

# MLPs can persevere in a rising interest rate environment

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**While MLPs (master limited partnerships) have typically fared better than bonds and other yield-oriented securities such as real estate investment trusts (REITs) and utilities during a rising interest rate environment, it is important to remember that they are not immune. The low interest rates that were in place after the 2008 recession helped midstream MLPs and other pipeline companies raise capital economically, enabling returns that are significantly higher than their cost of capital. That in turn supported cash distribution growth. With the strengthening U.S. economy and higher rates, investors are wondering what that could mean for their MLP investments (and to a lesser extent pipeline companies), given their attractive distribution rates. Let's take a look at both the direct and indirect effects of rising rates on MLPs and pipeline companies.**

## Direct effects

The direct relationship is fairly simple as it reflects how increasing interest expenses can affect variable or floating rate debt held by companies. The key mitigating factor is that MLPs have historically been very conservative in terms of their debt structure. Midstream companies, including long-haul crude oil, refined product and natural gas pipeline companies generally utilize 70 to 100 percent fixed-rate debt, making their cash flow growth and longer-term performance less sensitive to higher rates. In short, we believe the direct impact of rising rates on midstream MLPs is minimal and in our view will not significantly hinder growth.

## Indirect effects

The indirect effect of higher interest rates on MLPs relates to their impact on total return. There are three main factors that can provide a buffer to rising rates: excess coverage can allow for slightly lower returns on invested capital; focus on internal growth versus external growth; and ability to pass through inflation in tariff rates or benefit from increased demand.

First, it's important to distinguish the catalyst for rising rates – typically either rising inflation or an improving economy. Both have potential benefits for MLPs.

- A strengthening economy helps midstream MLPs and pipeline companies transporting energy because aggregate demand increases, likely driving increased volumes transported.
- If inflation is the catalyst, though in our view this is the less likely scenario at this time, some MLP and pipeline companies can pass through the rate as it relates to liquids pipelines, which receive tariff escalators tied to the producer price index (PPI) that would push up the rate side of the equation.

We believe both catalysts for rising rates could drive improved cash flow, which could offset an increase in rising equity and debt.

## History as teacher

MLPs, like all distribution-paying entities, can experience some short-term volatility during periods of rising rates. However, MLP distribution growth has historically provided positive returns over the long term during these periods. MLPs and pipeline companies' combination of attractive yield and growth potential distinguishes them from other income-oriented investments. Unlike bonds and REITs, MLPs can grow their distributions, which can help drive total return. Historically, MLP prices have experienced short-term volatility when interest rates increased, followed by a rebound and solid long-term performance. The following table reflects our analysis of the past 15 periods of one or more consecutive months with a 50 basis point or more increase in the 10-year Treasury since 2000. During those periods, the 10 year treasury yield change has averaged 0.8%, MLPs returned 6.8%, compared to -1.4% for bonds and 5.1% for U.S. equities. MLPs outperformed bond returns in 13 of 15 periods of rising rates since 2000 by an average margin of 8.2%.

## Impact of rising interest rates on MLPs

Time period*	10-year treasury yield change	MLP returns	Bond returns	U.S. equities returns
3/2001 - 6/2001	0.5%	11.0%	1.1%	-0.9%
11/2001 - 12/20/01	0.8%	-0.7%	-2.0%	8.6%
3/2002	0.5%	7.8%	-1.7%	3.8%
10/2002 - 11/2002	0.6%	0.2%	-0.5%	15.2%
6/2003 - 8/2003	1.1%	7.3%	-2.9%	5.1%
4/2004 - 5/2004	0.8%	-8.6%	-3.0%	-0.2%
9/2005 - 10/2005	0.5%	-2.3%	-1.8%	-0.9%
1/2006 - 6/2006	0.7%	9.0%	-0.7%	2.7%
4/2008 - 5/2008	0.6%	8.3%	-0.9%	6.2%
1/2009 - 2/2009	0.8%	11.1%	-1.3%	-18.2%
4/2009 - 6/2009	0.9%	19.3%	1.8%	15.9%
12/2009	0.6%	6.9%	-1.6%	1.9%
9/2010 - 3/2011	1.0%	24.6%	-0.8%	27.8%
5/2013 - 8/2013	1.1%	-0.9%	-3.7%	3.0%
8/2016 - 1/2017	1.0%	9.4%	-3.0%	6.0%
<b>Averages</b>	<b>0.8%</b>	<b>6.8%</b>	<b>-1.4%</b>	<b>5.1%</b>

As of 6/30/2017 \*Time periods are determined using end of month yields and returns. Periods shown are those where the U.S. 10-year government bond interest rate increased by at least 50 basis points over one or more consecutive months. Returns are period specific and are not annualized. Interest rate increase source: Bloomberg. MLPs are represented by the Tortoise MLP Index<sup>®</sup> (as of 1/1/2000), bonds are represented by the Bloomberg Barclays U.S. Aggregate Bond Index and U.S. equities are represented by the S&P 500<sup>®</sup> Index. It is not possible to invest directly in an index. Please see important disclosures at end of presentation. **Past performance is no guarantee of future results.**

## Looking ahead

We believe though these assets are not immune to rising interest rates, they remain an attractive long-term investment in both periods of economic growth and uncertainty. While higher rates are inevitable, we believe that over the long term, quality growth will prevail.

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MLPs are subject to many risks, including those that differ from the risks involved in an investment in the common stock of a corporation. Holders of MLP units have limited control and voting rights on matters affecting the partnership. Holders of units issued by an MLP are exposed to a remote possibility of liability for all of the obligations of that MLP in the event that a court determines that the rights of the holders of MLP units to vote to remove or replace the general partner of that MLP, to approve amendments to that MLP’s partnership agreement, or to take other action under the partnership agreement of that MLP would constitute “control” of the business of that MLP, or a court or governmental agency determines that the MLP is conducting business in a state without complying with the partnership statute of that state. Holders of MLP units are also exposed to the risk that they will be required to repay amounts to the MLP that are wrongfully distributed to them. In addition, the value of an investment in an MLP will depend largely on the MLP’s treatment as a partnership for U.S. federal income tax purposes. If an MLP does not meet current legal requirements to maintain partnership status, or if it is unable to do so because of tax law changes, it would be treated as a corporation for U.S. federal income tax purposes. In that case, the MLP would be obligated to pay income tax at the entity level and distributions received by an investor generally would be taxed as dividend income. Furthermore, MLP interests may not be as liquid as other more commonly traded equity securities.

The Tortoise MLP Index<sup>®</sup> is a float-adjusted, capitalization-weighted index of energy master limited partnerships (MLPs). The Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes treasuries, government-related and corporate securities, mortgage-backed securities (agency fixed-rate and hybrid adjustable rate mortgage pass-through securities), commercial mortgage-backed securities (agency and non-agency) and asset-backed securities. The S&P 500<sup>®</sup> Index is an unmanaged, market-value weighted index of stocks that is widely regarded as the standard for measuring large-cap U.S. stock market performance. It is not possible to invest directly in an index.

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