

Energy infrastructure

3Q 2023 QUARTERLY COMMENTARY

The broad energy sector, as represented by the S&P Energy Select Sector Index®, returned 12.3% for the third quarter as companies continued to improve balance sheets, grow dividends, and buyback shares. Further aiding the sector's performance, crude oil rallied 32% following U.S. producers' lack of increasing capital investment and continued supply discipline from the Organization of the Petroleum Exporting Countries Plus (OPEC+). Specifically, Saudi Arabia voluntarily reduced its production by 1 million barrels per day (mm b/d). We believe OPEC+ remains intent to send a clear message to the market that it is focusing on profits over market share. This is a marked change from past messaging and is aligned with U.S. shale prioritizing profits over market share. Russian crude oil, despite Western sanctions, remains more resilient than expected, yet volumes are projected to decline and/ or face longer transit times to their end market.

Near-term supply and demand picture driven by global events

- · Rise in real yields threatening demand
- Israel / Hamas war resetting Middle East peace efforts, risk of wider conflict
- Saudi Arabia and OPEC+ (Russia) continuing reduced production, offset by Iran and Venezuela increases
- China's sluggish restart and weak efforts at stimulus
- Labor strikes at Australian LNG facilities and threat of pipeline sabotage in Europe
- Winter weather around the corner

In the physical markets, U.S. production remains steady. For 2023, the Energy Information Agency (EIA) forecasts that U.S. crude oil production hit an all-time high of 13.2 mm b/d in September 2023, eclipsing the U.S. pre-COVID production high. While the EIA forecasted numbers are a moving target, it is evident that production is up. On the demand side, the EIA projects world crude oil consumption to increase by 1.7 mm b/d in 2023 to a record 101.9 mm b/d. Refiners in particular benefitted from a robust summer driving season where refining margins reached record levels.

Crude Oil Demand Forecasts (mmbpd)

Source	2022	2023	2024	2028	2030	2045
EIA	99.1	100.9	102.2	> <	105.5	116.7
OPEC	99.6	102.1	104.3	> <	112.0	116.0
IEA	99.8	102.3	103.1	105.7	Peaking	NA

Source: Bloomberg, IEA, EIA, OPEC. As of 9/30/2023

© 2023 TortoiseEcofin www.TortoiseEcofin.com



Energy infrastructure companies underperformed their sector peers due to lower exposure to higher commodity prices. Their revenues are largely fee-based in nature. Midstream energy returns favored master limited partnerships (MLPs) due in part to the closing of ONEOK's announced buyout of Magellan Midstream (an MLP) and consequent index rebalancing.

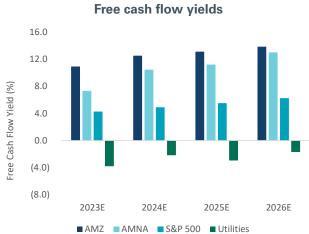
Interest rates continued to rise with the U.S. 10-year Treasury Note moving from 3.8% to 4.5% during the third quarter. Despite this increase, pipeline companies were able to generate positive returns and outperform other yield-oriented asset classes. This jives with history as historically pipeline companies have generally outperformed bonds and other yield-oriented securities in a rising rate environment. MLPs and pipelines companies outperformed bond returns in 14 of 18 periods of rising rates since 2000 by an average margin of 12.8% and 10.0%, respectively.

	10yr Treasury Yield				
Time Period	Change	TMLP Index Returns	TNAP Index Returns	Bond Returns	S&P 500 Returns
3/01-6/01	0.5%	11.0%	(1.4%)	1.1%	(0.9%)
11/01-3/02	1.2	0.8	1.7%	(1.9)	8.9
10/02-11/02	0.6	0.2	2.7%	(0.5)	15.2
6/03-8/03	1.1	7.3	2.6%	(2.9)	5.1
4/04-5/04	0.8	(8.6)	(2.8%)	(3.0)	(0.2)
9/05-6/06	1.1	(0.2)	5.0%	(1.2)	5.7
4/08-5/08	0.6	8.3	11.5%	(0.9)	6.2
1/09-6/09	1.3	32.9	10.9%	1.9	3.2
12/09	0.6	6.9	7.0%	(1.6)	1.9
9/10-3/11	1.0	24.6	32.1%	(0.8)	27.8
5/13-8/13	1.1	(0.9)	(2.6%)	(3.7)	3.0
2/15-6/15	0.7	(5.1)	(1.9%)	(2.2)	4.4
8/16-1/17	1.0	9.4	10.6%	(3.0)	6.0
9/17-4/18	0.8	(4.2)	(3.5%)	(2.3)	8.4
10/20-3/21	1.1	57.2	39.1%	(2.7)	19.1
7/21-4/22	1.7	21.8	23.0%	(10.4)	(5.0)
7/22-10/22	1.4	9.5	(2.6%)	(8.2)	(5.9)
4/23-9/23	1.1	13.1	2.0%	(4.6)	3.6
Averages	1.0%	10.2%	7.4%	(2.6%)	5.9%

Sources: Tortoise MLP Index, Tortoise NA Pipelines Index, Barclays Capital Aggregate Bond Index, Bloomberg. Past results are no guarantee of future results. It is not possible to invest directly in an Index. Time periods are determined using end of month yields and returns; Data set includes all periods in which the 10-year treasury yield increases more than 50 bps in a period of 12 months or fewer. *Returns are period specific and are not annualized.

As of 9/30/2023

We believe midstream's strong fundamentals, attractive valuations, defensive characteristics in a higher rate and inflationary environment support outperformance on a relative basis versus the broader markets. March's banking crisis and higher rates in the third quarter of 2023 serve as examples of the resiliency of the asset class and its ability to return capital to shareholders. In both instances, the ability to generate significant free cash flow from operations and have virtually no need to access capital markets proved to be beneficial.

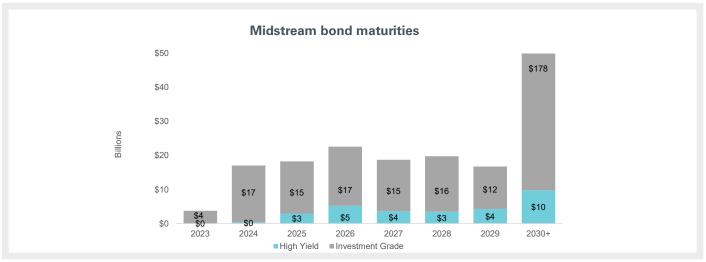


Source: Bloomberg, TCA, UBS, Goldman Sachs, Morgan Stanley, Wells Fargo. As of 9/30/2023

Reflects TCA views and opinions as of date herein which are subject to change at any time based on market and other conditions. Projections shown are no guarantee of future outcomes



The potentially higher cost of capital shouldn't be overlooked, but is diminished by several factors. We believe the direct cash flow impact from higher interest expense is minimal as current high free cash flow results in little to no need to access expensive capital markets. Debt refinancing risk is manageable due to extended maturity schedules and credit facilities are largely undrawn with an average utilization of 10%. Beyond favorable sector fundamentals, a higher interest rate environment typically is a sign of economic growth and a good leading indicator to strong energy demand. Lastly, internal capital projects are achieving returns of 15% to 20%, well above capital costs.



Source: Bloomberg

Finally, mergers and acquisitions (M&A) remains in full swing in the energy sector. Three midstream corporate M&A deals are likely to close in the back half of 2023. ONEOK (OKE) completed its acquisition of Magellan Midstream (MMP) in September while Energy Transfer's (ET) acquisition of Crestwood Equity Partners (CEQP) and HF Sinclair's (DINO) purchase of Holly Energy Partners (HEP) are expected to close in the fourth quarter. We view this trend positively. With consolidation happening across the industry, larger midstream entities are potentially more apt to retain pricing power with their increasingly larger counterparties.



Disclaimers

This commentary contains certain statements that may include "forward-looking statements." All statements, other than statements of historical fact, included herein are "forward-looking statements." Although Tortoise believes that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect, Actual events could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this publication. Tortoise does not assume a duty to update these forward-looking statements. The views and opinions in this commentary are as of the date of publication and are subject to change. This material should not be relied upon as investment or tax advice and is not intended to predict or depict performance of any investment. This publication is provided for information only and shall not constitute an offer to sell or a solicitation of an offer to buy any securities.

The S&P 500® Index is an unmanaged market-value weighted index of stocks, which is widely regarded as the standard for measuring largecap U.S. stock market performance. The Tortoise North American Pipeline IndexSM is a float-adjusted, capitalization weighted index of North American energy companies primarily engaged in the production of crude oil, condensate, natural gas or natural gas liquids (NGLs). Returns include reinvested distributions and dividends. The Tortoise MLP Index® is a float-adjusted, capitalization-weighted index of energy master limited partnerships (MLPs). The index is comprised of publicly traded companies organized in the form of limited partnerships or limited liability companies engaged in transportation, production, processing and/or storage of energy commodities. To be eligible for inclusion in the Tortoise MLP Index®, a company must be publicly traded, organized as a limited partnership or a limited liability company, and be classified as an "energy MLP" by the Master Limited Partnership Association (MLPA). The S&P Energy Select Sector® Index is a modified market capitalizationbased index of S&P 500° companies in the energy sector that develop and produce crude oil and natural gas and provide drilling and other energy related services. Returns include reinvested dividends. Utilities = S&P Utilities Select Sector Index, a modified market-cap weighted index composed of constituents of the S&P 500 in the utility sector (as defined by the Global Industry Classification Standard). The Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar denominated, fixedrate 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), asset-backed securities and commercial mortgage-backed securities (agency and non-agency). The Alerian MLP Index is the leading gauge of energy infrastructure master limited partnerships (MLPs). The capped, float-adjusted, capitalization-weighted index, whose constituents earn the majority of their cash flow from midstream activities involving energy commodities, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis (AMZX). The Alerian Midstream Energy Index is a broad-based composite of North American energy infrastructure companies. The capped, float-adjusted, capitalization-weighted index, whose constituents earn the majority of their cash flow from midstream activities involving energy commodities, is disseminated real-time on a pricereturn basis (AMNA) and on a total-return basis (AMNAX).

The Tortoise North American Pipeline IndexSM (an "Index") is the exclusive property of TIS Advisors, which has contracted with S&P Opco, LLC (a subsidiary of S&P Dow Jones Indices LLC) to calculate and maintain the Index. The Index is not sponsored by S&P Dow Jones Indices or its affiliates or its third-party licensors (collectively, "S&P Dow Jones Indices"). S&P Dow Jones Indices will not be liable for any errors or omission in calculating the Index. "Calculated by S&P Dow Jones Indices" and its related stylized mark(s) are service marks of S&P Dow Jones Indices and have been licensed for use by TIS Advisors and its affiliates. S&P® is a registered trademark of Standard & Poor's Financial Services LLC ("SPFS"), and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). No portion of this publication may be reproduced in any format or by any means including electronically or mechanically, by photocopying, or by any other form or manner whatsoever, without the prior written consent of TIS Advisors. 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), asset-backed securities and commercial mortgage-backed securities (agency and non-agency).

Free Cash Flow is the cash a company produces through its operations, less the cost of total capital expenditures (growth and maintenance.

It is not possible to invest directly in an index. Past performance is no guarantee of future results.