

ENCOURAGING ENERGY INVESTING FOR THE AVERAGE INVESTOR THROUGH
MASTER LIMITED PARTNERSHIPS

by

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ABSTRACT

This manuscript is written with the objective of exploring Master Limited Partnerships and encouraging the average investor to invest in them. MLPs, especially in index form are one of the easiest ways for the average investor, with limited knowledge of the energy industry, to participate in the energy industry. This manuscript explains the basics of MLPs and explains how and why to invest in them in index form.

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Introduction

Master Limited Partnerships, or MLPs are one of the most underrated equity investments. They have the ability to generate high yields, but the average investor lacks knowledge of the energy industry, which deters them from investing. This manuscript will take a deeper look into the structure of a MLP and decide whether or not it is actually a smart investment for the average investor. Some of the main details that will be investigated include: the basic corporate structure, why it is considered a pass-through entity, the main benefits associated with investing in a MLP, the main risks associated with investing in a MLP, and past energy industry performance. This manuscript will look specifically at energy MLPs. MLPs can exist in other industries, but come with different nuances and for that reason; we will only look at energy specific ones.

A Master Limited Partnership is a limited partnership that is publicly traded on an exchange. It combines the tax benefits of a limited partnership with the liquidity of a publicly traded security (Greene). A limited partnership has special tax benefits because the company pays no taxes on income. Instead the burden of tax is passed on to the investor, but in return, they are not financially liable for the company's debts. The liquidity associated with being publicly traded, allows for shares to be quickly sold or turned into cash by the holder.

There are currently many opinions by theorists regarding the ownership and payoff model of MLPs because the characteristics that make them so unique, also make them quite confusing. This leads to market confusion from the average investor as to whether MLPs are actually a good investment. MLPs have also evolved since their inception, mostly by having many more requirements and regulations being imposed. As more of these regulations are introduced, it has

becomes harder for the average investor to distinguish between the potential of MLPs to be successful or not successful.

There is not a clear consensus from the investment community on whether or not the average investor, with little energy knowledge, should invest in energy MLPs. The question then becomes if the average investor should stay away from them because of the complexity of understanding the risk, or if they should add them to their portfolio to increase diversification and gain a steady profit stream from distributions. MLPs do not necessarily carry an above average risk profile, it is just that the fundamental risk associated with them can be difficult and confusing for some investors to understand, especially those investors with little energy industry knowledge. The energy industry operates within its own variation of the business cycle; it is commonly called the “boom-bust cycle”. A deeper look into the specifics of this type of cycle will be explored later. But a recent example of the energy industry’s independence through this cycle was seen during the recession of 2008. During this recession, many businesses across the United States economic market heavily struggled or shutdown, while the energy industry flourished. The shale boom occurred at this time in the United States and was the sole contributing factor to the industry’s increased success.

Although MLPs are a great investment opportunity, there are still problems associated with them. MLPs can be good at masking risks within them, especially when invested in through an index or ETF vehicle. When someone invests directly in a MLP without using an investment vehicle, they are subject to much harsher rules and standards. This event is the main reason why the average investor stays away from MLPs. When investing directly into MLPs, the investor must fill a K-1 tax form, which lessens their attractiveness to investors because it is time consuming to fill out and file (Adveed). In addition, distributions are usually classified as

returned of capital and not taxed as a capital gain. This is a benefit for most, but sometimes only part of distributions are taxed at this level with the last 10-20% being taxed as a capital gain. This situation is confusing and makes filling out the K-1 even more difficult. MLPs can also have sneakily high leverage, which increases their risk and makes them more sensitive to interest rate changes. The single taxation treatment can also be deceptive. The tax treatment associated with MLPs can also be tricky because investors are taxed yearly on the possession of the unit, regardless of whether or not the investor receives a distribution. This means that the investor may have to pay taxes on money that they never received. The omission of payment is a RARE occurrence and MLPs will usually borrow money to bolster income to pay the distribution before even thinking about defaulting, but it is a possibility. These characteristics are the main obstacles associated with investing in MLPs and the reason they are argued about so commonly.

Energy MLPs are interesting to look at because the industry has been through a “boom-bust cycle” recently and in a short amount of time. The current state of the industry is one of low performance that is following a period of many years of high returns and great success. The “boom-bust cycle” condensed into this short amount of time makes for a more interesting study, as well as more a insightful one, because of the avoidance of large amounts of inflation. Energy MLPs create revenue through fee by volume and pay-to-rent, both of which allow for a constant revenue stream, but are greatly affected by changing commodity prices, which are determined by the stage in the cycle.

Literature Review

The question of whether MLPs are a good investment for the average investor has become a widely debated topic in recent years. This is mainly because of the bottoming out of

the energy industry in late 2014. To better understand MLPs, one should start with the history of their inception and include the attributes that make them special. These attributes include industry history, distribution rules, pass through status classification, and how IDRs work.

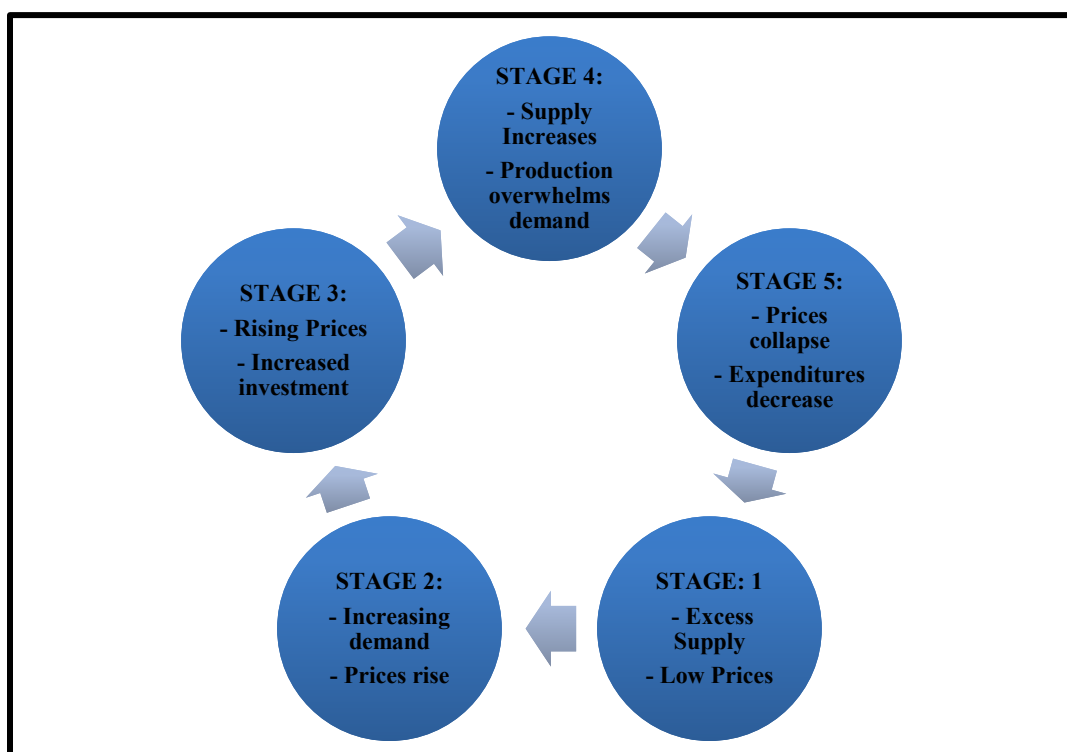
Energy Industry History

Most MLPs are energy related and the fact that Apache Petroleum Company was the first MLP formed in 1981 is no coincidence. Since they will be the focus of this paper, a better understanding of the energy industry will allow for better overall retention and understanding of the argument. First, the energy industry is cyclical in nature just like every other market. It can be affected by overall economic changes, as well as industry specific ones. Overall economic changes or shifts are more likely to affect demand of end products for short periods of time, this means that the average consumer will adjust their spending according to the market environment whether good or bad, but will change back to normal once the market stabilizes and finds equilibrium. While specific changes in the energy industry can cause fundamental shifts to both supply and demand in that specific industry. Most businesses and industries follow the typical business cycle while the energy industry follows a variation of it, usually described using the phrase “boom-bust cycle”.

The “boom-bust cycle” is exactly what it sounds like and can be explained through five stages (Rapier). The first stage of the cycle is at the bottom where there is an excess supply of oil or gas, and causes low prices. Low investment rates are a result of the low prices, but the low prices also stimulate the market for higher demand. This stimulation comes from the confidence in the product and ability for consumers to get used to buying more product because they can afford it. This leads into stage two where the growth of demand causes supply and demand to balance or move towards equilibrium, effectively raising prices. Higher prices lead to stage three,

where companies start making money and increase their investment in new projects. Prices continue to rise until stage four when demand becomes satisfied. In stage four, growth of demand flattens out. The investments in growth materialize into viable projects that start to pay off and supply begins to outweigh demand until stage five. In stage five, prices collapse and investment in growth opportunities are reduced until the cycle starts over.

Figure 1: Energy Industry Boom-Bust Cycle



Since this cycle is energy industry specific, a timeline of past performance can easily be matched up with the stages to fully illustrate the process. Stage one began in the United States when the first well was drilled in 1859 and continued to increase until it became commercialized and entered stage two. Stage two is when oil and gas were available to almost all consumers, area of living permitting, and people developed a demand for the products. Stage two is important because during it, in the 1990's, the United States began to run out of pure reservoirs

(Watkins). The United States had to depend on foreign oil and gas, which raised the equilibrium price. Stage three began when hydraulic fracking revolutionized the industry in the United States. This stage lasted from 2002 when it caught on commercially until stage three began in 2005. Fracking is when a hole is drilled down to petroleum rich shale rock, then explosives are sent down to break up the rock and create fissures. Finally a mixture of mud, water, and chemicals is pressurized and pushed down into the shale rock to push out the petroleum. As stated, stage three began in 2005, and was when the United States became semi-energy independent. The United States had become a global player in the recovery of petroleum and prices continued to rise until 2010. The early part of stage four began in 2008 but did not completely materialize until 2010, it lasted until the end of 2014 when the prices bottomed out, creating the collapse that led to stage five (Krause). Prices bottomed out because of OPEC, or Organization of Petroleum Exporting Countries, decided to increase their production and not cut it, in the hopes of edging out the United States with its expensive fracking techniques.

Since the energy industry can be affected by the market as a whole or by the energy industry specifically, different aspects of the energy industry are affected differently. The effects from a total market change are usually short lived. In these times of short volatility, prices will change immediately. Overall MLP health and their distributions will usually be able to escape the effects of these changes because of the short time that they last. The main danger to MLPs is a fundamental shift in the energy industry. A fundamental shift usually occurs when the supply or ability to supply is affected, like a stage four event. An example is when the shale boom occurred, flooding the market with natural gas and increasing the amount being transported through pipelines. Followed by a resistance of OPEC to cut its production.

History of MLPs

Since the first MLP was created in 1981, investors have been drawn to them. MLPs are special because they have the advantage of avoiding federal and state corporate taxes, with the holder being taxed, thus avoiding double taxation (Collins). The original reasons that Apache decided to create an MLP was to gain the ability of raising capital from smaller investors. They did this by offering a partnership investment as a common unit that was liquid and affordable. When an MLP has its initial public offering, or IPO, the available interests are split into common units, which the public investor own, and subordinate units, which the sponsor own. Subordinate units have no right to available cash until the MQD, or minimum quarterly distributions, to the common units holders is satisfied. The MQD is a requirement from the IPO prospectus that sets a time frame of a minimum amount of cash that the MLP must distribute to its common unit holders each quarter before paying the subordinate units. There is also an incentive system built into the MLP structure for the general partners. Because general partners are given subordinate units and are paid last, they take on extra risk in the beginning. To pay the general partners back for taking on so much risk and to also incentivize them to increase returns, an incentive distribution right, or IDR, is included in the business structure. IDRs have their own section and will be explained more below.

The idea of an MLP structure caught on quickly and became very popular, taking over the oil and gas industry and eventually moving to other industries. Soon, other businesses such as restaurants, hotels, cable networks, real estate and even the Boston Celtics basketball team started registering as MLPs. Because of increased popularity, new regulation had to be created. MLPs are now highly regulated and are usually only energy focused or sometimes Real Estate focused (Goodgame). In 2010, the first MLP Mutual Fund was created by Oppenheimer SteelPath, followed by the creation of the first MLP exchange traded fund (ETF) by Alerian. The

creation of these two investment vehicles is important because it allows the average investor to have even greater access to investing in MLPs. Any investor can invest in MLPs, but since an investor technically becomes a partner in the company, tax filings for the individual become more complicated. Traditionally a Schedule K-1 is needed for holding a partnership in an MLP investment. This document helps identify income, deductions, and credit associated with the partnership, but it is usually the last document issued by the company and requires many entries on an investor's tax return. This creates many hoops to jump through and a lot of wasted effort that decreases the opportunity cost of owning MLPs. Because of these problems, many investors look to just invest in mutual funds or ETFs, which allows them to deal with a Form 1099. The Form 1099 is much easier and consolidated and makes filing taxes associated with MLP ownership much easier.

Distribution Rules and Pass Through Status

Each share in an MLP is a form of partnership and pays a distribution. Distributions are essentially dividends. The main draw for investors is to invest for income from the quarterly distributions, and the most attractive part of receiving them is the pass through tax classification. This pass through classification is one that allows distribution income to avoid corporate taxes at both the state and federal level, leaving the income to be taxed at only the individual investor's income tax level. Most income is actually taxed at the top individual tax rate, meaning it is taxed at 39.6%. There are many stipulations associated with this status and it is one of the reasons that MLPs are so highly regulated. In order for an MLP to continue avoiding corporate taxes, it must have at least 90% of its gross income generated from "qualifying income" sources. In the beginning, "qualifying income" was more of a personal opinion definition, but has since been more strictly defined. Qualifying income is income that comes from operations that are essential to the everyday operations. For energy MLPs, this qualifying income is usually considered any

type of exploration, production, servicing, gathering, process, transporting, and storing for the Upstream, Midstream, Downstream, Refining, Mining, Processing, Fertilizer, and Wood Processing industries (Vinson & Elkins). However, there are some downfalls from having pass through status. The tax process for the investor receiving pass through distributions became much more complex, costly, and timely (Geunther). Another reason why some investors may be weary is because MLPs are expected to pay steady and increasing distributions. Investors are held accountable for taxes based on the given rate of distributions whether or not they actually receive the cash distribution. And sometimes the actual yield of the cash distribution is less than what it would be had it not received the pass through status. What some investors do not realize is that under the dividend tax relief law introduced in 2003, the dividend tax rate is 20% instead of the full income tax rate of 39.6%.

In addition, Distributions are technically only available cash from operations or “operating surplus”; this means that it is very possible to not receive a cash distributions. Operating surplus can be defined as the available cash at the end of the quarter less general partner reserves, cash to cover debt requirements, enough cash to cover distributions for the next four quarter, and working capital requirements or debts (Vinson & Elkins).

Initial Distribution Rights (IDRs)

The units of ownership that the sponsor hold are classified as subordinate units. This holds the sponsor at a disadvantage to be paid last, would it not be for IDRs or incentive distribution rights, then the sponsor would have no incentive to increase profits. The pass through classification makes MLPs attractive to public investors, but IDRs make forming MLPs attractive for sponsor parties. An IDR is an incentive tool for the general partner to grow the MLP. As the general partner grows the MLP they can get up to 50% payout of the cash. This

does not mean that they start taking away money from the limited partners pay out. The limited partner or investor will always get the distribution they are entitled to because of the MQD status, but as growth continues, general partners are entitled a great percentage of profits than they were before, this percentage can grow up to 50%. The limited partners shares will grow from the minimum distribution as well, but they will not reach full growth potential because of the IDRs.

Methods & Results

Introduction to results

One way to look at the feasibility of investing in MLPs is to use indexes. An index is a measurement of value of a specific section of a market. In this case, we are looking at the AMZX index and the S&P 500 index. The S&P 500 is an index of the top 500 stocks in the United States, and is supposed to reflect the market as a whole. Each stock in this index is value weighted by their total market value of outstanding shares. This means that they don't all have the percentage of value in the S&P 500. The AMZX, also called the Alerian MLP Index, is the leading benchmark of energy Master Limited Partnerships. It is capitalization weighted based on a method that is floating and adjusted on price return basis and total-return basis (Patredis). This means that its percentage of value in the index changes depending on its performance. When comparing these two indexes we are look at directional price and % yield. To see the success of AMZX, we need to compare is with the return of the market as represented by the S&P 500, in addition to prove our hypothesis, we need to see it out perform the S&P 500 as well.

Investor Behavior

The market as a whole operates under the idea that investors behave in a rational way and that all information is disbursed through the market, this is also known as the efficient market

hypothesis. Investors are typically risk-averse, investing in projects that's that offer high returns but not so high as to take on extraordinary risk. These are average investors, and the ones we are focusing on. Index funds are more attractive for the average investor because of the stable, low risk associated with them (Nussbaum). This low risk can be attributed to the diversification that a single security cannot attain by itself. Since an Index is a portfolio constructed to match part of the market, an investor can be fairly confident that their investment will grow unless that section of the market enters a recession. Essentially, it is offering broad exposure to the market or a segment of the market with low operating expenses and low portfolio turnover compared to what it would take for an investor to create a portfolio with similar makeup on their own. The S&P 500 traditionally offers a higher return than the market, but because of its low risk, the return is not drastically higher. The goal behind AMZX is to offer the same low risk profile but in a specialized industry.

Investing industry specific can sometimes offer higher returns than the market as a whole. Some investors take what is called an aggressive investment strategy where they look to take on high risks in return for higher return. They are not usually looking at indexes, but instead look to invest in specific companies. We are not looking at these investors for the purpose of this manuscript. These investors also don't always diversify fully across the market and stick to industries they have an intimate knowledge with. The AMZX index is good for the low risk investor but also investors with minimal knowledge of the energy industry. This way they can diversify across industries more safely.

Comparison Method

As illustrated above, the average investor is one who is slightly risk adverse but enjoys investing for the potential for returns. One reason investors can be hesitant to buy a stock is

because they lack knowledge of the industry it belongs to. This lack of knowledge is often translated into lack of confidence, dissuading the investor from investing. Indexes are important for this reason because they allow investors to rule out individual company factors and focus just on specific sections of the whole market. They are eliminating the problem of lack of knowledge by allowing others to diversify away the risk for them. While the S&P 500 is seen as the “cream of the crop” of the market as a whole, the AMZX is the same, but for the energy industry. The idea is that different industries have different life cycles and factors affecting their performance. So AMZX should be able to do better than the low risk market representation because it is just one industry and should be able to out beat the market, especially when it is in a period of high growth. In addition, the main reason behind this study is to show that MLPs are a good investment, so essentially all the AMZX needs to do is keep up with or outperform the S&P 500 as proxy for the whole market (Patredis). This can be seen in the figure 2.

Figure 2: AMZX return compared to the S&P 500 return

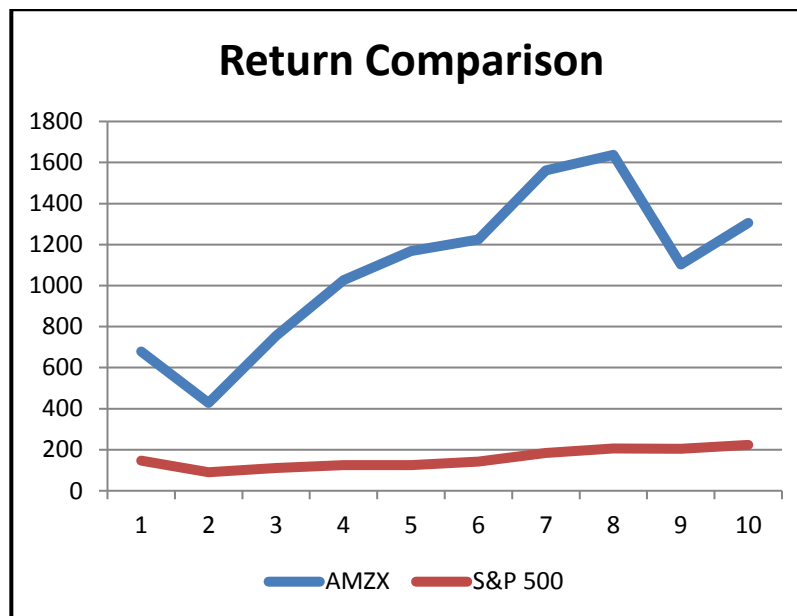


Figure 2 is a representation of the year-end prices for each index from the last ten years. While the funds are priced at different levels, the overall return of the index is the key comparison metric. For example, if an investor invested one dollar in each index at the beginning of the ten years, which dollar would have grown more than the other? The AMZX clearly climbs steeper than the S&P 500, and therefore has grown more, this observation can be made quickly and easily by just simply looking at the figure. But in more descriptive terms, the AMZX dollar would have grown to \$12.46 almost doubling the S&P 500 dollar at \$6.79, each new dollar amount being a multiple of the respective index's growth over the past ten years.

However, there are other factors to consider than pure growth. What were the market conditions for the last ten years? What stage of development is the particular market in? Did one of the markets have a significant event that would have hurt it? What about an event that dramatically changed it for the better? Does the number of constituents have an effect on the index? In addition, our example has one index representing the entire economy against a market industry index, which could add to the difference. But it has been specified above that the objective is to show that AMZX, as a representation of MLPs, is a good investment for the average investor. In this scenario, the AMZX just needs to perform the same or better than the market as a whole, more years than it performs below it.

Results

In the past ten years, the AMZX index has grown more than the S&P 500. But as mentioned before, the indexes are not identical in their perimeters and therefore the growth needs to be investigated. The AMZX is comprised of 44 companies while the S&P 500 is composed of 500. This difference allows for outliers' actions to be felt more in the AMZX index, than the S&P 500. The similarities are that both indexes are market capitalization weighted, or market-

value-weighted, which means that the stock is weighted by the value of its outstanding shares in proportion to the rest of the portfolio. Its market value of shares in proportion is accounted for, not just percentage of shares per company. Another large contributing factor to the difference is the market environments. The United States economy went through a recession, or overall bust in energy industry terms, from 2007 to 2009, and was slow to recover (Rich). This recession was in large part due to a burst in the housing market bubble, which caused a banking fail as well. The drop in the graph during 2008 illustrates this. The growth was slow to rebound because the recession was so wide reaching. It touched every industry and had such a piercing effect that it was hard to turn around quickly. This period in time for the United States market is called the Great Recession. The energy industry shows a large decrease during this time because of lack of available funds and high interest rates, but it bounces back much more quickly than the whole market. The high growth that the AMZX experienced when bouncing back can be marked as a boom stage. This time is more commonly known as the “shale boom”, it occurred when large deposits of oil and gas were found in shale rock beneath the United States and new technology called hydraulic fracturing was able to efficiently gather it.

Before this boom, the United States was running out of petroleum reserves and was becoming dependent on foreign countries for its oil and gas needs. For someone not familiar with this type of rock structure, a petroleum reserve is a subterranean lake or pool of petroleum. It is reached by drilling down into it and then pumping it out. In early 2008, the shale boom caught on in a commercial fashion and helped become one of the driving forces behind the economic growth in the United States. The basic mechanisms of fracking includes drilling down to shale rock formation, using explosives to break up the rock and then pumping a mixture of water, mud and chemicals down into the rock to push out the oil or gas. This new production method led to

the United States being able to produce much of its own oil and gas at an increasing rate until the growth bubble's burst in late 2014. The bust phenomenon can be seen between year 2014 and 2015. The bust happened because the global energy market had become saturated with supply and drove the prices down. The over supply was driven in part by OPEC announcing that it would flood the market with oil and gas by refusing to decrease their production and in some places increase it. OPEC is an acronym for Organization of Petroleum Exporting Countries, and many of its members are located in Asia, specifically the countries known as the "Middle East". OPEC had cornered the petroleum production market before the shale boom and was strategically trying to regain control with its bust technique of not cutting production. The full effects of its actions are still up for debate, but the energy market was heavily hurt. Oil prices eventually stabilized at \$50 per barrel, however, the drop from \$100 per barrel has caused tremendous economic turmoil in OPEC economies as well as Russia and South American countries. However in figure 1, the AMZX shows that the energy industry was quick to respond and right itself to equilibrium.

MLP Involvement

The AMZX was a quick responder to the events mentioned before because it is actually a subsector of a market sector. The AMZX is mainly made up of pipeline Master Limited Partnerships. The major pipelines carriers remain busy regardless of per barrel price, not often subject to the impact of swings in energy costs because of carrying contracts. After the bust of the United States energy industry it stabilized fairly quickly, but it did not recover to the previous high levels. One reason that the industry was able to hold on, is because of MLPs and American's demand for petroleum. While producing companies were struggling, pipelines companies were still transporting product. These companies will continue to transport product and that is why investors are drawn to them. As MLPs reach their distribution growth limits,

some may go private again and have to reorganize, but the index is stable and can replace companies when they drop out. It is a smart way for investors to diversify into the energy industry and avoid the risk of running dry.

Discussion Section

Conclusions from Methods Section

As was mentioned above, the AMZX represents the energy industry, but also more specifically represents MLPs. The reason we can make this assumption is because an MLP can be found for every type of energy company, but not all energy companies are MLPs. This distinction is important to make because the guiding question of this manuscript is specific to MLPs. The energy industry is a great industry and arguments can be made for and against it infinitely, but the argument here is specifically for MLPs. MLPs are an important company structure that not many people know about. MLPs offer distributions, which investors find very attractive, but are also relatively safe because of their contract natures. MLPs are special because they have a minimum income requirement in their contracts. They are paid by what they transport but most of them have items in their contracts that stipulates they must still be paid even if not used during the specified time period. There is also the incentive distribution rights tool, which encourages general partners to manage and operate the company in a fashion that increases profits and distributions to limited partners. The benefit of continuous and possibly growing distributions is something that would make a positive impact on the average investor's portfolio, but many of the average investors are too unfamiliar to invest. In the past ten years the MLPs have outperformed all of the top 500 companies in the United States combined by yield, as shown in figure 2.

Difference from Expectations

This performance by AMZX was expected as the energy industry and the market have been providing inverse yields during the last decade. However, it was not expected that the yield to be almost double for that of AMZX over the S&P 500. The S&P 500 has long since been an indicator of the financial performance of United States companies. The United States has some of the largest companies in the world and one would expect that the added diversification of the whole market would allow it to out do the AMZX. However, this is not the case. The diversification of the S&P 500 actually reduced the profits of the energy industry because it had to offset the poor performing industries and stocks.

Limitations

One potential limitation of this study is the comparison of one industry to a whole market that includes many different industries. When this happens there are fundamental differences in the subjects being compared. The index that represents a whole industry has two levels of diversification. These two levels are at industry specific level where businesses are diversified against each other and then at the market level where different industries are diversified against each other. While at the same time, the AMZX faces a single level of diversification through a single industry; it is just specific businesses diversified against each other. This discrepancy can be attributed to AMZX's ability to react and rebound faster than the S&P 500 when a disruptive event occurs.

Future Studies and Study Improvements

This study has proven that MLPs are a valid source of investment for the average investors. However, there are limitations to the study. In the future, a study could compare other industry specific indexes to the AMZX. This would allow for the double level of diversification found in the S&P 500 to be eliminated. In addition, AMZX was studied during a boom, or period

of growth within the industry. One should assume that it would perform well because of the new frontier. It is no surprise that it performed this well, but going forward will be a true test of the industry's resilience. During the next energy boom, it will be of interest to measure the MLPs' performance against the S&P 500 again. Indicators of this future performance, are the times that the AMZX faced adversity during the Great Recession and during the shale bust. Historically, the energy industry has found equilibrium in a quicker fashion than the whole market. However, the S&P 500 outperforms the energy sector in a stable economic environment. Certain factors affect specific industries more, and that is why we believe that even with slow growth, the AMZX will continue to outperform the whole market.

Implications Section

MLPs are a unique investment opportunity and have historically produced a positive yield. The average investor that this piece focuses on is one that is usually an income investor and will eventually depend on the return from their portfolio if not already depending on it. Portfolio diversification then becomes an important aspect of the investors' success in returns, because it allows them to control their risk exposure level. To understand how this works, we must first discuss what diversification is and why it matters. Securities hold two types of risk: diversifiable (unsystematic) and non-diversifiable (systematic) risk. Diversifiable risk, also called unsystematic risk, is risk that is specific to a certain industry of the market. For example, labor laws changing in a certain industry so profits decrease as pensions are added or hourly rates are increased.

Non-diversifiable risk, or systematic risk, is risk that is fundamental to market securities and cannot be eliminated or reduced. Think of it this way, investing in the market is always risky, there is no guarantee that money will be made or earned back. Investing is like putting

your money into the market based on educated guesses, you may be right but there will always be a possibility that you could be wrong. The whole point of diversification is to reduce systematic risk in a portfolio so the only possible risk is unsystematic, meaning it cannot be taken away. The point of this study is to show that MLPs are a good investment and can be useful for the average investor when trying to eliminate risk in their portfolio.

Diversification is key if an investor expects to live off of the return of their portfolio. When diversification is absent, the investor is left to the mercy of a specific market industry. However, diversification is easily obtainable with only transaction and information costs to bear, both of which are fairly insignificant. The driving force behind the idea of diversification is that the investor wants the best possible chance to make money off of their investment. In a real world scenario, not all markets will be performing at the same level or in the same phase of the business cycle. If an investor were to invest in just one industry or company then they would be at the mercy of just one performance level. It would be devastating for someone to have retired in 2008 and have only real estate investments in their portfolio. That person would have retired with only a fraction of what they originally thought they would have and it would greatly hurt his or her quality of life. If that same person had diversified their portfolio with energy MLPs, then the Real Estate linked assets would be under performing and the energy-linked assets would be over performing. This person would then not be suffer quite as much because the energy linked assets would be offsetting the loss from the real estate assets.

As was shown, MLPs are a relatively safe investment and have proven to be resilient no matter how the rest of the economy is performing. The Great Recession of 2008 is an example of how this and many other industries tanked while the energy industry was able to excel. MLPs can still turn a profit because of their contracted use agreements through fee income, the majority

of MLPs, which are pipeline companies operate by the amount of volume that they transport each period, with a minimum payment requirement whether or not the pipeline is actually being used. The distributions are a function of the fee income and are government regulated with inflation accounted for. This translates into confidence in returns. We see that investors have doubly protected themselves through a steady cash flow from distributions and shielded themselves from unsystematic risk by diversification.

Conclusion

This manuscript is written with the objective of exploring MLPs and encouraging the average investor to invest in MLPs. It is a specific defense and encouragement for those that do not understand the energy industry. Outside of the main petroleum producing states, not many Americans are familiar with the industry. The main concentration of Americans familiar with the energy industry is located in Texas, Oklahoma, and the Dakotas. Those states are the large petroleum producing states, and the one where people's jobs are dependent on the success of the industry. For those states, a majority of their local economy is from the production of petroleum products. So investment in petroleum companies will help encourage growth for a whole community. However, the reach of the profit from these companies is not only limited to their local governments, but has helped the United States become more energy independent than ever before, which benefits everyone living in the United States. They may not know, but when the average investor is investing in MLPs they are not only investing for the distribution returns themselves, but also for the health of the industry and the people who work in it.

When looking at the comparison of returns, the idea is not to dissuade the average investor from investing in the S&P 500, nor is its intent to disparage the S&P 500. A comparison is simply an encouragement to help the average investor diversify their own personal portfolio by

adding energy MLPs to it. Investing in energy is a win-win because in most cases, the investor will gain value while simultaneously helping an industry that is a pillar of the country's economy. MLP indexes specifically, allow the investor a safe vehicle for this investment because of the distributions, which are seen immediately by investors.

Distributions are an important tool that Master Limited Partnerships have been able to harness. Many average investors depends on income from their investments either immediately or at retirement. The pass-through status that MLPs qualify for is one of the main contributing factors for their success. When the investor's returns are taxed at a lower rate and avoid double taxation, it is more money that they can personally use. Since the average investor is looking for a payoff and relies on the returns at one point or another, MLPs become one of the better investments that they can own. The added value of an index is even better.

Obviously, more can be done for this study, including looking at MLPs outside of indexes or even looking into specific subsectors of the energy industry, but this topic is a good start. The Great Recession was a historic time in the United States where many people who did not experience the Great Depression first hand were given a taste of what it feels like to have a country's financial system fail you. Investors have learned how important it is to keep the whole country's economy safe and prosperous. Increased and continuous investment in all sectors is an important part of the health of the economy.

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