

## Weekly Briefing

### SKYView: Valuations

We have received many questions pertaining to current fixed income market valuations amidst a sharp 2019 recovery, and how our breakeven analysis may have changed since publishing the original simulation in early November 2018. As such, this *Weekly Briefing* takes a renewed look at downside protection across leveraged credit and adjacent fixed income asset classes, gauging resiliency in both long/measured and instantaneous/sharp yield widening scenarios.

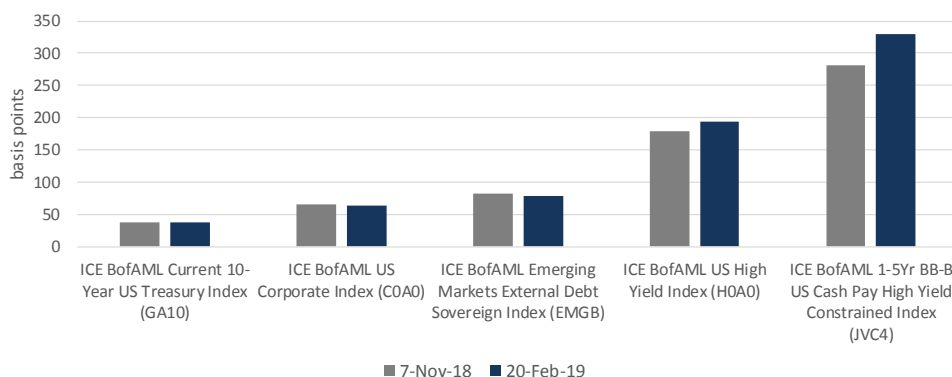
We acknowledge that a market recovery in January and February has some investors again concerned that yield tights have already been reached in this cycle, and that total return opportunities in fixed income remain few and far between now that the Q4'18 market dislocation has corrected. While we do not share this view, we nevertheless re-simulated the impact a hypothetical environment of rising yields would have on various fixed income asset class returns, updated to reflect post-rally metrics. Like our original analysis, the following simulation aims to calculate the maximum all-in yield increase an asset class could handle before total returns fell below breakeven levels (i.e., the point at which interest income is fully offset by the negative impact of rising yields). Our model maintains the following assumptions:

- 12 months investment horizon
- Increases in yield are linear in nature across all asset classes and occur in equal monthly increments
- No credit losses via defaults; no performance drag via downgraded securities exiting an index
- Coupon payments are reinvested in their respective strategies
- The driver of higher yield (whether by an increase in Treasury yields or a widening of spreads) is not specified
- No absorption of increased Treasury yields through spread compression (and vice versa)
- We include an estimate for duration extension for relevant asset classes under various widening scenarios
- No impact from roll-down as we assume investments are within a fund and repositioning would mitigate this impact
- Metrics are re-set monthly (increased carry and extension-related duration)
- Goal Seek is utilized to find the maximum increase in yield that would correspond to a 0% (breakeven) return

Our findings show both broad and short duration high yield (the ICE BofAML US High Yield Index and ICE BofAML 1-5Yr BB-B US Cash Pay High Yield Constrained Index, respectively) to be better positioned than adjacent fixed income indices (10-yr Treasuries, investment grade corporates, EM, etc.) to generate breakeven returns in a rising yield environment. For example, our simulation estimates that the ICE BofAML 1-5 Year BB-B US Cash Pay Constrained Index (JVC4, a proxy for short duration high yield) could absorb over 325 bps of linear yield widening over a 12-month period and still generate a total return of 0%. In contrast, the ICE BofAML US Corporate Index (COAO, a proxy for investment grade credit) could only absorb ~ 60 bps of linear yield widening over a 12-month period before returns fall below 0%. The chart below plots breakevens for several fixed income indices under the assumptions listed above. Additionally, we further delineate breakevens for rating buckets within the US high yield index in the chart at right. Note that breakevens for both flavors of high yield have increased since our simulation on November 7, 2018, while all others have remained flat or declined.

### Breakevens by Index

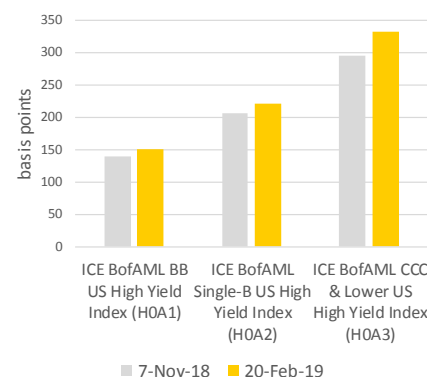
12-month time horizon



Source: SKY Harbor, ICE BofAML Indices

### US High Yield Breakevens by Rating

12-month time horizon

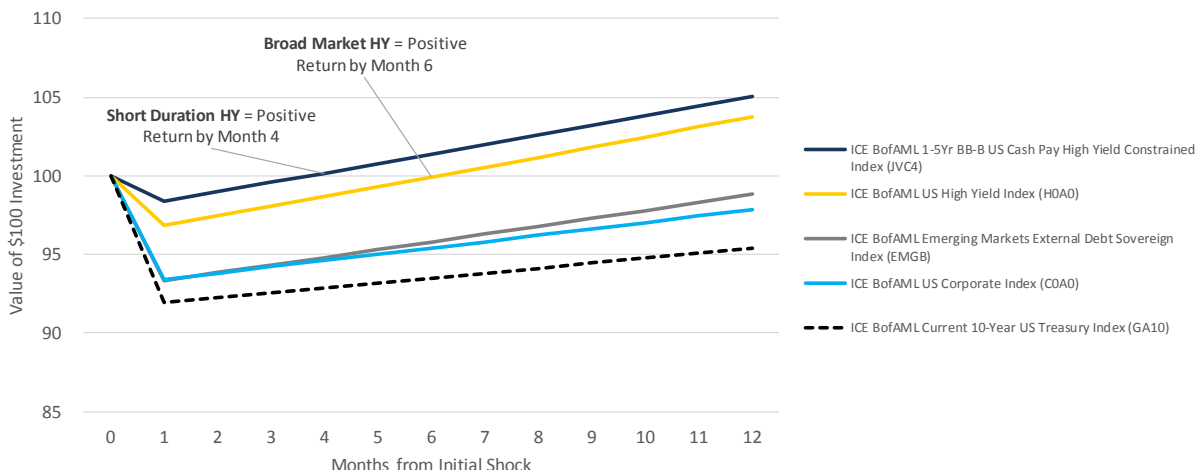


Recall, importantly, that our simulation assumes spreads absorb no increases in Treasury yields, and vice versa. In reality, this is unlikely, particularly for credit products with greater spread cushions. In a past analysis, we found that a key factor in determining whether a rise in rates can be offset (partially or in full) by a corresponding reduction in spread is most dependent upon the spread cushion (the percentage of yield made up of spread) present at the start of any period. Thus, our analysis likely underestimates breakevens for credit asset classes above, particularly those with higher spread cushions at present (broad and short duration high yield in particular).

While the analysis above is helpful in determining total return resilience in an environment in which yields rise over a 12-month time horizon, some investors may be more concerned with market timing (the risk of investing just before a yield shock). Using the weakest 10-day period in Q4'18 to illustrate our point, an investor putting to work a new US high yield allocation on December 12 would have suffered ~ 76 bps of yield widening within the first ten trading days. To better visualize this risk, we re-ran our prior simulation, but this time assuming the market suffers a 100 bps shock on day 1. After 100 bps of widening, we then assume yields remain steady over the next 12 months and quantify how long it would take the resulting carry to offset the initial drop in investment value. As demonstrated below, short duration and broad market high yield would recoup initial losses in the subsequent four and six months, respectively, while adjacent asset classes (investment grade credit, EM, Treasuries) would continue to be in the red 12 months out.

### Timing to Breakeven Returns Following Instantaneous 100 bps Yield Shock

cumulative returns, 12-month time horizon

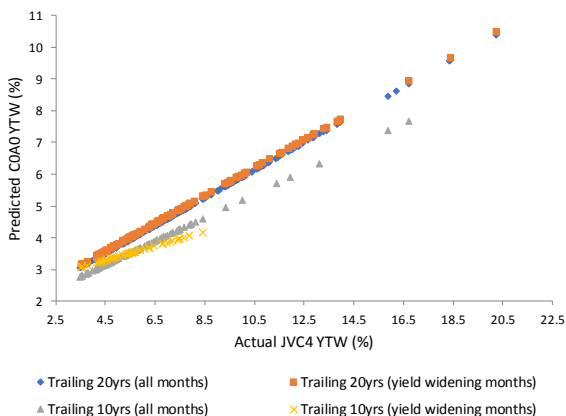


Source: SKY Harbor, ICE BofAML Indices

Common pushback to this analysis, however, is that a yield shock (assuming it arises from an increase in risk premiums demanded by the market, not an underlying move in Treasuries) is unlikely to impact all asset classes equally. Using two commonly compared asset classes when investors fear yield widening is imminent, we calculated differences in yield change sensitivity between short duration (JVC4) and investment grade (COA0) bonds. Using a variety of data sets (trailing 20 years of monthly data, trailing 10 years of monthly data, and similar timeframes further limited to periods in which yields are rising), we find that investment grade historically captures between 23% and 47% of short duration HY yield moves. As shown on page 1, short duration high yield breakevens are in excess of 5x the magnitude of investment grade and, as such, appear to offer greater downside protection even when adjusted for historical variability in yield capture betas. The chart below plots this relationship dynamic, and further demonstrates that short duration high yield breakeven recoveries appear superior to that of investment grade even after normalizing the shock magnitude for beta differences (i.e., short duration high yield recovers par following a 100 bps shock more quickly than investment grade would recover from a 23 bps to 47 bps shock).

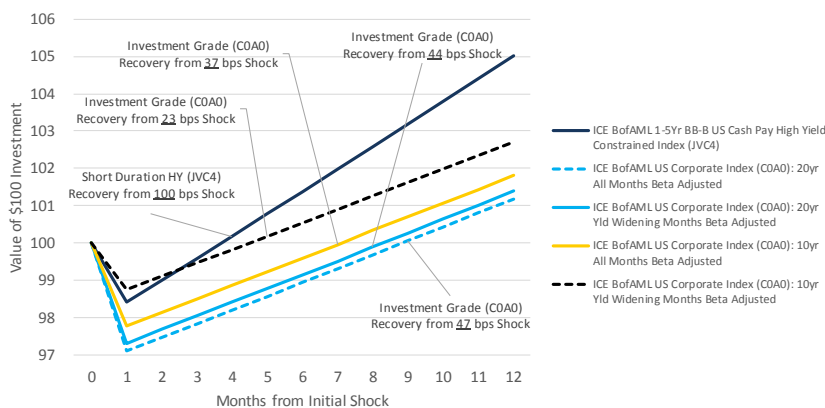
### Yield Sensitivity: Short Duration High Yield vs. Investment Grade

monthly data, regression best fit lines



### Timing to Breakeven Returns Following Instantaneous Yield Shock

cumulative returns, 12-month time horizon



Source: SKY Harbor, ICE BofAML Indices

Overall, we continue to be constructive on high yield valuations post the 2019 YTD recovery. Furthermore, our analysis shows that short duration US high yield is likely to be an attractive place to invest even if waning market sentiment were to cause yields across all fixed income asset classes to widen, by virtue of elevated breakeven levels and quicker relative recoveries following an immediate yield shock.

## On the Calendar

### Occurred

Event	Release Date	Period	Survey	Actual	Prior
Initial Jobless Claims	21-Feb-19	Feb	228k	216k	239k
Durable Goods Orders	21-Feb-19	Dec	1.7%	1.2%	0.7%
Markit US Manufacturing PMI	21-Feb-19	Feb	54.8	53.7	54.9

Source: SKY Harbor, Bloomberg

### Upcoming

Event	Release Date	Period	Survey	Actual	Prior
Housing Starts	26-Feb-19	Dec	1255k		1256k
Conf. Board Consumer Confid.	26-Feb-19	Feb	124.2		120.2
GDP Annualized QoQ	28-Feb-19	4Q	2.5%		3.4%

## Recommended Reading

Wei, Lingling and Davis, Bob (2019, February 21). US Bets on China's Special Envoy in Trade Talks. *The Wall Street Journal* (subs. req.), Retrieved from [https://www.wsj.com/articles/u-s-bets-on-chinas-special-envoy-in-trade-talks-11550795104?mod=hp\\_lead\\_pos6](https://www.wsj.com/articles/u-s-bets-on-chinas-special-envoy-in-trade-talks-11550795104?mod=hp_lead_pos6)

Bloomberg News (2019, February 21). China to Propose \$30 Billion More US Agriculture Purchases. *Bloomberg*, Retrieved from <https://www.bloomberg.com/news/articles/2019-02-21/china-said-to-propose-30-billion-more-u-s-agriculture-imports>

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