

SKY Harbor Weekly Briefing

SKYView: Valuation in Uncertain Times

An aggressive pursuit of tighter financial conditions amidst a backdrop rife with geopolitical tension continues to dampen economic growth prospects, leading to another week in which risk assets sold off. Uncertainty has given rise to a diverse set of forward-looking views, ranging from the global economy being on the precipice of a decade-long correction, to a view that the selloff has pushed valuations to exceedingly attractive levels. While our view falls somewhere in the middle of that range, we have been asked to elaborate on valuation and total return potential as we enter the final quarter of 2022. In this *Weekly Briefing*, we present our thoughts on current opportunities in high yield – informed by historical precedent – all while highlighting risks arising from extreme levels of global economic uncertainty.

Generating a Spread Target Despite Near-Term Uncertainty

ICE BofA US High Yield Index (H0A0) daily spreads have moved by at least 20 bps on four occasions over the last few weeks, having done so on average less than once a month over the prior decade. In light of such volatility, projecting high yield index spreads a year from now seems like a fool’s errand. Nevertheless, we present (below) an admittedly wide range of potential spread scenarios, anchored by long-run averages across differing economic growth environments. **On a weighted-average basis – subject to change but based on our internal view at this point in time – we tend to think H0A0 spreads move wider in the near term.**

	US High Yield Index @ Sep 27, 2022	Scenario #1 "Soft Landing"	Scenario #2 "High Inflation, Modestly Positive Growth"	Scenario #3 "High Inflation, Modestly Negative Growth"	Scenario #4 "Fed action induces recession, but severe contraction avoided"	Scenario #5 "Severe Recession"	Weighted Average Base Case
Index OAS	522	375	450	700	825	1,125	625
Est. Chance of Occurring		15%	25%	40%	15%	5%	
Notes		Recession avoided, spreads revert to tightest quartile	Inflation persists, rates climb, but economy avoids contraction	Inflation persists, rates climb, economic growth turns modestly neg	Spreads climb to ex-GFC recessionary average	The global economy falls into a severe recession (GFCish)	

Source: SKY Harbor, ICE data indices, National Bureau of Economic Research (NBER)

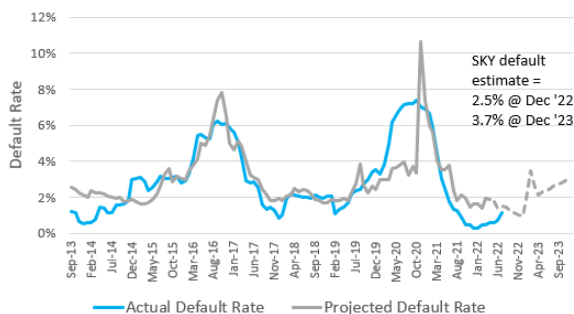
A shifting outlook from the Fed, driven by more persistent than expected inflation, has seemingly reduced the chances of a “soft landing,” even by Chairman Powell’s own admission during the September FOMC press conference. At the same time, the strength of corporate balance sheets keep the far tail – a “severe recession” that closely approximates the Global Financial Crisis – outside of our base case, at least for now. At present, **we anticipate a somewhat modest recession in the coming year**, while acknowledging that issues exogenous to our market (namely the war in Ukraine, China’s intentions with Taiwan, commodity price volatility, etc.) could swiftly exacerbate sentiment and depress growth even further. On a weighted-average basis, our scenario analysis above puts fair value of spreads in the 625 bps range, though the timing of such levels being reached are further clouded by the lag effect of key economic indicators. Nevertheless, **we view 625 bps as a reasonable datapoint when generating our spread target for next year**, particularly given the historical over-penalization of risk assets whenever the chances of a recession are on the rise. Additionally, we would anticipate the path of spreads to be non-linear in nature, expecting a number of near-term peaks and valleys particularly as central banks pivot away from a multi-year run of accommodative policy.

Negative EBITDA Growth vs. Strong Corporate Balance Sheets Cloud Default Outlook

Updating our default and recovery rate regression models, we arrive at a relatively benign base case view of credit losses on a go-forward basis. More specifically, **we see defaults rising from ~ 1.2% on a trailing 12-month basis to ~ 2.5% by the end of 2022, and rising further to ~ 3.7% by the end of 2023.** Note, more stringent lending standards and a rising chance of recession (based on the yield curve) are key drivers in our default outlook. At the same time, we see recovery rates on defaulted issuers falling from ~ 40% at present to ~ 30% a year from now, largely a function of a higher number of defaults and modest credit metric degradation from historically strong levels. We caution, however, that if geopolitical tensions were to rise, the inflationary impact of commodities would likely erode corporate earnings potential, which in turn could further pressure default rates well above the long-run annual average of 4.5%. A freezing of credit markets would further exacerbate stress in risk assets. In such a scenario, recovery rates would likely fall below our base case estimate.

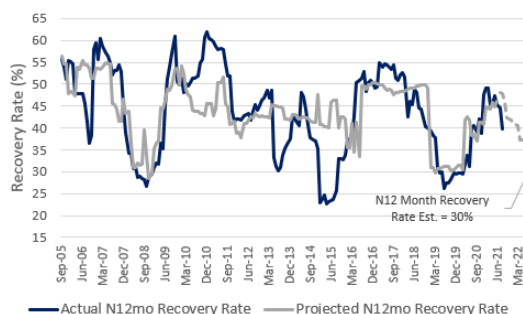
SKY Default Rate Projection Model

N12 Month Estimates based on Monthly Data



SKY Recovery Rate Projection Model

N12 Month Estimates based on Monthly Data



Source: SKY Harbor, ICE data indices, Federal Reserve, Bank of America Merrill Lynch, Bloomberg, Capital IQ

Putting this all together, and assuming market participants develop a similar outlook as ours, expected index credit losses a year from now (3.7% default rate * 1 – 30% recovery rate) should approximate 260 bps. On top of this, we add in ~ 300 bps of excess spread (this historical index average), to arrive at an alternative spread target of 560 bps. Note, **our credit loss estimate would rise by at least 70 bps for each 1% increase in the default rate, and our 300 bps estimate of excess spread would likely rise in tandem**, leading to a wider spread target should earnings degradation trend more negatively than expected.

SKY Harbor Default Loss Sensitivity Analysis

principal loss, in bps (default rate * 1-recovery rate)

2023		Default Rate						
Recovery Rate		2.9%	3.2%	3.4%	3.7%	3.9%	4.2%	4.4%
	37.5%	181	197	213	228	244	260	275
	35.0%	189	205	221	237	254	270	286
	32.5%	196	213	230	247	263	280	297
	30.0%	203	221	238	256	273	291	308
	27.5%	210	229	247	265	283	301	319
	25.0%	218	236	255	274	293	311	330
	22.5%	225	244	264	283	302	322	341

260 bps of credit losses
+ 300 bps cycle average excess spread
= 560 bps forward-looking spread target

Source: SKY Harbor, ICE Data Indices, BofA Merrill Lynch, Bloomberg

Using an average of methods (625 bps from our scenario analysis, 560 bps from our credit loss + excess spread models), **we establish our base case index spread target of ~ 595 bps.**

The Rates Outlook Remains Similarly Uncertain

As of September 27, 2022, 3-year and 5-year Treasury yields were approximately 4.43% and 4.22%, respectively, with rates having sold off materially since Chairman Powell's post-FOMC press conference last week. In fact, Treasury yields have moved by more than 40 bps over the last couple of days, with no clear conviction on the part of the market as to where they ultimately settle. **In our present view, and following a relatively significant move in the September dot plot (the median projection is now 4.6% for 2023), the market is incorporating a sufficiently hawkish view into rates markets.** With this in mind, we assume minimal movement in underlying Treasury yields over the next 12 months, though a lack of progress on the inflation front (after waiting on historical lags in data) would compel us to change this view.

Model Output (Our First Approach)

Putting all of these factor estimates together, and using the Bank of America Merrill Lynch valuation model, we arrive at an **estimated gross return in the mid/low single digits over the next 12 months, using the aforementioned estimates.** Note, however, that a more significant rally in the rates market (the consensus view, as of September 9, 2022, was for the 3-year and 5-year Treasury yield to fall to 3.05% and 3.02%, respectively, by the end of 2023) would result in a total return in the 7% to 8% range. At the same time, building risk factors could contribute to a more significant reduction in corporate earnings, stressing balance sheets and leading to a rise in the default rate relative to our base case estimate. In such a scenario, spread widening would more than offset the benefit of a rates rally.

ICE BofA US High Yield Index - H0A0		HY	5yr Trsy
Current Spread		530	422
Target		595	400
Predicted Change		65	-22
Duration		4.2	
Index Price		83.8	
Avg Par Coupon		573	
Tsy Change		-22	
Total Change in Yield		43	
Capital Gain		-173	
Period Multiplier		1.00	
Current Yield		659	
Default Rate		3.70	
Price (default universe)		55.8	
Credit Loss		138	

Expected Periodic Return (next 12 months)

3.5 %

ICE BofA 1-5 Year BB-B US Cash Pay High Yield Constrained Index - JVC4		SD HY	3yr Trsy
Current Spread		444	443
Target		515	430
Predicted Change		71	-13
Duration		2.7	
Index Price		91.2	
Avg Par Coupon		604	
Tsy Change		-13	
Total Change in Yield		58	
Capital Gain		-152	
Period Multiplier		1.00	
Current Yield		643	
Rating Migration Rate		3.00	
Price (downgrade universe)		72.4	
Downgrade Loss		31	

Expected Periodic Return (next 12 months)

4.6 %

BofA Merrill Lynch Model, SKY Harbor variable estimates. The predictions herein are forward-looking statements, subject to change without notice due to changing market conditions, expectations, or judgments that could cause actual results to differ materially from those contained herein.

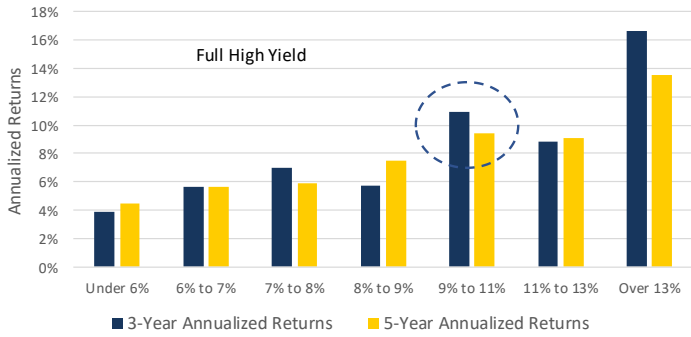
A Longer-Term Total Return Outlook (Our Second Approach)

Though timing can, in many circumstances, be everything, we have come to learn that **pinpointing spread inflection points in the high yield market can be exceedingly difficult, if not impossible.** Not surprisingly, spread target forecasts we have seen vary widely from source to source, particularly when it comes to the timing of near-term peaks. For example, a credible argument can be made that spread levels may temporarily exceed 700 bps, but such a near-term peak could occur later in 2022, setting the market up for a rally next year not fully captured in our analysis above.

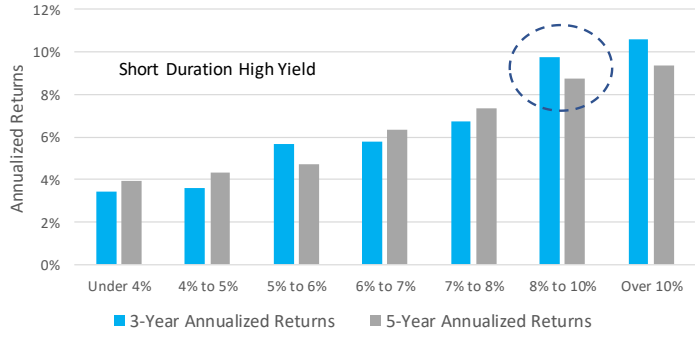
To adjust our results accordingly, and to acknowledge the difficulty in timing high yield market entry and exit points, we instead present the analysis below which calculates average annualized 3- and 5-year returns based on yield-to-worst entry points, all generated from similarly sized starting YTW buckets. **In our view, this is perhaps the better approach when the near-term outlook is so uncertain.** More specifically, starting YTW levels at present for the broad high yield index (H0A0, mid 9's) and the short duration high yield index (JVC4, high 8's) have historically led to **annualized 3 and 5-year total returns in the 8.5% to 11.0% range, regardless of whether or not an investment was timed perfectly to coincide with spread peaks.** As such, we think investors may be willing to look past expected economic / corporate headwinds in the near term, with discounted bond prices and elevated yields beginning to look sufficiently attractive for those currently on the sidelines.

Average Annualized Total Returns Based on Starting Yield-to-Worst Buckets

based on monthly H0A0 data since January 2000



based on monthly JVC4 data since January 2000



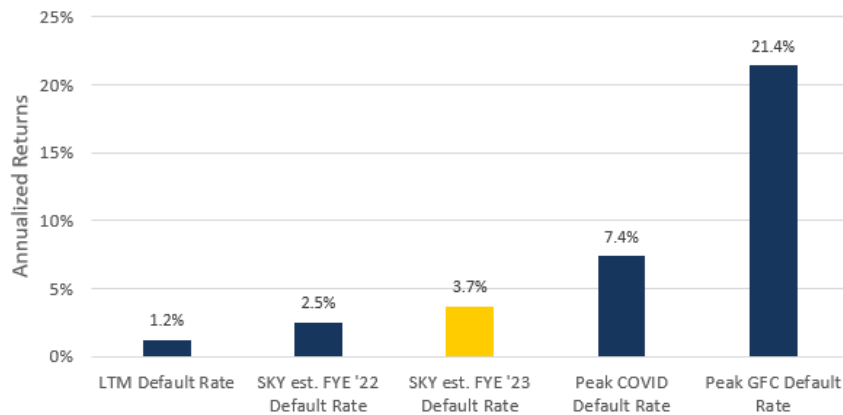
Source: SKY Harbor, ICE Data Indices

Potentially High Reward, But Risks Remain

Arguably the most tenuous estimate in our analysis is the future default rate, the path of which will be highly influenced by commodity prices, general inflation, and geopolitical tensions, and the outcomes of which are difficult to predict. **Though we are assuming an uptick in defaults over the next 12-month period, our 3.7% base case estimate is well below prior recessionary / stress period peaks.** Our more sanguine view of future default losses relative to historical norms is predicated on the strength of corporate balance sheets, and expected resilience given historically high starting interest coverage as we approach a more difficult environment for corporate EBITDA generation. However, a steeper than expected downturn and less controlled than expected inflation could compel us to revisit our view. In such a scenario, greater credit losses would push spread fair value wider, which would have a negative impact on index total returns. As noted earlier, investors have historically over-estimated the risk of default in periods of stress, which would further exacerbate upward spread target revisions.

Index Default Rates Can Vary Dramatically, Influencing Spread Levels

based on monthly data since 2005



Source: SKY Harbor, BofA Merrill Lynch

No Need to Take Excess Credit Risk

By rating bucket, total returns have been pretty tightly clustered for most of the year, with both credit risk and duration penalized by the market. **On an excess return basis, however, BBs have outperformed more significantly.**

September FOMC Meeting Caused Additional Rate Vol

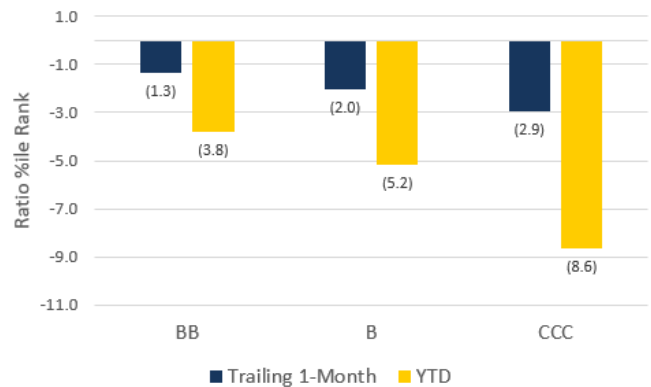
daily data, through Sep 27, 2022



Source: SKY Harbor, ICE Data Indices

BBs Have Outperformed on an Excess Return Basis

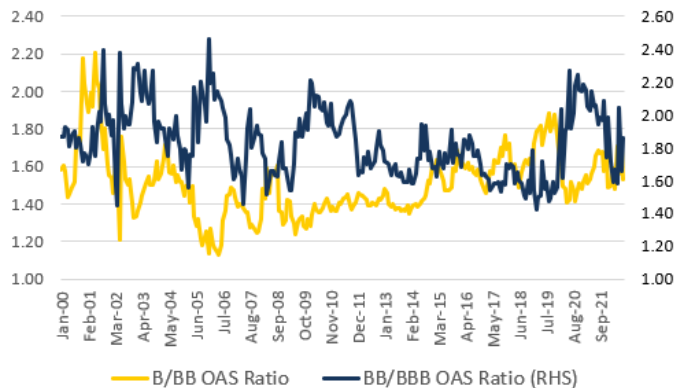
data as of Sep 27, 2022



This dynamic, unsurprisingly, has many concerned that BB valuations have become rich, particularly relative to single-B credit. To test this theory, we compared the single-B to BB spread ratio, over time, using monthly data going back to January 2000. The ratio at present registers as 60th percentile, implying BBs have become rich to single-Bs following outperformance over the last several months. Recognizing, however, that not all economic backdrops are created equally, we thought it prudent to overlay a measure of global growth, as the expectation of a slowdown in the coming quarters is now clearly the consensus view. Limiting our dataset to only periods in which Global Real Economic Activity (an index calculated by the US Federal Reserve Bank of Dallas) was negative, our adjusted single-B to BB spread ratio registered 45th percentile – **implying more attractive value in higher-quality credit given the likely pace of economic activity over the intermediate term**. Interestingly, the same analysis conducted on the BB to BBB spread ratio implies better value in the non-IG bucket when using all periods or limiting the set to only those consistent with economic contraction. Based on these results, and in conjunction with significant uncertainty on the horizon, **we believe opportunistically adding BB-rated credit makes sense in the current market environment**.

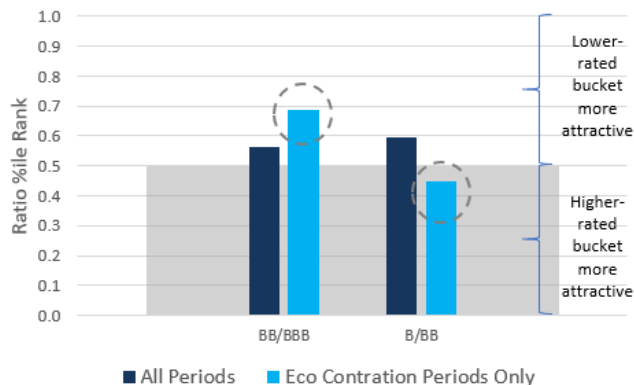
BBs Attractive vs. BBBs and Bs Given Economic Backdrop

monthly data, since Jan 2000



Ratio Percentile Rankings by Economic Backdrop

monthly data, since Jan 2000

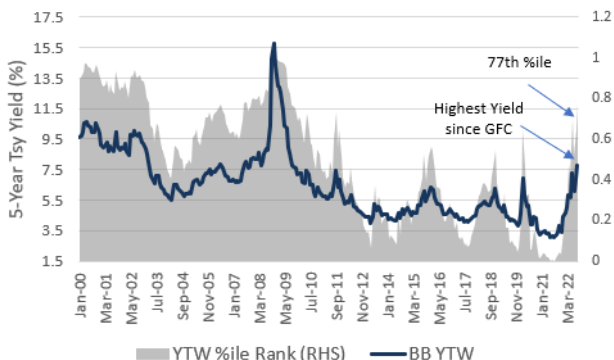


Source: SKY Harbor, ICE Data Indices, Federal Reserve Bank of Dallas

In rotating into higher-quality high yield, will investors forego the potential for elevated returns? In our view, no. **With ICE BofA BB US High Index (ticker H0A1) yields now in the upper 7% range, we highlight below that annualized 3 and 5-year total returns following similar starting points have been also approached the high-single / low double-digit range...relatively consistent with the market as a whole**. And, at the same time, we believe investors will be better protected being in higher-quality high yield in the event of a more significant than expected downturn.

BBs Now Yield 7.8%, Top Quartile Historically

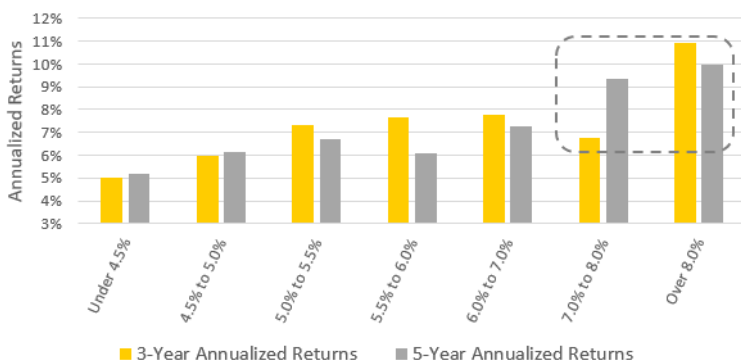
monthly data, since Jan 2000



Source: SKY Harbor, ICE Data Indices

BB Average Annualized Total Returns Based on Starting Yield-to-Worst Buckets

based on monthly H0A1 data since January 2000



In summary, we recognize there is a significant amount of uncertainty across global markets, with a relatively high likelihood that risk assets remain volatile in the near term. While the path to and timing of a spread peak is a clear unknown, we do think better-quality high yield credit is becoming increasingly attractive as BB yields approach 8%, particularly if rate market volatility begins to slow following a significant re-setting of expectations post the September FOMC. A more bullish view on lower-rated credit would likely come only after the global growth outlook becomes increasingly more projectable.

Concluding Thoughts & A Personal Note

Many of our readers may remember that back in June of this year I announced that I would no longer be involved in the creation of the *Weekly Briefing*, as I had decided to pursue an opportunity outside of the investment management industry. After a three month absence I have decided to return to SKY Harbor. I look forward to picking things back up where I left off, and feel fortunate to be in a position to once again communicate with clients and investors – an activity I had very much missed over this past summer.

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