

The Future Of Master Limited Partnerships

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ABSTRACT

Master limited partnerships have grown in size, number, and economic importance over the past fifteen years. They now represent a stable and healthy component of many investment portfolios. MLPs have generated impressive risk-adjusted performance compared to that of other equity investments. This performance is the result of their fee-based, low risk business structure that produces a steady cash distribution to investors. The future to these traditional MLPs and similar new entrants is quite positive. However, new entrants that potentially deviate from this successful operating structure are entering the MLP market. This raises major questions regarding the sustainability of these firms as MLPs. This study examines the future of MLP markets within the context of traditional and non-traditional new entrants. Furthermore, the emergence of institutional investors on MLP markets is discussed.

Keywords: Master Limited Partnerships; Energy Finance; Portfolio Management

INTRODUCTION

In 1997, Kinder Morgan, Inc. completed an initial public offering of the Kinder Morgan Energy Partners, L.P. This transaction facilitated the rebirth of an organizational structure long considered relatively dormant, the master limited partnership (MLP hereafter). Since 2001, the number of MLPs has increased dramatically and rapidly grown to significant economic importance (Ciccotello, 2011). According to the National Association of Publicly Traded Partnerships, there are currently over 100 MLPs with a total market capitalization of over \$400 billion. Of particular importance, a considerable portion of these firms now owns and manages much of the United States energy infrastructure. A result of this success is that the MLP has become a solid asset for many individuals and an increasing number of institutional investors. However, increased interest towards this asset class and changing dynamics across the energy industry will have an impact on MLPs going forward. The purpose of the current study is to provide insights about the future of the MLP as more traditional and alternative energy firms select this organizational structure.

For many individual investors, MLPs represent a healthy and stable component of their portfolios. Fleischer, Mead, Walker, and Johnstone (2010) describe how MLPs provide investors many favorable risk related qualities. These include moderately strong liquidity, increased transparency, and low correlation with other equity assets. While experiencing reduced risk, investors have enjoyed impressive returns as the result of their MLP holdings. At the end of 2012, the energy-focused Tortoise MLP Index documented a 5-year annual return of 22.26 percent (Bloomberg, 2013). Of course, many individual MLPs generated even greater returns. This performance is largely attributable to the MLP structure and operating strategy focused on the energy industry.

The importance of the MLP to the energy industry is well documented. Specifically, Ciccotello (2011) explains that the energy industry is capital intensive and MLPs have provided much of the needed capital. To date, a large portion of MLP investments have been in the energy infrastructure or midstream sector of the energy industry.¹ The midstream sector is the conduit between the supply of energy (i.e., upstream sector) and the demand for energy (i.e., downstream sector). Consequently, Fleischer et al. (2010) explain that a large fraction of every other energy critical infrastructure is directly dependent on the products MLPs deliver. In addition to the midstream sector, MLPs have also enjoyed success in the upstream and downstream sectors of the energy industry as well.

¹ The energy industry is generally divided into three sectors: upstream, midstream, and downstream. The Upstream sector is concerned with exploration and production of energy sources, the Midstream sector is concerned with the storage, transportation and wholesaling of energy product, and the Downstream sector is concerned with all activities of refining product down to the sale of product to the retail customer.

Ultimately, successful MLPs have focused on slow growth energy investments. These investments have allowed MLPs to structure their business operations in such a way that shielded these firms and their investors from many of the risks normally associated with energy investments while still producing superior results. This success appears likely to continue as the U.S. energy industry is poised increase its recent growth (Fleischer et al., 2010). However as with most successful businesses, new entrants are entering the market and structuring as MLPs. In fact, 40 MLPs have held IPOs since 2009 (Bloomberg, 2013). These new entrants range from traditional energy to alternative energy firms. An important question is whether the MLP structure is appropriate for these firms with respect to performance and risk. This question is addressed in the following sections.

THE MLP STRUCTURE

MLPs are entities publicly traded on United States equity markets that conform to the same accounting and disclosure requirements as publicly traded corporations. Even so, MLPs differ from corporations in several ways that benefit investors. First, their structure provides major tax advantages in that they are considered pass-through entities under the U.S. Tax Code. The qualified earnings of MLPs are passed through to investors and taxed once at the investors' individual marginal rates thus avoiding the double taxation problem that corporations face. In addition, depreciation benefits are also passed through to investors. The single taxation of qualified earnings combined with pass-through depreciation benefits results in a lower tax burden for the investor thereby increasing the value of their MLP holdings. In fact, Moore, Christensen, and Roenfeldt (1989) document a significant positive effect to the value of equity for firms converting from the corporate to MLP form. They partially credit this to MLP tax advantages, a reduction in free cash flow (due to the distribution requirements) and information signaling. Though the tax treatment of MLPs is beneficial, it does require the firm to follow some strict regulations.

Under their tax treatment, an MLP must generate at least 90 percent of its gross income from qualifying sources. The Revenue Act of 1987 limits qualifying sources to the income and capital gains from real estate and natural resource activities.² In addition, MLPs are structured to maintain a high payout ratio in order to attract investors. The combination of a qualified source of income and a high payout business structure vastly limits the type of firm that can benefit as MLPs. Consequently, energy focused MLPs have dominated this asset class since 2001 (Ciccotello, 2011).

To date, midstream energy MLPs have benefited greatly from this structure. These MLPs represent the largest sector of the MLP asset class. Focusing on energy infrastructure, a qualifying source of income, this sector is characterized by fee-based operations (Fleischer et al., 2010). Under the fee-based arrangement, MLPs receive capacity reservation fees to transport energy product (e.g., crude oil, natural gas, etc.) through their assets (e.g., pipelines, trucking, shipping, etc.). This fee is paid either by local utilities or the shipping firm to guarantee product delivery. Fleischer et al. (2010) points out that this arrangement minimizes the risk of "volume dependency" or "take or pay contracts" on revenue streams. As a result, MLPs enjoy stable revenue streams, steady cash flow, and limited commodity price risk. This is a major benefit due to the volatile nature of traditional energy investments due to commodity risks. Cornell (2011) provides an excellent example by documenting the fee-based revenue and low commodity risk of the Kinder Morgan Energy Partners MLP which is considered the bellwether of the MLP asset class. In addition, they are partially protected from inflation risk due to the capacity reservation fees being regulated by the Federal Energy Regulatory Commission (FERC) which allows the fee to be inflation adjusted. These stable cash flows and low risk exposures have allowed midstream MLPs to maintain large distributions to their investors.

Another beneficial difference between corporations and MLPs is ownership structure. Investors in MLPs are considered unit holders and not stockholders. Like other limited partnerships, MLPs have a limited and general partner structure. Retail investors are considered limited partners. They provide capital and have little to no decision making power with regard to firm operations. This is quite different than the decision making rights of corporate shareholders. Ribstein (2011) explains how this structure leads to stronger governance, which decreases agency

² Natural resources are defined under Section 613 of the Internal Revenue Code and include crude oil, natural gas, petroleum products, coal, timber, and any other depletable mineral. The permissible activities associated with these natural resources are detailed in Section 7704 of the Internal Revenue Code. They include compression, distribution, and exploration and development activities; gathering, mining, production, processing, refining, and storage activities; transportation activities (including pipelines transporting gas, oil, or related products); the marketing of any mineral or natural resource (including fertilizer, geothermal energy, and timber); and income from commodity investments.

costs, decreases the cost of capital, and results in greater strategic flexibility. Cornell (2011) illustrates how it results in improved liquidity. Overall, these characteristics result in a favorable risk-return profile for MLPs ultimately attracting investors through superior performance.

MLP PERFORMANCE

The annual performance of the Tortoise MLP Total Return and the Russell 2000 Total Return Indexes from 2001 through 2012 are presented in Figure 1. The Tortoise Index is appropriate for this comparison due to its focus on energy MLPs and its large number of MLP components compared to the number in other energy focused MLP indexes. This should result in the Tortoise providing the best proxy for the average firm across the MLP energy sector. It's compared to the Russell due to their similarity with respect to market capitalization. This graph illustrates MLP superior returns in two ways. First, the Tortoise produces overall annual returns greater than the Russell. Furthermore, the Tortoise generates only one negative annual return in 2008 compared to the Russell generating four negative returns. In an unreported graph, a comparison between the Tortoise and Standard and Poor's 500 Total Return Index produces a similar comparison with the Tortoise outperforming the S&P 500 in much the same way.

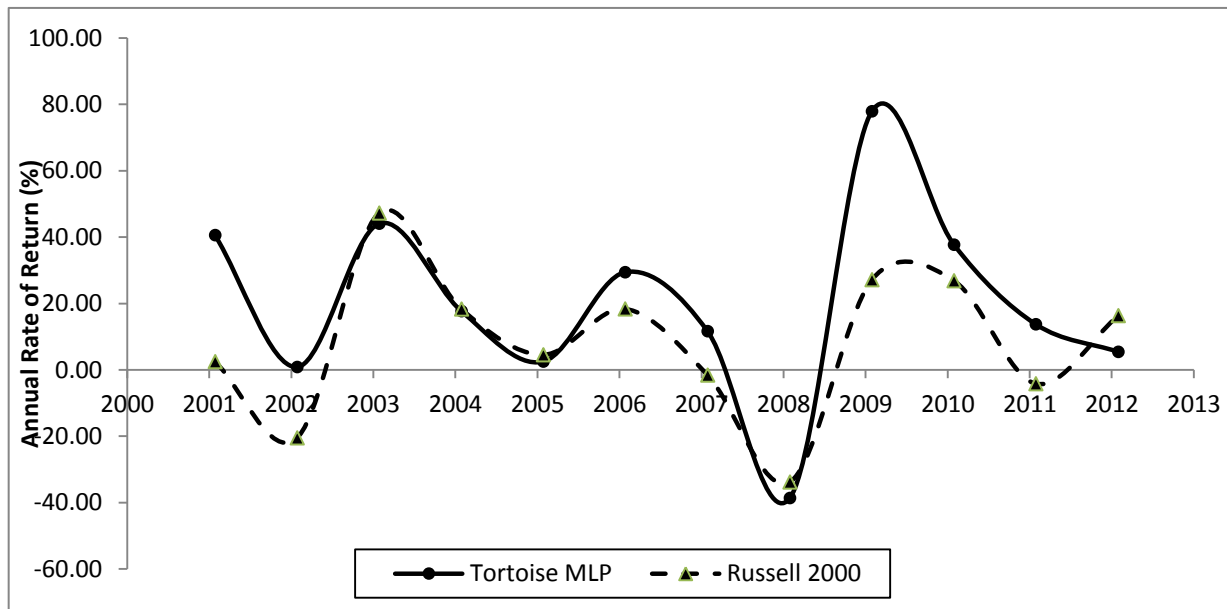


Figure 1: Annual Returns on the Tortoise MLP and Russell 2000 Indexes
 Notes: Annual return data collected from the Bloomberg Professional Database.

A more comprehensive comparison of MLP performance from 2001 through 2012 is presented in Exhibit 1. Specifically, the Tortoise is compared with a variety of indexes that represent different aspects of capital markets. The superior performance of the Tortoise is evident from the 16.77 percent average annual return compared to single digit average annual returns for all the representative indexes except for the NAREIT that generated an average annual return of 11.27 percent. The Tortoise also realized moderate variation in these returns measured by 16.35 percent annualized standard deviation. The beta coefficient for the Tortoise indicates that MLPs have a lower systematic risk relative to the S&P 500 than all the other indexes except for the S&P GSCI, a commodity-based index. This result is logical due to the very structured nature of the MLP industry, specifically its fee-based revenue and lower commodity risk exposure.

The risk-return relationship presented in the Correlation and Sharpe Ratio columns of Exhibit 1 solidifies the performance qualities of MLPs. Correlations are computed relative to the Tortoise and produce correlations all under 0.50. This is important as adding MLPs to a well-diversified portfolio will increase the portfolio's efficiency. Finally, MLPs generated a Sharpe Ratio of 0.93 during the sample period which is much greater than the other indexes. This indicates that MLPs generated greater returns on a risk-adjusted basis compared to the other capital

classes. Overall, the results in Exhibit 1 are similar to the results of the analysis conducted from 2001 through 2008 by Fleischer et al. (2010). They credit their documented performance to the MLP structure which has produced steady yields and growth. The current analysis which extends four years past the Fleischer results illustrates the robustness of MLP performance as they still outperformed given the strength of capital markets over the 2009 to 2012 period.

Exhibit 1: Annual Return Comparison of the Tortoise MLP Index to U.S. Indices, 2001-2012

Total Return Index	Annualized Return (%)	Annualized Standard Deviation (%)	Beta	Correlation to Tortoise	Sharpe Ratio
Tortoise MLP	16.77	16.35	0.71	1.00	0.93
S&P 500	2.61	15.89	1.00	0.46	0.07
Dow Jones Ind. Avg.	4.15	15.11	0.93	0.41	0.17
NASDAQ	1.69	22.76	1.12	0.43	0.01
Russell 2000	6.21	20.67	1.15	0.44	0.23
S&P GSCI	1.38	24.16	0.38	0.33	-0.01
NAREIT	11.27	23.87	1.02	0.34	0.41

Notes: Annual return data collected from the Bloomberg Professional Database. All indexes are total return indexes. Beta coefficients are based on monthly returns using the S&P 500 as the market index. Correlations are computed relative to the Tortoise MLP. The Sharpe Ratio is computed using monthly returns in excess of the 3 month T-Bill. The S&P 500, Dow Jones Industrial Average, NASDAQ, and Russell 2000 represent equity markets. The S&P GSCI is the former Goldman Sachs Commodity Index representing commodity markets. The NAREIT represents the Real Estate Investment Trust market.

Overall, the current analysis indicates that MLPs produce strong performance with lower risk and lower correlations. However, the success of MLPs is bringing new entrants into the market providing both opportunities and uncertainty for investors. The opportunities include providing investors the chance to diversify their energy MLP holdings. Many of these entrants are similar in structure to the more traditional MLP (e.g., Kinder Morgan) and likely to be solid investments, but some operate in sectors of the energy industry not conducive to the fee-based MLP structure. These opportunities can only be realized if these new entrants can operate successfully as MLPs. Furthermore, these new entrants could disrupt present market dynamics if they are not appropriate for the MLP structure.

FUTURE MLPS

The major question investors should examine regarding new MLP entrants is whether they will operate successfully under the MLP structure. This is primarily a question of cash flow, growth, and risk. Ciccotella and Muscarella (1997) document how the MLP is a poor fit for businesses that can't maintain a steady cash flow. Therefore, it is important to understand the operating environment of new entrants to determine potential cash flow stability and risks associated with these cash flows. Kensinger and Martin (1986) point out that MLPs are appropriate in slow-growth industries. Slow growth should allow firms to plan accordingly to maintain steady cash flows and distributions to investors. For many of the new entrants this may be problematic if they are new firms or spinoffs of assets that are new technologies. These types of firms would likely be in a rapid growth phase requiring capital and utilizing the majority of their cash for operations and growth. Finally, the degree of commodity price risk and correlation risk of new entrants should be examined. The answers to these questions largely depend on the type of new entrant. These are discussed below.

Traditional Entrants

Currently, traditional energy sector firms make up the vast majority of MLPs and are quite successful. As previously noted, the midstream sector dominates the others with respect to number. However, those representing the non-midstream sectors successfully operate under a steady cash flow, low risk environment. For example, Ciccotello (2011) documents that nine Exploration and Production firms were structured as MLPs in 2011. He points out that these firms focus on the production side of the sector as opposed to the exploration side. This is an important detail because of the vast differences in risks between the two. Although both exploration and production activities carry significant risks, exploration is generally considered the riskier of the two. The major difference is that exploration is searching for commercial quantities of hydrocarbons that might or might not materialize; while

production is concerned with extracting these commercial quantities once found.³ Another difference is that production firms have the ability to hedge commodity risk much easier than exploration firms. Ciccotello (2011) states the hedging of commodity price risks results in smoother revenue streams thus preserving the distribution stream and value for investors.

In 2012, Seadrill Partners⁴ a firm concentrating on exploration conducted an IPO. Seadrill conducts its exploration operations in deepwater offshore drilling. Offshore drilling is capital intensive and could potentially produce variable cash flows. Due to the uncertain nature of deepwater exploration, the firm's ability to operate under stable contracts or hedging will be greatly reduced. On the other end of traditional energy firms, CVR Refining is focused on refining, which is a downstream activity. Refining is another capital intensive business, but does have the ability to hedge its commodity risk. Both firms are in industries that have the potential to experience volatile cash flow. With respect to MLPs, Ribstein (2011) points out that establishing and maintaining a steady distribution policy increases in difficulty as cash flows become more unpredictable and would have a direct effect on value and performance. The dynamics described for Seadrill and CVR differ considerably from the slow growth, fee-based operating nature of the standard MLP. The potential for cash flow and distribution volatility associated with these newer types of MLPs should strongly be factored into valuation models for these types of entrants.

Alternative Entrants

The push for alternative energy has increased in intensity over the past several years.⁵ Recently, this push included legislation to allow alternative energy firms to structure as MLPs.⁶ To date, failures have plagued many of these firms such as SunPower, First Solar, among others. These failures illustrate that these firms likely are on the front end of their life cycles. Consequently, they should be viewed as unstable growth firms until proven otherwise. This is significant given that Ribstein (2011) states that the MLP form is not "suitable" for unstable growth companies. He points out that firms with variable earnings and a need for cash to fund growth would be impaired under the MLP form. Any cash deficit would be compounded by the requirement for MLPs to distribute their cash to unit holders. This suggests that alternative energy firms would probably suffer under the MLP structure as they would be unable to maintain a steady cash flow stream thus reducing or eliminating distributions to investors. An unsteady distribution stream would align these firms more closely to industrial firms with similar distribution variation. The likely result would be an increase in correlation risk for these firms. Reduced or eliminated distributions would also result in a reduction of capital in these firms as investors seek out higher distribution MLPs. This would result in increased costs of capital and decreased valuations. Overall, if and when alternative energy firms gain access through legislation to the MLP structure, their capacity for maintaining steady cash flow streams should be evaluated very closely and incorporated into valuation models for new entrants of this type.

Regulatory Entrants

In 2008, the IRS expanded its definition of qualifying income for MLPs to include industrial-source carbon dioxide, ethanol, biodiesel, and other alternative fuels. It also includes processing natural gas liquids into olefins, which comprise ethylene and propylene plants. This creates an opportunity for corporations with operations that include these chemicals to spin off these assets into an MLP. This type of transaction would allow these firms to avoid corporate taxes related to the operations of these assets and realize a higher valuation of the assets as a result. Most of the industries included in the expanded definition are already sustainable industries, but were simply excluded from MLP status prior to 2008. The major question facing this type of entrant is their sensitivity to commodity prices. For example, one would expect an ethanol MLP to carry a significant price risk to corn. If corn future prices experienced volatility, then one would expect the MLP to experience income, cash flow, and

³ This is an oversimplification, but illustrates the difference in the two. A more detailed discussion would include the risk of dry holes or failure to find commercial quantities for exploration firms and the complex nature of the production process for production firms. This is beyond the scope of the current paper.

⁴ It is important to note, that Seadrill Partners is technically a limited liability company that has chosen partnership taxation. As the National Association of Publicly Traded Partnerships points out, LLCs choosing partnership taxation are treated the same as MLPs for tax purposes. (<http://www.napt.org/PTP101/BasicFacts.html>)

⁵ For the purpose of this paper, alternative energy is considered a source of energy fueled by means that do not use fossil fuels; e.g., solar, wind, biomass, etc.

⁶ The most well-known and covered of this legislation is MLP Parity Act.

distribution volatility as well. It would be possible for some of these MLPs to hedge this risk to a certain degree, but the effect on reducing commodity risk under the MLP structure is not clear. Consequently, commodity risk and its potential effects on cash flow and distribution should be a major consideration of value for any of these regulatory entrants.

Although these entrants pose significant questions for MLP markets, a detailed empirical analysis of these questions is juvenile at this time. This is due to those MLPs that have entered the market recently as one of these new type entrants not existing long enough to provide adequate data for a meaningful analysis. In fact, SeaDrill Partners has yet to reach its one-year anniversary of its IPO at the time of this writing. A detailed analysis of the success or failure of these entrants as MLPs is a question for future research.

FUTURE INVESTORS

Finally, the changing nature of MLP investors will affect MLP markets going forward. While individuals are still the primary investors in MLPs, institutional investors are now entering the market. The 2004 American Jobs Creation Act opened the door for mutual fund investment in MLPs. The act allows mutual funds to purchase up to 10 percent of an MLP as long as the mutual fund's total exposure to MLPs does not exceed 25 percent of its portfolio. Ciccotello (2011) documents increased institutional ownership from what was once nonexistent to a range of 15 to 35 percent across different MLP sectors. He points out that institutional investors ultimately should enhance MLP markets by providing expertise and professional analysis. In addition, their participation in MLP markets will contribute greatly to identifying potential successes and failures of new MLPs entering the market. Institutional investors should also improve any governance issues found in MLPs. Generally, the existence of institutional investors should improve the efficiency of MLP markets in the future.

CONCLUSION

Over the past decade and a half, MLPs reemerged becoming a major participant in the U.S. energy industry while generating above-average, risk-adjusted returns for their investors. Given estimates about the continued growth in U.S. energy demand and recent successes in supply, the future of the traditional fee-based, low risk MLP is quite positive. In fact, Ribstein (2011) states that MLPs are part of an important non-corporate group of business organizations, he designates them as "uncorporate," and are here to stay. Many analysts believe that the distribution growth of traditional MLPs should emulate the increases in energy demand. If so, traditional MLPs will continue to be healthy and stable components of investment portfolios going forward. However, the emergence of new entrants into MLP markets provides opportunities, but with uncertainty regarding risks. The major question discussed in the current study is whether these new entrants can operate as MLPs under different operating models compared to traditional MLPs. Specifically, can these new MLPs maintain the fee-based, low risk distribution model that has been the standard for the traditional MLP. Finally, institutional investors are entering the market and should increase its efficiency. The current study raises many questions for investors and for future research into the MLP market going forward.

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