Morningstar Corporate Credit Research Highlights
Bond Markets Rally as Investors Price In Monetary Easing

Morningstar Credit Ratings, LLC
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Credit Market Insights

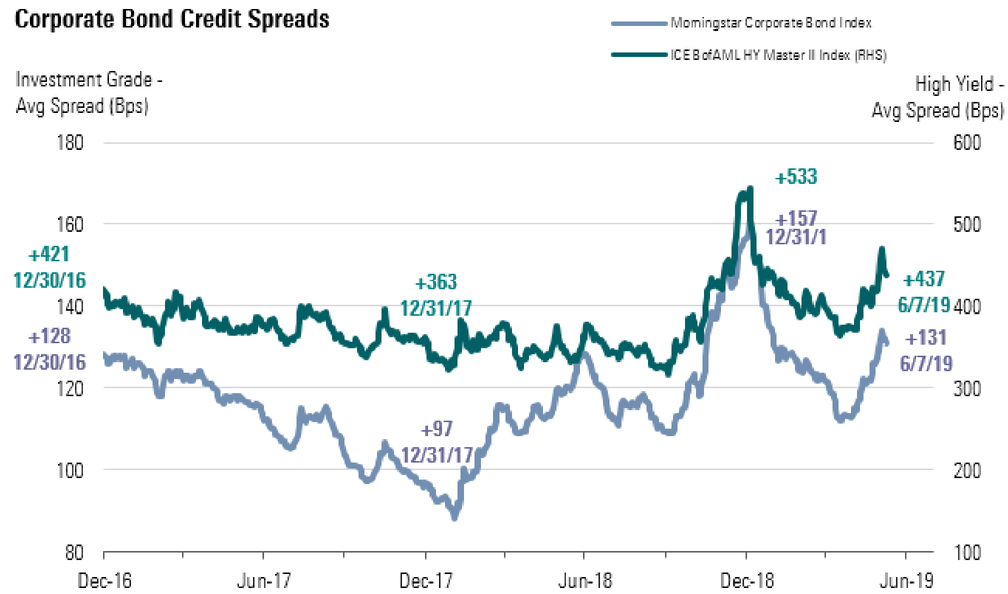
Bond Markets Rally as Investors Price In Monetary Easing

Fixed-income markets rallied across the board last week as investors bid up the prices for global sovereign bonds. The confluence of slowing economic growth, ongoing trade negotiations, and weakening employment led investors to price in a significantly higher probability that the U.S. Federal Reserve will begin to ease monetary policy in the near term. According to the CME FedWatch Tool, the probability that the Fed will lower the federal-funds rate in June rose to 25% and the probability of a rate cut in conjunction with the July meeting rose to 87%. Even after an expected rate cut this summer, investors don't think the Fed will stop at just one. The probability that the Fed will cut rates at least three times by the end of 2019 is slightly over 50%.

Economic growth has been slowing over the past few months. Based on current economic indicators, the Atlanta Federal Reserve Bank's GDPNow model estimate for the seasonally adjusted annual rate of real GDP growth in the second quarter dropped to 1.4%. The reading had been as high as 1.7% as recently as the beginning of May. With the economy softening, companies have been reducing the rate of hiring, and the employment report for May dropped to 75,000, the weakest reading since mid-2009.

As prices on Treasury bonds and other high-quality sovereign bonds rose, interest rates fell across the world, in some cases to all-time lows. In the United States, the yield on short- to medium-duration bonds fell, and by the end of the week, the 2-, 5-, 10-, and 30-year closed at 1.85%, 1.85%, 2.08%, and 2.57%, respectively. These are the lowest yields at which Treasuries have traded since 2017. In Europe, negative interest rates were not enough to dissuade investors from flocking to Germany's sovereign bonds as prices rose enough to push Germany's 5-year bond to an even greater negative yield of 0.60% (only 2 basis points from its prior low) and the yield on the 10-year bond declined to negative 0.26% (a new low).

After steadily widening out for the past few weeks, corporate credit spreads stabilized and began to reverse course. In the investment-grade market, investors remained cautious; the average credit spread of the Morningstar Corporate Bond Index (our proxy for the investment-grade corporate bond market) tightened only 1 basis point to +131. In the high-yield market, however, the ICE BofAML High Yield Master II Index tightened 22 basis points to +437.



Source: Morningstar, Inc., ICE BofAML Global Indexes. Data as of 06/07/2019

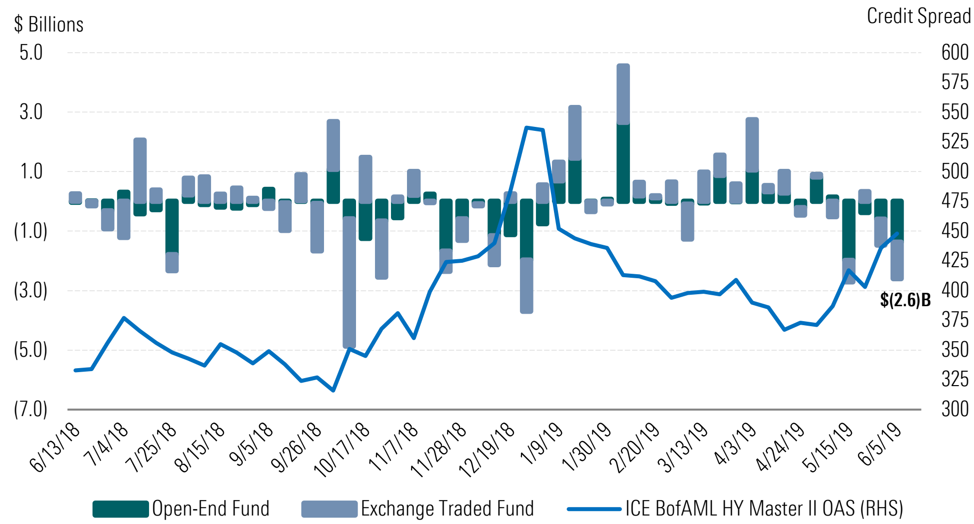
Year to date, fixed-income indexes have produced outsize gains compared with the amount of yield carry that bonds would have generated alone. For example, the Morningstar Core Bond Index (our broadest measure of the overall fixed-income market) has risen 5.14%. A significant portion of this return can be attributed to the increase in bond prices as interest rates have fallen across the yield curve. In the shorter end of the curve, since the end of last year, yields on the 2-year and 10-year Treasury bonds have fallen 64 and 60 basis points, respectively. In the corporate bond market, indexes have been further bolstered by tightening corporate credit spreads. For example, even after spreads widened in May, the average spread of the Morningstar Corporate Bond Index has tightened 26 basis points and the ICE BofAML High Yield Master II Index has tightened 96 basis points. Thus far this year, the Morningstar Corporate Bond Index has risen 7.67% and the ICE BofAML High Yield has increased 8.57%.

Weekly High-Yield Fund Flows

For the week ended June 5, investors pulled $2.6 billion out of the high-yield asset class. Outflows were led by withdrawals of $1.4 billion from high-yield open-end mutual funds, which were nearly matched by $1.2 billion of net unit redemptions across high-yield exchange-traded funds. This is the second-largest weekly withdrawal from the high-yield sector this year and the fourth-largest weekly withdrawal over the past 52 weeks.

Year to date, inflows into the high-yield asset class total $9.2 billion, consisting of $6.0 billion worth of net unit creation among high-yield exchange-traded funds and $3.2 billion of inflows across high-yield open-end mutual funds. Including the outflows registered late last year, over the past 52 weeks, total outflows equal $7.1 billion, with $7.5 billion of withdrawals across open-end mutual funds partially offset by $0.4 billion of net unit creation among high-yield ETFs.

Estimated Weekly High-Yield Bond Fund Flows and High Yield Credit Spreads



Source: Morningstar, Inc. and ICE BofAML Global Indexes.

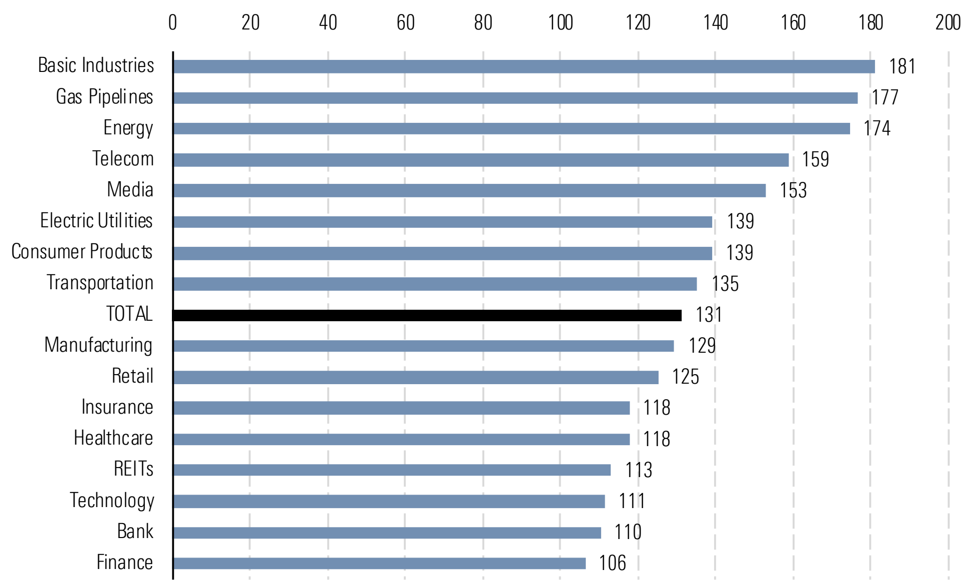
Exhibit 1 Morningstar Corporate Bond Index Sector Summary

Sector	Average Rating	Number of Issues	Modified Duration	Spread (bps)	MTD Spread Chg (bps)	YTD Spread Chg (bps)	MTD Total Return (%)	YTD Total Return (%)
TOTAL	**A-**	**5,265**	**7.1**	**131**	**(1)**	**(25)**	**0.49**	**7.67**
FINANCIAL	**A-**	**1,453**	**5.3**	**111**	**(0)**	**(31)**	**0.46**	**6.79**
Bank	A-	876	4.7	110	(0)	(32)	0.48	6.55
Finance	A-	249	5.1	106	(1)	(29)	0.45	6.53
Insurance	A	225	8.7	118	0	(20)	0.41	8.27
REITs	BBB+	94	5.7	113	(1)	(36)	0.44	7.38
INDUSTRIAL	**A-**	**3,123**	**7.7**	**139**	**(1)**	**(23)**	**0.52**	**8.06**
Basic Industries	BBB	267	7.6	181	(1)	(17)	0.62	7.91
Consumer Products	BBB+	340	7.9	139	(1)	(20)	0.55	8.61
Energy	A-	406	7.4	174	5	(22)	0.11	8.04
Healthcare	A-	445	7.9	118	(3)	(18)	0.59	7.44
Manufacturing	A-	487	6.2	129	(1)	(31)	0.45	7.36
Media	BBB+	179	8.9	153	(3)	(25)	0.75	9.44
Retail	A-	210	8.0	125	(0)	(18)	0.51	7.05
Technology	A	363	7.3	111	(3)	(16)	0.58	7.23
Telecom	BBB+	163	9.6	159	(4)	(33)	0.94	11.01
Transportation	BBB+	192	8.8	135	(1)	(21)	0.40	8.33
UTILITY	**BBB+**	**631**	**8.9**	**155**	**0**	**(30)**	**0.36**	**8.56**
Electric Utilities	A-	359	9.6	139	1	(30)	0.28	8.31
Gas Pipelines	BBB	252	7.9	177	(1)	(31)	0.46	8.98
Rating Bucket								
AAA Bucket		124	7.5	52	(1)	(7)	0.39	6.01
AA Bucket		493	6.1	73	1	(12)	0.35	5.58
A Bucket		1,929	7.0	101	(0)	(23)	0.46	7.04
BBB Bucket		2,719	7.3	170	(1)	(34)	0.54	8.65
Term Bucket								
1-4	A-	1,742	2.3	80	2	(21)	0.25	3.57
4-7	A-	1,179	4.8	117	(3)	(38)	0.55	6.93
7-10	BBB+	856	6.9	147	(2)	(32)	0.68	8.89
10PLUS	A-	1,488	13.8	186	(2)	(23)	0.59	12.16

Data as of 06/07/2019

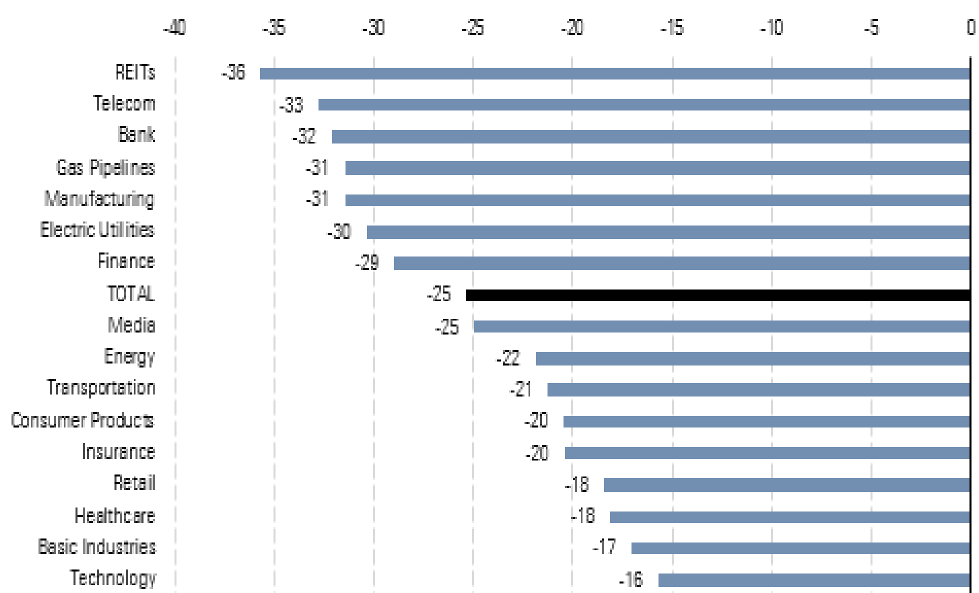
Source: Morningstar, Inc.

Exhibit 2 Morningstar Corporate Bond Index Spread by Sector



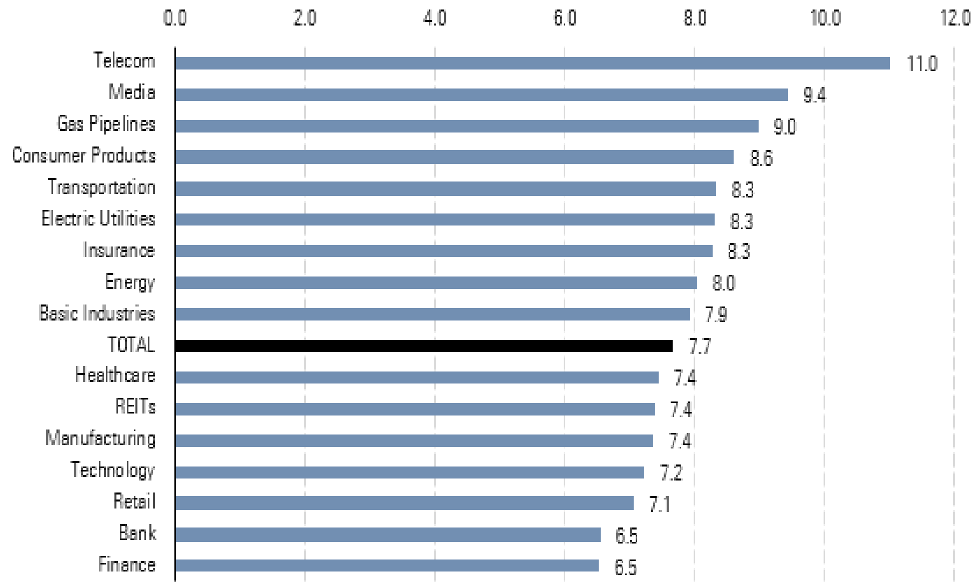
Source: Morningstar, Inc.

Exhibit 3 Morningstar Corporate Bond Index YTD Spread Change



Source: Morningstar, Inc.

Exhibit 4 Morningstar Corporate Bond Index YTD Return



Source: Morningstar, Inc.

Recent Notes Published by Credit Analysts

Apache Issuing New 10- and 30-Year Unsecured Notes to Fund Tender

Market Data

Apache Corporation (BBB-, stable) is in the market June 5 with an offering of 10- and 30-year notes. Proceeds will be used to fund a cash tender offer (also announced June 5) for up to $1.0 billion aggregate principal amount of outstanding senior indebtedness and for general corporate purposes. The tender offer is made up of two pools. Pool 1 consists of offers to purchase for cash up to $550 million aggregate for $403.2 million of 2.625% senior notes due 2023, up to $100 million for $392.6 million of 3.625% senior notes due 2021, and $686.5 million of 3.25% notes due 2022. Pool 2 consists of offers to purchase for cash up to $450 million aggregate for $800.0 million of 6.00% senior notes due 2037, $39.2 million of 7.625% senior notes due 2096, $300.0 million of 7.75% notes due 2029, $133.3 million of 7.95% notes due 2026, $78.6 million of 7.70% notes due 2026, and $150.0 million of 7.375% notes due 2047. A sweetened early tender offer provision (expires June 18) encourages holders of the existing nine notes to participate in the tender. The tender offers expires July 2. In effect, the offering would allow Apache to push out debt maturity to a later date.

For market comparables, we reference Pioneer Natural Resources (BBB, stable), a larger, Texas Permian-focused exploration and production peer. The following market pricing data was sourced from pricing service Interactive Data as of June 5.

In the 10-year area, comparable issues are quoted as follows:

- Apache 7.75% notes due 2029 at +244 basis points.
- Pioneer Natural Resources 7.20% notes due 2028 at +173 basis points.

In the 30-year area, comparable issues are quoted as follows:

- Apache 7.375% notes due 2047 at +283 basis points.

MCR Credit Risk Assessment

Our BBB- credit rating on Apache reflects the company's globally diversified portfolio of onshore and offshore oil and gas assets, with 56% of adjusted production coming from the United States (nearly all onshore), 32% from onshore Egypt, and 12% from the U.K. North Sea. Company production is 53% crude oil, 34% natural gas, and 13% natural gas liquids. The company's large size and lower country risk help to offset product and customer concentration, end-market cyclicality, and our estimate of no long-term sustainable competitive advantage, resulting in a high Business Risk score.

Ongoing efficiency gains across the organization's field operations and corporate support functions are resulting in progressively lower per-well drilling and completion costs, positioning it well for a better price environment, resulting in expanding free cash flow generation. Apache's growth strategy is to utilize its high-margin, cash flow-generating assets in Egypt and the North Sea to fund production growth in the Permian Basin (Texas and New Mexico) for the next few years.

We estimate the ratio of gross debt/trailing EBITDAX declining to about 1.5 times by 2022 from 1.7 times in 2018. We estimate Apache's EBITDAX margin gradually rising to about 66% by 2023 from 63% in 2019 as it benefits from ongoing field efficiency gains and gradually increasing energy price realizations. After capital expenditures (including a surge in midstream spending) and dividends, plus proceeds from divestments, we estimate negative $400 million free cash flow in 2019, steadily increasing to more than positive $2 billion in 2023. Our stable outlook assumes that the company can incrementally reduce leverage from efficiency gains and higher price realizations that should arise from a gradual improvement in oil and gas supply and demand fundamentals.

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