A reprinted article from March/April 2008

INVESTMENTS&WEALTH MONITOR

Master Limited Partnerships—Lessons from History

By James J. Murchie

IMCA® INTERNATIONAL | Advanced Education for Investment & Wealth Professionals

© 2008 Investment Management Consultants Association Inc. Reprinted with permission. All rights reserved.

Master Limited Partnerships—Lessons from History

By James J. Murchie

Publicly traded master limited partnerships (MLPs) in the energy industry are one of the fastest growing asset classes in the stock market today. This asset class boasts more than 70 MLPs with a combined market capitalization of about $135 billion, up from 27 MLPs in 2002 with a market cap of $25 billion. From 2000 through 2007, investors enjoyed a compound annual return of 22.7 percent (Alerian MLP Total Return Index) versus 1.7 percent for the S&P 500 and 16.4 percent for the Amex Energy Select Index (IXE) (source: Bloomberg). These MLPs currently yield over 7 percent. The quarterly per-share cash distributions that make up this yield have grown about 8 percent per year over this time. MLP sponsors (private companies, private equity funds, utilities, and oil companies) also have done well; bringing legacy energy assets public in an MLP with a high payout ratio has garnered a higher multiple than if they were floated as a conventional C-corporation with a more typical (i.e., low) payout ratio. Moreover, the general partnership interest retained by the sponsor has the potential for high growth.

While skeptics may argue that this success is mere financial engineering and valuation alchemy, for the most part real value is being created. This value creation is driven primarily by one factor: the capital-spending discipline that comes with a high-dividend obligation, similar to the leveraged buyout (LBO) effect. The high payout—which is tax-deferred—has the benefit of shifting a large portion of the total return to steady quarterly cash payments, lowering the volatility and covariance of the returns. In spite of this, MLPs have not yet attracted significant interest from institutional investors because the partnership form of MLPs creates tax-filing obligations for investors to each state in which the MLP operates and an unrelated business taxable income (UBTI) liability for nontaxable entities such as foundations and pension funds. In fact, income from MLPs was nonqualifying income for mutual funds until the law was amended in 2005 allowing up to 25 percent of a mutual fund's portfolio to be in MLPs.

A tax-deferred 7-percent yield combined with high single-digit growth, low volatility, and low correlation to other asset classes is an attractive set of characteristics. These attributes have resulted from years of trial and error. A review of this history is critical to understanding MLP structure and success.

A Brief History of MLPs

The first MLP was created to hold oil and gas assets spun out of Apache Corporation in 1981 when oil prices first reached $40 per barrel, up from about $12 just a few years earlier. Back then, individual marginal tax rates were 70 percent and corporate tax rates were about 45 percent. High-net-worth investors were pouring money into oil and gas drilling partnerships formed by investment banks. This was an era with no sector exchange-traded funds, few sector mutual funds, and only a handful of sector-specific unit investment trusts. Partnerships were more tax efficient because drilling expenses and tax credits related to drilling were passed through to investors who could use the credits and expenses to shelter other income. Therefore floating a publicly traded high-payout oil company in the form of a partnership that paid out all available cash flow made sense.

Others copied Apache and formed about 25 energy-related MLPs over the next few years. Other companies in the petrochemical, refining, paper, and forest-product industries soon followed. But when large non-natural resource companies such as Alliance Capital and the Boston Celtics formed as MLPs, Congress woke up to the revenue loss potential due to avoidance of double taxation. In the 1987 Tax Reform Act, Congress restricted publicly traded partnerships to real estate, natural resources, and dividend and interest income and gave nonconforming MLPs 10 years to revert to a corporate structure. Today some investors worry that recent elimination of the tax advantages for Canadian income trusts (to prevent mass corporate tax revenue leakage) could happen to U.S. MLPs. Arguably, it already happened—20 years ago.

The combination of the change in legislation and declining commodity markets took a toll on the MLP asset class. MLPs dependent on cyclical cash flows got hurt by the fall in the price of commodities (crude oil fell from $40 in 1981 to $10 in 1986) and by the late 1980s virtually all early MLPs involved in cyclical commodity businesses cut dividends, suffered dramatic drops in valuations, and de-listed. The first phase of MLP history—let's call it the "pioneering era"—was ending.

The next phase—let's call it "nuclear winter"—was characterized by investor distrust of anything MLP. Survivors of this shakeout were higher-quality and conservative MLPs whose cash flows did not depend on cyclical businesses. Companies such as Teppco Partners, Buckeye Pipeline, and Lakehead Partners (now

© 2008 Investment Management Consultants Association Inc. Reprinted with permission. All rights reserved.

Enbridge Energy Partners) dominated the next 10 years, until the mid-1990s. These companies were based on slow-growing, stable cash flows that escalated with inflation coming from pipelines and storage terminals rather than oil and gas production. The primary holders of MLPs were retail investors who saw them as bond substitutes. Then Rich Kinder came along.

Kinder was a regulatory lawyer who rose to become president and chief operating officer of Enron. He lost the battle to become chief executive officer, so he left the company. Kinder and Bill Morgan cobbled together some investors. In 1997 they bought Enron's interest in an MLP called Enron Liquid Pipeline Company and renamed it Kinder Morgan Energy Partners (KMP). Kinder liked the MLP structure because it ran like a private partnership, paying out all cash flow to partners on a regular basis. And he liked that the quarterly cash-distribution obligation was backed by noncyclical fee-based cash-flow businesses with low sustaining-capital requirements and modest growth. Further, he took a different approach to running the assets that Enron saw as a cost center to support its trading desk. He ran them like a business. He saw numerous de-bottlenecking opportunities that Enron had neglected as "too low-return." Over the next 10 years, Kinder grew the company by buying other similarly neglected energy infrastructure assets. From early 1997 to today, Kinder Morgan's market cap has grown from $260 million to $17 billion and quarterly cash distributions have grown from 16 cents to 88 cents, a compound annual growth rate of 18.8 percent. Rich Kinder ushered in the third phase of MLP history: the "growth MLP" era. Others copied his business model and today these companies represent the higher-quality members of the MLP asset class.

Today the types of businesses coming into MLPs are far more varied than in the past, and some have more risk. We'll visit risk later. Now let's talk about what makes MLPs different from other asset classes.

MLP Distinguishing Characteristics

Partnership Form

MLPs are publicly traded partnerships. They trade, settle, and clear just like other C-corporation stocks. Energy MLPs today have a combined trading volume of about $250 million per day (source: Bloomberg). An MLP investor receives a K-1 each year and may have state tax-filing requirements in all of the states that the MLP operates in. The partnership structure has been an entry barrier for large institutional nontaxable buyers because it generates UBTI and state tax-return requirements that deter many would-be MLP investors. Solutions to this tax have arisen, but they too have drawbacks. For example, some fund managers set up "blocker" corporations that keep state tax or UBTI obligations from passing through. However, this approach adds a layer of tax. The MLP closed-end funds launched in 2004 are mutual funds that pay tax. In another approach, offshore investors invest in MLP-focused hedge funds that hold MLPs in total-return swaps. Funds-of-funds have embraced this approach, but some institutional investors are uncomfortable now that the IRS has disallowed swaps on assets held for offshore accounts that it deems are set up solely to avoid withholding tax. One fund that we manage, by contrast, has set up a registered investment company (RIC) as a blocker that doesn't add a layer of tax. Most hedge fund managers don't want to live with the constraints of a RIC, but those constraints, such as limits on leverage and the need to retain an independent board of trustees, are exactly what many institutional investors seek to ensure preservation of capital.

High Payout Ratio Means Capital-Spending Discipline

The most attractive characteristic of MLPs is their high payout ratio. All the limited partnership agreements state that companies will pay out all available cash every quarter less a reserve that management deems appropriate to maintain the assets. This has two significant benefits. First, capital-spending discipline comes from paying out such a large portion of free cash flow, similar to the LBO effect. The second, discussed below, is that yield makes up a large portion of total return, reducing both volatility and covariance of the shares' total return.

Mature industries such as the energy industry grow about 1 percent to 2 percent per year, yet they earn returns on capital in the high single digits. Too many companies reinvest all cash flow generated by these returns in the mistaken belief that they can grow 8 percent to 10 percent per year even though the industry is growing only 1 percent to 2 percent. History shows us that most of these companies will disappoint and that the winners are companies such as Exxon, which have paid out an average of more than 50 percent of earnings in dividends and share buybacks, and MLPs and royalty trusts that have a mandate to pay out all available cash every quarter. As the oil analyst at Sanford Bernstein in the early 1990s, I published a report on this relationship and found a correlation of about 85 percent between the portion of top-line cash flow reinvested and unlevered return on capital employed for the major integrated oil companies. Updating the analysis 10 years later for the AMEX Oil Index had the same results. In mature, capital-intensive industries, where companies do their best projects first and their worst projects last, it makes sense that the higher the reinvestment rate, the lower the relative returns.

But how have MLPs grown per-share distributions if they pay out all their cash? The answer is that they must raise new capital. So when the company sees an opportunity to make an accretive acquisition or invest in a large accretive-growth project such as a pipeline extension, the company can issue

© 2008 Investment Management Consultants Association Inc. Reprinted with permission. All rights reserved.

new stock and new debt. This gives the capital markets a chance to "approve" the project. It would be difficult for an MLP to raise capital from its yield-hungry retirees for a dilutive acquisition that would cause the quarterly distribution to be cut on the promise of rising in the future. In mature noncyclical industries, if a business is not profitable now, when will it be?

Energy Infrastructure

Based on the market value of assets embedded in midstream MLPs, I estimate the value of energy infrastructure assets in North America at between $500 billion and $1 trillion. A pipeline map of North America looks like a highway and railroad map that includes local roads in hydrocarbon production areas such as Texas, Louisiana, and Oklahoma. These pipelines operate like tollways, collecting tariffs on the movement of crude oil, gasoline, diesel fuel, propane, natural gas, etc. from points of production or import to points of consumption. Storage and terminaling are associated with all these movements. With few exceptions, these services are provided for a fee that is based on the operating and capital costs of service and not on the commodity price. For interstate pipelines, these returns are regulated and often have an inflation escalator.

The MLP asset class has grown through the acquisition of these assets from oil companies, pipeline companies, utilities, and private owners. Recently, however, the need to invest in new infrastructure has begun to dominate midstream MLPs' investment activities. This need comes after a long period of underinvestment. Petroleum demand declined for five years straight from its 1978 peak due to recession, conservation, and substitution. Growth resumed in 1984 but the old high-water mark of demand (about 20 million barrels per day) stood until 2003–2004, ushering in the need for new investment. In addition, the maturation of hydrocarbon-production areas such as the shallow-water Gulf of Mexico, and their replacement by onshore resource plays such as the Barnett Shale in the Fort Worth Basin, the Rocky Mountains, and the Canadian Oil Sands, has triggered the need for massive investment in new pipelines, storage facilities, and terminals to deliver supply from new production areas.

> "The stability of cash flows and the low sustaining-capital requirements of the pipeline and storage businesses make them an ideal fit with the MLP asset class."

The stability of cash flows and the low sustaining-capital requirements of the pipeline and storage businesses make them an ideal fit with the MLP asset class. But there is another attribute of the infrastructure business: it's also like selling pick axes to miners. Everyone knows about Levi Strauss selling blue jeans to the forty-niners and Howard Hughes selling drill bits to wildcatters. Miners are optimists holding out for home runs. They think pipeline transportation operators and other service providers are suckers for accepting paltry 10-percent to 12-percent returns on capital. But with the addition of conservative leverage, an 11-percent return on assets can be a 15-percent return on equity (assuming 50-percent debt-to-capital and a 7-percent borrowing cost). Well, sign me up to be a 15-percent sucker.

Partnership Structure: Limited Partners and the General Partner

MLPs are created from existing assets owned publicly or privately. Usually, the sponsor acts as the general partner and usually retains about 20 percent to 50 percent of the shares. After the pioneering era and its many failures, new MLP initial public offerings met with skepticism regarding the safety of quarterly cash distributions. In response, sponsors subordinated their units to the publicly held common units with respect to receiving quarterly distributions. Thus for a new MLP in which the sponsor retained a 50-percent stake, cash flows could drop by half before distributions of the publicly held common units would be at risk. As the subordination structure found success in a skeptical market, general partners began getting a growth incentive in return, known as incentive distribution rights (IDRs). IDRs are a rising profit share on incremental per-share distributions. At first, the general partners' profit share is just 2 percent with no IDRs, but as per-share distributions rise by 15 percent, 25 percent, and 50 percent, the IDRs rise accordingly up to a 50-percent profit split.

Many would argue that a 50-percent sharing of incremental free cash flow is excessive and acts as a large tax on growth. While this criticism has merit, the IDRs have acted as a powerful incentive that has rewarded the limited unit holders with high single-digit growth in addition to their yield. Also, in response, a few MLPs have capped IDR profit splits at 25 percent. Others have come public without the IDRs but also have eliminated the subordination feature. While no one likes paying an excessive share of profits to management just for doing its job, MLP investors now have numerous opportunities to receive these payments themselves: The general-partner interests of 10 MLPs are publicly traded as separate entities. These entities have extraordinary growth characteristics due to the arithmetic of a 2-percent *average* interest in profit growing by a 50-percent *incremental* interest in profit growth in the underlying MLP. By my

© 2008 Investment Management Consultants Association Inc. Reprinted with permission. All rights reserved.

estimate, general-partner interests are growing per-share flows at about 2.4 times the growth rate of their respective MLP units.

Tax Efficiency

Partnerships do not pay tax, so double taxation of profits paid out in dividends is avoided. But just as important, MLP quarterly payments are treated as distributions of cash out of the partnership. These cash distributions are not taxable *per se*. Instead, they lower the tax cost basis of an investor's units. For example, imagine an investor pays $40 for an MLP with a 65-cent quarterly distribution ($2.60 per year). Most of this dividend will be deemed return of capital. If $2.00 of the $2.60 is return of capital, the cost basis will go from $40 to $38 in the first year, to $36 in the second year, and so on. The investor will owe tax on the difference between this lower basis and his cost (called recapture tax), but that tax is due only when shares are sold. For long-term investors, the present value of that tax liability is small.

Performance, Volatility, and Covariance

As previously mentioned, returns for MLPs have been very attractive on average. Assuming no major change in yield, MLPs have expected future total returns approximating yield plus growth in quarterly cash distributions. This annual growth has averaged about 7 percent historically, driven by volume gains, returns on investment from new projects, and accretive acquisitions. Recent growth has been as high as 13 percent annually, but I tend to think that 6-percent to 7-percent annual growth is more sustainable.

Annualized monthly volatility of midstream MLPs (as measured by the Wachovia Midstream MLP Index) over the past 10 years has been 14.1 percent. Over this period, the S&P 500 monthly volatility was 14.7 percent, the Philadelphia Utility Index was 17.1 percent, and the AMEX Oil Index was 20.1 percent.

TABLE 1: COVARIANCE OF ENERGY-RELATED MLPs WITH OTHER ASSET CLASSES, 1990–2003

Asset Class	Beta	R-squared
10-year U.S. Treasury	11%	4%
S&P 500	22%	3%
S&P Oil and Gas Producers	38%	9%

The Midstream MLP Index has 31 members now, but 10 years ago there were fewer than nine names, which would have increased the volatility.

Table 1 illustrates the covariance of energy-related MLPs with other asset classes from 1990 to 2003 (recession to recession).

The nearly nonexistent relationship between MLPs and interest rates (as measured by the 10-year benchmark) is surprising to many who assume that, as a bond substitute, MLPs would move with interest rates. But two factors drive this noncorrelation and are instructive in understanding covariance with all other asset classes. First, interest rates often can move opposite of credit spreads and the resulting investor appetite for stocks versus Treasuries. Indeed, this has been the case over the past six months and was the case from mid-2003 to mid-2007, when interest rates rose from under 3.5 percent to about 5 percent yet credit spreads narrowed as investors moved money from safe havens into riskier assets such as equities. Second, the correlations above represent the covariance of *total returns.* Because the bulk of total returns from bonds and about half the total returns from MLPs are made up of steady cash payments, which have a correlation to anything of almost zero, the resulting covariance of actual total returns is low. Some MLP fund managers, however, hedge exposure to interest rates by shorting 10-year bonds or bond futures, despite cost and lack of benefit.

A Final Thought

Survivorship bias is a common problem in analyzing historical data. But who survives and thrives and who doesn't is an essential lesson. Natural selection creates a group of companies that benefited from mistakes of the past. This selection process has created and demonstrated the success of MLPs that are noncyclical infrastructure businesses with low sustaining-capital requirements and a corporate structure that pays out most or all of free cash flow every quarter.

Yet in the past two years, 24 new MLPs have gone public, 14 in oil and gas production, refining, oil service, or shipping—all cyclical businesses. But cyclicality isn't the only concern; so is sustaining capital, and sustaining capital is a big number for oil and gas producers. Oil and gas production is the business of draining natural reservoirs. It's difficult to match up a long-term dividend obligation with a declining asset embedded in a company that will do no exploration drilling.

These new MLPs, of course, have no negative impact on the legacy MLPs, they just increase the risk to an "index" buyer. An index buyer will mistake ascribing success to the entire asset class rather than the business model. Just because an energy company is an MLP does not make it a good company. Only good management can make a good company. A good investment is a good company in the right asset class.

James J. Murchie is founder and chief executive officer of Energy Income Partners, LLC, which manages funds that invest in energy master limited partnerships, income trusts, and other energy-related securities. He earned a B.A. from Rice University and an M.A. from Harvard University. Contact him at jmurchie@energymlp.com.

© 2008 Investment Management Consultants Association Inc. Reprinted with permission. All rights reserved.

5619 DTC Parkway, Suite 500

Greenwood Village, CO 80111

Phone: +1 303-770-3377

Fax: +1 303-770-1812

www.IMCA.org

© 2008 Investment Management Consultants Association. Reprinted with permission. All rights reserved.

IMCA® and INVESTMENT MANAGEMENT CONSULTANTS ASSOCIATION® are registered trademarks of Investment Management Consultants Association Inc.
CIMA®, CERTIFIED INVESTMENT MANAGEMENT ANALYST®, CIMC®, CPWA®, and CERTIFIED PRIVATE WEALTH ADVISOR® are registered certification marks of Investment Management Consultants Association Inc.
Investment Management Consultants Association Inc. does not discriminate in educational opportunities or practices on the basis of race, color, religion, gender, national origin, age, disability, or any other characteristic protected by law.