



Size Matters

Defining and Comparing
Small-, Mid-, and Large-cap MLPs

Table of Contents

Introduction	3
Constituent Growth	4
Average Market Capitalization	5
Performance	6
Historical Yields	8
Conclusion	8

// Introduction

They say that everything is bigger down here in Texas but is bigger really better? What does bigger necessarily mean, especially in the context of MLPs? In the finance world, the “size” of a company is generally associated with its market capitalization, but how do we define what the difference is between a large-cap and a small-cap MLP? What’s the threshold? Is it \$5 billion or \$50 billion? If you ask five people in finance their definition of a “large-cap” company, you’ll likely get five different responses.

This gets especially confusing when one tries to compare MLP sizes to the broader market. Did you know that as of December 31, 2015, the entire energy MLP asset class had a market cap of about \$350 billion? It sounds like a lot, but in reality the entire sector is smaller than Exxon Mobil (XOM) alone. In practical application, pure size doesn’t mean much. As Einstein would tell you, it’s all relative! That’s why we came up with the Alerian MLP Size Indices.

At a high-level, we’ve sliced up the MLP space into three indices based on relative market capitalization. We’ve defined large-cap companies as those whose aggregate market capitalization make up 70% of the MLP universe, while mid-cap companies comprise the next 20%, and small-cap companies fill out the final 10%. This method of division

dynamically adjusts with growth (and contraction) of the sector, and avoids the pitfalls of defining a specific cut-off value. Furthermore, within each index, the companies are weighted by market cap, with the larger companies receiving a higher relative weighting. In conjunction with our recently released Energy MLP Classification Standard (EMCSSM), we now have a basis for comprehensively sorting and categorizing the space that has never existed before.

Looking at the table below, you’ll notice that there are 24 MLPs in the AMLI, which makes up around 70% of the overall energy MLP market cap, showing just how top-heavy this industry is today. While this is an interesting data point, it’s just that, a single data point that just shows how the industry is today. How did these size indices stack up historically? What kind of story can you tell when you peer into the looking glass and take snap shots into the past? Well, lucky for you we’ve done that work and back-tested all of these indices for the past decade, meticulously applying our methodology to provide the most accurate picture of how our niche industry has grown.

Alerian Large Cap (AMLI)

Top 70% of MLPs by total market capitalization

Number of Companies: 24

Company Size by Market Capitalization (millions)

<i>Average</i>	\$10,524
<i>Median</i>	\$8,221
<i>Largest</i>	\$51,307
<i>Smallest</i>	\$3,886

% Investment Grade: 75.7%

Alerian Mid Cap (AMMI)

The next 20% (essentially MLPs that make up the 70-90% range in total market cap)

Number of Companies: 27

Company Size by Market Capitalization (millions)

<i>Average</i>	\$2,336
<i>Median</i>	\$2,478
<i>Largest</i>	\$4,012
<i>Smallest</i>	\$761

% Investment Grade: 10.2%

Alerian Small Cap (AMSI)

The smallest 10% of MLPs

Number of Companies: 62

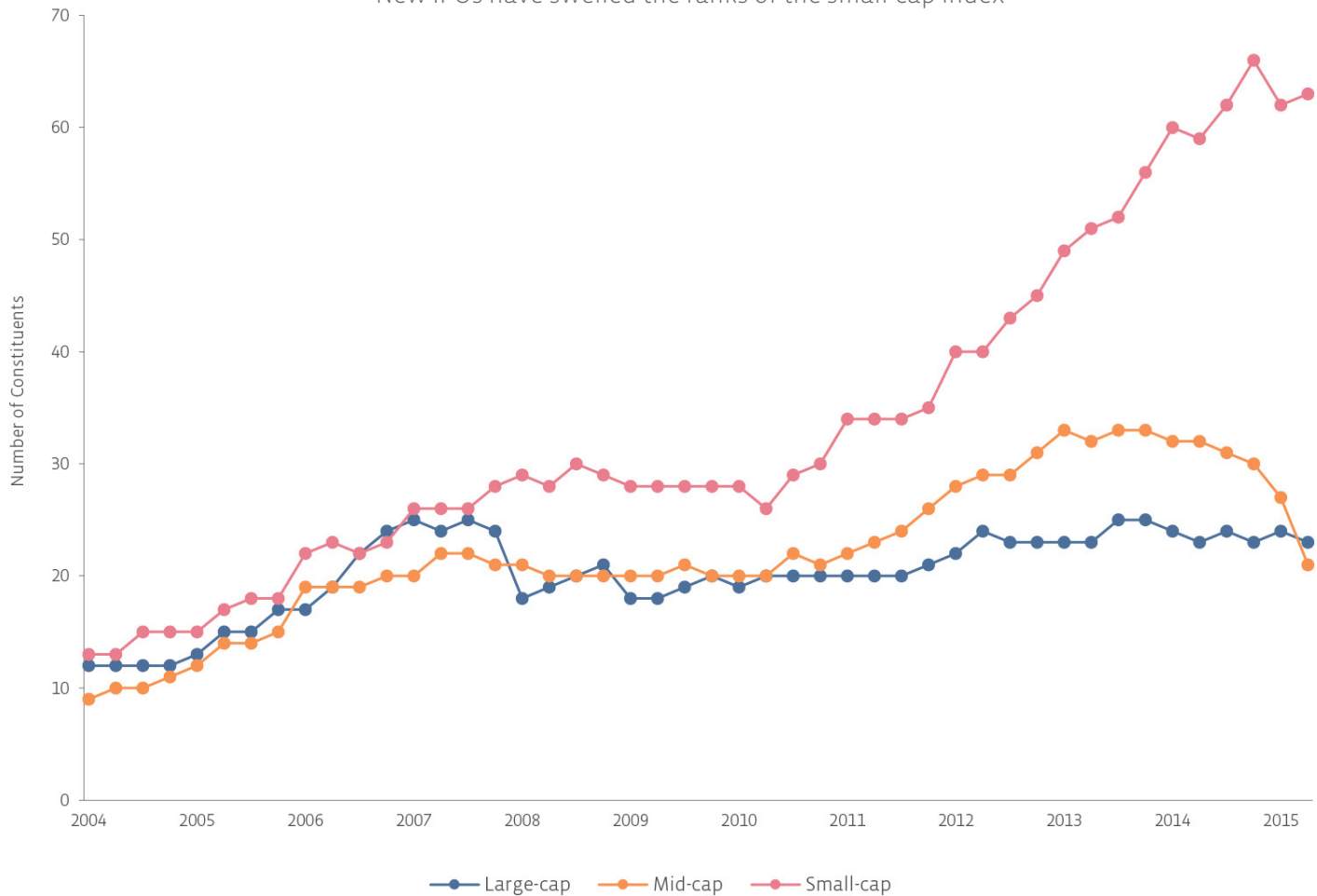
Company Size by Market Capitalization (millions)

<i>Average</i>	\$494
<i>Median</i>	\$436
<i>Largest</i>	\$1,548
<i>Smallest</i>	\$84

% Investment Grade: 0.0%

Source: Alerian as of December 31, 2015

New IPOs have swelled the ranks of the small-cap index



Source: Alerian as of December 31, 2015

// Constituent Growth

The chart above shows the number of constituents in each index on a quarterly basis. Between 2004 and 2008, there was a more equal distribution among each segment. After the 2008 financial crisis and recovery, the space began to see an explosion of growth, coming primarily from new IPOs, swelling the ranks of the small and mid-cap indices. Recently, during the commodity collapse, we've seen another adjustment in market capitalization distribution, with both the number of small- and mid-cap names falling. This redistribution of market capitalization is a result of more commodity-sensitive names facing financial difficulties and falling from the grace of investors. Although this chart ostensibly shows the number of mid-cap names declining dramatically while the number of small-cap names staying relatively constant, it fails to fully communicate the changing dynamics of the space.

For example, in the most recent quarterly rebalancing on March 18, 2016, seven names were removed from the AMMI and two equities were added for a net loss of five companies. One of the seven was added to the AMLI while the other six dropped down to the AMSI. However, in the AMSI, four equities were removed for failing to meet the minimum market capitalization requirement of at least \$75 million, giving it a net gain of two names. So while it may seem like mid-cap names took the biggest hit for number of companies removed, in reality, small-cap names were hit almost as hard. The losses to the AMSI were just offset by the addition of former AMMI constituents. Again, keep in mind that this is only the number of constituents for each index; it's not a reflection of the actual performance or size of the space, just how it has been divided.

// Average Market Capitalization

Another way to look at the history of the size indices is to examine the average market capitalization of each index's constituents, as shown below. As you can tell, average market capitalizations of companies in the AMSI and AMMI have risen modestly in the past decade, while the AMLI has skyrocketed, falling only during the most recent commodity collapse. This chart highlights the primary reason why a specific cut-off value for each segment doesn't make sense. As the space evolves, the definition of each cut-off point changes with it, which is why we've designed our index in a way that's both all-encompassing and flexible.

Some may look at the chart and interpret it as the large-cap indices having the most growth during the good years, as well as the steepest drop during the bad years. However, the chart doesn't reflect the *return performance* of the index¹; it only shows the quarterly change in average market capitalization. The scale of the chart can be disproportionately misleading. In fact, from the September 2014 peak to the March 2016 rebalancing, the average market cap for small-cap MLPs fell -57% versus -42% for large-cap MLPs and -32% for mid-cap MLPs.



Source: Alerian as of December 31, 2015

1. Keep in mind, each size index is market-cap weighted, not equally weighted.

Small-cap names have exhibited the highest volatility



Source: Alerian from December 30, 2005 to December 31, 2015

// Performance

Now let's pit the three indices against each other and directly compare their performance. The best way to do this is to look at the value of \$1,000 invested in each index over the past decade. This time period provides a comprehensive view, as it includes the 2008 great recession/ recovery, as well as the current commodity crisis. As a point of reference, the S&P 500's performance is also included, along with the benchmark for the space, the Alerian MLP Index (AMZ). All of the data referenced here is on a total-return basis.

As you can see from the graph above, the Alerian Large Cap MLP Index (AMLI) came away with a middling performance, even trailing during the boom years of the shale revolution. However, it did seem to have the fewest peaks and troughs, implying a low relative volatility. On the flip side, the Alerian Small Cap MLP Index (AMSI) was all over the place, with excellent performance in good times, but also the steepest drop once the markets turned against them. Being smaller equities, it takes far less to move the needle, but the needle moves in both directions: they were the worst-performing index over the past 10 years and exhibited the highest volatility. The Alerian Mid Cap MLP Index (AMMI) seemed to come away with the best balance of stability and performance at the end of the day.

// Performance

Below is a tabulated view of each index's performance data. The numbers corroborate with what we can intuitively see in the performance graph. The AMSI has the highest standard deviation (most volatility) out of all of the indices. On the flip side, the S&P 500, being comprised of some of the largest and most liquid companies in the US, has less volatility than any of the MLP indices. Compared to the benchmark AMZ, over the 10-year period, the AMSI underperformed, the AMMI outperformed, while the AMLI

followed the AMZ's performance pretty closely. This makes perfect sense, as the 24 names² in the AMLI represent roughly 70%³ of the total energy MLP market cap, while the AMZ (designed to be representative of the space as a whole), captures around 85%. When looking at the Sharpe Ratio, which is a measure of risk-adjusted return, mid- and large-cap MLPs look like a compelling investment, despite the recent turbulence in the energy sector.

Mid-cap MLPs outperform over a 10-year period

	AMLI	AMMI	AMSI	AMZ	S&P 500
3 Month	-4.7%	-4.3%	-12.7%	-2.8%	7.0%
6 Month	-28.0%	-25.6%	-40.9%	-24.3%	0.2%
YTD	-34.1%	-28.7%	-42.4%	-32.6%	1.4%
1 Year	-34.1%	-28.7%	-42.4%	-32.6%	1.4%
3 Year	-1.4%	-3.1%	-10.7%	-3.4%	15.1%
5 Year	2.9%	2.3%	-2.8%	1.5%	12.6%
10 Year	8.9%	9.9%	7.3%	8.7%	7.3%
Value of \$1,000	\$2,339	\$2,576	\$2,015	\$2,311	\$2,024
% Positive Months	60.0%	57.5%	63.3%	58.3%	65.0%
Standard Deviation	17.9%	21.4%	24.4%	18.3%	15.1%
Sharpe Ratio	0.51	0.50	0.37	0.49	0.47

Source: Alerian from December 30, 2005 to December 31, 2015

Percentage of positive months, standard deviation, value of \$1,000, and Sharpe ratio comparisons are based on monthly data over the trailing 10-year period.

2. Some perennial market-cap leaders in the space include Enterprise Products Partners (EPD), Energy Transfer Partners (ETP), Magellan Midstream Partners (MMP), Buckeye Partners (BPL), and Plains All American Pipelines (PAA). Prior to its 2014 reorganization as a C Corp, Kinder Morgan Energy Partners also played a leading role.

3. As a reminder, we've defined large-cap companies as those whose aggregate market capitalization make up 70% of the MLP universe, while mid-cap companies comprise the next 20%, and small-cap companies fill out the final 10%.

// Historical Yields

Around 2005 to 2008, the yields of the three indices were relatively in-line; the spread between small- and large-cap MLPs were rarely more than 100 bps from each other. At this point, the market cap of the entire sector was around \$100 billion and investors in the space were less discerning. MLPs were all valued generically, with few investors rigorously researching the space. However, during the financial crisis, yields blew out, and it became obvious that the large-cap MLPs had the balance sheets to weather the storm while the small-cap MLPs faced more challenges. The AMSI's yield peaked at around 23%, the AMMI's hit 19%, while the AMLI's rose to a high of 13%.

From 2010 and onwards, as the space grew, the yield gap between small-, mid-, and large-cap names grew as well. An increased interest in the asset class brought on a wave of MLP-focused investment products, which brought additional liquidity to the space. This increase in popularity also meant increased scrutiny, which further exacerbated the spread between small- and large-cap names. There was also an inherent bias towards large-cap names, as larger MLP access products favored the liquidity that they provided. As of December 31, 2015, the spread between the AMLI and AMMI was 218 bps, while the spread between the AMMI and AMSI was 410 bps.

Large-cap MLPs command premium yields



Source: Alerian as of December 31, 2015

// Conclusion

In the end, if we all had crystal balls, we could all buy low and sell high and be rich. Unfortunately, that's not the case. Individual investors need to decide for themselves what kind of risk/reward profile they're able to stomach. In the realm of MLPs, we've shown that while small-cap MLPs may ramp up like a rocket when times are good, they also fall the most when times are lean. Large-cap names may have the least volatility, but with the lower risk also comes lower overall reward. Mid-cap MLPs may hit that sweet spot in terms of returns, but the overall Sharpe Ratio is still

slightly behind the AMLI. If you're on the prowl for yield, be wary of what you wish for. While the AMSI has consistently had a higher yield than its peers, it's important to keep in mind that the high yield is there for a reason, and does not necessarily mean strong total returns in the long-run.

Whichever direction you go with your investments, we hope to leave you with enough data and analysis to make an informed decision. Good luck!

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