressure to a higher pressure to facilitate delivery of the gas from one point to another. Compression is often applied (1) at the wellhead, (2) throughout gathering and distribution systems, (3) into and out of processing and storage facilities, and (4) along intrastate and interstate pipelines. Within the life of a well, pressure eventually falls below the levels of the connecting gathering lines, which causes natural gas to no longer flow into the gathering lines. Compression is applied to the reservoir to facilitate flow from the well. As well pressure changes, adjustments to the amount of compression horsepower are required. Compression operators can provide producers with specialized needs, which potentially can improve production rates and increase volume.

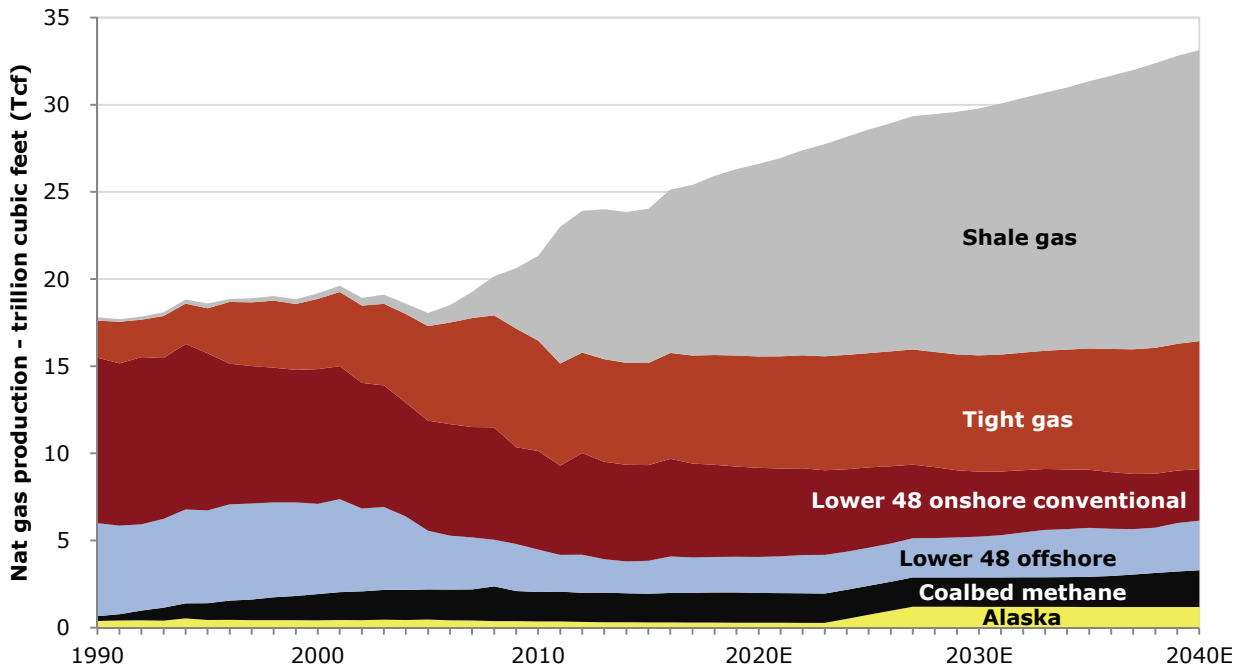
Exhibit 115. MLPs With Compression Businesses

MLP	Ticker
Compressco Partners, L.P.	GSJK
Exterran Partners L.P.	EXLP
Regency Energy Partners L.P.	RGP
USA Compression Partners, L.P.	USAC

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Compression is essential to natural gas production and transportation and less correlated with drilling and exploration activities. Compression growth is driven by the potential increase in production from unconventional natural gas sources (i.e., shale gas and coalbed methane), in our view. Notably, unconventional wells typically produce at lower pressures, which require more horsepower of compression relative to conventional natural gas plays. According to the EIA, shale gas and coalbed methane are expected to account for 57% of total U.S. natural gas production by 2040, versus 42% as of 2011 (latest data available). In addition to growing production from unconventional plays, older natural gas wells require progressively increased compression over time to produce the same volume of gas.

Exhibit 116. U.S. Natural Gas Production By Source, 1990-2040E



Source: EIA and Wells Fargo Securities, LLC

Compressor utilization also depends on producers' views regarding outsourcing. Many producers choose to outsource their compression requirements as the purchase of compression units could be a significant capital investment. Operators would be required to modify and replace compressors to retain efficiency, as well, and pipeline pressures change over time. By outsourcing their compression needs, producers are able to deploy their capital on investments related to their primary business (e.g., development of reserves).

**Revenue drivers.** Compression revenue is driven by the amount of operating horsepower (HP utilization rate) and the rate per HP charged to the customer. Compression MLPs typically generate revenue from a fixed, monthly fee per HP for compression services and may be incentivized to minimize the amount of downtime on the compressor units. These partnerships realize stable, fee-based cash-flow even during periods of limited or disrupted production.

**Commodity price sensitivity.** Because compression providers do not take title to the natural gas they compress, direct exposure to commodity prices and volatility is relatively limited. In addition, fuel to operate compression units is provided by the natural gas producer, which further limits commodity risks. Furthermore, compression demand is driven more by natural gas production and consumption than by exploration activities, which are directly affected by commodity prices.

**Risks.** A decline in natural gas production would negatively affect demand for compression services. In addition, producers' efforts to lower their operating costs in a low natural gas price environment could result in a higher return rate for third-party compressor units.

### Natural Gas Processing

Prior to long-haul transportation, natural gas from the wellhead must often be processed to remove heavier NGL components, or refined to remove impurities in order to meet specifications for pipeline transportation. A natural gas processing plant typically receives non-pipeline quality or "wet" natural gas via a gathering system and separates (1) pipeline quality or "dry" natural gas for transportation on interstate and intrastate natural gas pipelines from (2) raw NGL product mix for transportation on NGL pipelines to fractionation facilities and ultimately, various end markets, including petrochemical plants. For more details on natural gas processing and the NGL value chain, please see section *The NGL Value Chain*.

### Natural Gas Pipelines

**Interstate natural gas pipelines.** Interstate natural gas transportation pipelines in the United States are regulated by the Federal Energy Regulatory Commission (FERC), a government agency. Interstate pipelines transport gas across multiple states and are analogous to the "interstate highways" used for transportation. Natural gas transportation pipelines receive natural gas from gathering systems and other pipelines, and deliver it to industrial end users, utility companies, or storage facilities. Utilities or local distribution companies then distribute the natural gas to residential and/or commercial customers. Throughput in mainline natural gas transportation pipelines tends to be relatively stable due to steady growth in demand for natural gas from the industrial, commercial, electric power sector, and residential end users.

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Exhibit 117. MLPs With Natural Gas Pipeline Assets

MLP	Ticker	Interstate Pipelines	Intrastate Pipelines
American Midstream Partners, L.P.	AMID	✓	✓
Boardwalk Pipeline Partners L.P.	BWP	✓	
Crosstex Energy L.P.	XTEX		✓
El Paso Pipeline Partners L.P.	EPB	✓	
Enbridge Energy Partners L.P.	EEP		✓
Energy Transfer Partners L.P.	ETP	✓	✓
Enterprise Products Partners L.P.	EPD	✓	✓
EQT Midstream Partners, L.P.	EQM	✓	
Kinder Morgan Energy Partners L.P.	KMP	✓	✓
ONEOK Partners L.P.	OKS	✓	✓
QEP Midstream Partners LP	QEPM	✓	
Regency Energy Partners L.P.	RGP	✓	
Southcross Energy Partners, L.P.	SXE		✓
Spectra Energy Partners L.P.	SEP	✓	
Tallgrass Energy Partners, L.P.	TEP	✓	
TC Pipelines L.P.	TCP	✓	
Western Gas Partners L.P.	WES	✓	
Williams Partners L.P.	WPZ	✓	

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** In general, the growth in pipeline volume is closely tied to growth in demand for energy, which tracks GDP growth. Growth can be higher depending on regional demographic growth patterns and expansions. As an example, natural gas pipeline companies should benefit from states (e.g., Florida) constructing natural gas-fired electric generation plants (as opposed to coal-fired plants) to meet increasing demand for electricity. This anticipated increase in electricity demand is related to the expected population growth (related to the retiring Baby Boomer generation) in the Southeast region of the United States. Meaningful growth for MLPs with natural gas pipeline assets can be achieved through the consummation of acquisitions, the construction of new interstate pipelines, and the expansion of existing pipeline systems to new markets or customers.

**Revenue drivers.** Interstate natural gas pipelines predominantly generate fee-based revenue with minimal volumetric risk. New pipelines are generally backed by long-term take-or-pay contracts wherein shippers reserve capacity on the pipeline and pay demand charges independent of whether capacity is actually utilized. A small portion of an interstate pipeline's earnings may vary with volume. Notably, this relates to interruptible services provided to the pipeline's customers that have not reserved capacity on the system. These customers pay usage fees based on the actual volume of natural gas transported, stored, injected, or withdrawn from the pipeline system.

The transportation rate an interstate natural gas pipeline charges a customer can be one of the following: (1) the maximum rate allowable by the FERC, which is based on the pipeline's average cost of providing service, (2) a discounted rate from the maximum rate, (3) a market-based rate, or (4) a negotiated rate between the pipeline and the shipper.

Pipeline operators can also generate incremental revenue through fuel retention margin. Pipelines are typically allowed to recoup fuel transportation costs by retaining a portion of the natural gas transported across pipeline systems. By optimizing its pipeline system (e.g., transporting gas from other parts of the pipeline system at a lower cost), a pipeline operator can generate a small margin by selling the excess gas into the spot market. Therefore, during periods of low natural gas prices and/or low pipeline volume, fuel-retention margin decreases.

**Park and loan services.** Natural gas pipelines can also generate incremental revenue by providing customers with “park and loan” services (this typically requires FERC approval). Pipeline MLPs that offer this service allow the customer to deliver natural gas onto the pipeline system to be held (park) until a future date (e.g., until demand improves). The pipeline customer can also temporarily borrow gas from the pipeline operator (loan) to be paid back at a later date (e.g., in order to meet temporary peaks in demand). By providing “park and loan” services, the pipeline operators are able to help their customers balance their supply and demand needs.

**Risks.** Interstate natural gas pipeline assets have historically been less exposed to economic cycles (i.e., downturns), due to their low cost structure (versus other transporters, such as truck, rail, and barge) and government-regulated tariffs. The primary risks for MLPs with natural gas pipeline assets include (1) a slowdown in economic activity, (2) rising raw material and labor costs, (3) an overbuild of U.S. energy infrastructure, (4) regulatory risk related to allowed rates of return, (5) lower re-contracting rates, (6) a decline in commodity prices (resulting in a decline in drilling activity), and (7) a shift in regional supply sources, which could make certain pipelines less valuable over time.

**Commodity price sensitivity.** In general, interstate natural gas pipeline assets do not take title to the commodity, and hence, commodity price fluctuations have a minimal (if any) direct impact on cash flow. Earnings for interstate natural gas pipelines are typically based on demand charges (similar to rent), or a regulated tariff rate. Longer term, tariffs on interstate pipelines could vary as expiring contracts are renewed at prevailing market-based transportation rates, which would likely be affected by basis differentials and the markets to which the pipeline can provide access.

**Intrastate natural gas pipelines.** Intrastate natural gas pipelines perform essentially the same functions as interstate pipelines (i.e., connect producers to other intrastate or interstate pipelines and end-user markets), except that intrastate pipelines operate within state borders. An intrastate pipeline system generally transports natural gas between many different hubs and points within a particular state. Hence, basis differentials (i.e., the spot cost of transporting gas from one hub to another) among multiple hubs are a key driver of pipeline intrastate segment revenue. Some major trading points within Texas include Katy, Waha, Houston Ship Channel, and Carthage. Many intrastate pipeline operators leave a small amount of open capacity on their systems in order to opportunistically take advantage of high basis differentials.

MLPs that own intrastate pipelines are subject to state regulation based on the locations of their pipelines. Some intrastate pipelines are also subject to limited regulation by the FERC. For example, an intrastate pipeline is allowed to transport gas on behalf of an interstate pipeline or a local distribution company (LDC) that is served by an interstate pipeline without being subject to FERC regulation. However, the pipeline is required to make certain rate and other filings/reports that are in compliance with FERC regulations.

**Natural Gas Storage**

Natural gas storage assets are regulated by the FERC. These assets are an integral part of the natural gas value chain given the linear rate of production throughout the year and the seasonal nature of consumption (i.e., more natural gas is consumed than produced in the winter months, while less natural gas is consumed than produced in the summer months). Thus, natural gas storage acts as a mechanism to balance supply and demand. Customers for natural gas storage include financial institutions, producers, marketers, utilities, pipelines, and municipalities.

**Exhibit 118. MLPs With Natural Gas Storage Assets**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Boardwalk Pipeline Partners L.P.	BWP	Martin Midstream Partners, L.P.	MMLP
Buckeye Partners L.P.	BPL	Niska Gas Storage Partners	NKA
Crestwood Equity Partners, L.P.	CEQP	ONEOK Partners L.P.	OKS
Crestwood Midstream Partners, L.P.	CMLP	PAA Natural Gas Storage L.P.	PNG
Energy Transfer Partners L.P.	ETP	Spectra Energy Partners L.P.	SEP
Enterprise Products Partners L.P.	EPD	Tallgrass Energy Partners, L.P.	TEP
EQT Midstream Partners, L.P.	EQM	Williams Partners L.P.	WPZ

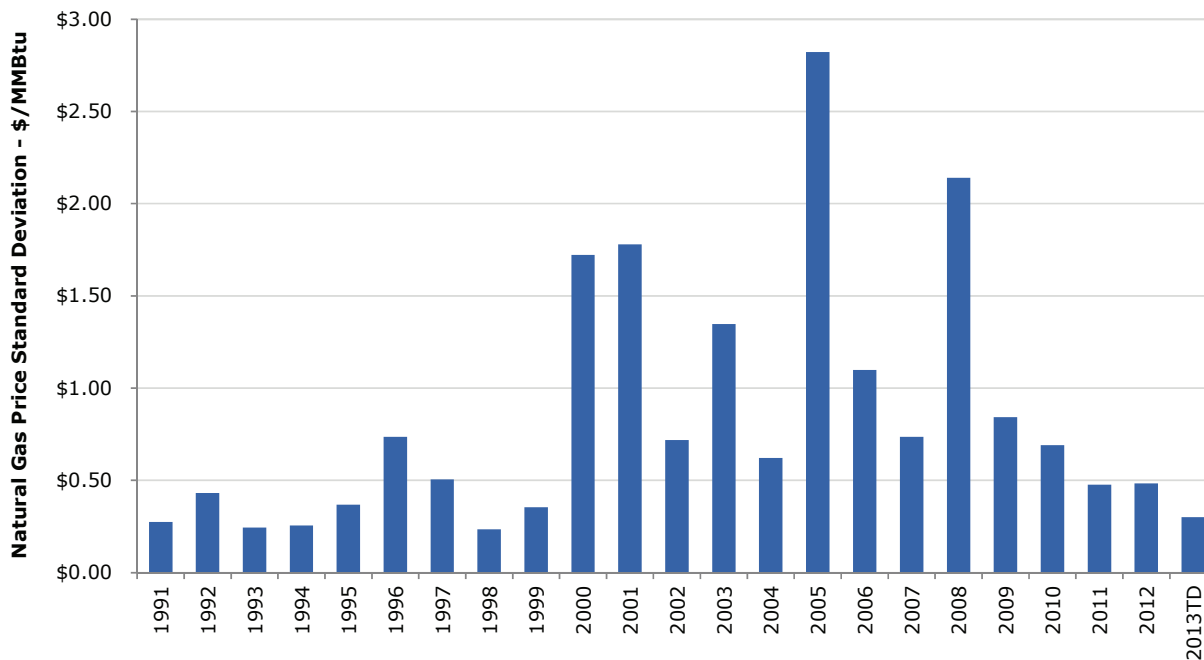
Kinder Morgan Energy Partners L.P. KMP  
Source: Partnership reports and Wells Fargo Securities, LLC

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**Industry and sector drivers.** The following outlines some of the factors that could influence the value of storage, which includes the following:

- **Seasonal spreads.** Winter summer spreads have narrowed over the past couple of years due to the combination of (1) a warmer-than-normal summer and (2) record natural gas production. We believe storage spreads could improve in the long term as natural gas fired electric generation capacity increases, weather returns to normal, and inventory is reduced to more manageable levels.
- **Volatility.** An increase in natural gas price volatility and spreads could enhance the value of storage. Since the 2008 credit crisis, the volatility of natural gas prices has decreased with a reduction in the number of dips and swells. The standard deviation of Henry Hub natural gas prices from 1991 to 2000 and from 2001 to 2010 averaged \$0.95 per MMBtu and \$2.35 per MMBtu, respectively, compared to 2011-2013 to date and 2013 to date averages of \$0.71 per MMBtu and \$0.30 per MMBtu. On an annual basis, standard deviation for natural gas prices peaked in 2005, when the industry saw prices range from \$5.50 to \$15.39 per MMBtu. As noted, volatility increases the value of storage as users can take advantage of price swings to capture arbitrage opportunities.

**Exhibit 119. Historical Natural Gas Price Standard Deviation By Year**



Note: 2013 year-to-date data is through October 22, 2013  
Source: Bloomberg and Wells Fargo Securities, LLC

- **Natural gas consumption patterns.** According to the EIA, U.S. natural gas consumption increased at a CAGR of 1.0% from 2002 to 2012 (to 69.7 Bcf per day from 63.1 Bcf per day). U.S. natural gas consumption is expected to increase at a CAGR of 0.7%, to 80.8 Bcf per day by 2040.
- **Higher peaks for storage.** The peak storage levels for natural gas (which typically occur in the fall) continue to increase, suggesting further demand for storage. This increase in peak storage levels is partly due to the increase in residential use of natural gas as a fuel source, which is highly seasonal. In addition, continued strength in natural gas production, driven by shale development and relatively weak demand, due to the economic environment, have resulted in higher storage levels.

In 2011, 57.7 million (or 50.4%) of U.S. homes used natural gas as their heating source, according to the American Gas Association (AGA), with 55% of newly constructed single-family homes being natural gas-based. This represents a 17% increase since 1995, or a CAGR of 1%. Since 2003, the month of November has been the peak storage month for natural gas, averaging 3.56 Tcf of storage. Further, the total amount of working natural gas in storage peaked at 3.93 Tcf on November 2, 2012.

- **Growth of natural gas-fired electric generation.** Natural gas-fired electric generation continues to increase as a percentage of the total market, implying greater future demand for natural gas and greater potential swings in demand based on seasonal weather patterns (i.e., summer). While coal currently dominates America's power generation source (i.e., 37% in 2012 and 39% for July 2013 to date, and 51% in 2003), the current U.S. administration has made a commitment to finding a power source that releases lower carbon dioxide emissions and is an abundant natural resource. Given its relatively low cost and supply outlook, due to recent shale production, natural gas has the ability to make a significant contribution to America's energy requirements, in our view. To note, natural gas accounted for 30% of total U.S. electricity generation in 2012 versus less than 17% in 2003.
- **Increase in industrial baseload demand.** Over the past three- (2009-2012) and five-year (2007-2012) periods, industrial demand for natural gas has increased at average annual rates of 5.0% and 1.4%, respectively. The growth in demand from the industrial sector likely reflects the boom in domestic natural gas production and the associated cost advantage relative to other fuels, like petroleum and other liquids, electricity, renewables, NGLs, and coal. However, the EIA noted that the mix of industrial fuels changes relatively slowly given the limited capacity for fuel switching in most industries.
- **Increased supply.** U.S. natural gas supply continues to increase, driven by low-cost shale development across North America. According to the EIA, the U.S. natural gas supply is expected to increase to 29.7 trillion cubic feet (Tcf) in 2040 at a CAGR of 0.6%. If production increases faster than demand, this could cause an imbalance between supply and demand, which would increase the value of storage (i.e., lower spot prices and higher futures prices). Alternatively, if natural gas production increases at a rate commensurate with demand, natural gas price volatility could be reduced, decreasing the value of storage. To note, demand for storage could continue to grow modestly even under this scenario as a storage requirements typically increase linearly as the market for a commodity expands.
- **LNG.** An increase in U.S. LNG exports could also increase the demand for storage. According to the EIA, LNG imports are expected to increase at a CAGR of 4.6%, to 5.5 Tcf by 2040 from 1.5 Tcf in 2011.

**Revenue drivers.** For the most part, natural gas storage companies generate a majority of their revenue from long-term fee-based contracts, while a smaller percentage of revenue is derived from short-term fee-based contracts and marketing activities. The main revenue drivers for these MLPs are organic capex investments and third-party acquisitions that would complement the partnership's existing footprint (i.e., provide operational synergies) or provide geographic diversification (i.e., via new and existing development projects). Another avenue for growth is the acquisition of distressed storage assets. These types of assets are likely to consist of either (1) mature, fully developed facilities that are under liquidity constraints and/or (2) development-oriented projects that have encountered financing or geologic or execution challenges.

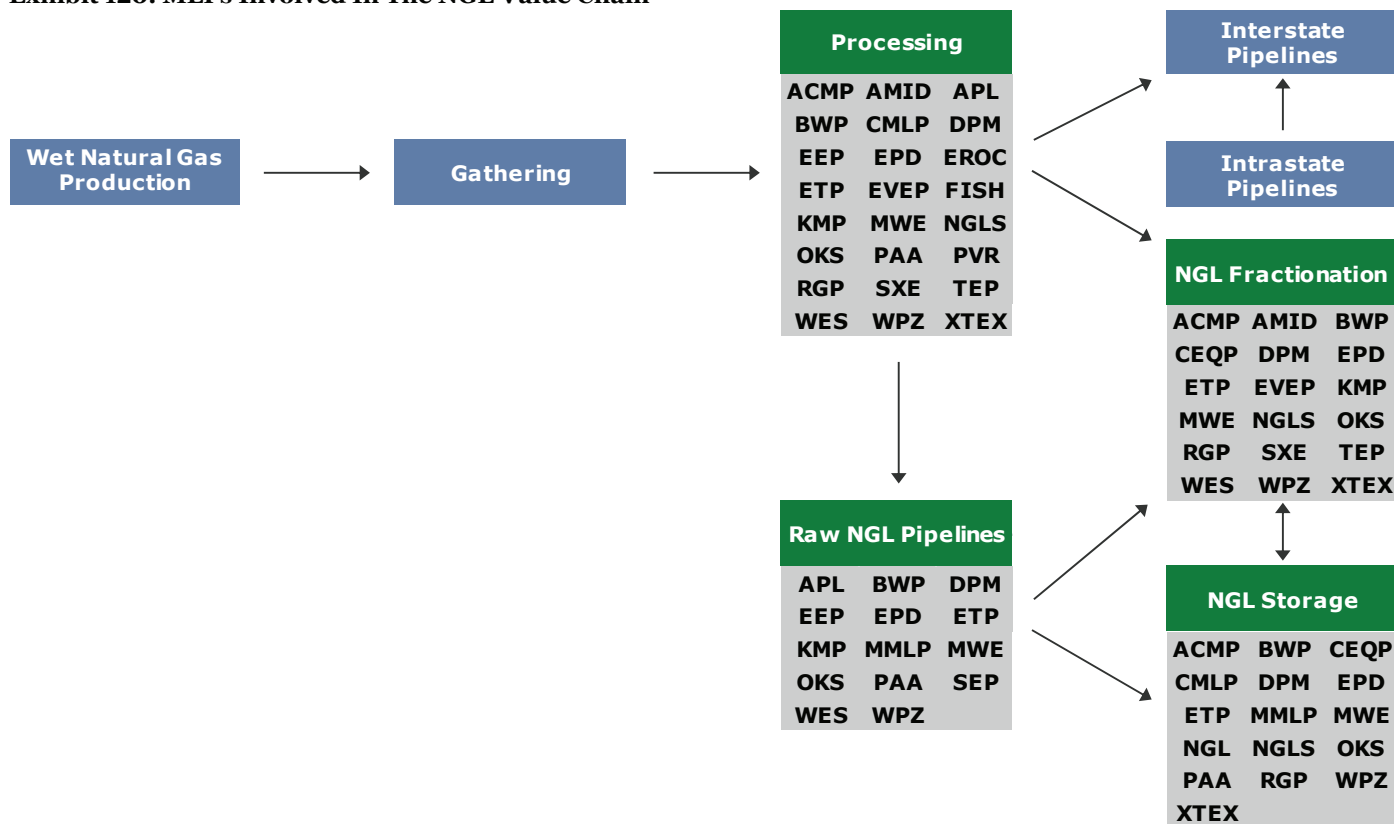
**Risks.** The primary risks for MLPs with natural gas storage assets include (1) narrower seasonal spreads, which reduce the long-term value of storage assets, (2) an overbuild of domestic natural gas storage, (3) lower re-contracting rates, (4) a decline in natural gas prices and volatility, and (4) rising interest rates. Lowering natural gas prices reduces the value of storage, all else being equal, as volatility based on a lower absolute price implies lower absolute margin. A high interest rate environment increases the carrying cost for natural gas storage (i.e., to finance working capital).

**Commodity price sensitivity.** Natural gas storage operators who lease capacity to third parties do not take title to the commodity and hence, have minimal (if any) exposure to commodity prices. A majority of revenue generated from natural gas storage assets is from reservation fees (i.e., demand charges) for the contracted capacity. Natural gas storage assets also generate cycling fees (a variable fee that is not affected by commodity prices) based on the actual volume injected or withdrawn by customers. Thus, natural gas storage rates are not directly affected by a sustained high (or low) commodity price environment. However, natural gas storage operators who hold capacity for their own account are exposed to fluctuations in prices and the shape of the NYMEX futures curve for natural gas. The main driver affecting storage rates is winter-summer natural gas price spreads, which represent the intrinsic value of a storage contract. To note, the winter-summer NYMEX forward spread is the difference between the highest- and lowest-price month for the future April through March period (i.e., 12-month period). Other factors that influence storage pricing include (1) overall natural gas price volatility, (2) the magnitude and duration of storage contracts, (3) the level of service provided (i.e., the number of turns, or maximum allowed injection and withdrawals per season), (4) the type of customer, and (5) location.

**The NGL Value Chain**

Approximately 75% of total NGLs supplied in the United States are derived from domestic natural gas processing (based on 2012 data). The remaining 25% is derived from refining and imports. From start to finish, the process of stripping NGLs from the natural gas stream and transporting fractionated NGL products to end markets or storage encompasses the operations of 28 MLPs under coverage.

**Exhibit 120. MLPs Involved In The NGL Value Chain**



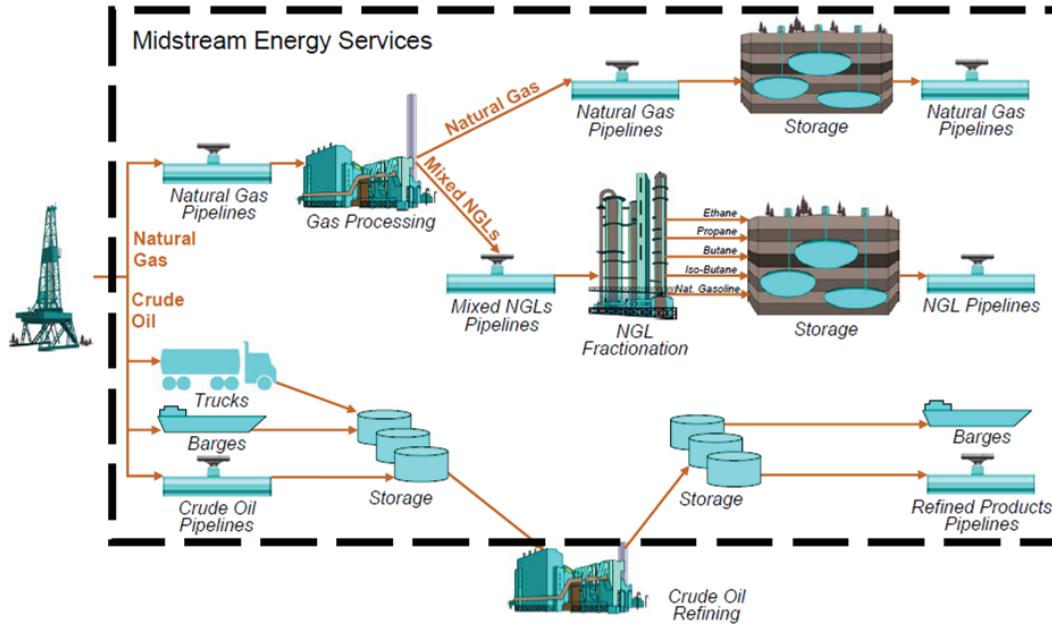
Source: Partnership reports and Wells Fargo Securities, LLC

**Natural gas liquids.** NGLs are hydrocarbons that are found and produced along with natural gas. NGLs are typically separated from the natural gas stream through natural gas processing. NGLs are comprised of five marketable products, which include ethane (C2), propane (C3), butane (C4), iso-butane, and natural gasoline (C5). These products account for 37%, 32%, 11%, 6%, and 14%, respectively, of an NGL barrel at Mont Belvieu, Texas, the largest NGL hub in the United States.

The NGL value chain consists of the following steps:



Exhibit 121. NGL Value Chain



Source: Enterprise Products Partners, L.P.

**Natural Gas Processing**

Prior to long-haul transportation, natural gas from the wellhead must often be processed to remove heavier NGL components or refined to remove impurities in order to meet specifications for pipeline transportation. A natural gas processing plant typically receives non-pipeline quality or “wet” natural gas via a gathering system and separates (1) pipeline quality or “dry” natural gas for transportation on interstate and intrastate natural gas pipelines from (2) raw NGL product mix for transportation on NGL pipelines to fractionation facilities and ultimately, petrochemical plants.

Exhibit 122. MLPs With Natural Gas Processing Assets

MLP	Ticker	MLP	Ticker
Access Midstream Partners, L.P.	ACMP	Kinder Morgan Energy Partners L.P.	KMP
American Midstream Partners, L.P.	AMID	Markwest Energy Partners L.P.	MWE
Atlas Pipeline Partners L.P.	APL	Marlin Midstream Partners, L.P.	FISH
Boardwalk Pipeline Partners L.P.	BWP	ONEOK Partners L.P.	OKS
Crestwood Midstream Partners L.P.	CMLP	Plains All American Pipeline L.P.	PAA
Crosstex Energy L.P.	XTEX	PVR Partners, L.P.	PVR
DCP Midstream Partners L.P.	DPM	Regency Energy Partners L.P.	RGP
Eagle Rock Energy Partners L.P.	EROC	Southcross Energy Partners, L.P.	SXE
Enbridge Energy Partners L.P.	EEP	Tallgrass Energy Partners, L.P.	TEP
Energy Transfer Partners L.P.	ETP	Targa Resources Partners L.P.	NGLS
Enterprise Products Partners L.P.	EPD	Western Gas Partners L.P.	WES
EV Energy Partners L.P.	EVEP	Williams Partners L.P.	WPZ

Source: Partnership reports and Wells Fargo Securities, LLC

**Types of processing methods.** The term “natural gas processing” refers to a number of different processes that occur in the following stages: (1) gas-oil separation, (2) condensate separation, (3) dehydration, (4) nitrogen extraction, and finally, (5) methane separation. Herein, we describe the two main techniques behind the final step in the process, methane separation, which refers to the actual separation of methane (i.e., natural gas) stream from NGL components. A vast majority of the natural gas processing plants in the United States utilize one of the following techniques for methane separation: (1) absorption method or (2) cryogenic expander process.

- **Lean oil absorption.** The lean oil absorption method utilizes specially formulated oils to “absorb” heavier NGL components from the incoming gas stream. As natural gas passes through the absorption tower, NGLs are captured by the absorption oil, which has an affinity to NGLs. The absorption oil is then fed into oil stills, where the mixture is heated above the boiling point of NGLs but below that of oil, separating the NGLs from the absorption oil. This process recovers approximately 75% of butanes, 80-85% of pentanes, and 40% of ethane from the natural gas stream. Higher recoveries can be achieved via the use of refrigerated absorption oil. Nevertheless, this process is inherently less effective at recovering ethane than the cryogenic method, a description of which follows.
- **Cryogenic expansion.** Most modern processing plants utilize the cryogenic expander process to extract NGLs. This process is highly efficient at extracting ethane, with recoveries in the 90-95% range, versus 40% under the absorption method. Cryogenic expansion involves the rapid cooling of natural gas via expansion to approximately negative 120 degrees Fahrenheit. At this temperature, ethane and the other NGL components condense out of the natural gas stream, while methane remains in its gaseous form.

**Types of processing modes.** While processors are obligated to extract heavier NGL components from a producer’s natural gas stream, they are not always required to process ethane. Because ethane is the “lightest” NGL component (i.e., it is the closest in composition to methane), it can be left in the natural gas stream and transported by pipelines. Accordingly, the processing of ethane is a discretionary option available to the processor. Modern processing plants can switch between full processing (ethane is processed) and ethane rejection (ethane is not processed) modes, depending on processing economics.

- **Ethane rejection.** Most modern processing plants have the ability extract heavier NGL components but leave ethane in the natural gas stream when processing economics are unfavorable. This process is known as ethane rejection, as the processor is choosing not to extract ethane and instead, leaving it in the natural gas stream. Ethane rejection usually occurs when the processing margin (specifically, the ethane margin) turns negative or uneconomic (i.e., below a plant’s fixed operating costs). At this point, a processor would likely avoid (if given the option) having to process ethane, as doing so would incur a loss. To note, the remainder of the NGL stream (i.e., propane+) is still processed. Alternatively, when processing economics are favorable (i.e., when ethane is worth more as a distinct product than as part of the natural gas stream), a processor would opt to extract ethane.
- **Conditioning mode.** Some processing plants have the ability to dramatically reduce processing volume for all NGL components under what is known as conditioning. Under a conditioning agreement, a company processes natural gas (typically for a fee) to the minimum extent necessary to meet pipeline specifications. Unlike ethane rejection, when only the processing of ethane is bypassed, conditioning allows a processor to bypass the processing of all NGL components. As a result, overall NGL output is significantly reduced, which allows the processor to minimize commodity exposure during periods of unfavorable processing margin.
- **Full recovery.** Full recovery refers to normal operating conditions when a processing plant is extracting both ethane and the heavier NGL components.

**End products of natural gas processing.** Processing plants accept wet natural gas and produce two primary end products: (1) residue natural gas and (2) raw natural gas liquids, as well as a mixture of byproducts.

- **Residue natural gas.** Residue or dry natural gas refers to the resulting natural gas stream after heavier NGL components have been extracted through processing. Residue natural gas consists primarily of methane and ethane (depending on processing economics) and is suitable for transportation on natural gas pipelines. Most major interstate natural gas pipelines in the United States require natural gas British thermal unit (Btu) values of less than 1,000. In comparison, wet natural gas has a Btu value in excess of approximately 1,100.
- **Raw NGL mix.** Raw NGL mix, or “y” grade, refers to the heavier NGL components that are extracted via natural gas processing. The resulting NGL mix is commingled product consisting of ethane (depending on whether ethane rejection took place), propane, butane, iso-butane, and natural gasoline. It is not until fractionation, the next step in the NGL value chain, that the raw NGL mix is further separated into individual NGL components.
- **Condensate.** Condensate or “lease condensate” refers to a specific portion of the NGL stream. Some of the heavier NGL components (e.g., natural gasoline) exist as a gaseous state only at underground pressures. These molecules will immediately “condense” to a liquid state when brought to atmospheric conditions, hence, the name condensate.
- **Other by-products.** Several important by-products are produced via natural gas processing and natural gas treatment, including Helium, carbon dioxide, and hydrogen sulfide.
- **Helium.** The world’s supply of helium comes almost exclusively from natural gas production, with the United States responsible for 70-80% of overall helium production. Helium is used primarily in magnetic resonance imaging, semiconductor processing, and rocket engine construction by NASA.
- **Carbon dioxide.** In 2004, approximately 6.2 Bcf of carbon dioxide was produced in seven processing plants in the United States. To note, the level of CO<sub>2</sub> produced during natural gas processing is significantly lower than that of fuel oil and coal. According to the EIA, CO<sub>2</sub> emissions total 117 pounds per MMBtu of natural gas, versus more than 200 pounds per MMBtu equivalent of coal. Carbon dioxide produced by natural gas processing is used primarily for support of tertiary-enhanced oil recovery production within the region.
- **Hydrogen sulfide.** Almost all of the world’s supply of elemental sulfur is recovered through the desulfurization of oil and natural gas. According to the U.S. Geological Survey, approximately 15% of U.S. sulfur production is derived from natural gas processing plants. Natural gas and crude oil/condensate high in sulfur content is referred to as “sour”; conversely, natural gas and crude oil light in sulfur content is referred to as “sweet.”

**Industry and sector drivers.** A relatively wide ratio between the price of crude oil and the price of natural gas is incentivizing producers to focus drilling in oil and liquids-rich areas (as opposed to areas with dry natural gas), where economics are more favorable. This has resulted in a slight uptick in processing volume. In addition, this relative price relationship has made natural gas-based ethane the preferred feedstock of the petrochemical industry at the expense of crude-based naphtha, resulting in strong demand for NGLs.

## Revenue Drivers

### Natural Gas Processing Contracts

Natural gas processors generate earnings under three basic types of processing arrangements: (1) keep whole (KW), (2) percentage of proceeds/index/liquids (POP/POL/POI), and (3) fee-based. Exhibit 123 provides a breakdown of estimated processing volume by contract type for MLPs that own gathering and processing assets.

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**Exhibit 123. Breakdown Of Contract Structures And Hedging For MLPs With Processing Assets**

MLP	Ticker	Processing Mix (Margin-Based)			
		Keep Whole	POP / POL	Fee-Based	Other
Access Midstream Partners, L.P.	ACMP	0%	0%	100%	0%
American Midstream Partners, L.P. <sup>1</sup>	AMID	24%	76%	0%	0%
Atlas Pipeline Partners, L.P.	APL	17%	46%	37%	0%
DCP Midstream Partners, L.P. <sup>3</sup>	DPM	5%	40%	50%	5%
Enbridge Energy Partners, L.P.	EEP	15%	80%	5%	0%
Eagle Rock Energy Partners, L.P.	EROC	7%	66%	27%	0%
Energy Transfer Partners, L.P.	ETP	19%	9%	72%	0%
EV Energy Partners, L.P.	EVEP	0%	0%	100%	0%
MarkWest Energy Partners, L.P. <sup>3</sup>	MWE	12%	25%	63%	0%
Targa Resources Partners L.P. <sup>1</sup>	NGLS	21%	43%	3%	33%
ONEOK Partners, L.P.	OKS	3%	63%	34%	0%
PVR Partners, L.P. <sup>1</sup>	PVR	2%	12%	86%	0%
Regency Energy Partners L.P. <sup>3</sup>	RGP	0%	30%	70%	0%
Southcross Energy Partners, L.P.	SXE	0%	90%	10%	0%
Western Gas Partners, L.P. <sup>2</sup>	WES	0%	0%	100%	0%
Williams Partners L.P.	WPZ	33%	3%	64%	0%
Crosstex Energy, L.P.	XTEX	12%	24%	64%	0%
<b>Average</b>		<b>9%</b>	<b>33%</b>	<b>52%</b>	<b>2%</b>
<b>Median</b>		<b>6%</b>	<b>28%</b>	<b>63%</b>	<b>0%</b>

Note 1: Processing contract mix is based on volumes

Note 2: 100% of commodity exposure is eliminated through long-term swap agreements with APC

Note 3: Fee-based percentages include cash flow generated from other fee-based activities (e.g. gathering, fractionation, and transportation)

Source: Partnership reports and Wells Fargo Securities, LLC estimates

- **Fee-based contracts.** The MLP receives a fee for the volume of natural gas that flows through its processing plant. Gross margin is directly related to the volume, not the price, of the commodity flowing through the system and the contracted fixed rate.
- **Percentage-of-proceeds (POP).** The processor gathers and processes natural gas on behalf of producers. The MLP sells the resulting residue gas (dry, pipeline quality gas) and NGLs at market prices and remits to the producer an agreed upon percentage of the proceeds based on an index price. A typical POP contract in the current market would entitle the producer to 90-95% of the proceeds (versus 80% historically) from the sale of natural gas and NGLs through the plant. The remaining 5-10% (versus 20% historically) would be captured by the operator of the processing plant. Accordingly, POP contracts share price risk between the producer and processor. Gross margin increases as natural gas prices, and NGL prices increase and decrease as natural gas prices and NGL prices decrease. A percentage-of-liquids (POL) contract is a type of POP contract where the processor receives only a percentage of the NGLs (and potentially condensate).

**Exhibit 124. General Formula To Calculate Percentage Of Proceed Margin**

Percentage Of Proceeds:	
<b>(+) NGL Proceeds</b>	Gross NGL volume * processor's equity interest = equity NGL volume. Equity NGL volume * realized NGL price = <b>POP NGL proceeds</b>
<b>(+) Residue Gas Proceeds</b>	Gross residue gas volume * processor's equity interest = equity residue natural gas volume. Equity residue gas volume * realized natural gas price = <b>POP residue gas proceeds</b>
<b>(+) Condensate Proceeds</b>	Gross condensate volume * processor's equity interest = equity condensate volume. Equity condensate volume * realized condensate price = <b>POP condensate proceeds</b>
<b>(=) Total POP Margin</b>	

Source: Wells Fargo Securities, LLC estimates

- **Keep-whole (KW).** The partnership gathers natural gas from the producer, processes the natural gas, and sells the resulting NGLs to third parties at market prices. Because the extraction of the NGLs from the natural gas stream reduces the energy (Btu) content of the natural gas, the processor must replace the natural gas (i.e., the shrinkage) that was extracted while processing. The processor either purchases natural gas at the market price to return to the producer, or makes a cash payment to the producer equal to the reduced energy content. Put another way, the processor must keep the producer “whole” on his natural gas that goes in and comes out of the processing plant.

**Risks.** Risks for processors include low or declining NGL prices. In addition, lower oil and gas prices could result in less drilling activity, and therefore, reduced volume for processing.

**Commodity price sensitivity.** Processing economics can be sensitive to both NGL prices and the spread between NGL and natural gas prices. Because the primary processing contracts are POP and keep whole, processors are typically “long” NGLs prices. For keep whole prices, processors benefit when NGL prices are high relative to natural gas prices.

**Fractionation**

NGL fractionation is the process of separating raw NGL mix produced by natural gas processing plants into discrete NGL purity components (i.e., ethane, propane, normal butane, iso-butane, and natural gasoline). Once separated, the liquids serve a variety of purposes primarily in the petrochemical industry.

**Exhibit 125. MLPs With Fractionation Assets**

MLP	Ticker	MLP	Ticker
Access Midstream Partners, L.P.	ACMP	Kinder Morgan Energy Partners L.P.	KMP
American Midstream Partners, L.P.	AMID	Markwest Energy Partners L.P.	MWE
Boardwalk Pipeline Partners, L.P.	BWP	ONEOK Partners L.P.	OKS
Crestwood Equity Partners, L.P.	CEQP	Regency Partners Partners, L.P.	RGP
Crosstex Energy, L.P.	XTEX	Southcross Energy Partners, L.P.	SXE
DCP Midstream Partners L.P.	DPM	Tallgrass Energy Partners, L.P.	TEP
Energy Transfer Partners L.P.	ETP	Targa Resources Partners L.P.	NGLS
Enterprise Products Partners L.P.	EPD	Western Gas Partners, L.P.	WES
EV Energy Partners L.P.	EVEP	Williams Partners L.P.	WPZ

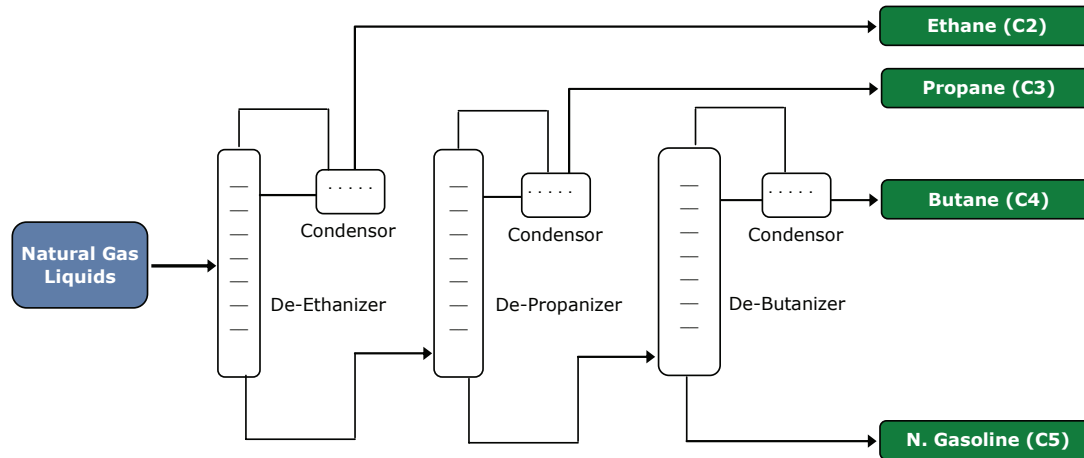
Source: Partnership reports and Wells Fargo Securities, LLC

**Fractionation process.** The fractionation process is accomplished by applying heat and pressure to the mixture of raw NGL hydrocarbons and separating each discrete product at the different boiling points for each NGL component of the mixture. The raw NGL mixture is passed through a specific series of distillation towers: de-ethanizer, de-propanizer, debutanizer, and de-isobutanizer. The name of each of these towers corresponds to the NGL component that is separated in that tower.

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The raw NGL mixture first passes through the de-ethanizer, where its temperature is increased to the point where ethane (the lightest component) boils off the top of the tower as a gas and is condensed into a purity liquid that is routed to storage. The heavier components in the mixture at the bottom of the tower (i.e., propane, butane, iso-butane, and natural gasoline) are routed to the second tower (de-propanizer), where the process is repeated, and the next lightest component (propane) is separated. This process is repeated until the mixture of liquids has been separated into its purity components. End products of NGL fractionation include ethane, ethane/propane mixtures (EP), commercial propane, propane/butane mixtures (LPG), butane, butane/gasoline mixtures, and natural gasoline.

Exhibit 126. Simplified Diagram Of NGL Fractionation Process



Source: Wells Fargo Securities, LLC

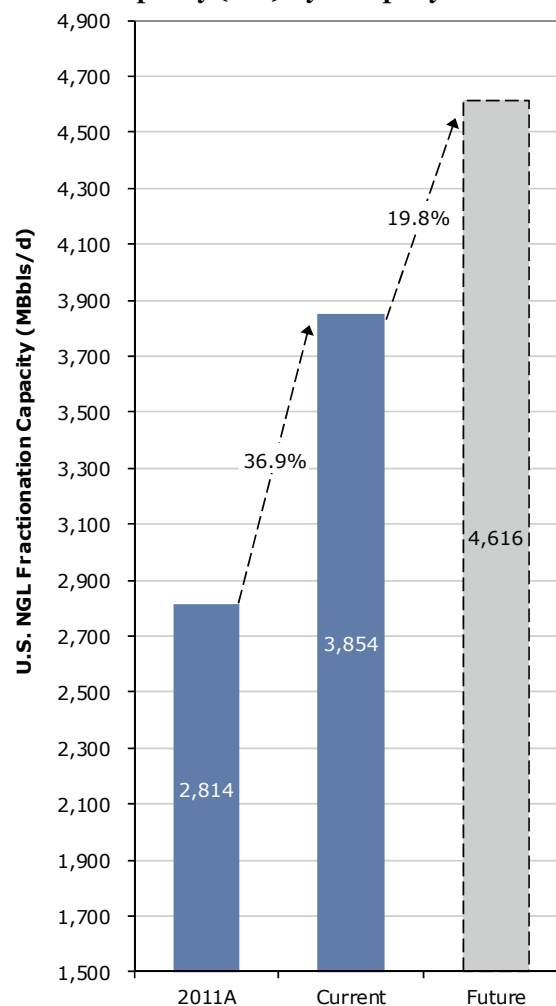
Industry And Sector Drivers

The drivers for fractionation capacity are largely supported by the petrochemical industry’s demand for ethane and propane (the largest components of the NGL barrel), which should continue to benefit from a global cost advantage. Since 2002, the U.S. petchem industry has increased ethane consumption by 20% to 912 MBbls/d (for 2013 year to date) from 760 MBbls/d. We forecast future demand for ethane could increase by an incremental 116 MBbls/d as a result of heavy-to-light conversions, 90 MBbls/d from ethylene capacity expansions/ debottlenecking, and 414 MBbls/d from the construction of six new worldscale crackers. In total, we forecast that U.S. Gulf Coast ethane demand could increase by 621 MBbls/d over the next seven years (i.e., year-end 2018, versus year-end 2012).

Although significant fractionation capacity has been constructed in the past couple of years, we expect incremental frac capacity to be constructed to accommodate growing NGL supplies. In total, we calculate 762 MBbls/d of announced fractionation capacity (20% of current capacity) expansions that are likely to come into service primarily in 2014 and beyond.

**Exhibit 127. Historical And Forecasted U.S. NGL Fractionation Capacity (Net) By Company**

Company Name	Frac Capacity (MBbls/d)		
	2011A	Current	Future
Enterprise Products Partners	669	893	893
ONEOK Partners	556	676	736
Targa Resources Partners	380	485	573
MarkWest	84	160	325
Phillips 66	149	160	160
Williams Partners	112	155	225
ExxonMobil	151	151	151
DCP Midstream (All)	134	150	165
Energy Transfer Partners	1	141	141
CP Chem	116	138	138
Formosa	40	115	115
Crosstex Energy	56	97	197
Promix	73	73	73
Regency Energy Partners	0	60	60
BP	46	58	70
Devon Energy Corp.	40	56	56
Ineos	55	55	55
Kinder Morgan Energy Partners	44	44	44
Enbridge Inc	44	44	44
Fort Chicago	44	44	44
Western Gas Partners	0	43	43
Dominion	0	36	59
Other	13	13	13
Valero Energy	8	8	8
Access Midstream	0	0	66
ConocoPhillips	0	0	25
Energy & Minerals Group	0	0	69
EV Energy	0	0	28
M3 Midstream	0	0	41
<b>Total Frac Capacity</b>	<b>2,839</b>	<b>3,879</b>	<b>4,616</b>



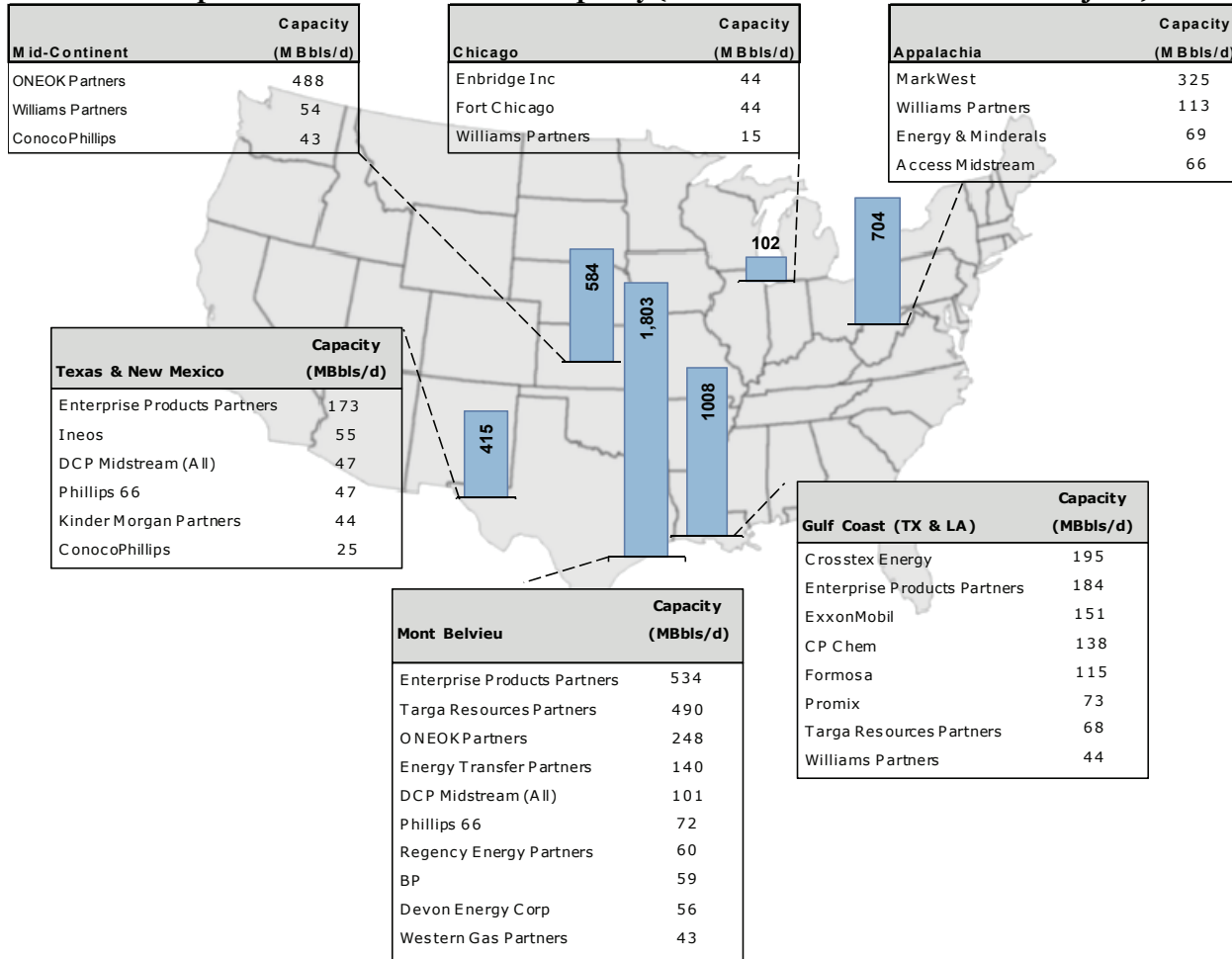
Note: Above exhibits reflect capacity totals based on proportionate share interests in U.S. fractionators

Note: Company reports and Wells Fargo Securities, LLC

Based on the aforementioned expansions, we calculate that U.S. NGL fractionation capacity could increase to 4,616 MBbls/d from 3,854 MBbls/d currently. Exhibit 128 highlights fractionation capacity by region and company, pro forma for all announced expansion projects.

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Exhibit 128. Map Of U.S. NGL Fractionation Capacity (Pro Forma For All Announced Projects)



Source: Partnership reports and Wells Fargo Securities, LLC

Revenue Drivers

NGL Fractionation Contracts

- NGL fractionation contracts are typically fee-based in nature. While direct commodity exposure is minimal, fractionators are typically exposed to volumetric risk. NGL production volume has remained relatively stable over the past ten years. However, there have been periods of time when unfavorable processing economics have forced processors into ethane rejection mode. This serves to rapidly reduce overall NGL volume, as ethane is the largest component of the NGL barrel. As a result, fractionation volume would be adversely affected.
- Due to the tight fractionation market, fractionators are re-contracting for longer terms, with rates doubling and tripling from several years ago. Notably, one prominent market player said it has re-contracted a large portion of its frac capacity under 7-10 year contracts. Enterprise has quoted frac rates of \$0.05-0.07 per gallon, versus rates of \$0.02-0.03 per gallon five years ago. The new contracts are being signed under “frac-or-pay” terms (i.e., customers reserve capacity and pay demand charges regardless of utilization). This replaces a long-standing contract structure, which was predicated on volume movements and spot pricing. We believe the change in contract length and structure is a significant event for the industry and is indicative of the midstream sector’s positive long-term belief in U.S. NGL market fundamentals.

**Risks.** The primary risk to fractionation is reduced utilization of capacity. A reduction in fractionation utilization could be due to lower NGL prices, a change in the relationship between crude oil and natural gas prices, or a weakening economic activity, which would reduce demand for NGL products.



**Commodity price sensitivity.** Fractionation services do not have direct sensitivity to commodity prices as this is typically fee-based. However, a decline in NGL prices is likely to result in less demand for fractionation services, which could reduce the utilization for frac capacity, resulting in reduced revenue and cash flow.

### Liquefied Petroleum Gas (LPG) Export Terminals

Following the fractionation process, some propane and butane are exported in the form of LPGs, which are used primarily as a feedstock for PDH facilities and steam crackers. Although the balance of the LPG mixture is dependent upon the season (i.e., higher propane ratio during winter; higher butane ratio during summer), LPG exports consist mostly of propane. We estimate that propane exports could increase to more than 500 MBbls/d by 2015 from 171 MBbls/d in 2012. Several energy companies have announced propane export projects. In total, we calculate 344 MBbls/d of announced export (43% of current capacity) expansions that are likely to come into service primarily in 2014 and beyond.

#### Exhibit 129. MLPs With NGL Export Facilities

MLP	Ticker
Enterprise Products Partners, L.P.	EPD
Sunoco Logistics Partners, L.P.	SXL
Targa Resources Partners, L.P.	NGLS

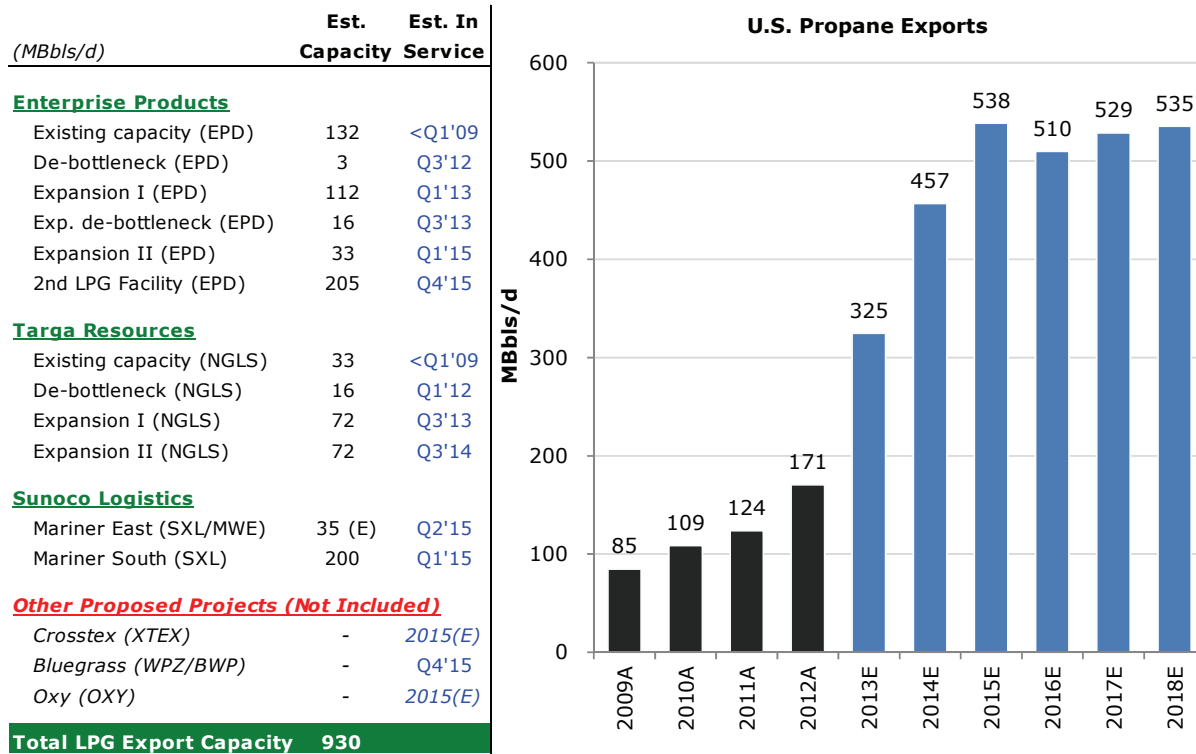
Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** The level of U.S. LPG exports is driven mostly by (1) global propane and butane pricing differentials, which encourage exports over imports, (2) announced or identified expansion projects by midstream companies to significantly expand existing propane export capacity, (3) continued growth in propane and butane supply from fractionation expansions, which ultimately may need to be exported in order to balance U.S. supply and demand, (4) strength of the U.S. Dollar, and (5) global LPG demand.

*Panama Canal Expansion Provides VLGCs With A Shorter Route To Asia.* Notably, an expansion of the Panama Canal is slated for completion in early 2015. The expansion should increase the dimensions of the lock system in the Panama Canal to allow larger ships, including very large gas carriers (VLGC), to use the canal. According to RBN Energy, approximately 80% of VLGCs that carry LPG are currently too large to pass through the Panama Canal; however, these ships should be able to travel through the canal following the completion of the expansion project. Targa indicated that the transit time for a vessel to reach Asia from the USGC is 25 days if the voyage is via the Panama Canal and 41 days if the route is around the southern tip of South America. A 25-day voyage time would enable U.S. exports to reach Asian markets in less time than exports from Western Europe and Western Africa. Given that a shorter voyage time generally implies (1) lower freight costs and (2) less price risk associated with commodity fluctuations during the delivery window, U.S. LPG exports could gain share in the global LPG market and help support growing demand in Asia.

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Exhibit 130. U.S. Propane Export Capacity / Propane Exports – Historical And Forecasted



Source for both exhibits: Company data, EIA, and Wells Fargo Securities, LLC estimates

**Revenue Drivers.** Operators of LPG export facilities derive most of their revenue from take-or-pay agreements, while a smaller percentage of revenue is derived from spot contracts. The monthly cash flow generated by an LPG export facility is dependent upon the number and cargo size of tankers loaded per month, and associated tariff rate per gallon.

**Commodity price sensitivity.** LPG export facilities generate predominantly fee-based cash flow for their operators, and therefore, are not directly exposed to commodity price fluctuations. However, a reduction in global pricing differentials (i.e., lower international LPG prices) or a decrease in global demand (i.e., South America, Europe, and Asia) for LPGs could negatively affect contract rates.

**Risks.** Although owners of LPG export facilities do not take ownership of the product they export, owners of these assets are exposed to risks associated with lower global pricing differentials and the price relative to other petrochemical feedstocks, namely, the impact on long-term re-contracting rates and future volume commitments.

**NGL Pipelines**

NGL pipelines transport (1) raw NGL mix (or unfractionated NGLs) from natural gas processing plants, refineries, and import terminals to fractionation plants and storage facilities, and (2) transport purity NGL products from fractionation facilities to petrochemical plants and other end markets. NGL pipeline volume is typically higher from October to March, due to propane (residential heating) and normal butane (motor gasoline blending) demand.

**Exhibit 131. MLPs With NGL Pipeline Assets**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Atlas Pipeline Partners, L.P.	APL	Markwest Energy Partners L.P.	MWE
Boardwalk Pipeline Partners, L.P.	BWP	Martin Midstream Partners, L.P.	MMLP
DCP Midstream Partners L.P.	DPM	ONEOK Partners L.P.	OKS
Enbridge Energy Partners, L.P.	EEP	Plains All American Pipeline, L.P.	PAA
Energy Transfer Partners L.P.	ETP	Spectra Energy Partners, L.P.	SEP
Enterprise Products Partners L.P.	EPD	Western Gas Partners, L.P.	WES
Kinder Morgan Energy Partners L.P.	KMP	Williams Partners L.P.	WPZ

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** A relatively wide relationship between the price of crude oil and natural gas is incentivizing producers to focus drilling in oil and liquids-rich areas (as opposed to areas with dry natural gas), where economics are more favorable. This has resulted in a slight uptick in processing volume. In addition, this relative price relationship has made natural gas-based ethane and propane the preferred feedstock of the petrochemical industry at the expense of crude-based naphtha, resulting in strong demand for NGLs and pipeline volume growth.

**Revenue drivers.** Most NGL pipelines generate cash flow based on a fixed fee per gallon of liquids transported and volume delivered. Rates charged by intrastate NGL pipelines are regulated by state agencies and are typically contractual fees negotiated between the pipeline and shippers. Rates charged by interstate NGL pipelines are regulated by the FERC. Interstate NGL pipelines could adopt the following ratemaking methodologies:

- **Indexing.** Pipeline operators can charge rates up to a prescribed ceiling, which changes annually based on inflation (as measured by the Producer Price Index for finished goods);
- **Cost of service.** The rate is based on costs incurred by the pipeline to provide transportation service;
- **Settlement rate.** The rate is agreed upon by the pipeline's customers; and
- **Market-based rates.** The rate is established by supply and demand dynamics in a competitive market.

However, as with NGL fractionation, NGL pipeline revenue is driven by volume. (To note, pipeline operators can sometimes secure shipper commitments before a new pipeline is built, which serves to mitigate volumetric risk). During periods of ethane rejection, NGL transportation volume is adversely affected, due to the reduction in ethane volume.

**Commodity price sensitivity.** NGL pipelines generate fee-based revenue, and therefore, do not have direct sensitivity to commodity prices. However, a weak economic environment could reduce demand for NGLs and result in lower volume being transported. In addition, a narrowing of the crude oil-to-natural gas ratio would potentially provide fewer incentives for producers to drill for liquids-rich natural gas, which could reduce the amount of NGLs produced by gathering and processing plants.

**Risks.** NGL transportation volume can decline if demand for NGLs decreases, which would likely occur if there is a slowdown in the economy. In addition, a narrowing of the crude oil and natural gas price ratio could make crude-based naphtha more attractive as a feedstock to the petrochemical industry relative to natural gas-based ethane, which could result in lower NGL volume. Finally, NGL pipeline volume can decrease during periods of ethane rejection.

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**NGL Storage**

NGLs are stored in large underground caverns formed out of geological salt domes. Storage facilities are typically capable of handling mixed NGLs, individual NGL products, and other petrochemical products. NGL products are distributed to customers such as petrochemical manufacturers, heating fuel users, refineries, and propane distributors.

NGLs are stored and priced in two main hubs: Mont Belvieu, Texas and Conway, Kansas. Mont Belvieu is the larger of the two and is the price reference point for North American NGL markets. Storage capacity at this hub is highly valuable because Mont Belvieu is located near the Gulf Coast, where most of the U.S. petrochemical companies (primary users of NGLs) are located.

**Exhibit 132. MLPs With NGL Storage Assets**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Access Midstream Partners, L.P.	ACMP	Markwest Energy Partners L.P.	MWE
Boardwalk Pipeline Partners L.P.	BWP	Martin Midstream Partners L.P.	MMLP
DCP Midstream Partners L.P.	DPM	NGL Energy Partners, L.P.	NGL
Crosstex Energy L.P.	XTEX	ONEOK Partners L.P.	OKS
Energy Transfer Partners L.P.	ETP	Plains All American Pipeline, L.P.	PAA
Enterprise Products Partners L.P.	EPD	Regency Energy Partners, L.P.	RGP
Crestwood Equity Partners, L.P.	CEQP	Targa Resources Partners L.P.	NGLS
Crestwood Midstream Partners, L.P.	CMLP	Williams Partners L.P.	WPZ

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Demand for NGL storage decreases in the fall or winter months, when propane inventory is drawn down for heating. Demand for butanes, natural gasoline, denaturant, and diluents are subject to some seasonality (e.g., vehicle miles are higher in the summer and the government air emission restrictions impact when butane is blended with gasoline). Storage contracts are usually awarded based on the operator’s fees, number of pipeline connections available, location relevant to major hubs (i.e., Mont Belvieu and Conway), and operational dependability. Besides MLPs, other storage owners include integrated major oil companies and chemical companies.

**Revenue drivers.** Storage operators derive a majority of their revenue from fee-based contracts, while a smaller amount is generated by throughput fees and optimization and marketing businesses. NGL storage profitability is determined by (1) the amount of the throughput fee, (2) storage capacity under reservation, and (3) the amount of throughput delivered into and withdrawn from storage.

- (1) Fee-based.** The rate is based upon the amount of NGL volume a customer has injected into underground storage. Operators charge fees based upon the number of days a customer has NGL product in storage multiplied by a pre-negotiated storage rate;
- (2) Reservation fees.** Customers have the ability to enter into capacity reservation agreements, which are typically longer term in nature. This gives the customer a guaranteed amount of storage for a period defined under the contract. The operator then collects a reservation fee based upon the customer’s level of storage capacity instead of actual volume stored. If customers exceed their storage capacity, they are charged excess storage fees; and
- (3) Throughput fees.** The fee is in addition and based on the amount of product injected into storage or withdrawn.

In addition to providing third-party services, some operators participate in NGL marketing, which encompasses a broad array of activities, including (1) utilizing NGL pipelines to capture NGL product price differentials between two market centers (i.e., Mont Belvieu and Conway) and (2) using NGL storage facilities to profit from seasonal variances. Because marketing profitability is tied to arbitrage opportunities in the market, cash flow can be variable. Most MLPs that participate in NGL marketing do so to optimize the value of their NGL assets and do not view it as a steady source of cash flow to fund distributions.

**Commodity price sensitivity.** Storage revenue is fee-based and therefore, not subject to commodity price volatility. However, reduced basis differentials and volatility could reduce arbitrage opportunities and therefore, reduce utilization of the asset.

**Risks.** While operators do not take ownership to the product they store, NGL storage operators are exposed to risks associated with lower NGL prices, basis differentials, and the price relative to natural gas. Operating margin typically declines during periods of narrow basis differentials between Mont Belvieu and Conway, which decreases optimization opportunities and NGL volume.

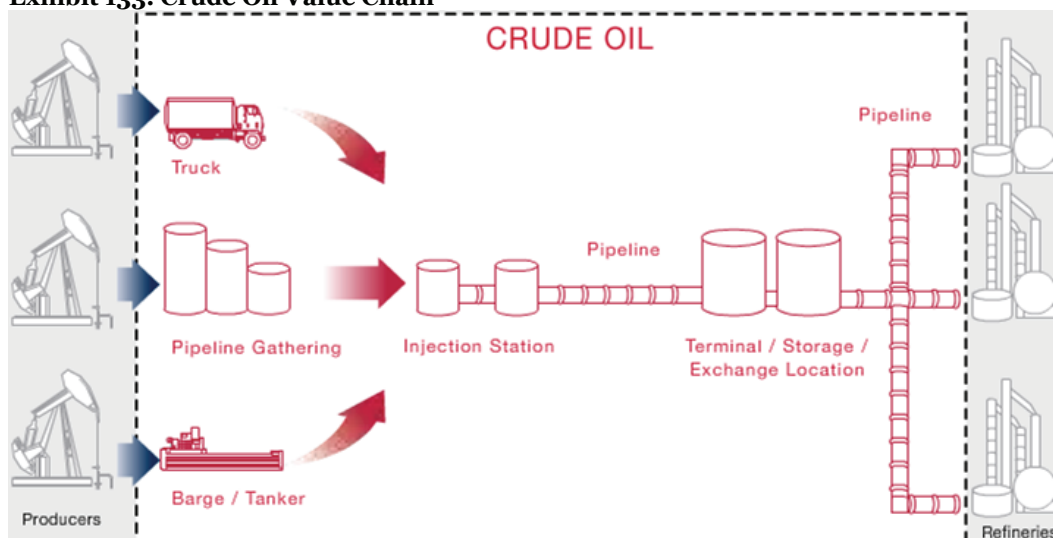
### NGL Marketing Contracts

NGL marketing encompasses a broad array of activities, including (1) utilizing NGL pipelines to capture NGL product price differentials between two market centers (i.e., Mont Belvieu and Conway) and (2) using NGL storage facilities to profit from seasonal variances. Because marketing profitability is tied to arbitrage opportunities in the market, cash flow can be variable. Most MLPs that participate in NGL marketing do so to optimize the value of their NGL assets and not as a source of cash flow through which to fund distributions.

### The Crude / Petroleum Products Value Chain

Crude oil is first collected from the wellhead via gathering lines, truck, and rail, or from import terminals and transported via pipeline to refineries. Once at the refinery, crude oil is turned into different refined petroleum products such as gasoline, diesel, jet fuel, kerosene, and heating oil. Based on annualized 2013 year-to-date EIA data (through July), U.S. refineries consumed almost 5.5 billion barrels of crude oil. Of this amount, we estimate that approximately 49% was sourced domestically, 34% was from waterborne imports, and 17% was imported from Canada. The refined products produced by the refineries are then shipped to various end-use markets via pipelines, barges and tankers, rail, and truck. Pipelines are the most cost-efficient mode of transportation and currently account for the majority of all domestic refined products transportation.

**Exhibit 133. Crude Oil Value Chain**



Source: Plains All American Pipeline, L.P.

### Crude Oil Lease Gathering And Pipelines / Petroleum Pipelines

**Crude oil lease gathering.** Crude oil is collected via gathering lines for onshore domestic production. For production fields that are not near pipelines or have modest production levels, crude oil is gathered via truck and transported to a central point for delivery into the crude pipeline grid.

**Crude oil pipelines.** Crude oil gathering pipelines transport crude from the wellhead to larger mainlines. Regulated main crude oil trunkline systems feed refiners from domestic production, waterborne imports, and Canadian imports. Given the resurgence in North American crude oil production, U.S. refiners are likely to receive an increasing percentage of their crude oil feedstocks via pipelines and less from waterborne imports. Based on annualized year-to-date data from the EIA (through July), U.S. waterborne crude oil imports are on pace to approximate 1.89 billion barrels, which would represent a decrease of 39.3% from 2004 levels of 3.10 billion barrels.

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**Exhibit 134. MLPs With Crude Oil Pipeline Assets**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Blueknight Energy Partners L.P.	BKEP	Phillips 66 Partners, L.P.	PSXP
Delek Logistics Partners, L.P.	DKL	Plains All American Pipeline L.P.	PAA
Enbridge Energy Partners L.P.	EEP	QEP Midstream Partners LP	QEPM
Enterprise Products Partners L.P.	EPD	Rose Rock Midstream, L.P.	RRMS
Genesis Energy L.P.	GEL	Sunoco Logistics Partners L.P.	SXL
Holly Energy Partners L.P.	HEP	Targa Resources Partners L.P.	NGLS
Kinder Morgan Energy Partners, L.P.	KMP	Tesoro Logistics, L.P.	TLLP
Magellan Midstream Partners L.P.	MMP	Western Refining Logistics L.P.	WNRL
MPLX, L.P.	MPLX	Williams Partners L.P.	WPZ
Nustar Energy L.P.	NS		

Source: Partnership reports and Wells Fargo Securities, LLC

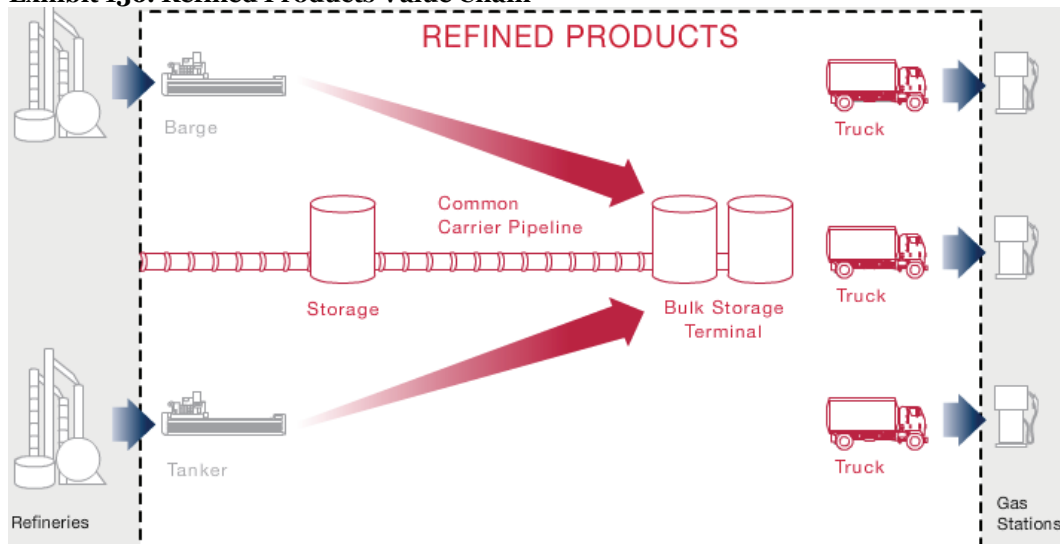
**Refined products pipelines.** Refined products pipelines are regulated common carrier transporters of refined petroleum products, such as gasoline, diesel fuel, and jet fuel. Primary pipeline customers are refiners and marketers of the product being shipped. End-user destinations include airports, rail yards, and terminals/truck racks, for further distribution to retail outlets. Refined product pipeline cash flow is stable based on the relatively inelastic base load demand from end users of gasoline, diesel fuel, etc. However, throughput can exhibit fluctuations depending upon economic cycles.

**Exhibit 135. MLPs With Refined Product Pipeline Assets**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Buckeye Partners L.P.	BPL	Nustar Energy L.P.	NS
Delek Logistics Partners, L.P.	DKL	Phillips 66 Partners, L.P.	PSXP
Enterprise Products Partners L.P.	EPD	Plains All American Pipeline L.P.	PAA
Holly Energy Partners L.P.	HEP	Sunoco Logistics Partners L.P.	SXL
Kinder Morgan Energy Partners L.P.	KMP	Tesoro Logistics, L.P.	TLLP
Magellan Midstream Partners L.P.	MMP	Transmontaigne Partners L.P.	TLP
MPLX, L.P.	MPLX		

Source: Partnership reports and Wells Fargo Securities, LLC

Exhibit 136. Refined Products Value Chain



Source: Plains All American Pipeline, L.P.

**Industry and sector drivers.** Earnings for crude oil and petroleum products pipelines are tied primarily to throughput (volume). Thus, consumer demand for refined products (i.e., gasoline, diesel, and jet fuel) and refinery demand for crude oil are the main drivers of pipeline and trucking volume. The demand for trucking services is driven primarily by (1) producing regions that lack pipeline infrastructure and (2) regional pricing differentials.

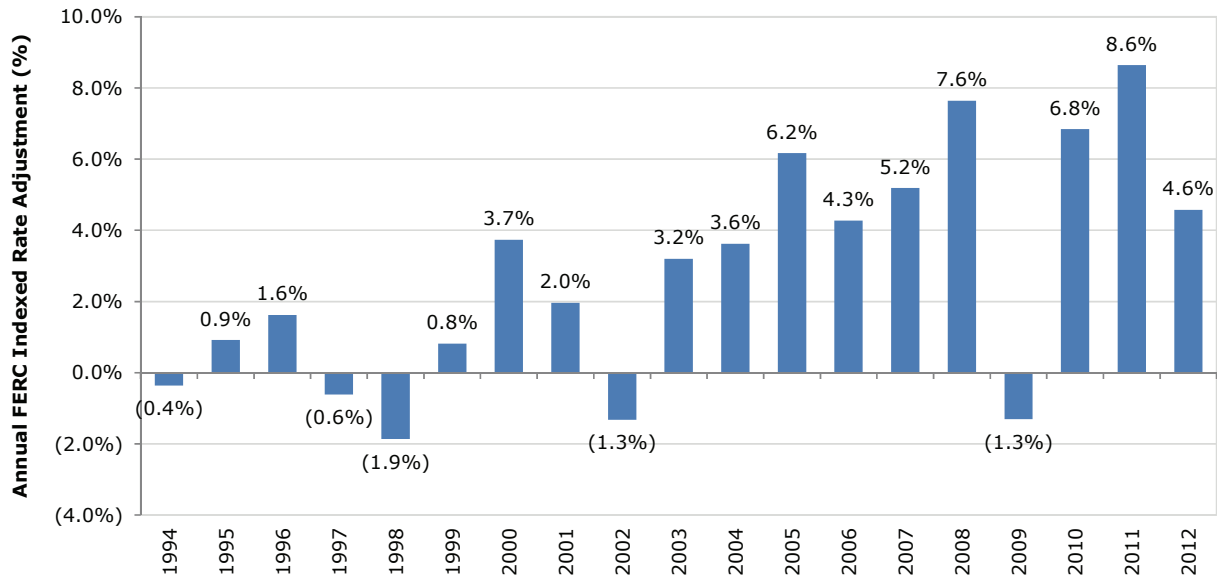
**Revenue drivers.** Crude oil and refined products pipelines are regulated by the FERC. Trucking rates are affected by the availability of regional (lower cost) transportation alternatives (e.g., pipelines and railroads), competitor pricing, and regional pricing differentials.

Pipelines adopt one of the following ratemaking methodologies:

**Indexing.** The maximum rate a pipeline can charge is adjusted annually based on changes in the Producer Price Index (PPI). This indexing methodology was instituted to streamline rate making for pipelines in competitive markets and provide a means of funding pipeline integrity and power costs. The FERC has adopted the use of the Producer Price Index for Finished Goods plus 2.65% (PPI+2.65%) as the annual adjustment to oil and petroleum products pipeline rate ceilings for a five-year period starting July 1, 2011. The FERC reviews this index on a five-year cycle, which commenced in 1996. The following exhibit indicates the historical trend for the actual tariff adjustments based on the index as it progressed from PPI: 1% in 1996 to PPI + 2.65% in 2012.

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Exhibit 137. Annual FERC Index-Based Rate Adjustments



Note: Annual FERC rate adjustments are effective as of the next year starting on July 1. For example, the 2012 annual FERC rate adjustment of 4.6% is effective for the period July 1, 2013, to June 30, 2014.  
Source: FERC and Wells Fargo Securities, LLC

Notably, those pipelines deemed to be in competitive markets are allowed to charge market-based rates. However, the index methodology does tend to set the tone for negotiating rates on a broader basis. The indexing of tariffs can help to insulate oil and products pipeline revenue during periods of inflation. Exhibit 138 highlights the relative exposure of refined products pipeline MLPs to the tariff rate indexing methodology.

Exhibit 138. MLPs With FERC Indexed-Based Pipeline Tariffs

Ticker	Rates Based On:		
	Market	Index	Other
BPL	45%	52%	4%
EEP	0%	40%	60%
EPD	25%	75%	
HEP	--	Mostly	--
KMP	--	Mostly	
MMP	60%	40%	--
MPLX	38%	72%	--
NS	5%	95%	--
SXL	60%	40%	
TLP	--	Mostly	--

Source: Partnership reports and Wells Fargo Securities, LLC estimates



**Cost of service.** Cost of service is a type of ratemaking methodology wherein the pipeline operator has the ability to adjust its tariff in order to generate enough revenue to recover its costs and earn an adequate return on its rate base. At the beginning of each calendar year, a pipeline would set its tariff for the year based on its expectations for volume and operating costs. To the extent that actual volume and/or operating costs differ from projections, costs could be recouped in future years by setting a higher tariff.

- **Settlement rate.** The rate is agreed upon by all shippers on the pipeline.
- **Market-based rates.** The rate is established by supply and demand dynamics in a competitive market. Some crude oil pipelines operate under buy/sell arrangements. The pipeline operator itself will purchase crude at one point on the pipeline and then simultaneously enter into a sales contract for that crude at another point on the pipeline. Crude is typically purchased at a set index price and sold at index plus a margin, effectively locking in a rate for the pipeline operator.
- **Negotiated rates.** For new service, the rate can be a special contractual agreement between the customer and the pipeline.

**Commodity price sensitivity.** In general, MLPs with petroleum pipeline, crude oil pipeline, and trucking assets have minimal direct exposure to commodity prices and provide stable, fee-based cash flow.

**Risks.** Refined product and crude oil demand is closely linked to overall economic growth. A severe economic downturn could reduce the demand for these products, which could result in lower throughput volume.

### Crude Oil / Refined Products Terminals

Terminalling operations provide storage, distribution, blending, and other ancillary services to pipeline systems. Terminals consist of either inland or marine terminals. Inland terminals generally receive product from pipelines or trucks and distribute them to third parties via the terminal's truck racks, where trucks deliver product to commercial, industrial, and retail end-users (e.g., retail gasoline stations). Marine terminals, usually located near refineries, are large storage and distribution facilities that handle crude oil or refined petroleum products. Terminal cash flow is typically affected by the number of petroleum products stored, which, in turn, are dependent upon petroleum product pipeline throughput, as well as the amount of blending activity that takes place at the facility. Crude oil terminal operators may use terminals as a natural extension of their pipeline system or may actively seek terminal throughput from third parties. When seeking volume from third parties, terminal cash flow is more subject to the operational expertise of the terminal operator or marketer. There are also terminalling facilities that handle products other than crude oil, natural gas, and refined products. These other products include asphalt, petrochemicals, industrial chemicals, vegetable oil products, coal, petroleum coke, fertilizers, steel, ore, and other dry-bulk materials.

### Exhibit 139. MLPs With Crude Oil And Refined Products Terminals

MLP	Ticker	MLP	Ticker
Blueknight Energy Partners L.P.	BKEP	NGL Energy Partners, L.P.	NGL
Buckeye Partners L.P.	BPL	Nustar Energy L.P.	NS
Delek Logistics Partners L.P.	DKL	Oiltanking Partners L.P.	OILT
Enbridge Energy Partners L.P.	EEP	Phillips 66 Partners, L.P.	PSXP
Enterprise Products Partners L.P.	EPD	Plains All American Pipeline L.P.	PAA
Genesis Energy L.P.	GEL	Rose Rock Midstream L.P.	RRMS
Global Partners L.P.	GLP	Sunoco Logistics Partners L.P.	SXL
Holly Energy Partners L.P.	HEP	Tesoro Logistics, L.P.	TLLP
Kinder Morgan Energy Partners L.P.	KMP	Transmontaigne Partners L.P.	TLP
Magellan Midstream Partners L.P.	MMP	Western Refining Logistics L.P.	WNRL
Martin Midstream Partners L.P.	MMLP	World Point Terminals L.P.	WPT
MPLX, L.P.	MPLX		

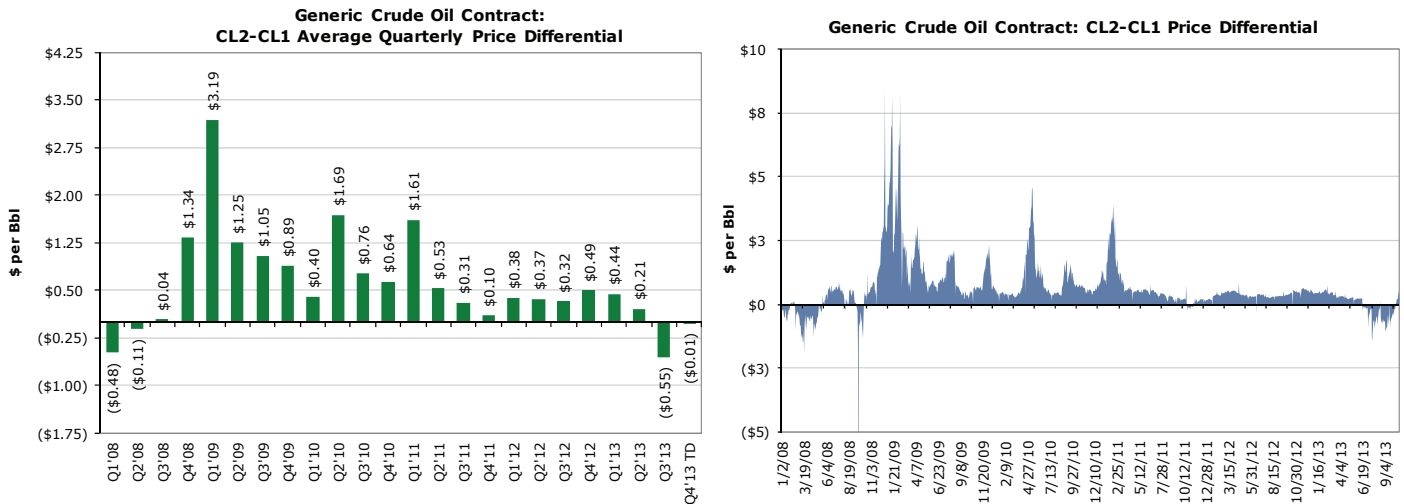
Source: Partnership reports and Wells Fargo Securities, LLC

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**Industry and sector drivers.** MLPs with crude oil and refined products storage typically benefit from periods of steep contango and market volatility. Storage demand is at a premium during periods of high contango spreads (future commodity prices on the NYMEX future curve are greater than spot prices). Hence, market participants can buy crude at spot prices, store the product, and simultaneously sell forward on the NYMEX curve at a higher price, locking in a profit. During periods of backwardation (future commodity prices are lower than spot prices), market participants sell as much product as possible to take advantage current prices. Thus, storage is typically less utilized during periods of market backwardation.

The volatility of crude oil prices also drives storage fundamentals. Wide swings in oil prices and shifts in the shape of the future curve usually lead to increased volume at storage facilities as producers and energy traders try to capture arbitrage opportunities. In addition to contango spreads and price volatility, macroeconomic factors dictate the amount of petroleum products consumed; therefore, volume has historically increased during periods of gross domestic product (GDP) expansion, when the economy uses more energy.

**Exhibit 140. Crude Oil Contango**



Source for chart and graph: Bloomberg and Wells Fargo Securities, LLC

**Revenue drivers.** Operators of terminal and storage assets generate fees from providing storage for crude oil and petroleum products under short- and long-term storage. Storage contracts typically last one year and can provide storage for a few days up to several months. Revenue is generated by charging producers a fixed rate to lease storage capacity. In addition, storage operators receive an incremental fee-based charge, based upon the amount of product moved in and out of the terminal. Storage operators can provide additional services such as blending and additive injection, which are typically margin-based. Terminals are unregulated, and therefore, charge market-based rates.

**Commodity price sensitivity.** Storage operators typically do not take possession of the commodity stored or delivered through their terminal. While a majority of revenue is generated by fee-based contracts, most owners of storage assets reserve an amount of storage for their own, proprietary use in order to take advantage of contango opportunities.

**Propane**

Propane is the only commodity wherein MLPs play a role in virtually every aspect of the energy value chain. MLPs are responsible for (1) gathering and processing wet natural gas production, (2) transporting and fractionating the raw NGL product mix, (3) marketing propane on a wholesale basis, and (4) distributing retail propane to end users. Propane companies are typically denoted as being involved in the final two steps in this value chain: wholesale propane marketing and retail propane distribution.

**Exhibit 141. MLPs With Propane Assets**

<b>MLP</b>	<b>Ticker</b>	<b>Type</b>
Amerigas Partners L.P.	APU	Retail
DCP Midstream Partners L.P.	DPM	Wholesale/Marketing
Crestwood Equity Partners L.P.	CEQP	Wholesale/Marketing
Crosstex Energy, L.P.	XTEX	Wholesale/Marketing
Enbridge Energy Partners, L.P.	EEP	Wholesale/Marketing
Energy Transfer Partners L.P.	ETP	Wholesale/Marketing
Enterprise Products Partners L.P.	EPD	Wholesale/Marketing
Ferrellgas Partners L.P.	FGP	Retail
Global Partners L.P.	GLP	Wholesale/Marketing
Kinder Morgan Energy Partners L.P.	KMP	Wholesale/Marketing
Martin Midstream Partners L.P.	MMLP	Wholesale/Marketing
NGL Energy Partners L.P.	NGL	Retail; Wholesale/Marketing
ONEOK Partners, L.P.	OKS	Wholesale/Marketing
Plains All American Pipeline L.P.	PAA	Wholesale/Marketing
Suburban Propane Partners L.P.	SPH	Retail
Targa Resources Partner L.P.	NGLS	Wholesale/Marketing
Williams Partners, L.P.	WPZ	Wholesale/Marketing

Source: Partnership reports and Wells Fargo Securities, LLC

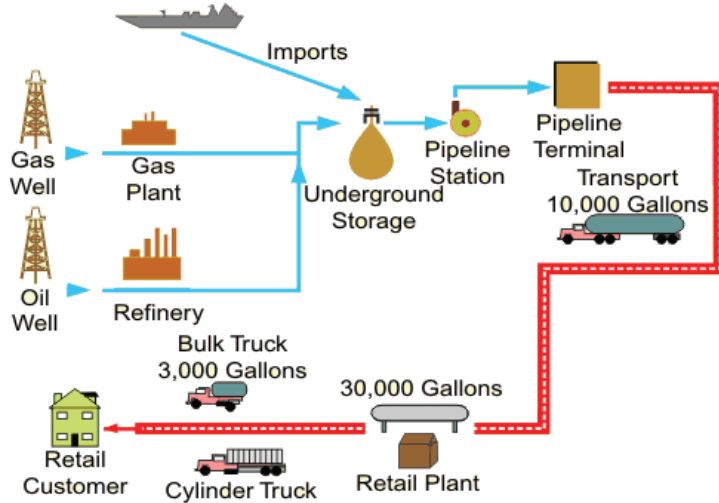
Wholesale propane suppliers generally act as intermediaries that facilitate the purchase of propane by retail distribution companies, petrochemical plants, and large non-residential customers. Wholesale propane businesses procure propane through multiple sources including: (1) directly from processing/fractionation facilities (51% of total propane supply in 2012), (2) refineries (39%), (3) imports (10%), or (4) other NGL marketers.

Retail propane companies purchase propane in bulk from wholesale propane companies and distribute propane via truck to residential, commercial, industrial, and agricultural customers. The largest end users of propane are the petrochemical (31% of total demand in 2012) and residential (26%) sectors. Propane is used as a feedstock in the production of various chemicals and plastics, and for home and water heating. In addition, exports accounted for about 13% of overall propane demand in 2012, with the remaining 30% of demand originating from the industrial, agricultural, and transportation sectors.

Industrial customers use propane primarily as a fuel for forklifts and stationary engines, while agricultural customers use propane for crop drying, tobacco curing, and chicken brooding.

Master Limited Partnerships

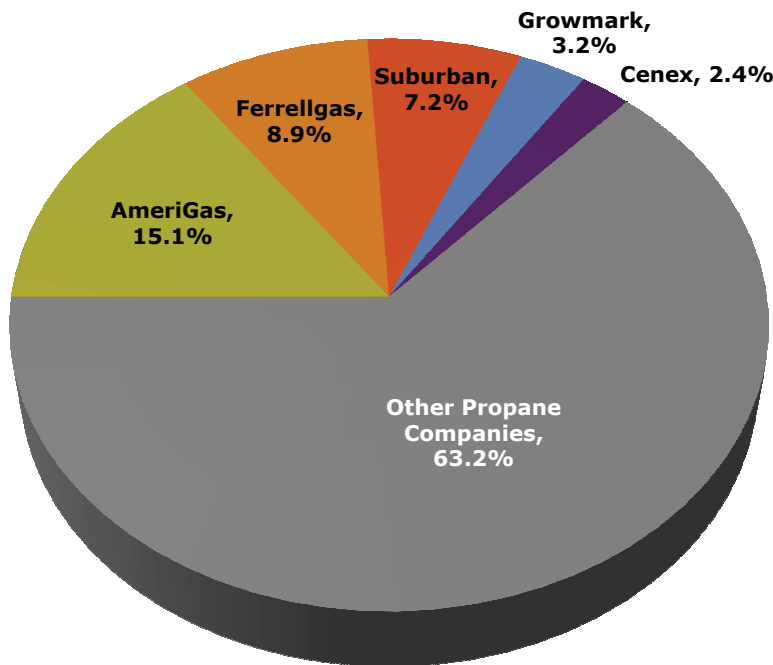
Exhibit 142. Propane Value Chain



Source: EIA

**Industry and sector drivers.** Since the overall long-term growth rate for the retail propane distribution industry is nominal, accretive acquisitions of smaller propane companies are key to enhancing long-term performance. The propane industry remains extremely fragmented, with the top five retailers controlling approximately 37% of the propane market and the remaining 63% made up of companies that each account for less than 1% of the total market. Drivers for the wholesale propane business include incremental domestic supply from frac expansions and new plays (e.g., the Marcellus), and the export market as a growing source of demand.

Exhibit 143. Market Shares Of Propane Distribution Companies



Source: AmeriGas Partners (data as of October 2012)

**Revenue drivers.** Wholesale propane suppliers typically generate revenue by charging customers a fixed margin in excess of the company's floating indexed-based supply cost. For example, a wholesale propane supplier will purchase propane at an index-based cost (e.g., either local index pricing, or Mont Belvieu plus transportation costs) and then market the propane to retail companies at the index-based supply cost plus a fixed margin, hence, generating a fixed margin in the transaction. The margin and amount of propane volume supplied to propane retailers is typically fixed under one-year contracts, with renewals occurring in the spring.

To note, wholesale propane suppliers may elect to market propane to customers under a fixed volume and pricing contract. In this scenario, the wholesale propane supplier enters into offsetting derivative commodity price sensitivity.

Retail propane distributors generate revenue under a similar structure. These companies procure propane from wholesale propane suppliers at a floating index-based price and then pass through the cost of acquiring the propane plus a margin to customers (i.e., retail propane price). In general, declining wholesale propane prices support earnings because retail prices tend to lag costs. Although rising wholesale propane prices can squeeze margin when retail prices lag cost increases, in recent years the changing nature of competition has allowed margin to expand in the face of rising propane prices. In addition, rising retail propane prices can lead to consumer conservation. Under normal circumstances, approximately 70% of annual cash flow is earned during the winter heating season (October through March).

**Risks.** Risks to MLPs with propane assets include warmer-than-normal weather, consumer conservation, economic activity (e.g., housing starts), attrition to less expensive energy sources, and the inability to pass higher costs on to consumers.

- **Conservation.** Although the number of heating degree days has remained essentially flat (i.e., an average annual increase of 0.3%) between 2005 and 2013 (winter heating seasons), we estimate that residential propane demand decreased by approximately 1-2% annually during the same time period. A portion of the variance likely reflects the impact of customer conservation, which has been a persistent challenge to the propane industry for the past several years. Relatively high propane prices and largely warmer-than-normal weather have led many propane customers to reduce thermostat settings and/or delay refilling propane tanks.
- **Market-share loss to natural gas.** Propane competes with several other sources of energy, some of which are less expensive on an equivalent BTU-value basis. While propane enjoys a cost advantage over electricity and fuel oil, natural gas is generally less costly than propane for home heating. Year-to-date 2013, residential heating fuel costs for propane were less expensive than electricity and fuel, by approximately 28% and 19%, respectively, but significantly more expensive than natural gas.
- **Warmer-than-normal winter weather.** The residential market primarily uses propane as a heating fuel and thus, experiences higher demand and prices during the heating season, which typically lasts from October through March. Hence, warmer-than-normal winter weather conditions could have an adverse impact on propane demand.

**Commodity price sensitivity.** On the whole, margin for wholesale and retail propane businesses is not directly affected by commodity price fluctuations given the cost plus margin nature of contracts. However, the ability to maintain margin is contingent on partnerships being able to pass on price increases to customers (i.e., retail distributors on the wholesale side and end-use customers on the retail side). Extremely high propane prices may cause conservation and may expose distributors to higher bad debt expense. Propane distributors tend also to have higher working capital requirements when prices are very high.

Master Limited Partnerships

Marine Transportation

Marine MLPs transport bulk commodities (typically energy products or dry bulk) via tankers, barges, and dry bulk vessels. The majority of these partnerships are probably most comparable in function to Pipeline MLPs in that they transport energy commodities, such as liquefied natural gas (TGP and GMLP), crude oil and refined petroleum products (CPLP), or dry bulk goods (NMM). Dry bulk goods include iron ore, coal, grains, and minor bulk commodities such as steel, fertilizer, and potash. The Offshore group is somewhere between Upstream and Gathering & Processing (FPSOs) and Pipeline (Shuttle tankers) MLPs, while Drilling MLPs are closest to Upstream (E&P) MLPs. To note, there are also MLPs that provide marine services that transport non-traditional refined products, like lubricants, asphalt, fuel oil, sulfur, petrochemical, and commodity specialty products. The primary customers for Marine MLPs include large oil refiners, chemical producers, integrated oil & gas companies, energy marketing companies, commodities traders, and major mining companies. Shipping partnerships are subject to various governmental and industry safety regulations, depending on the type of vessel and location.

Exhibit 144. MLPs With Marine Transportation Assets

Master Limited Partnership	Ticker	Intl. Product Tankers	Domestic Tank Vessels <sup>1</sup>	International Dry Bulk	Liquefied Natural Gas Vessels	Crude Oil Shuttle Tankers
Capital Product Partners L.P.	CPLP	✓		✓		
Enterprise Products Partners L.P.	EPD		✓			
Genesis Energy L.P.	GEL		✓			
Golar LNG Partners L.P.	GMLP				✓	
Knot Offshore Partners L.P.	KNOP					✓
Martin Midstream Partners L.P.	MMLP		✓			
Navios Maritime Partners L.P.	NMM			✓		
NGL Energy Partners L.P.	NGL		✓			
Teekay LNG Partners L.P.	TGP	✓			✓	
Teekay Offshore Partners L.P.	TOO	✓				✓

Note 1: Domestic Tank Vessels includes inland barges  
Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Continued commodity demand growth from emerging markets, infrastructure development, expanding global ton-miles, and broader OECD demand growth typically drive the global shipping markets. The shipping industry is highly fragmented, which lends itself to consolidation. Stringent safety requirements by customers should continue to work to the benefit of larger vessel operators, spawning mergers within the industry. The potential to acquire dock, terminal, storage facilities, and other harbor-based facilities could help to vertically integrate or diversify the business model of vessel operators. Shipping and marine transportation services are typically performed under spot and term contracts set under a competitive bidding process. The rates charged under these contracts can be based either on a daily basis or on a volume-transported basis. The terms and awarding of contracts are based on (1) vessel availability and capabilities, (2) timing of customer's schedule, (3) price, (4) safety record, (5) operator's experience and reputation, (6) vessel quality, and (7) the supply and demand of products being shipped.

Shipping contracts can vary in length depending upon the type of ship and operating market. Most contracts under the MLP (versus corporate) structure are longer term in nature (e.g., LNG contracts are typically under ten-years or more), which provides a shipping MLP with some cash flow stability. These longer-term contracts tend to have escalation clauses whereby certain cost increases such as labor and fuel are passed on to the customer. Shipping is subject to prevailing market trends, which tends to make spot market activity (i.e., for short-term contracts) more volatile. Shipping MLPs, like pipeline MLPs, do not assume ownership of the products shipped. U.S. point-to-point shipping competition is somewhat limited from foreign competitors, due to the *Jones Act*, which restricts such shipping to vessels operating under the U.S. flag, built in the United States, at least 75% owned and operated by U.S. citizens, and manned by U.S. crews. The shipping category encompasses several different MLPs with distinctly different business models and operating environments. These business models include the following:

## International Product Tankers

Product tankers transport refined petroleum products, typically gasoline, jet fuel, kerosene, fuel oil, naphtha, and other soft chemicals and edible oils. The marine transport of petroleum products between receipt and delivery points addresses the demand and supply imbalances for the refined product, which is usually caused by a lack of resources or refining capacity in the consuming country.

**Revenue drivers.** Charter rates are influenced by (1) length of haul; and (2) type of product being transported, while type and availability of vessels needed, in turn, are determined by shifting macroeconomic trends that shape global energy supply and demand patterns, including the following: (1) weather patterns; (2) contango and backwardated petroleum markets; and (3) the level of offshore floating inventory and currency fluctuation. Longer hauls from new refineries in Asia, India, and OPEC should also enhance revenue growth over the long term.

**Commodity price sensitivity.** Like pipeline MLPs, shipping MLPs typically do not take title to the product shipped; therefore, changes in commodity prices have a minimal direct impact on these companies. Shipping MLPs could potentially be indirectly affected by a (sustained) high commodity price environment (on the products transported), which ultimately results in a decrease in the demand for the products shipped (i.e., consumer conservation). Shipping MLPs' earnings are more directly tied to the underlying demand for the product shipped.

## Domestic Tank Vessels

Tank vessels, which include tank barges and tankers, transport gasoline, diesel, jet fuel, kerosene, heating oil, asphalt, and other products from refineries and storage facilities to other refineries, distribution terminals, power plants, and ships. The demand for domestic tank vessels is driven by the U.S. demand for refined petroleum products, which can be categorized by either clean oil (e.g., motor gasoline, diesel, heating oil, jet fuel, and kerosene) or black oil products (e.g., asphalt, petrochemical feedstocks, and bunker fuel). Clean oil demand is primarily driven by vehicle usage, air travel, and weather, while black oil demand is typically driven by oil refinery requirements and turnarounds, asphalt use, use of residual fuel by electric utilities, and bunker fuel consumption.

**Revenue drivers.** Revenue is driven by charter rates and volume shipped, which, in turn, are a function of the supply of vessels and demand for transportation service, both of which are a product of economic activity and regional refinery utilization. Future revenue growth depends on the level of economic activity and a tightening in the supply of tank vessels.

## International Dry Bulk Ships

Dry bulk vessels transport cargoes that consist primarily of major and minor bulk commodities. Major bulk commodities include coal, iron ore, and grain, while minor bulk commodities include steel products, forest products, agricultural products, bauxite and alumina, phosphates, petcoke, cement, sugar, salt, minerals, scrap metal, and pig iron. The demand for dry bulk trade is driven primarily by the demand for the underlying dry bulk products, which are, in turn, influenced by growth in global economic activity.

**Revenue drivers.** Global demand for various commodities will likely continue to affect demand for dry bulk vessels. Drivers influencing trends should include (1) growth in demand from developing countries in Asia (China) and India; (2) expansion of long-haul miles; (3) continued port congestion that reduces vessel supply; (4) weather patterns; and (5) the economy of the major industrial nations of the world.

**Commodity price sensitivity.** Like pipeline MLPs, shipping MLPs typically do not take title to the product shipped; therefore, changes in commodity prices have a minimal direct impact on these companies. Shipping MLPs could potentially be indirectly affected by a (sustained) high commodity price environment (on the products transported), which ultimately results in a decrease in the demand for the products shipped (i.e., consumer conservation). Shipping MLPs' earnings are more directly tied to the demand for the product shipped.

**Risks (International Product Tankers, Domestic Tank Vessels, and International Dry Bulk Ships).** Investments in shipping MLPs can be considered a higher-risk investment relative to pipeline MLPs, due to the following factors: (1) regulatory requirements (e.g., OPA 90 requires single-hulled vessels to be phased out by 2015); (2) short-term nature of contracts/contract rollovers (versus pipeline MLPs); (3) spot market volatility; (4) competitiveness of the contract bidding process; (5) new build risk (i.e., significant up-front capital); (6) decline in demand for shipped products; and (7) potential repeal of the *Jones Act*.

### Liquefied Natural Gas Vessels

Liquefied natural gas (LNG) is transported by specially designed double-hulled ships from producing to growing nations. The vast majority of LNG shipments occur in Europe and Asia. LNG vessels receive liquefied natural gas from liquefaction facilities for transport to re-gasification facilities at the receiving terminal.

**Revenue drivers.** LNG demand is driven by countries that consume significant quantities of natural gas but lack local production and/or pipeline infrastructure to deliver natural gas to its markets. Drivers include (1) weather patterns; (2) price differentials; (3) development of liquefaction and re-gasification facilities; and (4) global economic growth.

**Risks.** Investments in shipping companies that have a spot market orientation can be considered a higher risk investment relative to pipeline MLPs, due to the following factors: (1) regulatory requirements (e.g., OPA 90 requires single-hulled vessels to be phased out by 2015); (2) short-term nature of contracts (versus pipeline MLPs); (3) spot market volatility; (4) competitiveness of the contract bidding process; (5) new build risk (i.e., significant up-front capital); (6) decline in demand for shipped products; and (7) potential repeal of the *Jones Act*. LNG shipping MLPs (specifically TGP) mitigate the above risks by only entering into long-term contracts.

**Commodity price sensitivity.** Like pipeline MLPs, LNG shipping MLPs typically do not take title to the product shipped; therefore, changes in commodity prices have a minimal direct impact on these companies. Shipping MLPs could potentially be indirectly affected by a (sustained) high commodity price environment (on the products transported), which ultimately results in a decrease in the demand for the products shipped (i.e., consumer conservation). However, given the long-term nature of LNG vessel contracts these MLPs are less affected by supply and demand factors.

### Crude Oil Shuttle Tankers And Floating Production And Storage And Offtake Units

Shuttle tankers, which are commonly described as “floating pipelines,” are specially designed ships that transport crude oil and condensates from offshore oil field installations to onshore terminals and refineries. The primary differences between shuttle tankers and conventional crude oil tankers are that shuttle tankers are designed to be used in regions with harsh weather conditions (e.g., the North Sea) and have voyages that are shorter in duration. Floating production and storage and off take (FPSO or FSO) units provide on-site storage for offshore oil field installations. FSOs are secured to the seabed and receive crude oil from the production facility via a dedicated loading system. FSOs transfer crude oil to shuttle and conventional tankers through an export delivery system. Some specialized units (FPSOs) contain facilities that receive the oil production, process it and then store the crude before transferring it to a shuttle tanker for delivery to onshore facility for storage or refining.

**Revenue drivers.** Factors that drive the shuttle tanker sector include (1) the level of offshore drilling activity; (2) the current low level of new builds; and (3) the expansion of offshore drilling in Brazil, Australia, and West Africa.

**Risks.** Investments in shuttle tanker shipping MLPs can be considered a higher risk investment relative to pipeline MLPs, due to the following factors: (1) regulatory requirements; (2) potential spot market volatility; (3) competitiveness of the contract bidding process; (4) oil spills and (5) the natural production decline in mature offshore fields, like the North Sea.

**Commodity price sensitivity.** Like pipeline MLPs, shuttle tanker MLPs typically do not take title to the product shipped; therefore, changes in commodity prices have a minimal direct impact on these companies. In addition, due to the potential for reservoir damage and the cost of shutting-in offshore wells, offshore oil production is generally maintained even during periods of low oil prices. Shipping MLPs could potentially be indirectly affected by a (sustained) high or low crude oil price environment, which ultimately results in an increase or decrease in the demand for the products shipped. However, higher crude oil prices could also stimulate offshore drilling to the benefit of the sector.



## Coal

The universe of coal MLPs consists of three coal producers and two coal royalty businesses. The royalty-oriented partnerships enter into long-term leases that provide the coal operators the right to mine coal reserves on the partnerships' properties in exchange for royalty payments. A coal MLP's royalty payments are based on the volume of coal produced and the price at which it is sold. In addition, since coal royalty MLPs do not operate any of the mines, their operating costs are typically limited to corporate and administrative expenses. The coal-producing MLPs actually mine raw coal, negotiate contract terms, and, in some cases, own the reserves.

### Exhibit 145. MLPs With Coal Assets

MLP	Ticker	Type
Alliance Resource Partners L.P.	ARLP	Operator
Natural Resource Partners L.P.	NRP	Royalty owner
Oxford Resource Partners L.P.	OXF	Operator
PVR Partners, L.P.	PVR	Royalty owner
Rhino Resource Partners L.P.	RNO	Operator

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** The coal industry mines two types of coal, thermal and metallurgical. Thermal coal is used as a fuel source for electricity generation and competes against natural gas, while metallurgical coal (commonly referred to as met coal) is a key raw material used in the production of steel. Thus, the demand and price of coal is driven by a number of factors, both domestic and international.

Domestically, demand is driven by (1) electricity demand because electric utility companies are the primary consumers of coal (more than 90%); (2) the relative price of natural gas and crude oil, as some power producers can alternate their fuel consumption based on the relative price of different fuels; (3) weather, which can influence electricity demand and hydro-electric production; and (4) environmental regulations. The demand for electricity is generally influenced by the following: (1) economic growth; (2) weather patterns; and (3) coal customer inventory trends. Internationally, demand for coal is also influenced by the following: (1) worldwide electricity demand; (2) the value of the dollar; (3) economic growth in developing countries (i.e., China and India); and (4) demand for steel, which, in turn, drives demand for met coal.

### Coal Operator Overview

**Revenue drivers.** Over the intermediate term, coal mine operator revenue is likely to be influenced by (1) electricity demand; (2) demand for met coal from China; and (3) government regulation directed at coal mine operators and electricity utilities (air quality standards).

**Risks.** Risks to coal producer MLPs include the following: (1) coal price volatility; (2) controlling operating costs; and (3) regulatory issues (specifically permitting delays and changing environmental regulations).

### Coal Royalty Model Overview

**Revenue drivers.** Coal royalty-based MLPs revenue drivers are underpinned by the performance of coal mine operators, but tend to be less volatile because they do not incur operational costs. Thus, royalty coal MLPs revenue is driven solely by the price, volume, and production mix (met coal versus steam coal) of its lessees.

**Risks.** Risks to both coal producer and royalty-based MLPs include (1) coal price volatility; (2) operational and geological issues; and (3) regulatory issues (specifically permitting and environmental issues). Risks specific to coal royalty MLPs include (1) reliance on lessees to operate and produce on its reserves (i.e., the rate of production is dictated by the producer); and (2) no direct control over pricing (i.e., lessees negotiate new contracts with utilities and other end users directly).

**Commodity price sensitivity.** MLPs with coal assets directly benefit during periods of high energy commodity prices. Since most coal is sold under long-term (1-3 year) contracts, higher or lower coal spot prices do not immediately affect the majority of realized coal prices. However, when contracts roll over, they are typically renegotiated closer to prevailing spot prices.

**Master Limited Partnerships**

**Upstream (E&P)**

Upstream MLPs are focused on the exploitation, development, and acquisition of oil and natural gas producing properties. These partnerships produce oil and natural gas at the wellhead for sale to third parties. Typically, upstream MLPs do not undertake exploratory drilling, but rather, own and operate assets in mature basins that exhibit low decline rates and long reserve lives (i.e., the focus is primarily on maintaining, rather than increasing, production). Accordingly, these assets require a relatively small amount of capital to fund low-risk development opportunities and have predictable production profiles.

**Exhibit 146. MLPs With E&P Businesses**

<b>MLP</b>	<b>Ticker</b>	<b>MLP</b>	<b>Ticker</b>
Atlas Resource Partners L.P.	ARP	LRR Energy L.P.	LRE
Breitbart Energy Partners L.P.	BBEP	Memorial Production Partners L.P.	MEMP
Constellation Energy Partners	CEP	Mid-Con Energy Partners L.P.	MCEP
Eagle Rock Energy Partners L.P.	EROC	New Source Energy Partners L.P.	NSLP
EV Energy Partners L.P.	EVEP	Pioneer Southwest Energy L.P.	PSE
Kinder Morgan Energy Partners L.P.	KMP	QR Energy L.P.	QRE
Legacy Reserves L.P.	LGCY	Vanguard Natural Resources	VNR
Linn Energy LLC	LINE		

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Upstream MLPs rely predominantly on external financing (debt and equity) in order to fund acquisitions. Thus, access to capital plays a significant role in growth for these companies. In addition, a higher commodity price environment is beneficial to the unhedged portion of upstream MLP production. This excess cash flow can be reinvested to acquire mature reserves and/or to help fund organic growth initiatives, both of which should support additional distribution growth. Other factors affecting sector performance include well results, service costs, rig/crew availability, and the activity level of the acquisition market as acquisitions are the primary driver of growth.

**Revenue drivers.** The main revenue drivers for upstream MLPs are increasing commodity prices, acquisitions, and organic drilling.

**Risks.** Some of the risks associated with investing in upstream MLPs include (1) declining commodity prices, (2) inability to hedge at attractive prices, (3) lack of access to capital markets, and (4) a lack of acquisition opportunities.

**Commodity price sensitivity.** MLPs that own oil and gas assets have the most direct exposure to commodity prices. These partnerships mitigate this exposure by maintaining a rolling 3-4 year hedge program. Typically, upstream MLPs hedge about 70-90% of current production in the near-term. Hedging serves to protect against decreases in commodity prices and hence, supports the consistency of distribution payments. However, a prolonged period of depressed commodity prices could force a partnership to reduce its distribution. Many upstream MLPs target a high coverage ratio in order to partially mitigate this risk. Upstream MLPs also seek to address long-term commodity price and liquidity risk by maintaining conservative debt levels.

## Refining

Currently, there are five MLPs with refining assets that produce traditional refined products and specialty products from the refining of crude oil and other feedstocks. Specialty products include asphalt, lubricating oils, solvents, and waxes that are used as raw material components for basic industrial, consumer, and automotive products. The more traditional fuel products include unleaded gasoline, diesel fuel, propane, and jet fuel. The fuels products' industry uses the 3/2/1 crack spread as a proxy to provide an estimate of the per barrel margin that would be generated assuming that three barrels of crude oil are converted, or cracked, into two barrels of gasoline and one barrel of heating oil.

### Exhibit 147. MLPs With Refining Assets

MLP	Ticker	Type
Alon USA Partners L.P.	ALDW	Traditional
Calumet Specialty Products L.P.	CLMT	Specialty
CVR Refining L.P.	CVRR	Traditional
Martin Midstream Partners, L.P.	MMLP	Specialty
Northern Tier Energy L.P.	NTI	Traditional

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Factors driving the refining sector include (1) crack spreads (i.e., the spread between crude oil input prices and product output prices), (2) the demand for specialty and fuel products, and (3) overall economic activity.

**Revenue drivers.** Refining MLPs' cash flow is subject to commodity price fluctuations (i.e., crude oil). Thus, the MLPs' gross margin is dependent upon the price at which it can sell its specialty products and fuels and the price for crude oil and other feedstocks (i.e., input costs). Revenue drivers for refining companies include complementary and strategic acquisitions and organic growth projects. Some examples of internal growth projects include capacity additions, debottlenecking, and processing unit product mix enhancements.

**Risks.** Some of the risks associated with investing in refining MLPs include (1) rising feedstock prices (i.e., crude oil); (2) demand for fuel, refined products, and specialty hydrocarbon products; (3) alternative/competing products; and (4) unscheduled refinery turnarounds.

## Asphalt

Some MLPs own asphalt refining and/or storage assets. Asphalt is a highly viscous substance produced from crude oil (i.e., the bottom of the barrel), which is predominantly used for road paving. Due to the consistency of asphalt, it is stored in heated terminals and transported via truck, rail, and/or barge, but not pipelines. Approximately 85% of asphalt consumed in the United States is used for road paving and about 10% is used for roofing products (i.e., shingles). The asphalt business is seasonal and must be applied to roads during warm weather conditions. Thus, asphalt companies typically experience higher demand from May to October and build inventory during the colder months (i.e., November through April). The primary market for asphalt is (1) the Department of Transportation (DOT), (2) municipalities, and (3) commercial (e.g., parking lots, weigh stations, and underlayments for rail lines).

### Exhibit 148. MLPs With Asphalt Assets

MLP	Ticker
Blueknight Energy Partners L.P.	BKEP
Delek Logistics Partners L.P.	DKL
Martin Midstream Partners L.P.	MMLP
Nustar Energy L.P.	NS
Western Refining Logistics L.P.	WNRL

Note 1: BKEP, DKL, MMLP, and WNRL own asphalt storage assets

Note 2: NS owns a 50% interest in an asphalt refining joint venture

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Factors that drive demand for asphalt include the pace of federal, state, and local government highway spending, demand for housing, and economic activity. In addition, a reduction in asphalt supplies due to declining imports, lower refinery utilization rates, and increase number of coker projects at refineries can also serve to bolster margins due to a tighter supply and demand dynamic. Coker capacity additions are expected to be one of the main factors driving tighter asphalt supplies. Coker projects allow refineries to produce higher value products (e.g., gasoline, diesel, and jet fuel) from heavier, less expensive crude oils, which reduce aggregate market asphalt supplies.

**Revenue drivers.** MLPs with asphalt storage assets generate predominantly fee-based revenue. The primary revenue driver behind MLPs with this type of asset includes acquisitions and organic growth projects in order to expand handling capacity. Revenue generated from asphalt refining assets is sensitive to commodity price fluctuations. The cash flow profile from asphalt refining assets are usually enhanced via organic capex initiatives that can include improvements in a refinery’s (1) ability to handle more types of crude oil, (2) energy efficiency, and (3) product yields.

**Risks.** The primary risk for MLPs with asphalt storage assets is re-contracting risk. The main risks associated with the MLPs that own asphalt refining assets include (1) volatility of asphalt prices (this includes seasonality), (2) inability to hedge asphalt prices, (3) a slowdown in commercial and residential construction, and (4) declining product yield values.

**Liquefied Natural Gas (LNG)**

LNG describes the process whereby natural gas is transformed from a gaseous to liquid state and shipped via marine tankers to consuming markets. Natural gas is cooled into liquid form at a liquefaction facility and transported via specially designed ships to markets that have insufficient natural gas supplies or limited natural gas pipeline infrastructure. Upon delivery of the LNG to the receiving terminal, the LNG is returned to its gaseous state (i.e., re-gasification). Once re-gasified, the natural gas is stored in specially designed facilities or delivered to natural gas consumers through pipelines.

**Exhibit 149. MLPs With LNG Assets**

<b>MLP</b>	<b>Ticker</b>
Cheniere Energy Partners L.P.	CQP
El Paso Pipeline Partners L.P.	EPB
Energy Transfer Equity, L.P.	ETE
Energy Transfer Partners L.P.	ETP
Kinder Morgan Energy Partners L.P.	KMP

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** The growth in domestic natural gas production, which has largely been driven by the emergence of several liquids-rich producing regions in the United States, has created notable pricing differentials between the United States, and Asia and Europe. As a result, midstream companies are developing LNG export projects to connect U.S. producers seeking higher priced markets with international buyers looking for lower cost natural gas supplies. Other factors influencing the LNG export markets include overall economic growth, global demand for natural gas (i.e., increasing gas fired generation), domestic natural gas production, environmental legislation (i.e., restricting construction of coal fired power plants), and construction of additional liquefaction plants.

As previously noted, there are 32 announced natural gas liquefaction projects located across the United States, of which, four of the projects have received approval from the DOE to export natural gas to countries that do not have a FTA with the United States. Capital investments tied to the three announced LNG export projects could approximate \$31 billion based on our calculations. The construction of announced (and potential) LNG export facilities should stimulate new demand for natural gas and could require additional infrastructure to deliver gas supplies to these facilities.

**Revenue drivers.** MLPs involved in the LNG industry generate predominantly fee-based revenue (e.g., reservation fee contracts) from long-term throughput utilization agreements (TUA). The fees generated from these contracts are typically paid on a monthly basis. The main revenue drivers for these MLPs are organic capex investments and third-party acquisitions that would expand the partnerships’ liquefaction/regasification capacity.

**Risks.** Risks associated with investing in MLPs with domestic LNG assets include the LNG market not developing as quickly as anticipated. For MLPs with regasification assets, lower domestic natural gas prices relative to prices of internationally produced natural gas could have a negative effect on the partnerships' business (MLPs with U.S. liquefaction assets would benefit under this price scenario). On the other hand, MLPs with domestic liquefaction assets could be adversely affected if international natural gas prices are lower than U.S. natural gas prices as it would be uneconomical to ship LNG cargoes to Europe and Asia. In addition, there is some customer concentration risk, as domestic MLPs' existing LNG assets are contracted out to only 3-5 customers.

**Commodity price sensitivity.** Significant declines in domestic natural gas prices (relative to international prices) could make it uneconomical for regasification plants, while lower international gas prices (relative to domestic prices) would likely be uneconomic for U.S. liquefaction facilities. Notably, MLPs with existing LNG assets typically do not take title to the commodity and hence, do not have direct commodity exposure.

**Wholesale Fuel Distribution**

Wholesale fuel distribution MLPs purchase motor fuel from independent refiners and integrated oil companies and sell the fuel (e.g., gasoline, kerosene, fuel oil, refined lubricating oils, and diesel fuel) primarily to retail outlets and commercial customers. To note, the sale of fuel products to end users at the retail level (e.g., gas stations), is not considered MLP qualifying income.

**Exhibit 150. MLPs With Wholesale Fuel Distribution Assets**

<b>MLP</b>	<b>Ticker</b>
Delek Logistics Partners L.P.	DKL
Global Partners, L.P.	GLP
Lehigh Gas Partners L.P.	LGP
Northern Tier Energy L.P.	NTI
Susser Petroleum Partners L.P.	SUSP
Western Refining Logistics L.P.	WNRL

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** The primary driver behind the wholesale fuel distribution business is motor fuel demand, which is influenced by motor fuel prices, economic expansion, population demographics, and geographic factors. On the basis of data from the EIA, U.S. motor gasoline demand has increased at an average annual rate of 0.9% from 1985 to 2012. In addition, motor fuel demand is seasonal and can be influenced by weather.

**Revenue drivers.** Wholesale fuel distributors typically generate revenue by charging customers a margin in excess of the company's rack price. For example, a wholesale fuel distributor purchases motor fuel at the "rack" price (i.e., the refiner's profit on the motor fuel) and then sells the motor fuel to retail outlets at either the "dealer tank wagon" (DTW), or "rack plus" prices. The DTW price includes the cost of the motor fuels to the customer and includes the profit to the wholesale distributor, taxes, transportation, and other costs. Under DTW pricing, the wholesale distributor may also provide additional services to the customers, such as the use branded trademarks and advertising. For rack plus prices, the rack price plus a margin equals the profit to the wholesale distributor, who may charge transportation, taxes, insurance, and other services separately.

**Risks.** The risks associated with MLPs with wholesale fuel distribution businesses include (1) a decline in motor fuel demand (or rising gasoline prices), (2) unscheduled refinery downtime, (3) use of more fuel efficient vehicles, (4) increasing fuel economy standards, and (5) inability to renegotiate supplier/dealer contracts at favorable rates.

**Fertilizer**

Fertilizer MLPs are involved in the production of nitrogen-based fertilizers, which include ammonia, urea ammonium nitrate (UAN), urea, and/or ammonium nitrate. Along with phosphate and potassium, nitrogen plays a vital role in the development and growth of plants. Although these nutrients are naturally found in soil, farming depletes these nutrients, which reduces crop yields. Thus, farmers must use fertilizers to replenish the soil with these nutrients.

**Exhibit 151. MLPs With Fertilizer Assets**

<b>MLP</b>	<b>Ticker</b>
CVR Partners L.P.	UAN
Rentech Nitrogen Partners L.P.	RNF
Terra Nitrogen Company L.P.	TNH

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** The demand for fertilizer is driven primarily by (1) population growth, (2) changes in dietary preferences/requirements (mostly in developing countries), and (3) bio-fuel consumption (e.g. if bio-fuel consumption increases, more fertilizer would be required to increase corn production). As the population of the world continues to grow and urban development increases, the available farm land to produce more food has declined. As a result, more fertilizer is required to increase food production with less available farm land. Although the five largest fertilizer producers control more than 75% of the market share, consolidation opportunities exist. A number of smaller nitrogen fertilizer assets are owned by companies, with fertilizer production not being their core business.

**Revenue drivers.** Fertilizer revenue is dependent upon the pace of economic growth (i.e., fertilizer demand), weather conditions, commodity prices (i.e., natural gas and crude oil are input costs in the production of nitrogen-based fertilizers), crop prices (i.e., historically there has been a positive correlation between grain and fertilizer prices), and transportation costs.

**Risks.** The risks associated with MLPs involved in the fertilizer business include (1) weak economic conditions (i.e., declining fertilizer demand and prices), (2) rising commodity prices, (3) more stringent environmental emission regulations, (4) adverse weather conditions, and (5) a decline in domestic ethanol production.

**Frac Sand**

Frac sand MLPs are involved in the mining of sand deposits through an open-pit bench extraction method (most conventional), which follows the removal of any overlying organic matter (e.g., soil) that is concealing the deposit. Subsequent to the removal of the deposit, the sand is processed in several stages (the number of stages depends upon the sand’s composition and chemical purity) to separate the sand grains that may be bonded together in a larger mass. After the sand grains have been processed, the frac sand is classified by coarseness, with coarser sands being preferred versus finer mesh sizes given their effectiveness in hydraulic fracturing (i.e., creates larger channels for the hydrocarbons to easily flow to the surface). Frac sands are transported to customers via rail, truck, or barge.

Notably, frac sand is one of the three primary types of proppant used in the hydraulic fracturing process. The other two types are resin-coated sand and manufactured ceramic beads, which are both considerably more expensive than frac sand given their higher crush strength.

**Exhibit 152. MLPs With Frac Sand Assets**

<b>MLP</b>	<b>Ticker</b>
Emerge Energy Services L.P.	EMES
Hi-Crush Partners L.P.	HCLP

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** Frac sand demand is driven primarily by horizontal drilling activity and related hydraulic fracturing services, as well as the continued advancement in drilling and completion technologies (i.e., allows for development of unconventional resource formations). The technological improvements in drilling have led to increases in the (1) number of wells drilled per rig, (2) amount of fracturing sites within a well, (3) percentage of horizontal wells relative to vertical wells, and (4) distance/length of horizontal wells. In turn, each of these factors has led to an increase in the need of proppants.

**Revenue drivers.** Frac sand revenue is dependent upon oil and gas producer demand, available supply of high-quality frac sands, and proximity of frac sand deposits to the resource plays underdevelopment. A portion of frac sand MLP revenue can be secured by take-or-pay agreements.

**Risks.** Risks associated with MLPs that own frac sand assets include (1) a change in industry laws and regulations (e.g., more stringent fracking restrictions), (2) a decline in crude oil and natural gas demand (and prices), (3) rising transportation costs, (4) the inability to locate new, high quality frac sand reserves, (5) the development of a cost-competitive alternative to frac sands, and (6) oversupply of frac sand.

## Water Services

Water Services include (1) water supply (i.e., the provision of fresh water to crude oil and/or natural gas producers); and (2) water treatment (i.e., gathering, transportation, treatment, and disposal of wastewater generated from crude oil and natural gas production). The water treatment market predominantly uses the disposal method (i.e., water is discarded into deep injection wells) to handle water used in oil and gas production (an estimated 90% of the water services market uses this technique). The other two primary methods include treatment (about 10%) and the use of evaporation pits (a de minimis amount of the total water services market).

### Exhibit 153. MLPs With Water Services Assets

MLP	Ticker
Crestwood Midstream Partners, L.P.	CMLP
NGL Energy Partners L.P.	NGL
PVR Partners, L.P.	PVR

Source: Partnership reports and Wells Fargo Securities, LLC

**Industry and sector drivers.** The demand for water services is driven primarily by crude oil and natural gas drilling activity (i.e., demand) and related hydraulic fracturing activities.

**Revenue drivers.** MLPs with water service businesses generate revenue by charging a fee per barrel to supply (fresh water), gather, transport, process, and dispose of (wastewater). These companies can also generate incremental revenue by selling recycled water to producers and recovered hydrocarbons (from the process of treating the water) in the open market. Notably, some of these fee-based contracts include either acreage dedications from producers, or volume commitments.

**Risks.** Risks associated with MLPs that provide water treatment services include (1) a change in industry laws and regulations, (2) a decline in crude oil and natural gas demand, (3) rising transportation costs, and (4) increased competition (given low barriers to entry).

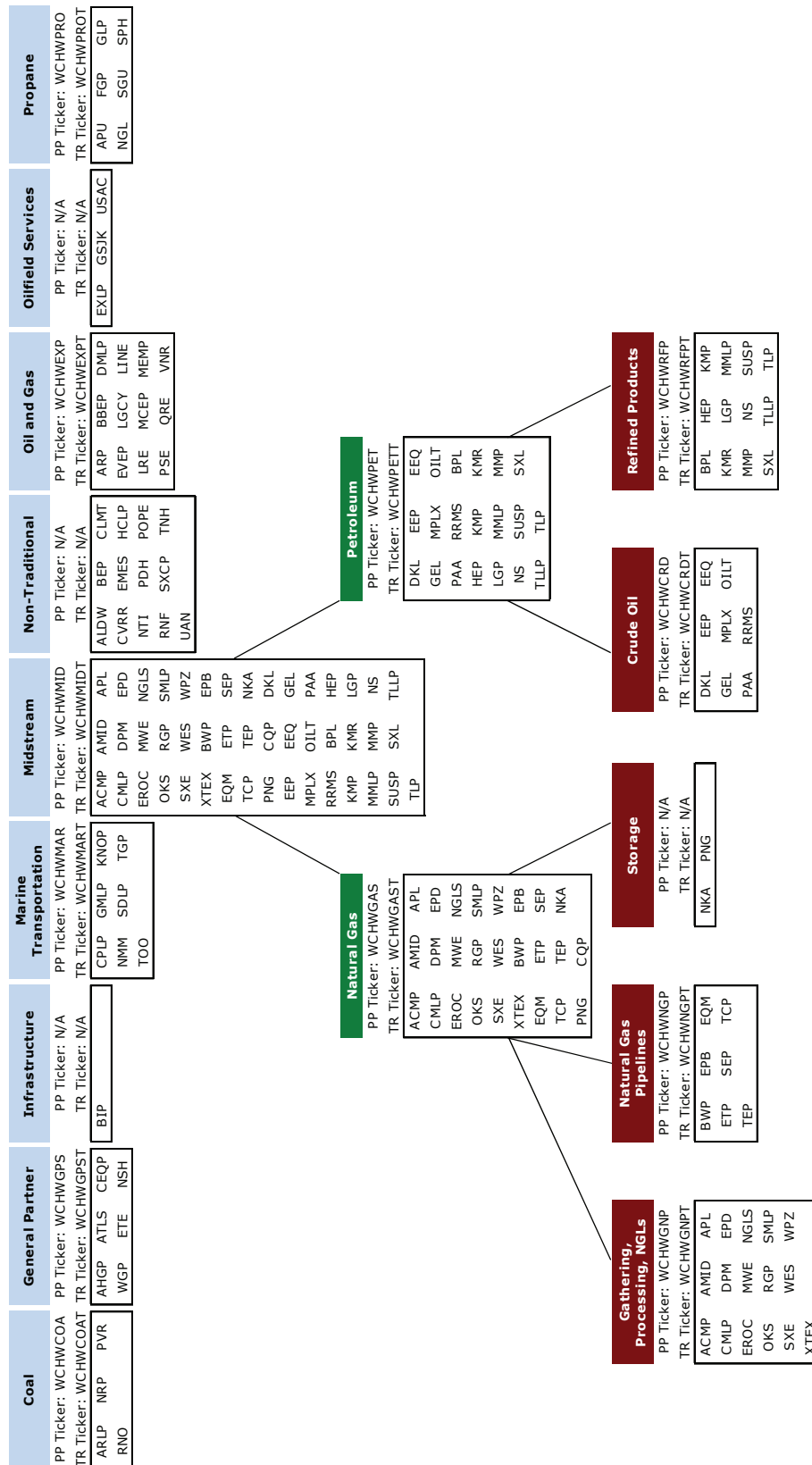
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# Appendix

Master Limited Partnerships

Exhibit 154. Wells Fargo Securities MLP Index Constituents By Industry, Sector, And Subsector



PP = Price Performance  
TR = Total Return  
MLP subsector index quotes are available on Bloomberg  
Source: Standard & Poor's and Wells Fargo Securities, LLC estimates





## Exhibit 156. Estimated Breakdown Of Fee-Based Cash Flow By MLP

		Breakdown of Cash Flow		
Partnership	Ticker	Percentage Fee-based	Percentage Other (i.e. Commodity, Spread, etc.)	
Large Cap Pipeline MLPs	Buckeye Partners, L.P.	BPL	94%	6%
	Boardwalk Pipeline Partners, LP	BWP	97%	3%
	Enbridge Energy Partners, L.P. Class A	EEP	83%	17%
	El Paso Pipeline Partners, L.P.	EPB	100%	0%
	Enterprise Products Partners L.P.	EPD	70%	30%
	Energy Transfer Partners, L.P.	ETP	75%	25%
	Kinder Morgan Energy Partners, L.P.	KMP	81%	19%
	Magellan Midstream Partners, L.P.	MMP	81%	19%
	NuStar Energy L.P.	NS	97%	3%
	ONEOK Partners, L.P.	OKS	77%	23%
	Plains All American Pipeline, L.P.	PAA	63%	37%
	Spectra Energy Partners, LP	SEP	100%	0%
	Sunoco Logistics Partners L.P.	SXL	85%	15%
	Williams Partners L.P.	WPZ	76%	24%
<b>Average</b>		<b>84%</b>	<b>16%</b>	
Small & Mid Cap Midstream	Blueknight Energy Partners, L.P.	BKEP	100%	0%
	Crestwood Midstream Partners LP	CMLP	93%	7%
	Delek Logistics Partners LP	DKL	84%	16%
	Exterran Partners, L.P.	EXLP	100%	0%
	Genesis Energy, L.P.	GEL	36%	64%
	Global Partners LP	GLP	5%	95%
	Holly Energy Partners, L.P.	HEP	100%	0%
	Martin Midstream Partners L.P.	MMLP	70%	30%
	MPLX LP	MPLX	100%	0%
	NGL Energy Partners LP	NGL	25%	75%
	Niska Gas Storage Partners LLC	NKA	81%	19%
	PAA Natural Gas Storage, L.P.	PNG	86%	14%
	Susser Petroleum Partners LP	SUSP	66%	34%
	Tesoro Logistics LP	TLLP	100%	0%
USA Compression Partners LP	USAC	100%	0%	
<b>Average</b>		<b>76%</b>	<b>24%</b>	
Gathering & Processing MLPs	Access Midstream Partners, L.P.	ACMP	100%	0%
	American Midstream Partners, LP	AMID	41%	59%
	Atlas Pipeline Partners, L.P.	APL	42%	58%
	DCP Midstream Partners, LP	DPM	58%	42%
	EQT Midstream Partners LP	EQM	100%	0%
	MarkWest Energy Partners, L.P.	MWE	60%	40%
	Targa Resources Partners LP	NGLS	54%	46%
	PVR Partners, L.P.	PVR	72%	28%
	QEP Midstream Partners LP	QEPM	92%	8%
	Regency Energy Partners LP	RGP	67%	33%
	Southcross Energy Partners, L.P.	SXE	76%	24%
	Western Gas Partners, LP	WES	71%	29%
	Crosstex Energy, L.P.	XTEX	87%	13%
<b>Average</b>		<b>71%</b>	<b>29%</b>	

Note: Excludes hedges

Source: Partnership reports and Wells Fargo Securities, LLC estimates

Continued on next page.

Master Limited Partnerships

		Breakdown of Cash Flow		
		Percentage Fee-based	Percentage Other (i.e. Commodity, Spread, etc.)	
Partnership	Ticker			
Upstream MLPs	Atlas Resource Partners, L.P.	ARP	0%	100%
	BreitBurn Energy Partners L.P.	BBEP	0%	100%
	Eagle Rock Energy Partners, L.P.	EROC	11%	89%
	EV Energy Partners, L.P.	EVEP	0%	100%
	Legacy Reserves LP	LGCY	0%	100%
	Linn Energy, LLC	LINE	0%	100%
	LRR Energy, L.P.	LRE	0%	100%
	Mid-Con Energy Partners, LP	MCEP	0%	100%
	Memorial Production Partners LP	MEMP	0%	100%
	Pioneer Southw est Energy Partners L.P.	PSE	0%	100%
	QR Energy, LP	QRE	0%	100%
Vanguard Natural Resources, LLC	VNR	0%	100%	
<b>Average</b>		<b>1%</b>	<b>99%</b>	
Prop.	AmeriGas Partners, L.P.	APU	0%	100%
	Suburban Propane Partners, L.P.	SPH	0%	100%
<b>Average</b>		<b>0%</b>	<b>100%</b>	
Marine	Capital Product Partners LP	CPLP	100%	0%
	Golar LNG Partners LP	GMLP	100%	0%
	Navios Maritime Partners LP	NMM	100%	0%
	Seadrill Partners LLC	SDLP	100%	0%
	Teekay LNG Partners L.P.	TGP	100%	0%
	Teekay Offshore Partners L.P.	TOO	100%	0%
<b>Average</b>		<b>100%</b>	<b>0%</b>	
Coal	Alliance Resource Partners, L.P.	ARLP	0%	100%
	Natural Resource Partners L.P.	NRP	0%	100%
	Oxford Resource Partners, LP	OXF	0%	100%
<b>Average</b>		<b>0%</b>	<b>100%</b>	
<b>Average</b>		<b>59%</b>	<b>41%</b>	
<b>Median</b>		<b>75%</b>	<b>25%</b>	

Note: Excludes hedges. Including hedges, WES would be approximately 100% fee based.  
Source: Partnership reports and Wells Fargo Securities, LLC estimates



**Master Limited Partnerships**

**Exhibit 158. Historical GP Transactions**

Date	General Partner	Percent Acquired	Price (\$MM)	Buyer	FTM Cash Flow (\$MM)	FTM Multiple Estimate
Mar-96	Buckeye Partners, LP	100.0%	\$63	BMC Acquisition Co. (management)	\$3.4	18.5x
May-99	Suburban Propane Partners, LP	100.0%	\$6	SPH Management	\$1.0	6.2x
Jun-01	Plains All-American Pipeline, LP	56.0%	\$42	Investor Group (including management)	\$3.8	19.7x
Jun-03	Magellan Midstream Partners, LP	100.0%	\$42	Madison Dearborn/Carlyle Riverstone	\$14.3	2.9x
Oct-03	GulfTerra Energy Partners, LP	9.9%	\$88	Goldman Sachs	\$94.0	9.5x
Dec-03	GulfTerra Energy Partners, LP	9.9%	\$89	El Paso Corp	\$94.0	9.5x
Dec-03	GulfTerra Energy Partners, LP	50.0%	\$425	Enterprise Products Partners	\$94.0	9.0x
Dec-03	Natural Resource Partners, LP	52.5%	\$4	Investor Group (including management)	\$2.8	2.7x
Jan-04	Heritage Propane Partners, LP	100.0%	\$30	LaGrange Energy, LP	\$3.0	10.0x
Jan-04	Crosstex Energy, Inc.	23.0%	\$52	Public (IPO)	\$16.7	13.5x
Mar-04	Plains All-American Pipeline, LP	44.0%	\$21	Vulcan Capital	\$15.1	3.2x
Mar-04	Buckeye Partners, LP	100.0%	\$235	Carlyle/Riverstone Global Energy and Power Fund II, LP	\$18.7	12.6x
Nov-04	Northern Border Partners, LP	82.5%	\$175	ONEOK, Inc.	\$13.7	15.5x
Nov-04	Kaneb Pipe Line Partners, LP	100.0%	\$193	Valero, LP	NA	NA
Jan-05	Enterprise Products Partners, LP	9.9%	\$63	EPCO Inc.	\$72.2	8.7x
Feb-05	TEPPCO Partners, LP	100.0%	\$1,100	EPCO Inc.	\$75.7	14.5x
Mar-05	Pacific Energy Partners, LP	100.0%	\$45	Lehman Brothers Merchant Banking Group	\$1.4	32.1x
Jun-05	Inergy Holdings, L.P.	19.6%	\$88	Public (IPO)	\$24.1	18.7x
Aug-05	Plains All-American Pipeline, LP	19.0%	\$81	Remaining 7 GP Owners	\$30.2	14.1x
Aug-05	Enterprise GP Holdings, LP	16.0%	\$398	Public (IPO)	\$105.7	23.6x
Feb-06	Energy Transfer Equity, LP	17.6%	\$507	Public (IPO)	\$228.0	12.6x
Feb-06	Magellan Midstream Holdings, LP	35.1%	\$539	Public (IPO)	\$57.8	26.6x
May-06	Alliance Holdings GP, L.P.	20.0%	\$300	Public (IPO)	\$59.5	25.1x
Jun-06	Pacific Energy Partners, LP	100.0%	\$700	Plains All-American Pipeline, LP	\$26.9	26.1x
Jul-06	Valero GP Holdings, LLC	40.6%	\$380	Public (IPO)	\$54.8	17.0x
Jul-06	Atlas GP Holdings	17.1%	\$83	Public (IPO)	\$24.0	20.2x
Jul-06	Suburban Propane Partners, LP	100.0%	\$76	Suburban Propane Partners, L.P.	\$0.0	NA
Aug-06	Buckeye GP Holdings, L.P.	37.1%	\$179	Public (IPO)	\$23.3	20.7x
Sep-06	TransaMontaigne Partners, L.P.	100.0%	\$345	Morgan Stanley Capital Group (MSCG)	\$14.3	24.1x
Sep-06	Hiland Holdings GP, L.P.	32.4%	\$130	Public (IPO)	\$17.8	22.4x
Dec-06	Penn Virginia GP Holdings, L.P.	17.7%	\$128	Public (IPO)	\$37.7	19.2x
Apr-07	Buckeye GP Holdings, L.P.	63.0%	\$412	ArcLight Capital Partners, Kelso, and Lehman Brothers	\$22.9	28.6x
May-07	TEPPCO Partners, LP	100.0%	\$900	Enterprise GP Holdings, LP	\$48.9	18.4x
Jun-07	Regency Energy Partners, GP	91.0%	\$154	GE Energy Financial Services (GEFS)	\$2.9	58.4x
Sep-07	MarkWest Hydrocarbon	10.3%	\$53	MarkWest Energy Partners, L.P.	\$35.9	20.5x

Source: Company reports and Wells Fargo Securities, LLC estimates

*Continued on next page.*



Date	General Partner	Percent Acquired	Price (\$MM)	Buyer	FTM Cash Flow (\$MM)	FTM Multiple Estimate
Mar-09	Magellan Midstream Holdings, LP	100.0%	\$1,148	Magellan Midstream Partners, L.P.	\$99.0	12.0x
Apr-09	Hiland Holdings GP, L.P.	100.0%	NA	Harold Hamm	NA	NA
May-10	Regency Energy Partners, GP	100.0%	\$300	Energy Transfer Equity, LP	\$15.6	19.2x
Jun-10	Buckeye GP Holdings, L.P.	100.0%	\$1,160	Buckeye Partners, L.P.	\$61.0	22.3x
Aug-10	Inergy Holdings, L.P.	100.0%	\$1,853	Inergy, L.P.	\$98.5	19.7x
Sep-10	Enterprise GP Holdings, LP	100.0%	\$9,123	Enterprise Products Partners	\$369.6	19.9x
Sep-10	Penn Virginia GP Holdings, L.P.	100.0%	\$950	Penn Virginia Resource, L.P.	\$64.3	14.8x
Sep-10	Natural Resource Partners, GP	100.0%	NA	Natural Resource Partners, L.P.	NA	15.1x
Dec-10	Genesis Energy, GP	100.0%	\$673	Genesis Energy, L.P.	\$26.8	25.0x
Oct-11	El Paso Pipeline, GP	100.0%	NA	Kinder Morgan, Inc.	NA	Above Average
Apr-12	Sunoco Logistics, GP	100.0%	\$1,225 (E)	Energy Transfer Partners, LP	\$71.2	17.2x
Jun-12	Chesapeake Midstream, GP	50.0%	\$319 (E)	Global Infrastructure Partners	\$14.5	22.0x
Dec-12	Access Midstream Partners, GP	50.0%	\$765	Williams Companies, Inc.	\$15.9	48.1x
Apr-13	American Midstream, GP	90.0%	NA	ArcLight Capital	NA	NA
Aug-13	Sunoco Logistics, GP	50.0%	\$2,235	Energy Transfer Equity, LP	\$80.4	27.8x
Aug-13	Martin Midstream GP LLC	50.0%	NA	Alinda Capital	NA	NA
Oct-13	Plains GP Holdings, L.P.	19.7%	NA	Public (IPO)	NA	NA
Oct-13	Crosstex Energy, Inc.	70.0%	\$2,476	Devon Energy Corporation	\$138.0	17.9x
<b>Mean Multiple</b>						<b>18.8x</b>
<b>Median Multiple</b>						<b>18.6x</b>

## Notes:

FTM is forward 12 months

Magellan GP value is based on a \$1,082 million total price paid for 54.6% interest in the partnership, which included 100% GP interest and 14.6 million LP, class B, and subordinated units.

Heritage Propane Partners, LP (HPG) is now Energy Transfer Partners, LP (ETP).

Source: Company reports and Wells Fargo Securities, LLC estimates

Master Limited Partnerships

Exhibit 159. States With MLP Large Cap Pipeline Assets

	Large Cap Pipeline MLPs													
	BPL	BWP	EEP	EPB	EPD	ETP	KMP	MMP	NS	OKS	PAA	SEP	SXL	WPZ
Alabama		X	X	X	X	X	X	X	X		X	X		X
Alaska														
Arizona					X	X	X				X			
Arkansas		X	X	X	X	X	X	X	X		X	X		
California	X				X		X		X		X			
Colorado				X	X	X	X	X	X	X	X		X	X
Connecticut	X						X				X			
Delaware		X			X			X			X			X
Florida	X	X	X	X	X	X	X		X		X	X		
Georgia			X	X	X		X	X	X		X	X		X
Hawaii														
Idaho					X		X						X	X
Illinois	X	X	X		X	X	X	X	X	X	X		X	
Indiana	X	X	X			X	X		X	X	X		X	
Iowa					X		X	X	X	X	X			
Kansas			X	X	X		X	X	X	X	X		X	X
Kentucky		X	X		X	X	X			X	X		X	
Louisiana	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Maine					X						X			
Maryland					X		X		X		X		X	X
Massachusetts	X				X									
Michigan	X		X			X	X				X		X	
Minnesota			X		X		X	X	X	X	X			
Mississippi		X	X	X	X	X	X				X	X		X
Missouri	X		X			X	X	X	X	X	X			
Montana			X	X	X					X	X		X	
Nebraska					X		X	X	X	X	X			
Nevada	X					X								
New Hampshire														
New Jersey	X				X		X		X		X		X	X
New Mexico	X				X	X	X		X	X	X		X	X
New York	X		X		X		X		X		X		X	X
North Carolina			X		X		X	X	X		X	X		X
North Dakota			X		X		X	X	X	X	X			
Ohio	X	X			X	X	X				X		X	
Oklahoma		X	X	X		X	X	X	X	X	X	X	X	X
Oregon					X		X		X		X			X
Pennsylvania	X				X		X				X		X	X
Rhode Island					X									
South Carolina			X	X			X	X	X		X			X
South Dakota							X	X	X	X	X			
Tennessee	X	X	X			X	X	X	X	X	X	X		
Texas	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Utah				X	X	X	X				X			X
Vermont					X						X			
Virginia					X	X	X	X	X		X	X	X	X
Washington							X		X		X		X	X
West Virginia					X	X	X				X			
Wisconsin	X		X		X		X	X		X	X			
Wyoming				X			X		X	X	X			X

Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

Exhibit 160. States With MLP Small & Mid Cap Midstream Assets

	Small & Mid Cap Midstream MLPs																						
	BKEP	CMLP	CQP	DKL	GEL	GLP	HEP	LGP	MMLP	MPLX	NGL	NKA	OILT	PNG	PSXP	RRMS	SUSP	TCP	TLLP	TLP	WNRL	WPT	
Alabama					X				X													X	
Alaska																				X			
Arizona					X		X		X										X				
Arkansas	X			X	X				X												X		X
California	X								X			X							X	X			
Colorado	X															X			X	X			
Connecticut						X																	
Delaware																							
Florida					X				X												X		X
Georgia	X				X				X		X										X		
Hawaii																							
Idaho	X						X													X			
Illinois	X				X				X	X	X				X				X				X
Indiana	X				X					X	X								X		X		
Iowa	X				X														X				
Kansas	X				X				X		X					X							
Kentucky					X			X		X											X		
Louisiana			X	X	X				X	X				X	X		X				X		X
Maine						X		X															
Maryland						X																	X
Massachusetts					X			X															
Michigan	X									X				X					X				
Minnesota																			X				
Mississippi					X				X		X										X		
Missouri	X	X			X					X											X		X
Montana	X															X			X	X			
Nebraska	X				X														X				
Nevada	X																		X				
New Hampshire						X		X															
New Jersey	X					X		X															X
New Mexico	X				X		X										X					X	
New York		X			X	X		X															X
North Carolina					X																	X	
North Dakota																X		X	X				
Ohio	X							X		X												X	
Oklahoma	X				X		X				X	X				X	X				X		
Oregon					X														X				
Pennsylvania	X	X			X	X		X		X													
Rhode Island						X																	
South Carolina					X	X																X	
South Dakota																			X				
Tennessee	X				X	X																	X
Texas	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X				X	X	X
Utah	X				X		X		X											X			
Vermont						X																	
Virginia	X				X	X				X											X		X
Washington	X						X												X				
West Virginia					X					X													X
Wisconsin	X				X														X				
Wyoming																							

Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

Master Limited Partnerships

Exhibit 161. States With MLP Gathering And Processing Assets

	Gathering And Processing MLPs															
	ACMP	AMID	APL	DPM	EQM	FISH	MWE	NGLS	PVR	QEPM	RGP	SMLP	SXE	TEP	WES	XTEX
Alabama		X						X					X			
Alaska																
Arizona						X		X								
Arkansas	X		X	X				X			X					
California								X								
Colorado		X		X			X			X	X	X		X	X	
Connecticut				X												
Delaware																
Florida								X								
Georgia								X								
Hawaii																
Idaho																
Illinois								X	X							
Indiana				X				X								
Iowa																
Kansas	X		X	X				X			X			X	X	
Kentucky				X			X	X	X							
Louisiana		X		X		X	X	X			X					X
Maine				X				X								
Maryland				X												
Massachusetts				X				X								
Michigan				X			X									
Minnesota																
Mississippi		X					X	X					X			
Missouri			X					X								
Montana																
Nebraska								X						X		
Nevada																
New Hampshire				X												
New Jersey								X								
New Mexico	X						X	X	X							
New York			X	X				X								
North Carolina																
North Dakota										X						
Ohio			X	X			X	X								
Oklahoma	X		X	X			X	X	X		X				X	
Oregon								X								
Pennsylvania			X	X	X		X	X	X		X					
Rhode Island				X												
South Carolina								X								
South Dakota																
Tennessee		X		X				X	X							
Texas	X	X	X	X		X	X	X	X		X	X	X		X	X
Utah						X		X		X					X	
Vermont				X												
Virginia				X	X		X	X	X		X					
Washington																
West Virginia				X	X		X		X		X					
Wisconsin																
Wyoming				X		X			X	X				X	X	

Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

## Exhibit 162. States With MLP Upstream Assets

	Upstream MLPs												
	ARP	BBEP	EROC	EVEP	LGCY	LINE	LRE	MCEP	MEMP	NSLP	PSE	QRE	VNR
Alabama			X		X							X	
Alaska													
Arizona													
Arkansas				X	X	X						X	X
California		X				X							
Colorado	X			X	X	X							X
Connecticut													
Delaware													
Florida		X										X	
Georgia													
Hawaii													
Idaho													
Illinois						X							
Indiana	X	X				X							
Iowa													
Kansas				X		X		X					
Kentucky		X				X							X
Louisiana			X	X		X			X			X	
Maine													
Maryland													
Massachusetts													
Michigan		X		X									
Minnesota													
Mississippi			X		X	X							X
Missouri													
Montana						X							X
Nebraska													
Nevada													
New Hampshire													
New Jersey													
New Mexico				X	X	X	X					X	X
New York	X												
North Carolina													
North Dakota					X	X							X
Ohio	X			X									
Oklahoma		X	X	X	X	X	X	X		X		X	X
Oregon													
Pennsylvania	X			X		X							
Rhode Island													
South Carolina													
South Dakota						X							
Tennessee	X												X
Texas		X	X	X	X	X	X	X	X		X	X	X
Utah													
Vermont													
Virginia				X		X							
Washington													
West Virginia				X		X							
Wisconsin													
Wyoming		X			X								X

Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

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Exhibit 163. States With MLP Propane, Oilfield Services, And Coal Assets

	Propane MLPs				Oilfield Services MLPs					Coal MLPs			
	APU	FGP	SGU	SPH	EMES	EXLP	GSJK	HCLP	USAC	ARLP	NRP	OXF	RNO
Alabama	X	X			X	X						X	
Alaska	X	X		X								X	
Arizona	X	X		X		X						X	
Arkansas	X	X				X	X		X			X	
California	X	X		X		X	X					X	
Colorado	X	X		X		X	X					X	X
Connecticut	X	X	X	X									
Delaware	X	X		X									
Florida	X	X		X								X	
Georgia	X	X		X								X	
Hawaii	X	X											
Idaho	X	X		X									
Illinois	X	X								X	X		X
Indiana	X	X		X						X	X	X	
Iowa	X	X										X	
Kansas	X	X				X	X		X			X	
Kentucky	X	X		X		X			X	X	X	X	X
Louisiana	X	X				X	X		X			X	
Maine	X	X		X								X	
Maryland	X	X	X	X						X	X		
Massachusetts	X	X	X	X									
Michigan	X	X				X					X	X	
Minnesota	X	X										X	
Mississippi	X	X				X	X					X	
Missouri	X	X				X							
Montana	X	X				X	X					X	
Nebraska	X	X				X						X	
Nevada	X	X		X									
New Hampshire	X	X		X									
New Jersey	X	X	X	X									
New Mexico	X	X				X	X					X	
New York	X	X	X	X		X						X	
North Carolina	X	X		X					X	X		X	
North Dakota	X	X				X						X	
Ohio	X	X		X		X			X			X	X
Oklahoma	X	X				X	X		X	X	X		
Oregon	X	X		X								X	
Pennsylvania	X	X	X	X		X	X		X	X	X	X	X
Rhode Island	X	X	X	X									
South Carolina	X	X		X								X	
South Dakota	X	X				X						X	
Tennessee	X	X		X		X						X	
Texas	X	X			X	X	X	X	X			X	
Utah	X	X		X		X	X						
Vermont	X	X		X								X	
Virginia	X	X	X	X		X	X		X	X	X		X
Washington	X	X		X								X	
West Virginia	X	X				X	X		X	X			X
Wisconsin	X	X			X			X				X	
Wyoming	X	X		X		X	X						

Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

## Exhibit 164. States With Non Traditional MLP Assets

	Non-Traditional										
	ALDW	CLMT	CVRR	EMES	NTI	OCIP	PDH	RNF	SXCP	TNH	UAN
Alabama				X							
Alaska											
Arizona		X									
Arkansas		X	X								
California		X					X				
Colorado											
Connecticut		X			X						
Delaware		X									
Florida		X									
Georgia		X									
Hawaii											
Idaho											
Illinois		X			X		X	X	X		
Indiana		X									
Iowa			X		X				X		
Kansas		X	X								X
Kentucky		X									
Louisiana		X									
Maine											
Maryland											
Massachusetts		X									
Michigan		X									
Minnesota		X			X						
Mississippi		X									
Missouri		X	X		X						
Montana											
Nebraska			X						X	X	
Nevada											
New Hampshire											
New Jersey		X									
New Mexico											
New York		X									
North Carolina		X									
North Dakota					X						
Ohio		X						X			
Oklahoma			X							X	
Oregon		X									
Pennsylvania		X									
Rhode Island											
South Carolina		X									
South Dakota			X								
Tennessee		X									
Texas	X	X	X	X		X	X				X
Utah		X									
Vermont											
Virginia		X									
Washington		X									
West Virginia											
Wisconsin		X		X	X						
Wyoming											

Source: National Association of Publicly Traded Partnerships and Wells Fargo Securities, LLC

Master Limited Partnerships

Exhibit 165. MLP Market Data

(SMM, except per unit data)		Ticker	Price 10/22/2013	Current Yield	Current Distribution	52-Week Low	52-Week High	Market Cap	Enterprise Value	3-Month Avg. Vol.	Tax Form: Est. Deferral
Large Cap Pipeline MLPs	NuStar Energy L.P.	NS	\$43.21	10.1%	\$4.38	\$36.15	\$54.95	\$3,365	\$5,769	425,400	K-1: 80%
	Enbridge Energy Management, L.L.C.	EEQ	\$29.62	7.3%	\$2.17	\$25.80	\$32.30	-	-	341,273	1099: 0%
	Enbridge Energy Partners, L.P. Class A	EEP	\$31.01	7.0%	\$2.17	\$26.88	\$33.49	\$9,688	\$14,789	673,562	K-1: 100%
	Energy Transfer Partners, L.P.	ETP	\$52.75	6.8%	\$3.58	\$40.19	\$54.85	\$18,577	\$37,189	1,036,204	K-1: 80%
	Kinder Morgan Management, LLC	KMR	\$78.34	6.7%	\$5.28	\$66.30	\$88.17	-	-	575,031	1099: 0%
	Boardwalk Pipeline Partners, LP	BWP	\$31.75	6.7%	\$2.13	\$23.55	\$33.00	\$7,468	\$10,725	437,712	K-1: 80%
	Williams Partners L.P.	WPZ	\$53.26	6.5%	\$3.45	\$45.01	\$54.66	\$22,044	\$30,817	797,459	K-1: 80%
	Kinder Morgan Energy Partners, L.P.	KMP	\$83.89	6.3%	\$5.28	\$74.76	\$92.99	\$33,983	\$52,564	1,220,832	K-1: 90%
	Buckeye Partners, L.P.	BPL	\$68.07	6.2%	\$4.25	\$44.37	\$73.44	\$7,227	\$9,873	457,339	K-1: 80%
	El Paso Pipeline Partners, L.P.	EPB	\$41.85	6.0%	\$2.52	\$33.64	\$44.99	\$9,081	\$13,254	433,127	K-1: 80%
	ONEOK Partners, L.P.	OKS	\$54.44	5.3%	\$2.88	\$45.40	\$61.34	\$11,983	\$17,220	604,927	K-1: 80%
	Plains All American Pipeline, L.P.	PAA	\$52.00	4.6%	\$2.40	\$42.60	\$59.52	\$17,784	\$24,577	1,117,043	K-1: 80%
	Spectra Energy Partners, LP	SEP	\$45.65	4.5%	\$2.04	\$27.15	\$47.73	\$4,962	\$6,017	145,992	K-1: 80%
	Enterprise Products Partners L.P.	EPD	\$63.70	4.3%	\$2.76	\$48.52	\$65.59	\$56,838	\$73,010	1,132,143	K-1: 90%
	Magellan Midstream Partners, L.P.	MMP	\$59.63	3.6%	\$2.13	\$39.06	\$59.96	\$13,528	\$15,668	484,896	K-1: 80%
	Sunoco Logistics Partners L.P.	SXL	\$69.00	3.5%	\$2.40	\$44.00	\$69.48	\$7,197	\$9,511	182,005	K-1: 80%
<b>Large Cap Pipeline MLP Median</b>				<b>6.3%</b>				<b>\$10,836</b>	<b>\$15,229</b>	<b>529,963</b>	<b>80%</b>
Small & Mid Cap Midstream	Niska Gas Storage Partners LLC	NKA	\$15.50	9.0%	\$1.40	\$9.66	\$17.00	\$535	\$1,178	64,480	K-1: 80%
	Crestwood Midstream Partners LP	CMLP	\$21.87	7.3%	\$1.60	\$20.90	\$26.01	\$1,879	\$2,621	692,308	K-1: 80%
	Global Partners LP	GLP	\$33.99	7.1%	\$2.40	\$21.93	\$40.99	\$934	\$1,704	49,651	K-1: 80%
	Lehigh Gas Partners LP	LGP	\$27.75	6.9%	\$1.91	\$16.66	\$29.18	\$418	\$673	38,510	K-1: 60%
	Martin Midstream Partners L.P.	MMLP	\$48.25	6.5%	\$3.12	\$30.03	\$48.60	\$1,282	\$1,851	71,605	K-1: 80%
	TC PipeLines, LP	TCP	\$51.18	6.3%	\$3.24	\$38.74	\$52.61	\$3,190	\$3,499	120,951	K-1: 80%
	PAA Natural Gas Storage, L.P.	PNG	\$22.98	6.2%	\$1.43	\$17.95	\$23.59	\$1,670	\$2,260	313,483	K-1: 80%
	NGL Energy Partners LP	NGL	\$32.09	6.2%	\$1.98	\$21.19	\$33.90	\$1,721	\$2,511	237,830	K-1: 80%
	World Point Terminals LP	WPT	\$19.62	6.1%	\$1.20	\$19.15	\$20.50	\$647	\$647	205,805	K-1: 80%
	Holly Energy Partners, L.P.	HEP	\$32.17	6.0%	\$1.94	\$30.19	\$44.90	\$1,887	\$2,686	92,483	K-1: 75%
	TransMontaigne Partners L.P.	TLP	\$43.37	6.0%	\$2.60	\$31.51	\$50.77	\$627	\$875	33,375	K-1: 80%
	Susser Petroleum Partners LP	SUSP	\$31.48	5.8%	\$1.81	\$23.65	\$33.41	\$689	\$870	26,651	K-1: 55%
	Blueknight Energy Partners, L.P.	BKEP	\$8.45	5.7%	\$0.48	\$6.32	\$9.50	\$192	\$454	19,896	K-1: 80%
	Cheniere Energy Partners, L.P.	CQP	\$31.54	5.4%	\$1.70	\$17.59	\$32.45	\$10,654	\$15,338	206,882	K-1: 80%
	Delek Logistics Partners LP	DKL	\$29.97	5.3%	\$1.58	\$20.52	\$35.96	\$724	\$814	35,104	K-1: 80%
	Rose Rock Midstream, L.P.	RRMS	\$34.90	5.0%	\$1.76	\$28.46	\$42.18	\$752	\$756	124,212	K-1: 80%
	Western Refining Logistics, LP	WNRL	\$24.01	4.8%	\$1.15	\$23.12	\$24.74	\$1,095	\$1,095	1,669,592	K-1: 80%
	Genesis Energy, L.P.	GEL	\$51.87	4.0%	\$2.09	\$30.86	\$55.99	\$4,252	\$5,272	247,812	K-1: 90%
	Tesoro Logistics LP	TLLP	\$56.35	3.6%	\$2.04	\$41.26	\$71.92	\$2,599	\$3,501	114,957	K-1: 80%
MPLX LP	MPLX	\$37.61	3.0%	\$1.14	\$25.35	\$39.69	\$2,779	\$2,791	60,544	K-1: 80%	
Oiltanking Partners, L.P.	OILT	\$59.17	2.9%	\$1.70	\$33.11	\$59.68	\$2,302	\$2,502	30,094	K-1: 80%	
Phillips 66 Partners LP	PSXP	\$33.28	2.6%	\$0.85	\$28.10	\$35.94	\$2,344	\$2,344	470,539	K-1: 80%	
<b>Small Cap Midstream MLP Median</b>				<b>5.9%</b>				<b>\$1,476</b>	<b>\$2,055</b>	<b>103,720</b>	<b>80%</b>
Oilfield Serv.	Compressco Partners, L.P.	GSJK	\$22.67	7.5%	\$1.70	\$15.07	\$25.72	\$352	\$364	12,946	K-1: 80%
	USA Compression Partners LP	USAC	\$24.81	7.1%	\$1.76	\$17.25	\$26.50	\$727	\$1,080	52,223	K-1: 80%
	Exterra Partners, L.P.	EXLP	\$29.97	7.0%	\$2.09	\$19.65	\$32.39	\$1,481	\$2,196	94,899	K-1: 80%
	Hi-Crush Partners LP	HCLP	\$32.70	5.8%	\$1.90	\$13.21	\$33.07	\$944	\$1,073	149,964	K-1: 40%
	<b>Oilfield Services MLP Median</b>				<b>7.0%</b>				<b>\$835</b>	<b>\$1,076</b>	<b>73,561</b>
Gathering & Processing MLPs	PVR Partners, L.P.	PVR	\$26.49	8.3%	\$2.20	\$21.87	\$29.26	\$2,542	\$4,299	638,863	K-1: 80%
	American Midstream Partners, LP	AMID	\$21.52	8.0%	\$1.73	\$13.11	\$23.00	\$198	\$323	17,325	K-1: 80%
	Southcross Energy Partners, L.P.	SXE	\$20.17	7.9%	\$1.60	\$16.21	\$26.49	\$493	\$729	34,869	K-1: 80%
	Marlin Midstream Partners LP	FISH	\$19.20	7.3%	\$1.40	\$17.45	\$20.25	\$168	\$296	114,587	K-1: 80%
	Regency Energy Partners LP	RGP	\$26.24	7.1%	\$1.86	\$20.58	\$29.52	\$5,066	\$8,001	556,246	K-1: 80%
	Atlas Pipeline Partners, L.P.	APL	\$38.51	6.4%	\$2.48	\$29.53	\$40.06	\$2,900	\$4,536	383,173	K-1: 80%
	DCP Midstream Partners, LP	DFM	\$49.50	5.7%	\$2.84	\$37.78	\$58.50	\$3,826	\$5,566	397,854	K-1: 70%
	Targa Resources Partners LP	NGLS	\$53.70	5.3%	\$2.86	\$34.39	\$54.13	\$5,596	\$8,246	305,032	K-1: 80%
	Summit Midstream Partners LP	SMPL	\$33.99	5.1%	\$1.74	\$18.26	\$35.40	\$1,818	\$2,353	43,365	K-1: 80%
	Crosstex Energy, L.P.	XTEX	\$26.51	5.0%	\$1.32	\$13.06	\$29.50	\$2,597	\$3,521	423,770	K-1: 80%
	MarkWest Energy Partners, L.P.	MWE	\$73.25	4.6%	\$3.36	\$46.03	\$73.96	\$11,124	\$14,147	801,561	K-1: 80%
	Talgrass Energy Partners LP	TEP	\$25.47	4.5%	\$1.15	\$20.53	\$26.85	\$1,032	\$1,254	56,165	K-1: 80%
	QEP Midstream Partners LP	QEPM	\$23.42	4.3%	\$1.00	\$21.52	\$23.88	\$1,251	\$1,251	466,252	K-1: 80%
	Access Midstream Partners, L.P.	ACMP	\$51.06	3.8%	\$1.94	\$30.10	\$51.58	\$9,648	\$12,364	380,205	K-1: 80%
Western Gas Partners, LP	WES	\$61.35	3.7%	\$2.24	\$45.10	\$65.16	\$6,871	\$8,089	138,411	K-1: 80%	
EQT Midstream Partners LP	EQM	\$52.13	3.3%	\$1.72	\$27.70	\$53.51	\$1,813	\$1,813	191,215	K-1: 80%	
<b>Gathering &amp; Processing MLP Median</b>				<b>5.2%</b>				<b>\$2,569</b>	<b>\$3,910</b>	<b>342,618</b>	<b>80%</b>
Upstream MLPs	Eagle Rock Energy Partners, L.P.	EROC	\$7.77	11.3%	\$0.88	\$6.01	\$10.52	\$1,205	\$2,362	754,650	K-1: 80%
	OR Energy, LP	ORE	\$17.73	11.0%	\$1.95	\$14.76	\$20.81	\$1,441	\$2,217	263,529	K-1: 80%
	LRR Energy, L.P.	LRE	\$17.93	10.8%	\$1.94	\$13.13	\$19.57	\$469	\$711	126,347	K-1: 70%
	Atlas Resource Partners, L.P.	ARP	\$20.19	10.7%	\$2.16	\$18.30	\$26.50	\$1,026	\$1,258	266,181	K-1: 90%
	Linn Energy, LLC	LINE	\$29.22	9.9%	\$2.90	\$20.35	\$42.57	\$6,835	\$13,091	1,933,914	K-1: 100%
	BreitBurn Energy Partners L.P.	BBEP	\$19.48	9.9%	\$1.92	\$14.01	\$21.75	\$1,982	\$2,973	600,481	K-1: 75%
	Memorial Production Partners LP	MEMP	\$20.83	9.8%	\$2.05	\$16.50	\$21.36	\$921	\$1,358	484,100	K-1: 75%
	New Source Energy Partners LP	NSLP	\$22.98	9.6%	\$2.20	\$19.19	\$23.65	\$206	\$253	27,885	K-1: 60%
	Linn Co. LLC	LNCO	\$32.11	9.0%	\$2.90	\$23.03	\$44.20	\$1,117	\$1,117	375,486	1099: 70%
	Vanguard Natural Resources, LLC	VNR	\$28.18	8.7%	\$2.46	\$24.23	\$30.22	\$2,007	\$3,005	332,838	K-1: 75%
	EV Energy Partners, L.P.	EVEP	\$37.35	8.2%	\$3.08	\$32.61	\$66.30	\$1,593	\$2,613	254,496	K-1: 75%
	Legacy Reserves LP	LGCY	\$28.73	8.1%	\$2.32	\$22.33	\$29.78	\$1,645	\$2,498	131,282	K-1: 70%
Mid-Con Energy Partners, LP	MCEP	\$26.85	7.7%	\$2.06	\$17.40	\$27.05	\$516	\$627	59,620	K-1: 60%	
Pioneer Southwest Energy Partners L.P.	PSE	\$48.83	4.3%	\$2.08	\$20.63	\$53.11	\$1,744	\$1,920	183,622	K-1: 70%	
<b>Upstream MLP Median</b>				<b>9.7%</b>				<b>\$1,323</b>	<b>\$2,069</b>	<b>264,855</b>	<b>75%</b>

Source: Partnership reports, FactSet, and Wells Fargo Securities, LLC

Continued on next page.



MLP Primer Fifth Edition

		Price	Current	Current	52-Week	Market	Enterprise	3-Month	Tax Form:	Primary		
	(SMM, except per unit data)	10/22/2013	Yield	Distribution	Low	High	Cap	Value	Avg. Vol.	Est. Deferral	Analyst	
Propane	Ferrelgas Partners, L.P.	FGP	\$22.77	8.8%	\$2.00	\$15.21	\$23.74	\$1,800	\$3,037	167,538	K-1: 90%	Suspended
	AmeriGas Partners, L.P.	APU	\$45.14	7.4%	\$3.36	\$37.63	\$50.45	\$4,191	\$6,355	188,938	K-1: 75%	S. Lui
	Suburban Propane Partners, L.P.	SPH	\$48.50	7.2%	\$3.50	\$36.69	\$50.25	\$2,848	\$4,264	134,068	K-1: 80%	S. Lui
	Star Gas Partners, L.P.	SGU	\$5.44	6.1%	\$0.33	\$3.92	\$5.53	\$315	\$395	66,154	K-1: 80%	Not Covered
<b>Propane MLP Median</b>			<b>7.3%</b>				<b>\$2,324</b>	<b>\$3,651</b>	<b>150,803</b>	<b>80%</b>		
Marine	Navios Maritime Partners LP	NMM	\$15.11	11.7%	\$1.77	\$12.01	\$15.90	\$1,007	\$1,352	467,692	1099: 31%	M. Webber
	Capital Product Partners LP	CPLP	\$9.13	10.2%	\$0.93	\$5.79	\$10.15	\$858	\$1,364	414,093	1099: 60%	M. Webber
	KNOT Offshore Partners LP	KNOP	\$25.15	6.9%	\$1.74	\$20.68	\$26.17	\$431	\$631	21,556	1099: 70%	Not Covered
	Golar LNG Partners LP	GMLP	\$31.64	6.5%	\$2.06	\$25.52	\$36.00	\$1,788	\$2,730	76,541	1099: 30%	M. Webber
	Teekay LNG Partners L.P.	TGP	\$41.78	6.5%	\$2.70	\$34.50	\$45.42	\$2,917	\$4,569	180,265	K-1: 70%	M. Webber
	Teekay Offshore Partners L.P.	TOO	\$32.90	6.4%	\$2.10	\$24.55	\$36.09	\$2,722	\$4,906	154,176	1099: 70%	M. Webber
Seadrill Partners LLC	SDLP	\$32.91	5.1%	\$1.67	\$22.90	\$34.30	\$1,361	\$2,573	36,243	1099: 80%	M. Webber	
<b>Marine MLP Median</b>			<b>6.5%</b>				<b>\$1,575</b>	<b>\$2,652</b>	<b>167,220</b>	<b>65%</b>		
Coal	Rhino Resource Partners LP	RNO	\$13.26	13.4%	\$1.78	\$11.87	\$17.41	\$368	\$523	47,039	K-1: 60%	Not Covered
	Natural Resource Partners L.P.	NRP	\$20.29	10.8%	\$2.20	\$16.90	\$24.37	\$2,228	\$3,408	213,612	K-1: 65%	S. Dubinsky
	Alliance Resource Partners, L.P.	ARLP	\$76.55	6.0%	\$4.61	\$52.21	\$78.99	\$2,830	\$3,608	52,056	K-1: 80%	S. Dubinsky
	Oxford Resource Partners, LP	OXF	\$1.75	0.0%	\$0.00	\$1.52	\$1.30	\$37	\$205	60,494	K-1: 75%	S. Dubinsky
<b>Coal MLP Median</b>			<b>10.8%</b>				<b>\$1,298</b>	<b>\$1,966</b>	<b>56,275</b>	<b>70%</b>		
Non-Traditional	CVR Refining LP	CVRR	\$26.05	20.7%	\$5.40	\$21.21	\$35.98	\$3,845	\$3,913	489,482	K-1: 50%	Not Covered
	Aion USA Partners LP	ALDW	\$15.85	17.9%	\$2.84	\$11.40	\$29.12	\$991	\$1,209	373,326	K-1: 50%	Not Covered
	Rentech Nitrogen Partners, L.P.	RNF	\$28.68	11.9%	\$3.40	\$24.36	\$49.18	\$1,114	\$1,321	144,124	K-1: 60%	Not Covered
	CVR Partners, LP	UAN	\$19.76	11.8%	\$2.33	\$17.25	\$30.00	\$1,444	\$1,457	278,261	K-1: 50%	Not Covered
	Northern Tier Energy LP Class A	NTI	\$23.31	11.7%	\$2.72	\$17.83	\$33.24	\$2,147	\$2,330	1,371,933	K-1: 50%	Not Covered
	PetroLogistics LP	PDH	\$12.19	9.8%	\$1.20	\$10.51	\$16.95	\$1,696	\$2,014	211,329	K-1: 80%	Not Covered
	OCI Partners LP	OCPL	\$23.00	9.0%	\$2.07	\$16.08	\$23.68	\$1,852	\$2,333	1,952,560	K-1: 70%	Not Covered
	Calumet Specialty Products Partners, L.F.	CLMT	\$31.51	8.7%	\$2.74	\$26.67	\$40.25	\$2,184	\$2,885	444,264	K-1: 75%	Not Covered
	Emerge Energy Services LP	EMES	\$34.88	8.0%	\$2.80	\$16.44	\$38.17	\$810	\$908	172,239	K-1: 35%	M. Conlan
	Terra Nitrogen Company, L.P.	TNH	\$206.05	7.8%	\$16.08	\$196.02	\$256.50	\$3,850	\$3,681	13,876	NA	Not Covered
	SunCoke Energy Partners LP	SXCP	\$25.09	6.7%	\$1.69	\$18.00	\$25.25	\$788	\$1,009	48,320	K-1: 70%	Not Covered
<b>Non-Traditional MLP Median</b>			<b>9.8%</b>				<b>\$1,696</b>	<b>\$2,014</b>	<b>278,261</b>	<b>60%</b>		
MLP GPs	NuStar GP Holdings, LLC	NSH	\$25.93	8.4%	\$2.18	\$19.34	\$34.17	\$1,105	\$1,124	248,028	K-1: 80%	M. Blum
	Alliance Holdings GP, L.P.	AHGP	\$59.65	5.3%	\$3.14	\$43.52	\$66.27	\$3,571	\$3,571	34,484	K-1: 50%	S. Dubinsky
	Energy Transfer Equity, L.P.	ETE	\$68.48	3.8%	\$2.62	\$41.72	\$68.71	\$19,223	\$21,908	896,263	K-1: 60%	M. Blum
	Atlas Energy, L.P.	ATLS	\$47.26	3.7%	\$1.76	\$31.15	\$55.89	\$2,428	\$2,462	317,733	K-1: 75%	P. Satish
	Crestwood Equity Partners LP	CEQP	\$14.27	3.6%	\$0.52	\$10.04	\$16.89	\$2,442	\$8,269	405,587	K-1: 50%	M. Blum
	Western Gas Equity Partners LP	WGP	\$40.12	2.0%	\$0.79	\$27.00	\$44.27	\$8,782	\$8,782	72,312	K-1: 70%	S. Lui
<b>General Partner (MLP) Median</b>			<b>3.8%</b>				<b>\$3,006</b>	<b>\$5,920</b>	<b>282,880</b>	<b>65%</b>		
C-Corp GPs	Kinder Morgan, Inc. Class P	KMI	\$36.21	4.5%	\$1.64	\$31.93	\$41.49	\$38,715	\$48,442	5,706,480	1099: 0%	M. Blum
	TransCanada Corporation	TRP	\$44.66	4.0%	\$1.79	\$42.39	\$49.65	\$31,575	\$56,789	423,327	1099: 0%	Not Covered
	The Williams Companies, Inc.	WMB	\$36.97	4.0%	\$1.46	\$30.55	\$38.57	\$25,396	\$33,136	5,909,148	1099: 0%	S. Lui
	Spectra Energy Corp	SE	\$36.00	3.4%	\$1.22	\$26.55	\$37.11	\$24,096	\$39,602	3,549,587	1099: 0%	Not Covered
	Targa Resources Corp.	TRGP	\$78.56	2.9%	\$2.28	\$45.74	\$79.50	\$3,325	\$5,719	178,590	1099: 0%	M. Blum
	Teekay Corporation	TK	\$43.61	2.9%	\$1.27	\$28.88	\$44.21	\$3,084	\$10,707	331,843	1099: 0%	Not Covered
	Enbridge Inc.	ENB	\$42.58	2.8%	\$1.20	\$37.67	\$48.41	\$35,171	\$64,074	850,336	1099: 0%	Not Covered
	Rains GP Holdings, L.P.	PA GP	\$21.51	2.8%	\$0.60	\$21.50	\$23.20	\$13,036	\$13,536	NA	1099: 100%	Not Covered
	ONEOK, Inc.	OKE	\$55.77	2.7%	\$1.52	\$39.39	\$56.02	\$11,649	\$13,768	1,771,243	1099: 0%	M. Blum
	Crosstex Energy, Inc.	XTXI	\$32.28	1.6%	\$0.52	\$11.32	\$35.57	\$1,535	\$1,561	233,910	1099: 0%	S. Lui
	SemGroup Corporation Class A	SEMG	\$61.65	1.3%	\$0.80	\$34.76	\$62.64	\$2,621	\$2,857	328,375	1099: 0%	Not Covered
<b>General Partner (C-Corp) Median</b>			<b>2.9%</b>				<b>\$17,873</b>	<b>\$23,452</b>	<b>636,831</b>	<b>0%</b>		
<b>All MLPs Average</b>			<b>7.0%</b>				<b>\$4,291</b>	<b>\$5,972</b>	<b>347,360</b>	<b>73%</b>		
<b>All MLPs Median</b>			<b>6.5%</b>				<b>\$1,852</b>	<b>\$2,511</b>	<b>211,329</b>	<b>80%</b>		
<b>All MLPs Median (Excluding GPs)</b>			<b>6.7%</b>			<b>All MLPs Sum:</b>	<b>\$445,309</b>	<b>\$615,617</b>				

As of 10/22/2013  
Source: Partnership reports and FactSet

Master Limited Partnerships

Exhibit 166. MLP Valuation Metrics

	Ticker	Price	Current	EV / Adj. EBITDA 1		Price / DCF		Price / EPS		3-Yr Distrib.	P/DCF To	
		10/22/2013	Yield	2013E	2014E	2013E	2014E	2013E	2014E	CAGR ('14-16E)	Growth 2	
Large Cap Pipeline MLPs	Buckeye Partners, L.P.	BPL	\$68.07	6.2%	14.9x	14.0x	15.9x	14.3x	20.3x	18.2x	4.5%	3.2x
	Boardwalk Pipeline Partners, LP	BWP	\$31.75	6.7%	15.7x	15.6x	15.8x	15.6x	25.8x	24.9x	0.8%	-
	Enbridge Energy Partners, L.P. Class A	EEP	\$31.01	7.0%	13.6x	11.9x	16.9x	13.4x	32.8x	19.5x	2.9%	4.6x
	El Paso Pipeline Partners, L.P.	EPB	\$41.85	6.0%	16.5x	17.2x	15.9x	15.6x	22.2x	22.3x	2.8%	5.6x
	Enterprise Products Partners L.P.	EPD	\$63.70	4.3%	16.0x	15.3x	16.9x	16.3x	23.9x	22.8x	6.7%	2.4x
	Energy Transfer Partners, L.P.	ETP	\$52.75	6.8%	17.4x	14.9x	14.0x	12.7x	-	-	4.8%	2.6x
	Kinder Morgan Energy Partners, L.P.	KMP	\$83.89	6.3%	17.5x	18.1x	15.6x	14.9x	33.7x	31.1x	4.1%	3.6x
	Magellan Midstream Partners, L.P.	MMP	\$59.63	3.6%	15.6x	16.1x	21.3x	19.5x	23.7x	22.2x	10.4%	1.9x
	NuStar Energy L.P.	NS	\$43.21	10.1%	14.3x	13.0x	15.0x	11.4x	40.4x	21.6x	0.2%	-
	ONEOK Partners, L.P.	OKS	\$54.44	5.3%	19.3x	17.8x	19.0x	15.8x	23.9x	20.2x	8.6%	1.8x
	Plains All American Pipeline, L.P.	PAA	\$52.00	4.6%	16.9x	17.1x	14.1x	15.6x	16.6x	19.0x	9.1%	1.7x
	Spectra Energy Partners, LP	SEP	\$45.65	4.5%	24.2x	17.1x	21.4x	18.1x	25.6x	18.8x	7.9%	2.3x
	Sunoco Logistics Partners L.P.	SXL	\$69.00	3.5%	15.9x	17.3x	12.0x	13.8x	17.3x	23.1x	12.8%	1.1x
	Williams Partners L.P.	WPZ	\$53.26	6.5%	14.7x	17.2x	16.7x	16.3x	28.9x	29.5x	4.7%	3.5x
<b>Large Cap Pipeline MLP Median</b>				<b>6.1%</b>	<b>15.9x</b>	<b>16.6x</b>	<b>15.9x</b>	<b>15.6x</b>	<b>23.9x</b>	<b>22.2x</b>	<b>4.7%</b>	<b>2.5x</b>
Small & Mid Cap.	Blueknight Energy Partners, L.P.	BKEP	\$8.45	5.7%	7.1x	7.4x	11.7x	6.2x	26.1x	11.1x	17.7%	0.3x
	Crestwood Midstream Partners LP	CMLP	\$21.87	7.3%	14.9x	12.5x	13.2x	10.7x	-	27.2x	6.5%	1.7x
	Delek Logistics Partners LP	DKL	\$29.97	5.3%	12.9x	11.8x	12.6x	10.5x	15.1x	12.8x	12.6%	0.8x
	Exterran Partners, L.P.	EXLP	\$29.97	7.0%	10.1x	10.0x	10.2x	10.0x	28.2x	22.1x	3.2%	3.2x
	Genesis Energy, L.P.	GEL	\$51.87	4.0%	18.9x	16.5x	21.3x	17.4x	34.6x	24.6x	10.6%	1.6x
	Global Partners LP	GLP	\$33.99	7.1%	8.9x	8.4x	9.2x	7.6x	21.0x	14.7x	7.0%	1.1x
	Holly Energy Partners, L.P.	HEP	\$32.17	6.0%	16.4x	16.4x	16.0x	15.3x	31.0x	26.9x	6.4%	2.4x
	Martin Midstream Partners L.P.	MMLP	\$48.25	6.5%	13.3x	13.0x	15.9x	13.9x	30.7x	26.0x	3.3%	4.2x
	MPLX LP	MPLX	\$37.61	3.0%	21.8x	19.1x	26.9x	19.8x	34.1x	20.4x	17.7%	1.8x
	NGL Energy Partners LP	NGL	\$32.09	6.2%	9.6x	9.1x	11.4x	9.8x	-	18.8x	10.4%	0.9x
	Niska Gas Storage Partners LLC	NKA	\$15.50	9.0%	7.1x	7.5x	10.6x	7.0x	-	13.6x	2.9%	2.4x
	PAA Natural Gas Storage, L.P.	PNG	\$22.98	6.2%	18.5x	17.9x	15.2x	15.5x	23.0x	23.7x	1.2%	-
	Susser Petroleum Partners LP	SUSP	\$31.48	5.8%	15.2x	13.5x	14.8x	12.6x	17.7x	15.3x	9.3%	1.4x
	Tesoro Logistics LP	TLLP	\$56.35	3.6%	26.2x	19.9x	25.1x	18.1x	34.4x	28.3x	15.2%	1.2x
USA Compression Partners LP	USAC	\$24.81	7.1%	12.7x	11.2x	13.8x	10.1x	-	24.3x	5.1%	2.0x	
<b>Small Cap Pipeline MLP Median</b>				<b>6.2%</b>	<b>13.3x</b>	<b>12.5x</b>	<b>13.8x</b>	<b>10.7x</b>	<b>28.2x</b>	<b>22.1x</b>	<b>7.0%</b>	<b>1.5x</b>
Gathering & Processing MLPs	Access Midstream Partners, L.P.	ACMP	\$51.06	3.8%	15.5x	14.6x	16.4x	13.9x	36.5x	38.6x	15.2%	0.9x
	American Midstream Partners, LP	AMID	\$21.52	8.0%	8.1x	7.7x	15.9x	8.9x	-	-	5.3%	1.7x
	Atlas Pipeline Partners, L.P.	AFL	\$38.51	6.4%	13.9x	13.0x	15.2x	12.9x	-	47.8x	12.4%	1.0x
	DCP Midstream Partners, LP	DPM	\$49.50	5.7%	20.7x	15.8x	19.0x	14.1x	29.6x	20.7x	8.4%	1.7x
	EQT Midstream Partners LP	EQM	\$52.13	3.3%	19.1x	15.3x	22.1x	17.9x	23.1x	21.3x	22.5%	0.8x
	MarkWest Energy Partners, L.P.	MWE	\$73.25	4.6%	18.7x	14.0x	19.5x	14.3x	-	31.5x	10.0%	1.4x
	Targa Resources Partners LP	NGLS	\$53.70	5.3%	15.3x	14.9x	18.4x	14.6x	47.2x	28.3x	8.7%	1.7x
	PVR Partners, L.P.	PVR	\$26.49	8.3%	13.2x	12.2x	12.5x	11.2x	-	31.5x	1.5%	7.5x
	QEP Midstream Partners LP	QEFM	\$23.42	4.3%	16.1x	14.1x	19.3x	15.7x	26.5x	21.1x	15.0%	1.0x
	Regency Energy Partners LP	RGP	\$26.24	7.1%	13.7x	12.2x	12.6x	12.2x	-	30.3x	5.8%	2.1x
	Southcross Energy Partners, L.P.	SXE	\$20.17	7.9%	12.8x	11.7x	22.2x	9.9x	-	26.4x	4.6%	2.2x
	Western Gas Partners, LP	WES	\$61.35	3.7%	22.8x	19.8x	23.9x	18.3x	40.9x	31.4x	13.2%	1.4x
	Crosstex Energy, L.P.	XTEX	\$26.51	5.0%	17.3x	15.1x	18.4x	16.9x	-	-	8.0%	2.1x
	<b>Gathering &amp; Processing MLP Median</b>				<b>5.3%</b>	<b>15.5x</b>	<b>14.1x</b>	<b>18.4x</b>	<b>14.1x</b>	<b>33.1x</b>	<b>30.3x</b>	<b>8.7%</b>
Upstream MLPs	Atlas Resource Partners, L.P.	ARP	\$20.19	10.7%	8.6x	7.8x	8.1x	6.6x	-	20.1x	7.0%	0.9x
	BreitBurn Energy Partners L.P.	BBEP	\$19.48	9.9%	7.8x	7.6x	9.3x	7.7x	26.4x	14.8x	4.0%	1.9x
	Eagle Rock Energy Partners, L.P.	EROC	\$7.77	11.3%	9.5x	9.3x	11.6x	10.5x	-	-	0.0%	-
	EV Energy Partners, L.P.	EVEP	\$37.35	8.2%	12.2x	9.6x	16.2x	11.2x	-	23.4x	4.9%	2.3x
	Legacy Reserves LP	LGCY	\$28.73	8.1%	8.7x	8.4x	10.5x	9.8x	42.9x	21.3x	5.2%	1.9x
	Linn Energy, LLC	LINE	\$29.22	9.9%	8.8x	8.2x	11.3x	10.1x	32.1x	25.4x	1.6%	6.4x
	LRR Energy, L.P.	LRE	\$17.93	10.8%	8.5x	8.2x	9.4x	8.6x	17.4x	13.5x	0.9%	9.2x
	Mid-Con Energy Partners, LP	MCEP	\$26.85	7.7%	8.7x	8.7x	9.5x	8.6x	12.7x	10.7x	2.6%	3.3x
	Memorial Production Partners LP	MEMP	\$20.83	9.8%	5.1x	7.2x	7.0x	8.0x	11.7x	9.6x	4.0%	2.0x
	Pioneer Southwest Energy Partners L.P.	PSE	\$48.83	4.3%	16.7x	13.0x	21.4x	16.2x	23.1x	16.3x	5.0%	3.2x
	QR Energy, LP	QRE	\$17.73	11.0%	7.9x	7.7x	8.4x	8.4x	13.8x	12.2x	0.0%	-
Vanguard Natural Resources, LLC	VNR	\$28.18	8.7%	9.3x	9.0x	10.4x	10.3x	23.4x	25.5x	3.9%	2.6x	
<b>Upstream MLP Median</b>				<b>9.8%</b>	<b>8.7x</b>	<b>8.3x</b>	<b>9.9x</b>	<b>9.2x</b>	<b>23.1x</b>	<b>16.3x</b>	<b>3.9%</b>	<b>2.5x</b>
Prop	AmeriGas Partners, L.P.	AFU	\$45.14	7.4%	11.1x	11.2x	11.0x	10.8x	29.4x	23.3x	3.7%	2.9x
	Suburban Propane Partners, L.P.	SFH	\$48.50	7.2%	12.1x	11.7x	12.2x	11.6x	20.6x	18.7x	3.2%	3.6x
<b>Propane MLP Median</b>				<b>7.3%</b>	<b>11.6x</b>	<b>11.4x</b>	<b>11.6x</b>	<b>11.2x</b>	<b>25.0x</b>	<b>21.0x</b>	<b>3.5%</b>	<b>3.3x</b>

Note 1: EBITDA adjusted downward to reflect GP percentage share of cash flow

Note 2: P/DCF to growth ratio is based on 2014E P/DCF multiple divided by estimated 3-year distribution growth rate

Source: Partnership reports, FactSet and Wells Fargo Securities, LLC estimates

Continued on next page.

MLP Primer Fifth Edition

	Ticker	Price	Current	EV / Adj. EBITDA 1		Price / DCF		Price / EPS		3-Yr Distrib.	P/DCF To	
		10/22/2013	Yield	2013E	2014E	2013E	2014E	2013E	2014E	CAGR ('14-16E)	Growth 2	
Marine	Capital Product Partners LP	CPLP	\$9.13	10.2%	11.9x	11.3x	8.6x	8.8x	-	28.6x	2.8%	3.1x
	Golar LNG Partners LP	GMLP	\$31.64	6.5%	10.0x	-	14.1x	12.1x	14.2x	12.5x	6.2%	2.0x
	Navios Maritime Partners LP	NMM	\$15.11	11.7%	8.8x	9.8x	8.9x	11.2x	17.3x	34.1x	0.0%	-
	Seadrill Partners LLC	SDLP	\$32.91	5.1%	6.5x	7.7x	17.8x	15.1x	16.0x	15.6x	10.7%	1.4x
	Teekay LNG Partners L.P.	TGP	\$41.78	6.5%	18.2x	-	13.9x	13.3x	14.2x	15.8x	4.3%	3.1x
	Teekay Offshore Partners L.P.	TOO	\$32.90	6.4%	12.5x	-	15.9x	12.2x	27.1x	22.8x	6.3%	1.9x
<b>Marine MLP Median</b>			<b>6.5%</b>	<b>10.9x</b>	<b>9.8x</b>	<b>14.0x</b>	<b>12.1x</b>	<b>16.0x</b>	<b>19.3x</b>	<b>5.2%</b>	<b>2.0x</b>	
Coal	Alliance Resource Partners, L.P.	ARLP	\$76.55	6.0%	9.5x	8.8x	8.9x	8.4x	10.8x	10.5x	7.4%	1.1x
	Natural Resource Partners L.P.	NRP	\$20.29	10.8%	12.4x	11.1x	7.7x	10.6x	13.6x	12.6x	(6.5%)	-
	Oxford Resource Partners, LP	OXF	\$1.75	-	-	-	4.2x	4.2x	-	-	-	-
<b>Coal MLP Median</b>			<b>8.4%</b>	<b>10.9x</b>	<b>9.9x</b>	<b>7.7x</b>	<b>8.4x</b>	<b>12.2x</b>	<b>11.5x</b>	<b>0.4%</b>	<b>1.1x</b>	
MLP GPs	Alliance Holdings GP, L.P.	AHGP	\$59.65	5.3%	NM for GP	-	18.6x	16.9x	15.4x	14.4x	9.1%	1.9x
	Atlas Energy, L.P.	ATLS	\$47.26	3.7%	NM for GP	-	28.0x	19.5x	-	-	36.3%	0.5x
	Crestwood Equity Partners LP	CEQP	\$14.27	3.6%	NM for GP	-	20.1x	24.0x	-	-	16.6%	1.4x
	Energy Transfer Equity, L.P.	ETE	\$68.48	3.8%	NM for GP	-	27.2x	24.9x	-	-	13.2%	1.9x
	NuStar GP Holdings, LLC	NSH	\$25.93	8.4%	NM for GP	-	11.9x	11.9x	22.2x	18.1x	0.4%	-
	Western Gas Equity Partners LP	WGP	\$40.12	2.0%	NM for GP	-	-	35.3x	-	-	27.5%	1.3x
<b>General Partner (MLP) Median</b>			<b>3.8%</b>	<b>NM</b>	<b>NM</b>	<b>20.1x</b>	<b>21.7x</b>	<b>18.8x</b>	<b>16.2x</b>	<b>14.9%</b>	<b>1.4x</b>	
C-Corp GPs	Kinder Morgan, Inc. Class P	KMI	\$36.21	4.5%	NM for GP	-	22.3x	20.2x	31.9x	23.1x	6.9%	2.9x
	ONEOK, Inc.	OKE	\$55.77	2.7%	NM for GP	-	20.0x	30.9x	43.1x	-	20.9%	1.5x
	Targa Resources Corp.	TRGP	\$78.56	2.9%	NM for GP	-	29.5x	24.2x	42.6x	26.5x	19.0%	1.3x
	The Williams Companies, Inc.	WMB	\$36.97	4.0%	NM for GP	-	17.5x	16.5x	-	30.4x	15.9%	1.0x
	Crosstex Energy, Inc.	XTXI	\$32.28	1.6%	NM for GP	-	-	26.6x	-	-	30.8%	0.9x
<b>General Partner (C-Corp) Median</b>			<b>2.9%</b>	<b>NM</b>	<b>NM</b>	<b>21.2x</b>	<b>24.2x</b>	<b>42.6x</b>	<b>26.5x</b>	<b>19.0%</b>	<b>1.3x</b>	
<b>All MLPs Average</b>			<b>6.6%</b>	<b>13.7x</b>	<b>12.7x</b>	<b>15.1x</b>	<b>13.3x</b>	<b>24.8x</b>	<b>21.8x</b>	<b>7.4%</b>	<b>2.3x</b>	
<b>All MLPs Median</b>			<b>6.4%</b>	<b>13.6x</b>	<b>12.5x</b>	<b>15.1x</b>	<b>12.7x</b>	<b>23.8x</b>	<b>21.4x</b>	<b>6.0%</b>	<b>1.9x</b>	
<b>All MLPs (Excl. GPs) Median</b>			<b>6.5%</b>	<b>13.6x</b>	<b>12.5x</b>	<b>14.8x</b>	<b>12.2x</b>	<b>23.9x</b>	<b>21.8x</b>	<b>5.2%</b>	<b>2.0x</b>	

Note 1: EBITDA adjusted downward to reflect GP percentage share of cash flow

Note 2: P/DCF to growth ratio is based on 2014E P/DCF multiple divided by estimated 3-year distribution growth rate

As of 10/22/2013

Source: Partnership reports, FactSet and Wells Fargo Securities, LLC estimates

Master Limited Partnerships

Exhibit 167. Credit Metrics

	(SMM, except per unit data)	Ticker	Total Debt (At Q2'13)	Pro Forma Debt / EBITDA (TTM) 1					S&P Debt	Moody's	Investment
				2013E	2014E	2015E	2016E	2017E	Rating	Rating	Grade?
Large Cap Pipeline MLPs	Buckeye Partners, L.P.	BPL	\$2,646	3.4x	4.1x	3.8x	3.8x	3.8x	BBB-	Baa3	Yes
	Boardwalk Pipeline Partners, LP	BWP	\$3,258	4.3x	4.4x	4.4x	4.4x	4.3x	BBB	Baa1	Yes
	Enbridge Energy Partners, L.P. Class A	EEP	\$5,101	5.2x	4.4x	4.5x	3.5x	3.3x	BBB	Baa2	Yes
	El Paso Pipeline Partners, L.P.	EPB	\$4,173	3.9x	4.3x	4.3x	4.3x	4.1x	BBB-	Ba1	Yes
	Enterprise Products Partners L.P.	EPD	\$16,173	3.6x	3.7x	3.6x	3.6x	3.5x	BBB+	Baa1	Yes
	Energy Transfer Partners, L.P.	ETP	\$18,612	4.0x	4.2x	4.0x	3.9x	3.9x	BBB-	Baa3	Yes
	Kinder Morgan Energy Partners, L.P.	KMP	\$18,581	3.5x	4.0x	3.9x	3.9x	3.8x	BBB	Baa2	Yes
	Magellan Midstream Partners, L.P.	MMP	\$2,140	3.4x	3.4x	3.3x	3.2x	3.2x	BBB+	Baa2	Yes
	NuStar Energy L.P.	NS	\$2,403	3.7x	3.5x	3.6x	3.7x	3.5x	BB+	Ba1	No
	ONEOK Partners, L.P.	OKS	\$5,237	4.0x	4.0x	3.9x	3.8x	3.7x	BBB	Baa2	Yes
	Plains All American Pipeline, L.P.	PAA	\$6,793	2.9x	3.4x	3.4x	3.3x	3.3x	BBB	Baa2	Yes
	Spectra Energy Partners, LP	SEP	\$1,056	4.6x	4.2x	4.0x	3.9x	3.8x	BBB	Baa3	Yes
	Sunoco Logistics Partners L.P.	SXL	\$2,314	2.3x	3.0x	2.9x	3.0x	3.0x	BBB-	Baa3	Yes
	Williams Partners L.P.	WPZ	\$8,773	3.3x	3.4x	3.0x	2.8x	2.8x	BBB	Baa2	Yes
<b>Large Cap Pipeline MLP Median</b>			<b>\$4,637</b>	<b>3.6x</b>	<b>4.0x</b>	<b>3.8x</b>	<b>3.7x</b>	<b>3.6x</b>			
Small & Mid Cap.	Blueknight Energy Partners, L.P.	BKEP	\$262	4.3x	4.1x	4.1x	4.1x	4.1x	None	None	No
	Crestwood Midstream Partners LP	CMLP	\$742	4.8x	4.0x	3.7x	3.7x	3.5x	BB	B1	No
	Delek Logistics Partners LP	DKL	\$90	2.1x	2.1x	1.8x	1.6x	1.6x	None	None	No
	Exterran Partners, L.P.	EXLP	\$715	3.2x	3.1x	3.0x	3.2x	3.2x	B-	B2	No
	Genesis Energy, L.P.	GEL	\$1,020	3.5x	3.6x	3.5x	3.4x	3.4x	B	None	No
	Global Partners LP	GLP	\$769	3.4x	2.9x	2.8x	2.6x	2.6x	None	None	No
	Holly Energy Partners, L.P.	HEP	\$799	4.1x	3.7x	3.7x	3.7x	3.5x	BB-	None	No
	Martin Midstream Partners L.P.	MMLP	\$568	3.6x	3.3x	3.5x	3.2x	3.1x	B-	B3	No
	MPLX LP	MPLX	\$12	2.8x	2.9x	3.1x	3.2x	3.2x	None	None	No
	NGL Energy Partners LP	NGL	\$791	2.7x	2.7x	2.7x	2.7x	2.8x	None	None	No
	Niska Gas Storage Partners LLC	NKA	\$644	4.1x	4.5x	4.2x	3.9x	3.7x	B+	B2	No
	PAA Natural Gas Storage, L.P.	PNG	\$590	4.1x	4.0x	4.0x	3.9x	3.9x	None	None	No
	Susser Petroleum Partners LP	SUSP	\$182	2.6x	1.9x	2.8x	2.1x	3.0x	None	None	No
	Tesoro Logistics LP	TLLP	\$903	4.3x	4.1x	4.0x	4.0x	4.0x	BB-	None	No
USA Compression Partners LP	USAC	\$353	4.4x	3.8x	3.5x	3.3x	3.0x	None	None	No	
<b>Small Cap Midstream MLP Median</b>			<b>\$644</b>	<b>3.6x</b>	<b>3.6x</b>	<b>3.5x</b>	<b>3.3x</b>	<b>3.2x</b>			
Gathering & Processing MLPs	Access Midstream Partners, L.P.	ACMP	\$2,716	3.8x	3.4x	3.3x	3.3x	3.3x	BB	Ba3	No
	American Midstream Partners, LP	AMID	\$125	4.8x	3.6x	3.8x	3.7x	3.6x	None	None	No
	Atlas Pipeline Partners, L.P.	APL	\$1,636	4.4x	4.2x	3.5x	3.3x	3.2x	B+	B2	No
	DCP Midstream Partners, LP	DPM	\$1,740	3.8x	3.9x	4.0x	3.8x	3.7x	BBB-	Baa3	Yes
	EQT Midstream Partners LP	EQM	None	0.1x	2.8x	3.2x	3.2x	3.2x	None	None	No
	MarkWest Energy Partners, L.P.	MWE	\$3,023	4.0x	3.4x	2.8x	2.7x	2.6x	BB	Ba3	No
	Targa Resources Partners LP	NGLS	\$2,650	3.7x	3.6x	3.4x	3.2x	3.2x	BB	Ba3	No
	PVR Partners, L.P.	PVR	\$1,758	4.6x	4.3x	3.5x	3.6x	3.8x	B-	B2	No
	QEP Midstream Partners LP	QEPM	None	-	1.9x	2.0x	2.3x	2.6x	None	None	No
	Regency Energy Partners LP	RGP	\$2,935	4.3x	4.1x	3.5x	3.4x	3.5x	BB	B1	No
	Southcross Energy Partners, L.P.	SXE	\$237	5.9x	4.0x	3.4x	3.6x	3.4x	None	None	No
	Western Gas Partners, LP	WES	\$1,418	3.5x	3.5x	3.4x	3.4x	3.4x	BBB-	Baa3	Yes
	Crosstex Energy, L.P.	XTEX	\$924	4.7x	3.0x	3.1x	3.5x	3.1x	B+	None	No
	<b>Gathering &amp; Processing MLP Median</b>			<b>\$1,740</b>	<b>4.2x</b>	<b>3.6x</b>	<b>3.4x</b>	<b>3.4x</b>	<b>3.3x</b>		
Upstream MLPs	Atlas Resource Partners, L.P.	ARP	\$232	4.6x	3.4x	3.2x	2.9x	2.7x	B-	Caa1	No
	BreitBurn Energy Partners L.P.	BBEP	\$991	3.6x	3.0x	2.8x	2.9x	2.9x	B-	None	No
	Eagle Rock Energy Partners, L.P.	EROC	\$1,158	4.8x	4.3x	4.2x	4.1x	4.0x	B	None	No
	EV Energy Partners, L.P.	EVER	\$1,019	5.4x	4.6x	3.6x	3.5x	3.0x	B-	None	No
	Legacy Reserves LP	LGCY	\$853	3.1x	2.8x	2.4x	2.3x	2.4x	B-	Caa1	No
	Linn Energy, LLC	LINE	\$6,256	4.6x	4.3x	3.9x	4.0x	4.0x	B	B2	No
	LRR Energy, L.P.	LRE	\$242	3.2x	2.5x	2.5x	2.8x	2.9x	None	None	No
	Mid-Con Energy Partners, LP	MCEP	\$111	2.2x	1.7x	1.7x	1.9x	1.9x	None	None	No
	Memorial Production Partners LP	MEMP	\$437	3.7x	2.9x	2.6x	2.4x	2.6x	B-	None	No
	Pioneer Southwest Energy Partners L.P.	PSE	\$176	1.9x	1.8x	1.9x	2.1x	2.1x	None	None	No
	QR Energy, LP	QRE	\$776	3.3x	3.0x	2.9x	2.8x	2.8x	B-	None	No
Vanguard Natural Resources, LLC	VNR	\$998	3.1x	3.2x	2.9x	2.8x	2.6x	B	B3	No	
<b>Upstream MLP Median</b>			<b>\$815</b>	<b>3.4x</b>	<b>3.0x</b>	<b>2.9x</b>	<b>2.8x</b>	<b>2.8x</b>			

Note 1: Pro forma debt/EBITDA ratios may include full-year credit for growth projects under constructions and/or recent acquisitions

Source: Partnership reports, FactSet and Wells Fargo Securities, LLC estimates

Continued on next page.

MLP Primer Fifth Edition

	(\$MM, except per unit data)	Ticker	Total Debt (At Q2'13)	Pro Forma Debt / EBITDA (TTM) 1					S&P Debt Rating	Moody's Rating	Investment Grade?
				2013E	2014E	2015E	2016E	2017E			
Prop.	AmeriGas Partners, L.P.	APU	\$2,164	4.0x	4.0x	4.0x	4.0x	4.1x	None	Ba2	No
	Suburban Propane Partners, L.P.	SPH	\$1,416	4.0x	3.8x	3.6x	3.5x	3.5x	BB-	WR	No
	<b>Propane MLP Median</b>		<b>\$1,790</b>	<b>4.0x</b>	<b>3.9x</b>	<b>3.8x</b>	<b>3.8x</b>	<b>3.8x</b>			
Marine	Capital Product Partners LP	CPLP	\$506	4.2x	3.5x	3.9x	3.7x	-	None	None	No
	Golar LNG Partners LP	GMLP	\$942	-	-	-	-	-	None	None	No
	Navios Maritime Partners LP	NMM	\$345	-	-	-	-	-	None	None	No
	Seadrill Partners LLC	SDLP	\$1,212	-	-	-	-	-	None	None	No
	Teekay LNG Partners L.P.	TGP	\$1,652	-	5.6x	5.1x	5.1x	5.1x	None	None	No
	Teekay Offshore Partners L.P.	TOO	\$2,184	-	4.9x	4.8x	5.0x	5.1x	None	None	No
	<b>Marine MLP Median</b>		<b>\$1,077</b>	<b>4.2x</b>	<b>4.9x</b>	<b>4.8x</b>	<b>5.0x</b>	<b>5.1x</b>			
Coal	Alliance Resource Partners, L.P.	ARLP	\$778	1.2x	1.3x	1.0x	0.9x	3.4x	None	None	No
	Natural Resource Partners L.P.	NRP	\$1,180	4.3x	3.9x	3.2x	2.8x	2.8x	None	None	No
	Oxford Resource Partners, LP	OXF	\$168	-	3.4x	3.4x	3.4x	-	None	None	No
	<b>Coal MLP Median</b>		<b>\$778</b>	<b>2.7x</b>	<b>3.4x</b>	<b>3.2x</b>	<b>2.8x</b>	<b>3.1x</b>			
MLP GPs	Alliance Holdings GP, L.P.	AHGP	None	-	-	-	-	-	None	None	No
	Atlas Energy, L.P.	ATLS	\$34	2.3x	1.6x	1.2x	0.9x	0.8x	None	None	No
	Crestwood Equity Partners LP	CEQP	NA	2.2x	2.9x	2.5x	2.2x	1.9x	B+	None	No
	Energy Transfer Equity, L.P.	ETE	\$2,685	3.1x	3.1x	2.6x	2.4x	2.2x	None	None	No
	NuStar GP Holdings, LLC	NSH	\$19	-	-	-	-	-	None	None	No
	Western Gas Equity Partners LP	WGP	None	0.0x	0.0x	0.0x	0.0x	0.0x	None	None	No
	<b>General Partner (MLP) Median</b>		<b>\$34</b>	<b>2.3x</b>	<b>2.3x</b>	<b>1.9x</b>	<b>1.6x</b>	<b>1.4x</b>			
C-Corp GPs	Kinder Morgan, Inc. Class P	KMI	\$9,727	4.2x	2.8x	2.6x	2.4x	2.2x	None	None	No
	ONEOK, Inc.	OKE	\$2,119	4.8x	4.7x	4.4x	4.2x	4.1x	BBB	Baa2	Yes
	Targa Resources Corp.	TRGP	\$2,393	-	-	-	-	-	None	None	No
	The Williams Companies, Inc.	WMB	\$7,740	4.0x	4.1x	3.8x	3.2x	3.0x	BBB-	Baa3	Yes
	Crosstex Energy, Inc.	XTXI	\$26	2.7x	-	-	-	-	None	None	No
	<b>General Partner (C-Corp) Median</b>		<b>\$2,393</b>	<b>4.1x</b>	<b>4.1x</b>	<b>3.8x</b>	<b>3.2x</b>	<b>3.0x</b>			
	<b>All MLPs Average</b>		<b>\$2,324</b>	<b>3.6x</b>	<b>3.4x</b>	<b>3.3x</b>	<b>3.2x</b>	<b>3.2x</b>			
	<b>All MLPs Median</b>		<b>\$1,008</b>	<b>3.7x</b>	<b>3.5x</b>	<b>3.4x</b>	<b>3.4x</b>	<b>3.2x</b>			

As of 10/22/2013

Note 1: Pro forma debt/EBITDA ratios may include full-year credit for growth projects under constructions and/or recent acquisitions

Source: Partnership reports, FactSet and Wells Fargo Securities, LLC estimates

Master Limited Partnerships

Exhibit 168. Annual Distribution Growth

	2003A	2004A	2005A	2006A	2007A	2008A	2009A	2010A	2011A	2012A	2013E	Estimated Distribution CAGRs			
												1-Yr ('14E)	3-Yr ('14-16E)	5-Yr ('14-18E)	
Large Cap Pipeline MLPs	BPL	2.0%	4.9%	7.5%	7.0%	6.5%	6.1%	5.8%	5.1%	5.5%	1.8%	3.0%	4.7%	4.5%	4.0%
	BWP					14.5%	6.2%	4.2%	4.1%	2.7%	1.2%	0.0%	0.0%	0.8%	2.0%
	EEP	2.1%	0.0%	0.0%	0.0%	1.4%	4.5%	1.0%	3.2%	3.4%	2.5%	0.5%	1.1%	2.9%	3.9%
	EPB							13.5%	19.4%	18.4%	16.6%	13.3%	3.5%	2.8%	3.0%
	EPD	8.1%	4.8%	10.2%	7.5%	6.7%	6.5%	5.8%	5.5%	5.2%	5.4%	6.5%	6.8%	6.7%	6.7%
	ETP	1.0%	22.3%	27.0%	37.2%	18.9%	8.8%	0.7%	0.0%	0.0%	0.0%	1.1%	5.8%	4.8%	3.9%
	KMP	8.0%	9.1%	9.1%	4.2%	6.7%	15.5%	4.5%	4.8%	4.8%	8.0%	7.1%	6.0%	4.1%	4.4%
	MMP	16.9%	11.1%	17.0%	13.3%	9.1%	8.8%	2.4%	4.0%	7.3%	18.4%	16.2%	15.3%	10.4%	8.6%
	NS	7.3%	8.5%	5.2%	7.0%	6.5%	6.5%	3.9%	0.8%	1.9%	0.5%	0.0%	0.0%	0.2%	0.8%
	OKS	0.0%	0.0%	0.0%	18.1%	6.5%	5.8%	2.1%	3.4%	5.1%	13.7%	7.4%	8.5%	8.6%	7.2%
	PAA	3.5%	6.3%	12.6%	12.5%	11.7%	6.2%	3.4%	3.5%	5.0%	8.7%	10.0%	10.0%	9.1%	8.2%
	SEP						13.1%	13.0%	11.5%	7.5%	4.3%	6.3%	10.3%	7.9%	7.1%
	SXL	11.6%	16.8%	9.6%	19.2%	8.1%	11.9%	11.2%	9.4%	6.6%	19.8%	25.6%	15.3%	12.8%	10.0%
	WPZ						16.0%	1.8%	7.1%	8.8%	8.3%	8.6%	6.0%	4.7%	4.4%
<b>Median</b>	<b>5.4%</b>	<b>7.4%</b>	<b>9.3%</b>	<b>10.0%</b>	<b>6.7%</b>	<b>6.5%</b>	<b>4.1%</b>	<b>4.4%</b>	<b>5.1%</b>	<b>6.7%</b>	<b>6.8%</b>	<b>6.0%</b>	<b>4.7%</b>	<b>4.4%</b>	
Small & Mid Cap.	BKEP					(68.6%)	(100.0%)			NA	8.4%		24.7%	17.7%	11.3%
	CMLP										5.6%		5.9%	6.5%	6.4%
	DKL										6.8%		12.0%	12.6%	10.7%
	EXLP						16.4%	4.2%	0.8%	4.0%	4.1%	4.0%	3.8%	3.2%	2.6%
	GEL	NA	NA	5.0%	23.8%	28.8%	26.1%	10.1%	9.7%	10.5%	10.5%	10.6%	10.9%	10.6%	10.5%
	GLP					8.1%	2.4%	0.0%	1.0%	1.5%	6.4%	10.9%	7.6%	7.0%	5.7%
	HEP				12.3%	7.4%	5.8%	5.3%	4.7%	5.1%	5.5%	6.5%	6.5%	6.4%	6.4%
	MMLP		4.2%	7.3%	8.2%	9.4%	10.4%	1.4%	0.3%	1.3%	0.5%	1.6%	2.6%	3.3%	3.3%
	MPLX											10.2%	20.5%	17.8%	15.0%
	NGL											18.7%	12.0%	10.4%	8.1%
	NKA									0.0%	0.0%	0.0%	0.5%	2.9%	2.8%
	PNG									3.5%	1.8%	0.0%	0.0%	1.2%	2.2%
	SUSP											4.8%	9.7%	9.3%	7.4%
	TLLP										23.6%	25.5%	23.8%	15.2%	13.0%
USAC											4.4%	8.2%	5.1%	5.0%	
<b>Median</b>	<b>#NUM!</b>	<b>4.2%</b>	<b>6.2%</b>	<b>12.3%</b>	<b>8.7%</b>	<b>8.1%</b>	<b>2.8%</b>	<b>1.0%</b>	<b>3.5%</b>	<b>4.8%</b>	<b>6.5%</b>	<b>8.2%</b>	<b>7.0%</b>	<b>6.4%</b>	
Gathering & Processing MLPs	ACMP								9.4%	15.7%	15.5%		15.4%	15.2%	11.4%
	AMD										2.0%		6.5%	5.3%	5.0%
	APL	11.7%	11.9%	18.4%	7.6%	5.0%	(9.2%)	(95.4%)	NA	NA	15.8%	8.1%	10.0%	12.4%	9.5%
	DPM					35.6%	13.0%	0.4%	1.6%	4.5%	6.0%	5.9%	7.6%	8.4%	7.7%
	EQM										18.6%		28.9%	22.5%	17.5%
	MWE		20.2%	9.1%	16.0%	14.9%	16.2%	2.0%	0.4%	11.3%	12.6%	5.9%	10.0%	10.0%	9.0%
	NGLS							5.3%	2.9%	8.6%	12.8%	11.3%	10.9%	8.7%	7.8%
	PVR	3.0%	5.0%	21.2%	16.4%	11.5%	8.8%	1.6%	0.0%	5.3%	8.1%	2.8%	0.7%	1.5%	1.4%
	QEPM											0.0%	15.0%	15.0%	13.7%
	RGP						13.2%	1.4%	0.0%	1.7%	1.7%	1.6%	5.6%	5.8%	5.0%
	SXE											0.0%	1.4%	4.6%	4.7%
	WES								5.0%	14.3%	14.9%	18.4%	17.3%	13.2%	10.9%
	XTEX		32.0%	13.5%	13.0%	6.9%	(14.2%)	(100.0%)	NA	NA	7.3%	2.7%	8.5%	8.0%	6.3%
	<b>Median</b>	<b>7.4%</b>	<b>16.1%</b>	<b>15.9%</b>	<b>14.5%</b>	<b>11.5%</b>	<b>10.9%</b>	<b>1.5%</b>	<b>1.0%</b>	<b>8.6%</b>	<b>12.6%</b>	<b>5.9%</b>	<b>9.2%</b>	<b>8.6%</b>	<b>7.7%</b>
Upstream MLPs	ARP										29.2%		13.1%	7.0%	4.8%
	BBEP						19.1%	(100.0%)		10.6%	7.2%	4.3%	5.4%	4.0%	3.7%
	EROC						9.8%	(93.9%)	NA	NA	17.7%	0.0%	0.0%	0.0%	0.6%
	EVEP						33.1%	6.8%	0.5%	0.5%	0.5%	0.5%	0.5%	4.9%	6.1%
	LGCY						19.9%	1.5%	0.2%	3.8%	3.9%	3.6%	5.2%	5.2%	4.9%
	LINE						10.0%	0.0%	2.4%	5.8%	6.2%	0.0%	0.0%	1.6%	2.0%
	LRE											2.0%	1.3%	0.9%	0.9%
	MCEP											7.8%	4.1%	2.6%	1.9%
	MEMP											5.2%	4.4%	4.0%	3.7%
	PSE							0.0%	0.0%	2.0%	2.0%	0.0%	6.3%	5.0%	4.3%
	QRE										13.1%	0.6%	0.0%	0.0%	0.0%
VNR							7.1%	7.9%	5.7%	3.9%	3.0%	2.3%	3.9%	4.8%	
<b>Median</b>						<b>19.1%</b>	<b>0.0%</b>	<b>0.5%</b>	<b>4.8%</b>	<b>5.1%</b>	<b>2.5%</b>	<b>4.2%</b>	<b>4.0%</b>	<b>4.0%</b>	

Source: Partnership reports and Wells Fargo Securities, LLC estimates

Continued on next page.

		2003A	2004A	2005A	2006A	2007A	2008A	2009A	2010A	2011A	2012A	2013E	Estimated Distribution CAGRs		
													1-Yr ('14E)	3-Yr ('14-16E)	5-Yr ('14-18E)
Prop.	APU	0.0%	0.0%	1.8%	3.6%	5.2%	4.9%	4.7%	5.2%	5.8%	7.3%	5.0%	4.8%	3.7%	2.9%
	SPH	2.7%	4.3%	0.5%	6.1%	12.5%	9.1%	3.6%	2.5%	0.7%	0.7%	2.7%	3.0%	3.2%	3.2%
	<b>Median</b>	<b>1.4%</b>	<b>2.1%</b>	<b>1.2%</b>	<b>4.8%</b>	<b>8.8%</b>	<b>7.0%</b>	<b>4.1%</b>	<b>3.9%</b>	<b>3.2%</b>	<b>4.0%</b>	<b>3.8%</b>	<b>3.5%</b>	<b>3.8%</b>	<b>3.4%</b>
Marine	CPLP							0.6%	-44.2%	1.6%	0.0%	0.0%	4.3%	2.8%	-
	GMLP										15.3%	12.4%	6.5%	6.2%	-
	NMM							8.8%	4.3%	3.9%	1.0%	0.3%	0.0%	0.0%	-
	SDLP											11.3%	17.1%	10.7%	-
	TGP				12.1%	10.9%	8.2%	2.7%	6.6%	3.7%	7.1%	0.7%	5.0%	4.3%	-
	TOO						14.5%	5.9%	5.6%	5.3%	2.5%	2.6%	7.0%	6.3%	-
<b>Median</b>				<b>12.1%</b>	<b>10.9%</b>	<b>11.3%</b>	<b>4.3%</b>	<b>4.9%</b>	<b>3.8%</b>	<b>2.5%</b>	<b>1.7%</b>	<b>4.3%</b>	<b>3.9%</b>	<b>3.4%</b>	
Coal	ARLP	5.0%	27.4%	24.1%	20.5%	12.3%	18.5%	13.2%	9.3%	14.2%	13.9%	8.8%	8.2%	7.4%	-
	NRP	26.7%	15.4%	17.2%	15.2%	12.6%	10.1%	4.3%	0.0%	0.9%	0.9%	0.0%	-18.2%	-6.5%	-
	OXF									33.3%	-38.6%	-	-	-	-
<b>Median</b>	<b>15.8%</b>	<b>21.4%</b>	<b>20.6%</b>	<b>17.8%</b>	<b>12.4%</b>	<b>14.3%</b>	<b>8.8%</b>	<b>4.7%</b>	<b>14.2%</b>	<b>0.9%</b>	<b>4.4%</b>	<b>4.5%</b>	<b>3.9%</b>	<b>3.3%</b>	
MLP GPs	AHGP					57.0%	34.2%	21.1%	13.8%	20.8%	18.4%	12.7%	10.6%	9.1%	-
	ATLS						29.1%	(100.0%)		NA	32.1%	58.2%	43.0%	36.3%	26.2%
	CEQP	10.5%	13.2%	19.8%	7.3%	6.8%	6.8%	6.3%	4.9%	0.4%	-52.8%	-	15.0%	16.6%	15.7%
	ETE					43.0%	22.6%	11.8%	1.2%	12.7%	3.1%	4.0%	5.8%	13.2%	10.8%
	NSH						14.5%	9.5%	8.1%	5.9%	6.6%	3.3%	0.0%	0.4%	1.6%
	WGP											23.7%	38.4%	27.5%	22.0%
<b>Median</b>	<b>10.5%</b>	<b>13.2%</b>	<b>19.8%</b>	<b>7.3%</b>	<b>43.0%</b>	<b>22.6%</b>	<b>9.5%</b>	<b>6.5%</b>	<b>9.3%</b>	<b>6.6%</b>	<b>12.7%</b>	<b>6.4%</b>	<b>6.8%</b>	<b>10.8%</b>	
C-Corp GPs	KMI										16.7%	15.7%	11.1%	6.9%	6.1%
	OKE	3.0%	36.2%	19.1%	14.3%	12.5%	9.7%	6.3%	13.1%	18.4%	17.8%	16.5%	22.1%	20.9%	15.6%
	TRGP									NA	35.9%	34.6%	27.2%	19.0%	15.4%
	WMB	(90.5%)	100.0%	212.5%	47.0%	8.2%	8.2%	2.3%	10.2%	59.8%	54.4%	20.2%	21.4%	15.9%	10.9%
	XTXI			35.8%	35.5%	13.1%	21.1%	(100.0%)		NA	20.0%	6.3%	56.9%	30.8%	23.0%
	<b>Median</b>	<b>(43.7%)</b>	<b>68.1%</b>	<b>35.8%</b>	<b>35.5%</b>	<b>12.5%</b>	<b>9.7%</b>	<b>2.3%</b>	<b>11.7%</b>	<b>39.1%</b>	<b>20.0%</b>	<b>16.5%</b>	<b>15.0%</b>	<b>15.9%</b>	<b>13.2%</b>
<b>Median (All MLPs)</b>	<b>3.5%</b>	<b>10.1%</b>	<b>11.4%</b>	<b>12.8%</b>	<b>9.4%</b>	<b>9.9%</b>	<b>3.6%</b>	<b>4.1%</b>	<b>5.2%</b>	<b>7.1%</b>	<b>5.7%</b>	<b>6.5%</b>	<b>6.4%</b>	<b>6.1%</b>	

Source: Partnership reports and Wells Fargo Securities, LLC estimates

Master Limited Partnerships

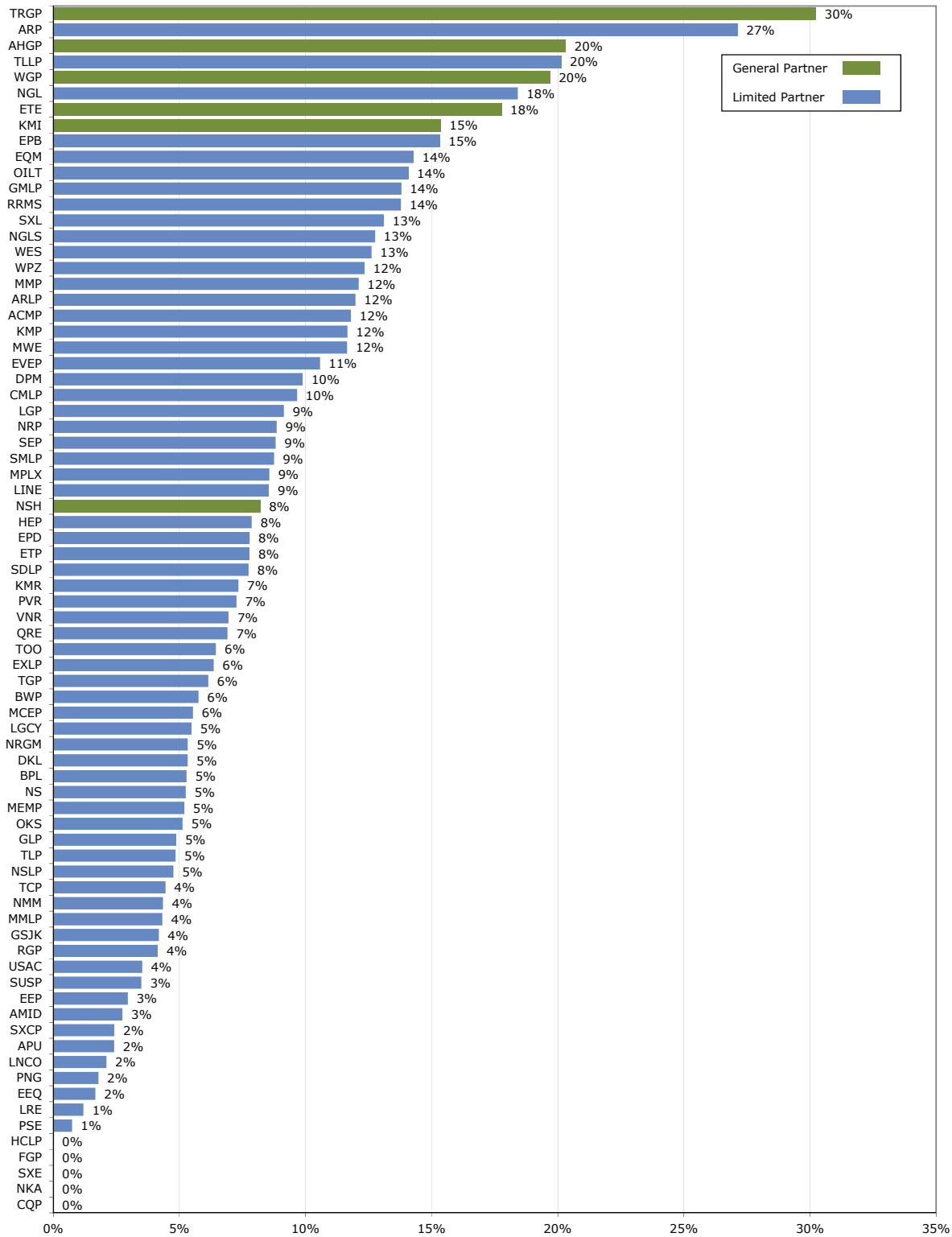
Exhibit 169. MLP IDR Tiers

	Ticker	Quarterly Distribution Thresholds			Q2'13 Quarterly Distribution	Current IDR Split	
		15% Tier	25% Tier	50% Tier			
Large Cap Pipeline MLPs	Buckeye Partners, L.P. <sup>1</sup>	BPL	-	-	-	\$0.63	45%
	Boardwalk Pipeline Partners, LP	BWP	\$0.40	\$0.44	\$0.53	\$0.53	50%
	Enbridge Energy Partners, L.P. Class A	EEP	\$0.30	\$0.35	\$0.50	\$0.54	50%
	El Paso Pipeline Partners, L.P.	EPB	\$0.33	\$0.36	\$0.43	\$1.06	50%
	Enterprise Products Partners L.P.	EPD	-	-	-	\$0.68	2%
	Energy Transfer Partners, L.P.	ETP	\$0.28	\$0.32	\$0.41	\$0.89	50%
	Kinder Morgan Energy Partners, L.P.	KMP	\$0.15	\$0.18	\$0.23	\$0.86	50%
	Magellan Midstream Partners, L.P.	MMP	-	-	-	\$0.53	2%
	NuStar Energy L.P.	NS	\$0.40	\$0.44	\$0.53	\$1.10	50%
	ONEOK Partners, L.P.	OKS	\$0.30	\$0.36	\$0.47	\$0.72	50%
	Plains All American Pipeline, L.P.	PAA	\$0.23	\$0.25	\$0.34	\$0.59	50%
	Spectra Energy Partners, LP	SEP	\$0.35	\$0.38	\$0.45	\$0.51	50%
	Sunoco Logistics Partners L.P. <sup>1</sup>	SXL	\$0.34	\$0.37	\$0.51	\$0.60	50%
Williams Partners L.P.	WPZ	\$0.40	\$0.44	\$0.53	\$1.32	50%	
<b>Large Cap Pipeline MLP Median</b>						<b>50%</b>	
Small & Mid Cap	Blueknight Energy Partners, L.P.	BKEP	\$0.13	\$0.14	\$0.18	\$0.45	50%
	Crestwood Midstream Partners LP	CMPL	-	-	\$0.37	\$0.59	50%
	Delek Logistics Partners LP	DKL	\$0.43	\$0.47	\$0.56	\$0.40	2%
	Exterran Partners, L.P.	EXLP	\$0.40	\$0.44	\$0.53	\$0.52	25%
	Genesis Energy, L.P.	GEL	-	-	-	\$0.29	2%
	Global Partners LP	GLP	\$0.46	\$0.54	\$0.66	\$0.40	2%
	Holly Energy Partners, L.P.	HEP	\$0.28	\$0.31	\$0.38	\$0.43	50%
	Martin Midstream Partners L.P.	MMLP	\$0.55	\$0.63	\$0.75	\$0.78	50%
	MPLX LP	MPLX	\$0.28	\$0.31	\$0.38	\$0.21	2%
	NGL Energy Partners LP	NGL	\$0.39	\$0.42	\$0.51	\$0.81	50%
	Niska Gas Storage Partners LLC	NKA	-	-	\$0.35	\$0.35	2%
	PAA Natural Gas Storage, L.P.	PNG	\$0.34	\$0.37	\$0.51	\$0.65	50%
	Susser Petroleum Partners LP	SUSP	\$0.50	\$0.55	\$0.66	\$0.49	2%
Tesoro Logistics LP	TLLP	\$0.39	\$0.42	\$0.51	\$0.43	25%	
USA Compression Partners LP	USAC	\$0.49	\$0.53	\$0.64	\$0.44	2%	
<b>Small Cap Midstream MLP Median</b>						<b>25%</b>	
Gathering & Processing MLPs	Access Midstream Partners, L.P.	ACMP	\$0.39	\$0.42	\$0.51	\$0.56	50%
	American Midstream Partners, LP	AMID	-	-	\$0.41	\$0.35	2%
	Atlas Pipeline Partners, L.P.	APL	\$0.42	\$0.52	\$0.60	\$0.62	50%
	DCP Midstream Partners, LP	DFM	\$0.40	\$0.44	\$0.53	\$0.71	50%
	EQT Midstream Partners LP	EQM	\$0.40	\$0.44	\$0.53	\$0.43	15%
	MarkWest Energy Partners, L.P.	MWE	-	-	-	\$0.25	2%
	Targa Resources Partners LP	NGLS	\$0.39	\$0.42	\$0.51	\$0.72	50%
	PVR Partners, L.P.	PVR	-	-	-	\$0.55	2%
	QEP Midstream Partners LP	QEPM	\$0.29	\$0.31	\$0.38	\$0.49	50%
	Regency Energy Partners LP	RGP	\$0.40	\$0.44	\$0.53	\$0.47	25%
	Southcross Energy Partners, L.P.	SXE	\$0.46	\$0.50	\$0.60	\$0.40	2%
	Western Gas Partners, LP	WES	\$0.35	\$0.38	\$0.45	\$0.40	25%
	Crosstex Energy, L.P.	XTEX	\$0.25	\$0.31	\$0.38	\$0.29	15%
<b>Gathering &amp; Processing MLP Median</b>						<b>25%</b>	
Upstream MLPs	Atlas Resource Partners, L.P.	ARP	\$0.46	\$0.50	\$0.60	\$0.49	15%
	Bretburn Energy Partners L.P.	BBEP	-	-	-	\$0.51	2%
	Eagle Rock Energy Partners, L.P.	EROC	-	-	-	\$0.22	2%
	EV Energy Partners, L.P.	EVEP	\$0.88	\$0.95	-	\$0.58	2%
	Legacy Reserves LP	LGCY	-	-	-	\$0.77	2%
	Linn Energy, LLC	LINE	-	-	-	\$0.48	2%
	LRR Energy, L.P.	LRE	\$0.55	\$0.59	-	\$0.73	25%
	Mid-Con Energy Partners, LP	MCEP	-	-	-	\$0.52	2%
	Memorial Production Partners LP	MEMP	\$0.55	\$0.59	-	\$0.54	2%
	Pioneer Southwest Energy Partners L.P.	PSE	-	-	-	\$0.52	2%
	QR Energy, LP	QRE	-	-	-	\$0.55	2%
Vanguard Natural Resources, LLC	VNR	-	-	-	\$0.52	2%	
<b>Upstream MLP Median</b>						<b>2%</b>	
Prop.	AmeriGas Partners, L.P.	APU	\$0.61	\$0.70	\$0.90	\$0.88	25%
	Suburban Propane Partners, L.P.	SPH	-	-	-	\$0.08	2%
<b>Propane MLP Median</b>						<b>14%</b>	
Marine	Capital Product Partners LP	CPLP	\$0.43	\$0.47	\$0.56	\$0.52	25%
	Golar LNG Partners LP	GMLP	\$0.44	\$0.48	\$0.58	\$0.42	2%
	Navios Maritime Partners LP	NMM	\$0.40	\$0.44	\$0.53	\$0.44	25%
	Seadrill Partners LLC	SDLP	\$0.45	\$0.48	\$0.58	\$0.42	2%
	Teekay LNG Partners L.P.	TGP	\$0.46	\$0.54	\$0.65	\$0.53	15%
	Teekay Offshore Partners L.P.	TOO	\$0.40	\$0.44	\$0.53	\$0.53	50%
<b>Marine MLP Median</b>						<b>20%</b>	
Coal	Alliance Resource Partners, L.P.	ARLP	\$0.28	\$0.31	\$0.38	\$1.15	50%
	Natural Resource Partners L.P.	NRP	-	-	-	\$0.55	2%
	Oxford Resource Partners, LP	OXF	\$0.50	\$0.55	\$0.66	\$0.00	2%
<b>Coal MLP Median</b>						<b>2%</b>	

Note 1: BPL has other tiers not shown. BPL's maximum tier is 45%. SXL's second tier is 37% instead of 25%.  
Source: Partnership reports and Wells Fargo Securities, LLC



Exhibit 170. Distribution Growth CAGR Since IPO



Note: MLPs who cut or suspended their distribution are excluded

Note: Distribution CAGRs based on annualized quarterly distribution growth rate since IPO

Source: Partnership reports and Wells Fargo Securities, LLC

## MLP Glossary Of Terms

**1P Reserves (Proved):** Proved reserves indicate there is at least a 90% probability or “reasonable certainty” that the reserves will be producing in the future.

**2P Reserves (Proved + Probable):** Probable reserves indicate there is at least a 50% probability or “more likely than not” chance that the reserves will be producing in the future.

**3P Reserves (Proved + Probable + Possible):** Possible reserves indicate there is at least a 10 % probability or “less likely than probable” chance that the reserves will be producing.

**Adjustable/Variable-Rate Debt:** Debt capital that is borrowed at a rate of interest that changes (varies) over the term of the loan. The rate is usually expressed as a percentage over a dynamic base rate like Prime or LIBOR and can cause interest expense fluctuations for borrowers if the base rate changes (in direct relation).

**Adjusted Yield:** An MLP’s current yield adjusted for the percent of cash flow going to the general partner (GP). For example, if the GP is receiving 15% of the underlying MLP’s total distributions and the underlying MLP’s unit trades at a 6.0% yield, the adjusted yield is approximately 7.1% (i.e., the current yield ÷ [1 - % of cash flow to GP]).

**Amine:** Amine is a type of chemical used to remove impurities from natural gas in order to make the natural gas suitable for pipeline transport.

**Aquifers:** Natural gas can be stored underneath the ground in depleted reservoirs, salt caverns, or aquifers. Aquifers are underground rock formations that act as natural water reservoirs, which can be used to store natural gas.

**Associated Gas:** Raw natural gas that has become dissolved in oil accumulations and is produced as a byproduct along with crude oil. If the gas is in contact, but not in solution with crude oil, it called associated free gas. Associated gas is typically rich with heavier NGLs.

**Available Cash Flow:** The cash flow available to the common unitholders and the general partner.

**Backwardation:** A market condition in which future commodity prices are lower than spot prices. A backwardated market usually occurs when demand exceeds supply.

**Base Gas:** All underground gas storage must contain a certain amount of “base gas,” or “cushion gas.” This base gas is the amount of gas that the storage facility must hold to provide the desired pressurization to extract natural gas.

**Basis differential:** The difference between the commodity price at as hub (e.g., Henry Hub spot natural gas price) and the corresponding cash spot price in another location (e.g., Carthage, Katy, Waha, etc.). The differential relates to factors like product quality, location, and available takeaway capacity (options).

**Blendstocks:** A liquid compound that is mixed with petroleum products to improve the petroleum’s characteristics. For example, blendstocks are mixed with motor gasoline to increase the gasoline’s octane or oxygen content.

**British Thermal Unit (Btu):** A unit of energy used to describe the energy (heat) content of a fuel (natural gas).

**Butadiene (C<sub>4</sub>H<sub>6</sub>):** Butadiene is an important building block of synthetic rubber. Butadiene is produced primarily as a by-product of stream cracking.

**Capital Asset Pricing Model (CAPM):** Maps the relationship between risk and expected return, and provides an alternate definition of the required rate of return (or cost of equity) of a given asset. It is defined as the risk-free rate (typically the 10-year Treasury) plus (+) beta multiplied (×) by the expected market return (typically the historical return of a given market index), minus (-) the risk-free rate.

**Capex:** Capital expenditures.

**Casinghead Gas:** See definition for *Associated Gas*.

**Compounded Annual Growth Rate (CAGR).** The measure of the average annual growth rate of a financial metric (e.g., distributions) over a certain time period.

**Compression / Compressor:** A compressor is used to compress a volume of product at an existing pressure to a higher pressure to facilitate delivery of the commodity from one point to another. Compression is often applied (1) at the wellhead, (2) throughout gathering and distribution systems, (3) into and out of processing and storage facilities, and (4) along intrastate and interstate pipelines. Compression revenue is driven by the amount of operating horsepower (HP utilization rate) and the rate per HP charged to the customer (i.e., fee based).

**Condensate/Lease Condensate:** Refers to a specific portion of the NGL stream. Some of the heavier NGL components (e.g., iso-butane and natural gasoline) exist as a gaseous state only at underground pressures. These molecules immediately “condense” to a liquid state when brought to atmospheric conditions, hence the name condensate.

**Contango:** A market condition in which future commodity prices are greater than spot prices.

**Conventional Natural Gas Production:** Typically relates to natural gas that is produced from underground formations composed of sandstone or carbonate rock. Conventional deposits are easier to produce relative to unconventional deposits.

**Corporation:** A distinct legal entity, separate from its shareholders and employees. As a separate legal standing entity, a corporation protects its owners from being personally liable in the event that the company is sued (i.e., limited liability). The shareholders contribute capital, but have no liability to business creditors, tax authorities, or any other parties, which may have a claim on corporate earnings and assets.

**Cost Of Capital:** The cost to a company of raising capital in the form of equity (common or preferred stock) or debt.

**Cost Of Debt Capital:** The interest rate that a company must pay on new borrowed funds.

**Cost Of Equity Capital:** Theoretical percentage return that a company has foregone by investing equity capital in a property instead of an alternative investment.

**Credit Cycle:** The credit cycle is the expansion and contraction of access to credit over the course of the business cycle.

**Crude Oil Pipelines:** Pipelines, which can be interstate or intrastate, primarily transport crude oil from gathering lines or other pipelines to refineries or storage facilities.

**Cryogenic Expander Process:** Cryogenic expansion involves the rapid cooling of natural gas via expansion to approximately negative 120 degrees Fahrenheit. At this temperature, ethane and the other NGL components condense out of the natural gas stream, while methane remains in its gaseous form. Most modern processing plants use the cryogenic expander process to extract NGLs.

**Current Yield:** Current dividend divided by the current stock price. Also, the annualized quarterly distribution divided by the MLP's current unit price.

**Cycle:** This refers to the complete withdrawal and injection of a storage facility's working gas capacity.

**Debt-To-Total Capital:** The ratio of a company's total debt to total capital, which includes equity and debt market values. The metrics is used to measure the degree of leverage of the company.

**Dehydration:** The process of removing water found in saturated natural gas. If left in the natural gas stream during long-haul transportation, water can form ice and corrosion inside pipelines. To meet transportation standards, natural gas is dehydrated to remove any water from the natural gas stream.

**Depleted Reservoir:** Natural gas can be stored underground in depleted reservoirs, salt caverns, or aquifers. Depleted reservoirs are naturally occurring formations wherein all recoverable natural gas or oil has been produced, leaving a void capable of holding natural gas.

**Dirty Hedge:** A company can use crude oil derivatives as a proxy to hedge its natural gas liquids' (NGL) exposure.

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**Distributable Cash Flow (DCF):** DCF is the cash flow available to the common unitholders after payments to the GP.

**Distribution:** MLPs typically distribute all available cash flow to unitholders in the form of distributions (similar to dividends).

**Distribution Coverage Ratio:** Indicates the cash available for distribution for every dollar to be distributed. The ratio is calculated by dividing available cash flow by distributions paid. Investors typically consider coverage ratio to be the “cushion” a partnership has in paying its cash distribution. In this context, the higher the ratio, the more secure the distribution.

**Distribution Tiers:** The percentage allocations (and the associated thresholds) of available cash flow between common unitholders and the general partner based on specified target distribution levels established at inception of the partnership.

**Distribution Yield:** Synonymous to a dividend yield.

**Downstream:** Refers to the refining and marketing sectors of the energy industry. It is also associated with the distribution (i.e., post refining/processing) of products to the end-user market for consumption.

**Dropdown:** The sale of an asset from the parent company (or sponsor company) to the underlying partnership. Dropdowns can also be defined as a transaction between two affiliated companies.

**Dry Natural Gas:** Natural gas is classified as “dry” or “wet” depending on the amount of NGLs present. Dry or lean natural gas typically contains less than 1 gallon of recoverable NGLs per Mcf of gas (GPM) and is composed primarily of methane. The amount of NGLs contained in the natural gas stream can vary depending upon the region, depth of wells, proximity to crude oil, and other factors.

**Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA):** Earnings before interest, taxes, depreciation and amortization. A non-GAAP measure used to provide an approximation of a company’s profitability. This measure excludes the potential distortion that accounting and financing rules may have on a company’s earnings; therefore, EBITDA is a useful tool when comparing companies that incur large amounts of depreciation expense because it excludes these non-cash items which could understate the company’s true performance.

**Earnings Per Unit (EPU):** EPU is synonymous with a C corp.’s earnings per share (EPS). EPU is calculated by dividing net income allocated to the limited partners divided by the weighted average LP units outstanding at the end of the period.

**EBITDA Multiple:** An EBITDA multiple is the expected return an acquisition or organic growth project is estimated to generate. For example, a \$100 million investment at an 8x EBITDA multiple, would be expected to generate approximately \$12.5 million on an annual basis (or a 12.5% return).

**Energy Information Administration (EIA):** An independent statistical agency of the U.S. Department of Energy (DOE). The EIA provides energy data (e.g., pricing, supply, and reserves), short- and long-term forecasts (e.g., supply and demand), and analyses that can be used to understand energy usage in the U.S. Its publications cover petroleum, natural gas, electricity, coal, renewable and alternative fuels, and nuclear energy.

**Ethane:** Typically the largest component of the natural gas liquids stream produced alongside natural gas. It is primarily used as a feedstock for ethylene production by the petrochemical industry. Thus, the demand for ethane is tied closely to ethylene production, which, in turn, is tied to demand for plastics, or more broadly speaking, the health of the overall economy.

**Ethane Extraction:** Natural gas processors choose to extract (i.e., separate) ethane from the natural gas stream when processing economics are favorable (i.e., when ethane is worth more as a distinct product than as part of the natural gas stream).

**Ethane Rejection:** A natural gas processor will likely choose, if given the option, to reject ethane (i.e., leave it in the natural gas stream) rather than extract it, when the processing margin (specifically the ethane margin) turns negative or uneconomic (i.e., below a plant’s fixed operating costs). If the processor is unable to reject ethane under this scenario, the company would likely incur a loss. To note, the remainder of the NGL stream (i.e., propane+) is still processed. Most modern processing plants have the ability extract heavier NGL components, but leave ethane in the natural gas stream when processing economics are unfavorable.

**Ethylene:** A building block for polyethylene, which is the most popular plastic in the world. Ethylene is the simplest olefin produced by the petrochemical industry.

**Excess Cash Flow:** The cash flow that remains after distributions have been paid to common and subordinated unitholders and general partner.

**Expansion Capital Expenditures (CAPEX):** See definition for *Organic CAPEX*.

**Federal Energy Regulatory Commission (FERC):** An independent agency that regulates the interstate transmission of electricity, natural gas, and oil. The FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.  
(Definition source – [www.ferc.gov](http://www.ferc.gov))

**Fee-Based:** In a fee-based contract, the operator receives a fixed fee for each unit of volume that flows through its system. The agreed upon fee does not materially fluctuate over the life of the contract. Fee-based contracts are used widely across the MLP sector (e.g. for gathering, processing, pipeline, and storage assets).

**Feedstock:** The raw material used by petrochemical plants in the production of ethylene, propylene, and butadiene (also known as olefins). Feedstock is also commonly referred to as “feedslate.”

**Firm Storage:** Type of service offered by storage operators in which contracts consist primarily of take-or-pay agreements, with minimal price or volumetric risk.

**Fixed-Charge Coverage Ratio:** This ratio takes net earnings before capital charges (interest expense and preferred capital costs as well as amortization) divided by capital charges. EBITDA coverage ratio is similar but less stringent--EBITDA divided by total interest expense (including capitalized interest and debt premium amortization, but excluding finance cost amortization).

**Forward Yield:** An MLP’s next four quarterly distributions (i.e., total distributions received over the next 12 months) divided by an MLP’s current price.

**Frac Spread:** See definition for *Processing Margin*.

**Fractionation:** The process that involves the separation of the NGLs into discrete NGL purity products (i.e., ethane, propane, normal butane, iso-butane, and natural gasoline).

**Fracturing:** A process that typically involves the pumping of water (at very high pressures) to create an extensive crack in the rock formation. The crack in the rock exposes an increased surface area that allows a greater amount of natural gas to be produced.

**Fuel Oil:** Refers to the heaviest commercial fuel that can be obtained from crude oil. Its weight exceeds that of natural gasoline or naphtha. For example, diesel is a type of fuel oil.

**Full Recovery:** Full recovery refers to normal operating conditions when a processing plant is extracting both ethane and the heavier NGL components.

**Gallons of Recoverable NGLs per Mcf (GPM):** Refers to the amount of NGLs contained in the natural gas stream and is dependent upon the region, depth of wells, proximity to crude oil, and other factors.

**Gas Oil:** Considered a heavy feedstock used in ethylene production. Gas oils include diesel fuel, heating fuel, and light fuel oils.

**Gathering Pipelines:** A network of small diameter (4-6”) pipelines that collect and transport raw natural gas (from producing natural gas wells) to a central delivery point for transport to a processing and treating facility or directly to the pipeline system (if the gas does not require processing).

**General Partner (GP):** The GP (1) manages the day-to-day operations of the partnership, (2) generally has a 2% ownership stake in the partnership, and (3) is typically eligible to receive an incentive distribution (through the ownership of the MLPs’ incentive distribution rights).

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**GP MLPs:** Publicly traded MLPs that own the controlling GP interest and incentive distribution rights of their underlying MLP. Some GPs also own LP units of the underlying MLP. An investment in a GP MLP is a leveraged play on the underlying MLP because the GP's financial performance and distributions are dependent upon the underlying partnership's operations and distribution growth prospects.

**Header System:** A central pipeline that directs and manages flows of smaller, interconnecting pipelines.

**Heavy Feedstock:** Consists primarily of hydrocarbons derived from crude oil sources such as heavy naphtha and gas oil. If a heavy feedstock is used in the production of ethylene, the byproducts (excluding ethylene) include propylene and butadiene as well as heavier hydrocarbons known as aromatics (i.e., C5+) suitable for gasoline blending.

**Heavy Naphtha:** Heavy naphtha, which is composed of heavier hydrocarbons found at the bottom of the naphtha splitter, is classified as heavy feedstock.

**Held by Production (HBP):** If an oil or gas well successfully produces during the primary term of the lease, the lease is automatically extended and considered held by production. The lease will remain valid as long as the property keeps producing a minimum quantity of oil or gas as previously negotiated in the lease.

**HVAC:** Heating, ventilating and air conditioning

**Incentive Distribution Agreement:** At inception, MLPs establish agreements between the GP and LP that outline the percentage of total cash distributions that are to be allocated between the GP and LP unitholders.

**Incentive Distribution Rights (IDRs):** Allow the holder (typically the general partner) to receive an increasing percentage of quarterly distributions after the MQD and target distribution thresholds have been achieved. In most partnerships, IDRs can reach a tier wherein the GP is receiving 50% of every incremental dollar paid to the LP unitholders. This is known as the 50/50 or "high splits" tier.

**Injection Rate:** Refers to the amount of gas that can be injected into the facility. Both of these measurements are usually expressed in billion or million cubic feet per day.

**Injection Season:** Refers to the time period (usually from April to October) when producers and pipelines inject natural gas into storage for use during the winter months (November to March).

**Interruptible Service:** Customer contracts for pipeline or storage capacity on a spot market basis at prevailing rates. Capacity is not guaranteed and is offered only if available.

**Interstate Natural Gas Pipelines:** Transport natural gas across multiple states and are regulated by the Federal Energy Regulatory Commission (FERC). Natural gas pipelines receive supply from gathering systems and/or other pipelines, and deliver it to industrial end users, utility companies, storage facilities or other pipelines.

**Interstate Pipelines:** A pipeline that transports product across state lines. Interstate pipelines are regulated by the FERC.

**Intrastate Natural Gas Pipelines:** Intrastate natural gas pipelines perform essentially the same functions as interstate pipelines except that intrastate pipelines operate within state borders and are regulated by state agencies. An intrastate pipeline system generally transports natural gas between many different hubs and points within a particular state. Hence, basis differentials among multiple hubs are a key driver of intrastate pipeline revenue.

**Intrastate Pipelines:** An intrastate pipeline is a pipeline that operates within one state. Intrastate pipelines are regulated by state, provincial or local jurisdictions.

**I-Shares:** Equivalent to MLP units in most aspects, except the payment of distributions is in stock instead of cash. I-shares do not generate K-1 statements or UBTI.

**Isobutane:** Has the same molecular formula as normal butane, but a different structural formula (i.e., atoms are rearranged). Isobutane is used in refinery alkylation to enhance the octane content of motor gasoline.

**K-1 Statement:** The statement that an MLP investor receives each year from the partnership that shows his/her share of the partnership's income, gain, loss, deductions, and credits. A K-1 is similar to Form 1099 received by shareholders of a corporation.

**Keep-Whole:** In a keep-whole arrangement, the processor retains title to the NGLs produced from the natural gas stream to sell at market prices. By extracting the NGLs, the volume and BTU content of the dry gas is reduced. This is referred to as "shrinkage." The processor must then replace the BTUs that it extracts from the natural gas stream (via the extraction of NGLs) with equivalent BTUs of natural gas. A holder of a keep-whole contract would be long NGL prices and short natural gas prices.

**Lean Natural Gas:** See definition for *Dry Natural Gas*.

**Lean Oil Absorption Method:** One of the primary techniques (the other being cryogenic expander process) used for methane separation, that is, the actual separation of methane (i.e., natural gas) from NGL components, which is the last step in natural gas processing. The absorption method uses specially formulated oils to "absorb" heavier NGL components from the incoming gas stream. As natural gas passes through the absorption tower, NGLs are captured by the absorption oil, which has an affinity to NGLs. The absorption oil is then fed into oil stills where the mixture is heated above the boiling point of NGLs but below that of oil, thereby separating the NGLs from the absorption oil.

**Light Feedstock:** Hydrocarbon feeds derived from natural gas sources (i.e., ethane, propane, and butane); however, it can also refer to light naphtha. Light feedstock produces lighter olefins including ethylene, propylene, and butadiene.

**Light Naphtha:** Light naphtha, which is composed primarily of C5 hydrocarbons (i.e., natural gasoline), is generally classified as a light feedstock.

**Limited Partner (LP):** The LP (1) provides capital, (2) has no role in the MLPs' operations or management, and (3) receives cash distributions.

**Limited Partnership:** A business structure (specifically a type of partnership) comprised of at least one general partner and at least one limited partner. A limited partner provides capital to the partnership and has a potential liability limited to the total amount of his/her investment in the entity. The general partner is responsible for managing the partnership.

**Line Of Credit:** An agreement established with a bank, insurance company, or financial services company to lend funds to a company for acquisition, development projects, or other operating purposes. The agreement usually specifies a maximum amount the bank will lend, the term of the agreement and the interest rate to be paid by the company.

**Liquefaction:** This is the process that changes natural gas from a gaseous state to a liquid state.

**Liquefied Natural Gas (LNG):** LNG is the result of a process whereby natural gas is transformed from a gaseous to liquid state. Natural gas is cooled into liquid form at a liquefaction facility and transported via specially designed ships to markets that have insufficient natural gas supplies or limited natural gas pipeline infrastructure. Upon delivery of the LNG to the receiving terminal, the LNG is returned to its gaseous state (i.e., re-gasification).

**Liquid Petroleum Gases (LPGs):** Created (as a byproduct) during the refining of crude oil or from natural gas production. LPGs are typically in some form of mix of propane and butane.

**Looping:** Refers to the installation of additional pipeline next to an existing pipeline system in order to increase the system's capacity.

**Maintenance Capital Expenditures (Capex):** An expenditure that is made to sustain an existing asset and preserve its useful life or cash flow generating ability.

**Marketed Natural Gas Production:** Refers to gross natural gas withdrawals from reservoirs less the natural gas used for re-pressuring, quantities vented and flared, and non-hydrocarbon gases removed in treating or processing operations.

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**Master Limited Partnership (MLP):** Limited partnership investment vehicles consisting of units (rather than shares) that are traded on public exchanges. MLPs consist of a general partner (GP) and limited partners (LPs). MLPs are also commonly referred to as “partnerships.”

**Maximum Potential Distribution (MPD):** MPD represents the maximum distribution a partnership could, in theory, pay if it distributed all of its sustainable cash flow. Alternatively, it is the distribution that could be paid such that the distribution coverage ratio equals 1.0x (no excess cash flow).

**Methane (CH<sub>4</sub>):** Methane is equivalent to dry natural gas, it is the primary component of natural gas.

**Methane Separation:** Methane separation is the actual separation of the methane (i.e., natural gas) stream from NGL components. Approximately 90% of the natural gas processing plants in the United States use one of the following techniques for methane separation (1) absorption method or (2) cryogenic expander process.

**Midstream:** Refers to gathering, treating, processing, transportation, or storage of a product after it has left the wellhead (i.e., upstream), but before it has been distributed to the end use market (i.e., downstream).

**Midstream MLPs:** A broad term that encompasses all aspects of the energy value chain except the production of oil and gas, and the distribution of energy products to end markets (i.e., the function of electric and gas utility companies). Midstream includes all types of commodities and encompasses the gathering and processing, transportation, and/or storage of crude oil, natural gas, natural gas liquids (NGLs), and/or refined petroleum products.

**Minimum Quarterly Distribution (MQD):** The minimum distribution the partnership plans to pay to its common and subordinated unitholders, assuming the company is able to generate sufficient cash flow from its operations (after the payment of fees, expenses, maintenance capex, and cash flow to the GP). The partnership does not guarantee its ability to pay the MQD during any quarter.

**Naphtha:** Considered a heavy feedstock used in ethylene production. Naphtha is also a highly flammable liquid hydrocarbon mixture that is produced through crude oil distillation (i.e., derived from crude oil).

**Natural Gas Liquids (NGLs):** Extracted from the raw natural gas stream into a liquid mix (consisting of ethane, propane, butane, iso-butane, and natural gasoline). The NGLs are then typically transported via pipelines to fractionation facilities.

**Natural Gasoline:** Natural gasoline is extracted from natural gas and is a mixture of liquid hydrocarbons (i.e., primarily pentanes and heavier hydrocarbons). It is primarily used as a blendstock for motor gasoline and as a diluent.

**NGL Pipelines:** Pipelines that transport (1) raw NGL mix (or unfractionated NGLs) from natural gas processing plants, refineries, and import terminals to fractionation plants and storage facilities, and/or (2) purity NGL products from fractionation facilities to petrochemical plants and other end markets. The largest components of a NGL barrel include ethane, which is primarily used as a feedstock by the petrochemical industry in the production of plastics, and propane, which is also used as a residential heating fuel in addition to being a petchem feedstock.

**NGL Yield:** Represents the amount of NGLs present in natural gas.

**Non-Associated Gas:** Natural gas that is free from contact with crude oil (e.g., dry natural gas is non-associated gas).

**Normal Butane:** Used as a petrochemical feedstock for the production of ethylene and butadiene (used to make synthetic rubber), as a blendstock for motor gasoline, and as a feedstock to create isobutane through isomerization. (The isomerization process is accomplished by heating normal butane in the presence of a catalyst to create isobutane.)

**Oil Sands/ Bituminous Sands:** A type of unconventional petroleum deposit. They are usually comprised of a mixture of sand, clay, water, and bitumen. Bitumen is an extremely viscous oil, yet after treatment it can be used by refineries to produce fuels such as gasoline and diesel. While oil sands are found throughout the world, large amounts have been discovered in Canada’s Alberta province.

**Olefin:** Any unsaturated chemical compound containing at least one carbon double bond. The petrochemical industry produces three primary olefins ethylene, propylene, and butadiene.



**Optimization and Marketing:** A midstream operator can keep a certain amount of capacity of its midstream asset(s) for its own account. The operator uses a marketing function to maximize the value of its asset by employing the same strategies as its customers, such as arbitraging seasonal spreads, employing contango strategies and cycling storage when market opportunities present themselves.

**Organic Growth Capital Expenditures (Capex):** An expenditure that is made to augment existing assets or increase an asset's life or cash flow generating ability.

**Park and Loan:** The storage operator either "loans" gas to a market participant on a temporary basis or "parks" gas in its facility on a temporary basis for a fee. This service is opportunistic in nature and depends upon market demand and storage capacity availability.

**Partnership:** A partnership is not considered to be a separate entity, but rather is an aggregate of all the partners. All partners are liable for the obligations of the partnership; although limited partners enjoy limits on their liability, they are not fully shielded in the way shareholders are. Creditors generally have the right to seek return of capital distributed to a limited partner if the liability for which payment is sought arose before the distribution. This right survives the termination of a partner's interest. Limited partners may also be liable for substantial tax liabilities that could be determined through the audit process long after they have sold their interest. As a practical matter, however, this is unlikely to happen to a PTP investor. (*Source: NAPTP*)

**Percent of Proceeds (POP)/Liquids (POL):** The processor gathers and processes natural gas on behalf of producers. The MLP sells the resulting residue gas (dry, pipeline quality gas) and NGLs at market prices and remits to the producer an agreed upon percentage of the proceeds based on an index price. A typical contract would entitle the producer to 90-95% of the proceeds from the sale of natural gas and NGLs through the plant, while the remaining 5-10% would be assigned to the processing plant operator. Accordingly, POP contracts share price risk between the producer and processor. A percentage-of-liquids (POL) contract is a type of POP contract where the processor receives a percentage of the NGLs only.

**Petrochemicals:** Petrochemicals are chemical compounds that are made from raw materials, which are derived from petroleum or hydrocarbons. Some examples of petrochemicals include ethylene, propylene, and benzene.

**Pipeline Quality Gas:** Natural gas that has had all of the natural gas liquids (and impurities) removed from the natural gas stream and is considered "dry natural gas." The natural gas liquids and impurities are removed from the natural gas stream because major natural gas transmission lines usually impose restrictions on the make-up of the natural gas that is allowed into the pipeline. Pipeline quality gas is typically composed of approximately 95% methane.

**Play:** A proven geological formation that contains petroleum and/or natural gas.

**Polyethylene:** The primary derivative of ethylene, it is the most popular plastic in the world. Polyethylene comes in several different grades, depending on its density and molecular branching. The three most common grades are low density polyethylene, linear low-density polyethylene, and high-density polyethylene. Low-density polyethylene is used to create thin film plastics such as plastic bags and film wrap. High-density polyethylene is used to create sturdier plastics such as detergent bottles, garbage containers, and water pipes. Since approximately 50% of ethylene is polymerized into polyethylene, polyethylene production is an important proxy for ethylene demand, and hence ethane/NGL demand.

**Processing:** A natural gas processing plant typically receives non-pipeline quality or "wet" natural gas via a gathering system. It separates pipeline quality or "dry" natural gas for transportation on interstate and intrastate natural gas pipelines from raw NGL product mix for transportation on NGL pipelines to fractionation facilities and ultimately, petrochemical plants.

**Processing Margin:** The difference between the price of natural gas and a composite price for NGLs on a BTU-equivalent basis.

**Producer Price Index (PPI) Adjustment:** The FERC has allowed crude oil pipelines to increase the (maximum) rates charged to shippers based on the use of an index system. The index system is based on the Producer Price Index for Finished Goods plus 2.65%. Pipelines are allowed to increase their rates on an annual basis on July 1.

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**Propane/C<sub>3</sub>:** The third-largest component of the natural gas stream (preceded by methane and ethane). It is primarily used as a feedstock by the petrochemical industry to produce ethylene and propylene. The bulk of remaining propane consumption is related to its use as a heating fuel in the residential and commercial markets. Hence, demand for propane is closely tied to the overall health of the economy and fluctuations in weather patterns.

**Propylene (C<sub>3</sub>H<sub>6</sub>):** Like ethylene, propylene (also known as propene) is an important chemical used in the manufacture of plastics. It is the second simplest olefin behind ethylene.

**Proved Developed Producing Reserves (PDP):** Reserves that can be recovered via existing wells and through the use of existing equipment and operations.

**Proved Undeveloped Reserves (Pods):** Pods are reserves that are recovered through new wells (on undrilled acreage) or from existing wells that require significant capital expenditures (to be recompleted).

**PV-10 (Standardized Measure):** The after-tax present value of estimated future cash flow of proved reserves. The calculation is based on current commodity prices and is discounted at 10%.

**Raw NGL Mix/ "Y" Grade:** Refers to the NGL components that are extracted via natural gas processing. The resulting NGL mix is commingled product consisting of ethane (depending on whether ethane rejection took place), propane, butane, iso-butane, and natural gasoline. It is not until fractionation, the next step in the NGL value chain, that the raw NGL mix is further separated into individual NGL components.

**Recompletion:** The completion of an existing wellbore (i.e., had been previously completed) for production.

**Refined Petroleum Products:** Crude oil refineries process and refine oil into refined petroleum products. These products are primarily used as fuels by consumers (gasoline, diesel, jet fuel, kerosene, and heating oil).

**Refined Products Pipelines:** FERC regulated transporters of refined petroleum products, such as gasoline, diesel fuel, and jet fuel. Primary pipeline customers are refiners and marketers of the product being shipped. End-user destinations include airports, rail yards, and terminals/truck racks, for further distribution to retail outlets. Refined product pipeline volumes and cash flow are stable based on the relatively inelastic base load demand from the end users of gasoline, diesel fuel, etc. and the fee-based pipeline rates charged. However, throughput can exhibit fluctuations depending upon economic cycles.

**Residue Natural Gas:** See definition for *Dry Natural Gas*.

**Royalty Payment:** A payment received based on either a percentage of sales revenue or a fixed price per unit sold. For example, a partnership may lease out its coal reserves to operators for the right to mine the partnership's coal reserves in exchange for royalty payments.

**Salt Caverns:** Natural gas can be stored underground in depleted reservoirs, salt caverns, or aquifers. Salt caverns are formed out of underground salt deposits. Salt caverns are usually leached, or solution mined, by injecting fresh water via drills into the salt cavern.

**Shale:** A form of sedimentary rock, which could contain crude oil or natural gas.

**Steam Cracker:** A petrochemical plant that uses either light feedstock (i.e., ethane, propane, LPGs) or heavy feedstock (i.e., heavy naphtha, gas oil), depending on plant configuration and economics to create ethylene, propylene, and other petrochemicals. In order to create these petrochemicals (e.g., ethylene), saturated hydrocarbons need to be broken down (or cracked) into smaller, unsaturated hydrocarbons in a process known as steam cracking. Steam cracking is accomplished by heating the hydrocarbon feedstock diluted with steam in a furnace to approximately 650-850 degrees Celsius. Subsequently, the mixture is rapidly cooled to 400 degrees Celsius to stop the reaction. Water is then injected to further cool the mixture; thereby creating a condensate, rich in ethylene and various quantities of other byproducts (depending on the type of feedstock).

**Storage/Terminals:** MLP storage operators handle various commodities including natural gas, crude oil, refined products, and NGLs. They typically derive a majority of their revenue from fee-based contracts, while a smaller amount is generated by throughput fees and optimization businesses.

**Subordinated Units:** Secondary to common units because, for a period of time, the subordinated units are not entitled to receive distributions until the common units have received the Minimum Quarterly Distribution (MQD) plus any arrearages from prior quarters. Subordinated units increase the likelihood that (during the subordinated period) there will be sufficient available cash to be distributed to the common units. In addition, subordinated units are not entitled to distribution arrearages.

**Subordination Period:** The subordination period is the period of time that subordinated units are not entitled to receive any distributions until the common units have received the Minimum Quarterly Distribution (MQD) plus any arrearages from prior quarters. The subordination period typically last for three years from the date of the partnership's initial public offering. However, the subordination period could be terminated at an earlier date if the partnership achieves certain criteria. Upon expiration of the subordinated period, the units convert to common units on a one-for-one basis.

**Take-or-Pay Contract:** Under a take-or-pay agreement, the customer is obligated to pay for capacity reserved on an asset regardless of whether the customer utilizes the asset.

**Tax Deferral Rate:** A percentage of the cash distribution to the unitholder that is tax deferred until the security is sold. The tax deferral rate is an approximation provided by the partnership and is only effective for a certain period of time.

**Treating:** Natural gas gathered with impurities higher than what is allowed by pipeline quality standards is treated with liquid chemicals (i.e., amine) to remove the impurities. The natural gas is treated at a separate facility before being processed.

**Unconventional Natural Gas Production:** Relates primarily to natural gas that is produced from tight formations (i.e., low porosity and permeability), gas shales, and coal bed methane. Natural gas produced from unconventional sources is typically more difficult to extract and thus, is more expensive than conventional production.

**Units:** MLP units are synonymous with C Corp.'s shares.

**Unrelated Business Taxable Income (UBTI):** MLP income received by a tax-exempt entity (e.g., corporate pension accounts, 401-K, and endowment funds) is considered "income earned from business activities unrelated to the entity's tax-exempt purpose" or UBTI. A tax-exempt entity that receives more than \$1,000 per year of UBTI may be liable for the tax on the UBTI.

**Upstream:** This refers to the production of oil and natural gas from the wellhead (i.e. exploration and production).

**Weighted Average Cost of Capital (WACC):** WACC is the hurdle rate for new investments. As it relates to MLPs, it is the proportional weight of equity and debt in a partnership's capital structure. Unlike C Corps, MLPs do not realize a tax benefit on their debt (since they do not pay corporate taxes).

**Wellbore:** A wellbore is the hole created by a drill bit.

**Wellhead:** The equipment at the surface of a crude oil or natural gas well used to control the pressure of the well. The wellhead is also the point at which natural gas or crude oil leaves the ground.

**Wet Natural Gas:** Natural gas is classified as "dry" or "wet" depending on the amount of NGLs present. Wet or rich natural gas contains at least 1 gallon of recoverable NGLs per Mcf of gas (GPM) and up to as much as 5-6 GPM. The amount of NGLs contained in the natural gas stream can vary depending upon the region, depth of wells, proximity to crude oil, and other factors.

**Wheeling:** A storage operator moves gas across its facilities from one pipeline interconnect or another, which enables customers to deliver their gas to the desired market. The storage operator collects a fee for this service; however, this service is performed on a spot basis and is driven by market factors.

**Winter-Summer Spread:** The difference between the highest natural gas price on the NYMEX 12-month forward curve and lowest price, less the carrying costs of storage. The spread represents effectively the value of storage in any given year because a user of storage can buy natural gas in the summer (when prices are seasonally low due to less demand), inject it into storage and sell forward on the NYMEX at the higher winter price, locking in a margin.

**Master Limited Partnerships**

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**Withdrawal Rate/ Deliverability Capacity:** The amount of natural gas that can be extracted from the storage facility on a daily basis.

**Withdrawal Season:** Refers to the time period (usually from November through March), when natural gas supplies are withdrawn from storage for use during the heating season.

**Working Gas:** Working Gas is the volume of natural gas that can be injected or withdrawn during normal storage operations. Most facilities quote their storage capacity as working gas.

**Workover:** The operations on a producing well to resume or increase production.

**Yield Spread:** The percentage point difference between the current yields on alternative investments (i.e., Dow Jones Industrials, S&P 500, and Utilities) and MLPs.

**Energy Industry Abbreviations**

**Bbls:** Barrels

**Bcf/d:** One billion cubic feet per day

**MBtu:** One thousand Btus.

**Mcf:** One thousand cubic feet of natural gas.

**MBbls:** One thousand barrels.

**MBbls/d:** One thousand barrels per day.

**MM:** In millions.

**MMBbls:** One million barrels.

**MMBbls/d:** One million barrels per day.

**MMBtu:** One million Btus.

**MMBtu/d:** One million Btus per day.

**MMcf:** One million cubic feet of natural gas.

**MMcf/d:** One million cubic feet of natural gas per day.

**Tcf:** One trillion cubic feet of gas.

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