

High Yield

Shorter Duration Capping Upside Potential

| CORE

Duration has declined to a record low, largely because of an increase in bonds trading above their next call price. With upside capped for much of the index, we evaluate upside and downside price moves based on shifts in yields, highlighting select bonds that look attractive or unattractive.

The risk-on sentiment in the market at the close of 2019 has continued through the first half of January, with spreads for the US High Yield Index 14bp tighter this year. The rally has pushed yields lower, with the index breaking below a 5% yield to worst earlier this week, the lowest level since July 2014. As valuations have increased, the duration of the index has shortened and is currently under 3.0, the lowest level of all time and down from 4.0 at the end of 2018 and a post-crisis average of 4.1 (Figure 1).

This duration shortening can be attributed to two factors. First, the number of call-constrained bonds has increased dramatically over the past year, with 73% of the index and 88% of BB bonds now trading above their next call price, well above the long-term average (Figure 2). Those numbers were just 12% and 18%, respectively, at the end of 2018, the last time the index duration was above 4.0.

Second, the composition of the index has evolved over time. For example, the average time to both first call date and maturity date has declined as bonds have rolled down, and the pace of issuance has not been sufficient to offset that effect, with new issues having shorter non-call periods and maturity dates in recent years. In addition, rising star volumes have outpaced fallen angel volumes in eight of the past nine years. With rising stars having longer maturities than the index on average, this has resulted in longer-dated paper leaving the high yield market at a faster rate than it has entered through fallen angels.

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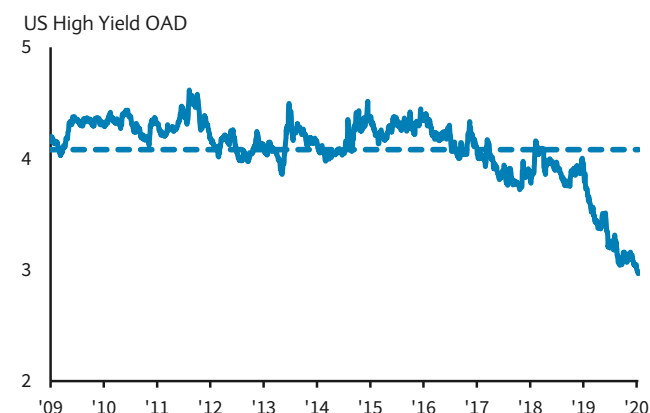
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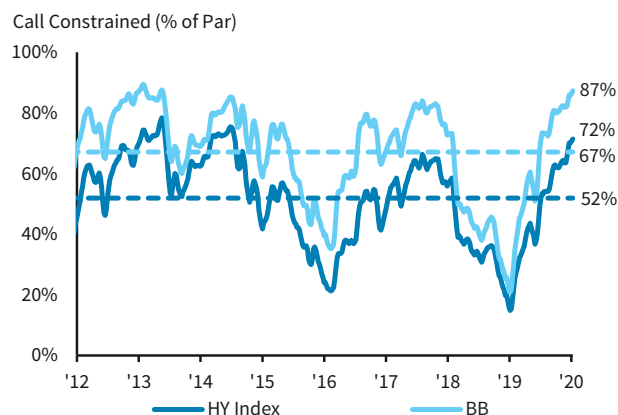
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FIGURE 1. Index Duration Is at a Record Low

Note: Dashed line is 2009-present average level.
Source: Bloomberg, Barclays Research

FIGURE 2. More Than 70% of the US High Yield Index Is Call Constrained

Note: Call constrained defined as trading above next call price.
Source: Bloomberg, Barclays Research

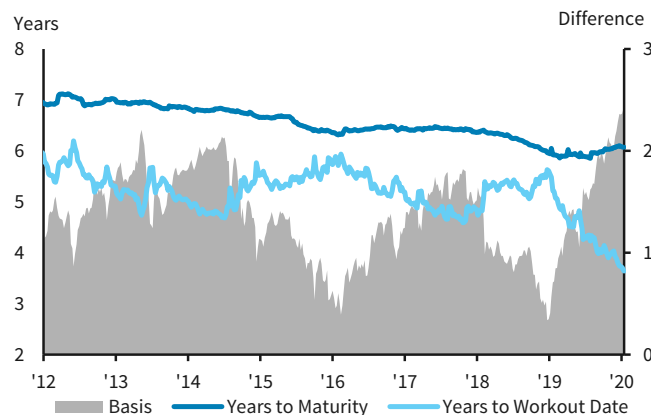
The increased call-constrained rate in the market has caused a meaningful divergence between average time to maturity and time to workout date (defined as the date to which yield to worst is calculated). As seen in Figure 3, the basis between maturity date and workout date has increased to 2.4 years, up two years from the end of 2018 and one year above the average since the start of 2012. Although the average maturity of the index has declined by nearly a year since 2012, the decline in years to workout date has been the most meaningful influence on the shrinking duration of the market.

As a result of the high level of call-constrained bonds, the convexity of the market has grown increasingly negative, with upside limited for most of the index. We estimate the convexity of each security by calculating the upside in price if yields rally 50bp and compare it with the downside if yields widen by 50bp. The ratio of upside to downside acts as a measure of convexity. Call-constrained bonds have limited room to rally further but could have more significant downside if yields increase and they are priced to extend. As a result, they will have an upside/downside ratio of less than one.

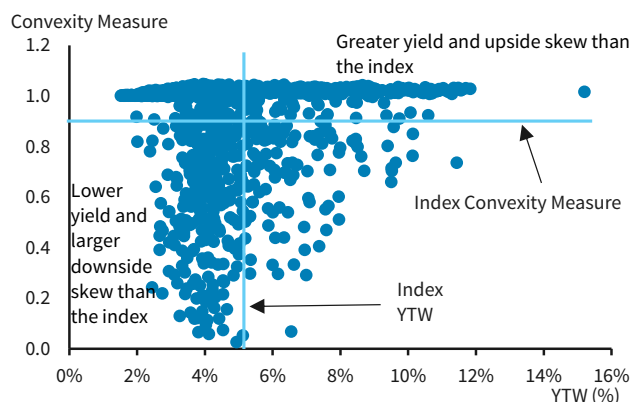
For example, Iron Mountain 4.875s of 2027 currently trade at roughly \$104, with a yield to worst of 4.1%. If this bond had a YTW of 3.6%, the price would increase roughly \$1.5, as it continues to be priced to a 2022 redemption date. On the other hand, the price would decline by \$2.5 if the YTW moved 50bp wider to 4.6%, as the bond is priced to extend past the next call date in such a scenario. This equates to an upside/downside ratio of 0.6.

Using this measure, we find that the index-wide level is 0.90 currently,¹ down from 0.98 at the end of 2018 and lower than any year-end level since 2012 (the average over that period is 0.95). Given that our analysis is based on yield-to-worst calculations, we exclude bonds that have more than 10 years to maturity in order to make a more accurate comparison with the index yield level. We note that the majority of these long bonds are fallen angels and, therefore, are generally bullet bonds that lack the upside limitations found in high yield call structures. The minor differences in this convexity measure can have significant implications for potential upside and downside returns across the High Yield Index.

¹ Analysis excludes bonds greater than 10 years to maturity as well as bonds with spread less than 0bp or greater than 1000bp.

FIGURE 3. The Number of Years to Workout Date Has Declined Meaningfully since 2018

Source: Bloomberg, Barclays Research

FIGURE 4. Upside/Downside Convexity Measure Compared with Yield to Worst

Note: Excludes bonds with more than 10 years to maturity, as well as bonds with spreads of less than 0bp or more than 1000bp.
Source: Bloomberg, Barclays Research

To isolate bonds that may have an imbalance between upside and downside price action, we plot the measure of convexity for each bond relative to its current yield to worst (Figure 4). Bonds in the bottom left of the chart have price action more skewed to the downside than the index as well as a yield to worst lower than the current index level. Conversely, bonds in the top right section have both greater upside convexity than the index and a higher yield than the index.

We believe that bonds in the top right sector present greater upside potential for investors, while bonds in the bottom left appear rich based on convexity. Figure 5 lists fifteen bonds with the highest convexity level based on this analysis that have yields to worst greater than the US High Yield Index and Overweight ratings from our fundamental analysts. Figure 6 lists the fifteen bonds with the lowest convexity level that have yields to worst below the index and are rated Underweight by our fundamental analysts.

FIGURE 5. Overweight Rated Bonds with Attractive Convexity Measure and Yield to Worst Greater than US High Yield Index

Issuer	Ticker	Coupon	Maturity Date	YTW (%)	OAS	Price	Sector	Analyst	Convexity Measure Level
Liberty Interactive	LINTA	8.5	7/15/2029	8.5	671	100	Media Entertainment	Sandeep Gupta	1.04
Global Marine	GLBMRN	7	6/1/2028	8.8	708	89	Oil Field Services	Paul Chambers	1.04
Cleveland-Cliffs	CLF	5.875	6/1/2027	6.8	495	95	Metals and Mining	Brian Lalli	1.04
AMC Entertainment	AMC	6.125	5/15/2027	8.0	621	90	Leisure	Vincent Foley	1.04
AMC Entertainment	AMC	5.875	11/15/2026	7.9	619	89	Leisure	Vincent Foley	1.03
QEP Resources	QEP	5.625	3/1/2026	6.4	473	96	Independent	Paul Chambers	1.03
Talen Energy	TLN	10.5	1/15/2026	12.0	1022	94	Electric	Srinjoy Banerjee, CFA	1.03
Diamond Offshore	DO	7.875	8/15/2025	10.9	923	88	Oil Field Services	Paul Chambers	1.03
Talen Energy	TLN	6.5	6/1/2025	10.9	921	83	Electric	Srinjoy Banerjee, CFA	1.03
Nabors	NBR	5.75	2/1/2025	8.9	725	87	Oil Field Services	Paul Chambers	1.03
ARD Finance	ARDFIN	6.5	6/30/2027	5.5	409	104	Packaging	Brian Lalli	1.03
Endo	ENDP	5.875	10/15/2024	6.1	419	99	Pharmaceuticals	Rishi Parekh	1.02
Talen Energy	TLN	7.25	5/15/2027	6.0	398	105	Electric	Srinjoy Banerjee, CFA	1.02
Community Health	CYH	8	3/15/2026	6.8	492	104	Healthcare	Rishi Parekh	1.02
Denbury Resource	DNR	7.75	2/15/2024	11.2	956	89	Independent	Paul Chambers	1.02

Note: Excludes bonds with more than 10 years to maturity, as well as bonds with spreads of less than 0bp or more than 1000bp.

Source: Bloomberg, Barclays Indices

FIGURE 6. Underweight Rated Bonds with Low Convexity Measure and Yield to Worst Lower than US High Yield Index

Issuer	Ticker	Coupon	Maturity Date	YTW (%)	OAS	Price	Sector	Analyst	Convexity Measure Level
Ardagh Pkg Fin	ARGID	6	2/15/2025	3.4	166	105	Packaging	Brian Lalli	0.1
Caesars	CGPHLC	5.25	10/15/2025	3.8	161	104	Gaming	Greggory Price, CFA	0.4
Goodyear	GT	5	5/31/2026	3.9	174	104	Automotive	Chris Wang	0.4
Davita	DVA	5.125	7/15/2024	3.2	142	103	Healthcare	Rishi Parekh	0.5
Vistra	VST	5.875	6/1/2023	1.1	-44	102	Electric	Srinjoy Banerjee, CFA	0.5
T-Mobile	TMUS	4.5	2/1/2026	3.4	134	103	Wireless	Jeff Harlib	0.5
Nielsen	NLSN	5	2/1/2025	3.9	187	103	Media Entertainment	Vincent Foley	0.6
B&G Foods	BGS	5.25	4/1/2025	4.2	222	103	Food and Beverage	Hale Holden	0.6
Vistra	VST	5.625	2/15/2027	3.9	194	106	Electric	Srinjoy Banerjee, CFA	0.7
Central Garden & Pet	CENT	5.125	2/1/2028	4.3	224	104	Consumer Products	Hale Holden	0.7
Ardagh Pkg Fin	ARGID	4.125	8/15/2026	3.1	119	104	Packaging	Brian Lalli	0.7
Outfront Media	OUT	5	8/15/2027	3.8	181	105	Media Entertainment	Vincent Foley	0.7
Melco Resorts	MPEL	4.875	6/6/2025	3.8	170	103	Gaming	Eugene Tham	0.7
Boyd Gaming	BYD	4.75	12/1/2027	3.7	171	105	Gaming	Greggory Price, CFA	0.8
Cleveland-Cliffs	CLF	4.875	1/15/2024	4.1	226	102	Metals and Mining	Brian Lalli	0.8

Note: Excludes bonds with more than 10 years to maturity, as well as bonds with spreads of less than 0bp or more than 1000bp.

Source: Bloomberg, Barclays Indices

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AMC 6 1/8 05/15/27, Overweight (USD 89.88, 15-Jan-2020)

ARD FINANCE SA, CD/D/E/J/K/L/M

ARDFIN 6 1/2 06/30/27, Overweight (USD 104.00, 15-Jan-2020)

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ARGID 6 02/15/25, Underweight (USD 104.63, 15-Jan-2020)

ARGID 4 1/8 08/15/26, Underweight (USD 104.00, 15-Jan-2020)

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BGS 5 1/4 04/01/25, Underweight (USD 103.13, 15-Jan-2020)

BOYD GAMING CORP, CD/CE/J/K/M

BYD 4 3/4 12/01/27, Underweight (USD 104.63, 15-Jan-2020)

CAESARS RESORT COLLECTION LLC / CRC FINCO INC, CD/J/K/M

CGPHLC 5 1/4 10/15/25, Underweight (USD 103.50, 15-Jan-2020)

CENTRAL GARDEN & PET CO, CD/CE/FA/J/K/M/N

CENT 5 1/8 02/01/28, Underweight (USD 103.75, 15-Jan-2020)

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CLF 4 7/8 01/15/24, Underweight (USD 102.38, 15-Jan-2020)

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DVA 5 1/8 07/15/24, Underweight (USD 102.38, 15-Jan-2020)

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QEP 5 5/8 03/01/26, Overweight (USD 96.00, 15-Jan-2020)

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TLN 7 1/4 05/15/27, Overweight (USD 104.38, 15-Jan-2020)

TLN 6 1/2 06/01/25, Overweight (USD 82.50, 15-Jan-2020)

TLN 10 1/2 01/15/26, Overweight (USD 93.50, 15-Jan-2020)

VISTRA ENERGY CORP, A/CD/CE/D/E/J/K/L/M

VST 5 7/8 06/01/23, Underweight (USD 102.13, 15-Jan-2020)

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