SKY HARBOR
CAPITAL MANAGEMENT

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December 8, 2023

US High Yield – 2024 Outlook

Executive Summary

Despite continuation of one of the most aggressive rate hiking cycles in decades, rising geopolitical tensions, and a wave of bank stress that led to rapid tightening of lending standards, high yield bonds generated strong returns thus far in 2023 (year-to-date through November 30). Boosted by strong carry and a benign default rate environment, broad high yield indices (we use the ICE BofA US High Yield Index, ticker H0A0 as our proxy) have returned 9.4%, 66th percentile based on annual data since 1997, and well above most expectations at the start of the year. Short duration high yield (using the ICE BofA 1-5 Year BB-B US High Yield Constrained Index, ticker JVC4) demonstrated similar strength, generating YTD returns of 8.6% (65th percentile), capturing a disproportionate amount of the broad market return (91%). In general, high yield remains on track to outperform US Investment Grade for the third consecutive year, while 5- and 10-Year Treasury Indices hover around breakeven levels (YTD returns of +1.4% and -1.2%, respectively).

As we have previously noted, index returns in ’23 were not linear in nature, nor was one factor dominant in explaining market sentiment. Rather, returns in each of the first six months of 2023 were driven by a different theme, ranging from disinflation that sparked hopes of a “soft landing,” to hawkish Fed commentary amidst risk of further bank failures. In general, however, lower-rated credit outperformed in 2023 on both a total and excess return basis. In our view, this dynamic was supported by receding fears of a recession amidst inflation data falling more rapidly than feared, prompting downward revisions to investor default rate expectations (which increased but remained below historical annual averages in 2023).

On balance, we maintain a cautiously optimistic view of the high yield asset class as we enter 2024. First, we think most of the pain associated with central bank tightening is now behind us. Second, though likely beyond peak earnings growth for this cycle, persistent balance sheet repair in the post-pandemic period and improved index quality (partially at the expense of leveraged loan and private debt markets, in our view) should translate into a relatively benign default rate environment in 2024. Finally, top quartile yields should provide cushion in the event of spread widening, with elevated carry positioning the index for attractive risk-adjusted returns over the intermediate term.

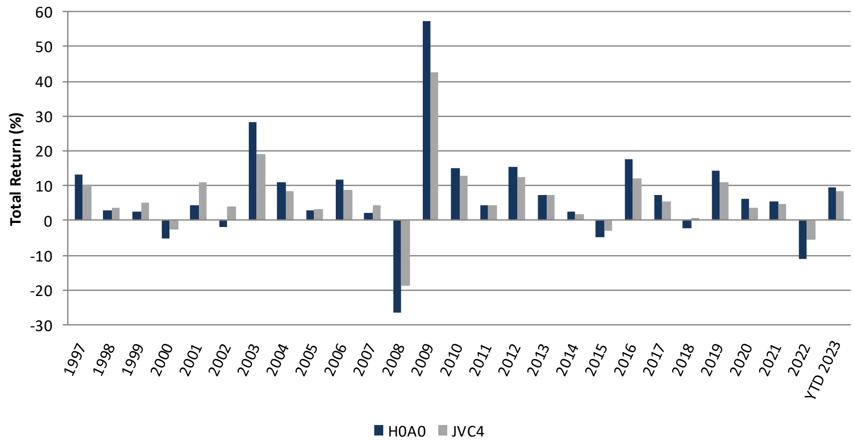
Key takeaways are as follows:

- Broad US high yield market returns of +9.4% in 2023 (YTD through November 30) are approximately 66th percentile relative to the last 25 years
- Short duration US high yield market returns of +8.6% in 2023 (YTD through November 30) are approximately 65th percentile over the same period
- CCC credit outperformed higher quality, driven by disinflation progress that bolstered the “soft landing” narrative
- Cyclicals (ex-Energy) outperformed Defensives despite an uptick in the default rate; several historically defensive sectors have become more volatile
- Small issues (< $350mm) performed in-line with large issues (> $1bn); illiquidity premiums are now below average to start 2024
- Index yield-to-worst (YTW) levels were largely range-bound in ’23, as a shrinking index (modest issuance, net rising stars) balanced limited demand
- Earnings proved more resilient than expected, with y/y EBITDA growth essentially flat in ’23 (outperforming our estimates on a stronger consumer)
- We expect leverage and coverage metrics will degrade in ‘24, driven by a model-driven EBITDA growth estimate of -4% and higher funding costs
- The par-weighted default rate for US high yield bonds hit 2.4% at Nov 30; **we forecast the ’24 default rate will be approximately 4.4%**
- We forecast **recovery rates on defaulted issuers will decline to ~ 35% in 2024**, below an historical average of approximately 43%
- Spreads appear a bit tight at present (384 bps, or 30th percentile); at the same time, yield levels look more attractive at 8.5% (78th percentile)
- Our macroeconomic scenario analysis and regression models imply a **2024 fair value spread target of ~ 460 bps**
- Spread per turn of leverage at present is 76 bps (38th percentile); we assume spread per turn will end ’24 at ~ 98 bps (74th percentile)
- EUR HY outperformed US HY in ’23 on an FX-adjusted basis; less onerous costs to hedge, in our view, position markets for a reversal in ‘24
- Recession risk is expected to remain the dominant credit investor concern in ’24; the threat of rising rates likely falls as geopolitical risk likely rises
- Economists put the chance of a US recession next year at ~50%; many banks are revising recession odds significantly lower as we head into year end
- Consumers face higher costs in ’24 (shelter, auto loans, credit card debt, and student loans); higher wages / low effective mortgage rates are offsets
- Gross issuance is down nearly 40% relative to the post-GFC annual average; **we expect an uptick to ~ $190bn of issuance in 2024**
- Ratings migration rates should modestly skew toward downgrades in ‘24; **expect a more balanced ratio of rising stars to fallen angels**
- Trading activity is now higher than the post-pandemic average; expect an uptick in primary market activity will help improve market liquidity in ‘24
- **We prefer higher-rated credit** based on strong YTW percentile rankings, higher average starting duration (given expected rate cuts), and lower spread change beta (given our anticipation of spread widening); BBs least sensitive to downside earnings surprise and increases in the default rate; as a partial offset, greater upside from credit loss avoidance via strong security selection may be present within the CCC cohort
- **We prefer adding duration** based on improved term risk comp. in the context of potential Fed cuts in ’24; credit curve is flat beyond 3, however
- We think idiosyncratic credit opportunities include beneficiaries of **trade down** behavior, credits levered to **infrastructure and political ad spending**, those with a **sustainable product focus**, beneficiaries of a **move back to working in the office**, businesses poised to boost profitability from **supply chain normalization / onshoring**, those better able to **leverage automation** and **improve productivity** via labor market stability, those with **self-help** opportunities, issuers being led by **conservative management teams** that are re-evaluating optimal capital structures in a higher interest rate environment, and credits with **longer-dated capital structures** that won’t be as disrupted by coupon re-sets
- OAS and YTW levels imply correlation-derived ’24 total returns in the 7% range; **our model projection for total return next year is also 7%**
- We think BB-rated credit will modestly outperform on an absolute basis in ‘24; we see **BB returns > B returns = CCC returns** in the coming year
- **The Maturity Wall** likely represents the greatest concern heading into ’24; we estimate an average cost uptick of ~ 280 bps for the ~ 10% of the market that will need to refinance in ’24, with CCCs facing the most dauting step change (+450 bps)
- **Geopolitical** developments are likely to impact risk taking in the coming year; an end to the fighting in Ukraine and/or the Middle East is a potential positive catalyst, while a China/Taiwan conflict would represent downside risk on the horizon

2023 Recap – Better Than Expected

Despite continuation of one of the most aggressive rate hiking cycles in decades, rising geopolitical tensions, and a wave of bank stress that led to rapid tightening of lending standards, high yield bonds generated strong returns thus far in 2023 (year-to-date through November 30). Boosted by strong carry and a benign default rate environment, **broad high yield indices (we use the ICE BofA US High Yield Index, ticker H0A0 as our proxy) have returned 9.4%, 66th percentile based on annual data since 1997, and well above most expectations at the start of the year**. Short duration high yield (using the ICE BofA 1-5 Year BB-B US High Yield Constrained Index, ticker JVC4) demonstrated similar strength, generating YTD returns of 8.6% (65th percentile), capturing a disproportionate amount of the broad market return (91%). In general, high yield remains on track to outperform US Investment Grade for the third consecutive year, while 5- and 10-Year Treasury Indices hover around breakeven levels (YTD returns of +1.4% and -1.2%, respectively).

Annual Returns by Index, Since 1997



Return and Ranking Data, 1997 - Nov. 30. 2023

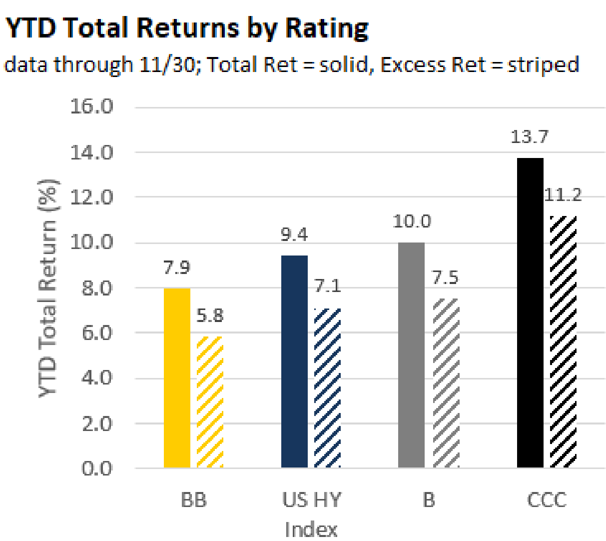
	ICE BofA US High Yield Index (H0A0)	ICE BofA 1-5 Year BB-B US Cash Pay High Yield Constrained Index (JVC4)
2023 YTD Return (%)	9.42	8.57
Percentile Rank	66%	65%

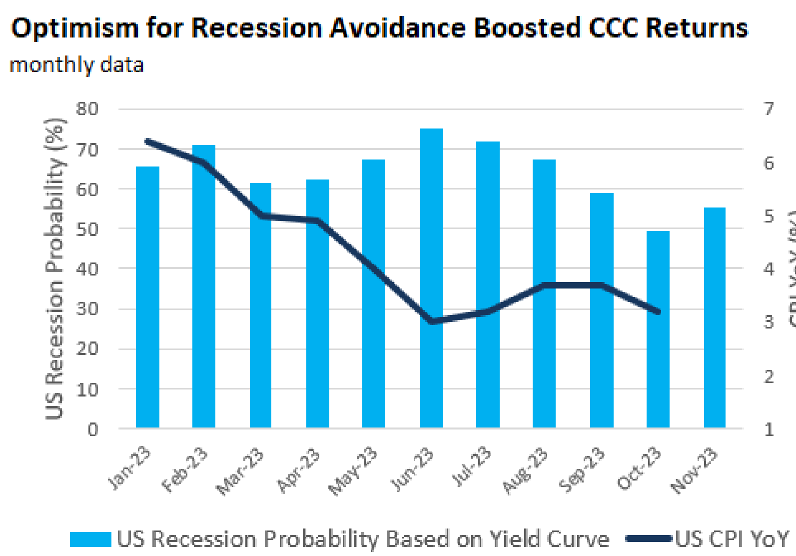
Spread Data, in basis points

	ICE BofA US High Yield Index (H0A0)	ICE BofA 1-5 Year BB-B US Cash Pay High Yield Constrained Index (JVC4)
Starting (1/1/23)	481	400
Ending (11/30/23)	384	312
Change	**(97)**	**(88)**

Source: SKY Harbor, ICE Data Indices

In both *Weekly Briefing* reports and discussions with clients, we have noted, at length, that index returns in each of the first six months of 2023 were driven by a different theme, ranging from disinflation that sparked hopes of a "soft landing," to hawkish Fed commentary amidst risk of further bank failures. In general, however, **lower-rated credit outperformed in 2023 on both a total and excess return basis**. In our view, this dynamic was boosted by receding fears of a recession amidst inflation data falling more rapidly than anticipated, prompting downward revisions to investor default rate expectations (which increased but remained below historical annual averages in 2023).

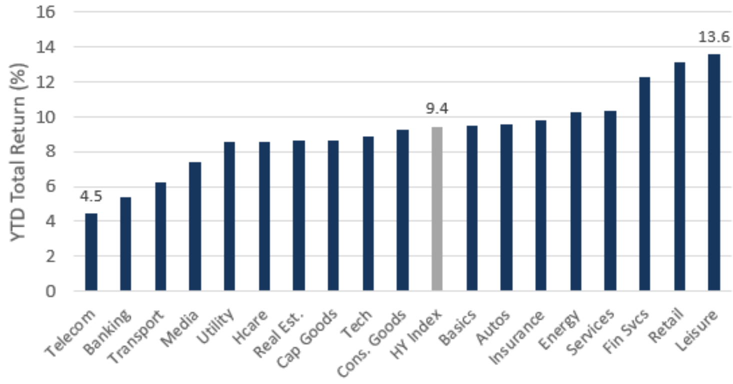




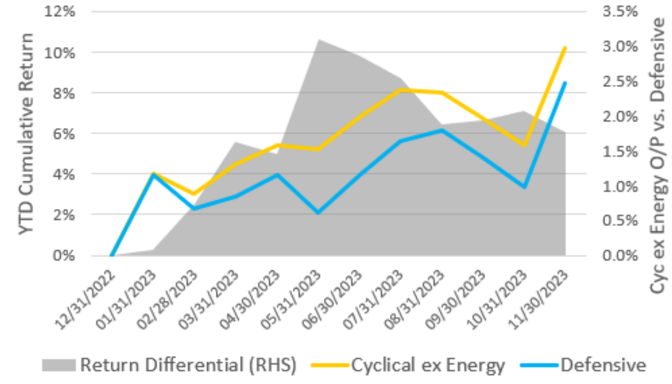
Source: SKY Harbor, Bloomberg Economics, Bureau of Labor Statistics, ICE Data Indices

On a sector basis, **Leisure led the way, as Americans continue to spend in the post-lockdown era despite inflationary pressures and partially at the expense of durables goods**. Within the sector, cruise lines posted some of the strongest YTD gains, with issuers such as Carnival, Norwegian, Royal Caribbean, and Viking posting returns in excess of 15%. At the other end of the spectrum, **Telecom lagged, largely due to significant stress within the Lumen (LUMN) and Level 3 (LVLT) capital structures**. Through November 30, Cyclicals (ex-Energy) have outperformed Defensives by 175 bps despite an uptick in the default rate, as several historically less volatile sectors diverged from trend (labor costs and reimbursement risk beset the Healthcare sector, secular challenges have hampered parts of Media, and, as previously alluded to, several large structures within the Telecom space have fallen into distressed territory). Finally, we would note that Energy, the leader in '22, has only marginally outperformed the high yield index YTD, with pressure on crude prices from waning Chinese demand only recently offset by the threat of additional OPEC+ cuts.

YTD Total Returns by Sector
data through November 30, 2023



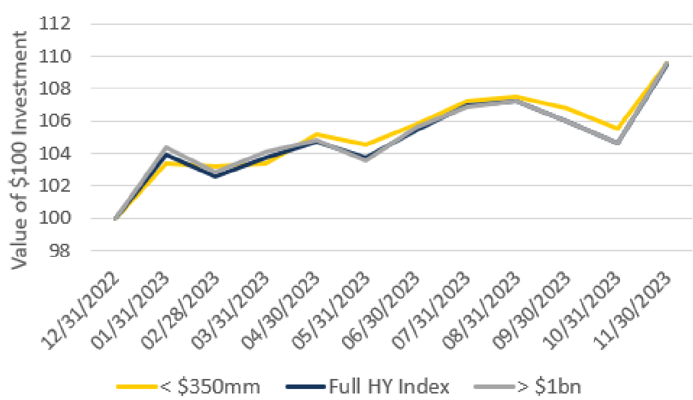
Cyclicals (ex Energy) Modestly Outperformed Defensives
monthly data



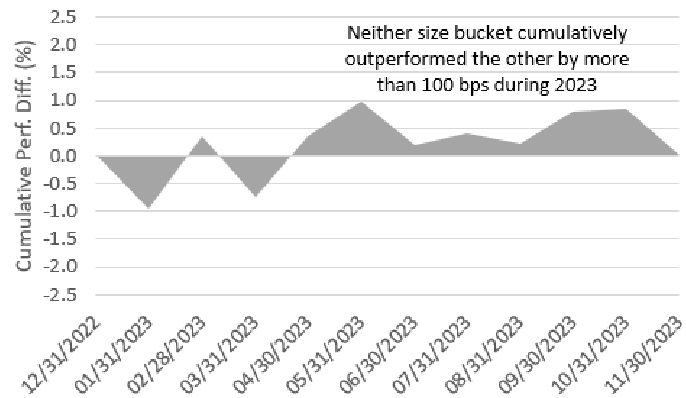
Source: SKY Harbor, ICE Data Indices

Issue size was a significant source of return differentiation immediately following peak COVID-related stress (Q1'20) through the end of 2022, with smaller issues (< $350mm in size) outperforming larger issues (> $1bn in size) by approximately 2,000 bps over that timeframe. However, as noted in our *Weekly Briefing* entitled "Recalculating Factor Compensation" in early March '23, issue size compensation had normalized and then fallen meaningfully below the long-run average toward the start of this year, and as a result **we no longer viewed smaller issues as generically "cheap" in the current market environment**. On a YTD basis, issue size was a statistically insignificant contributor to total returns.

US High Yield Performance by Issue Size (Cumulative)
monthly data, year to date through Nov 30, 2023



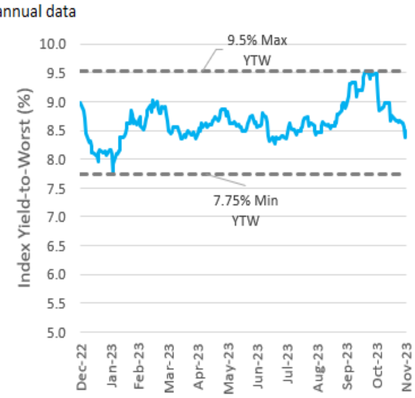
Cumulative Performance Differentials: Small vs. Large Issues
Small = < $350mm; Large = > $1bn



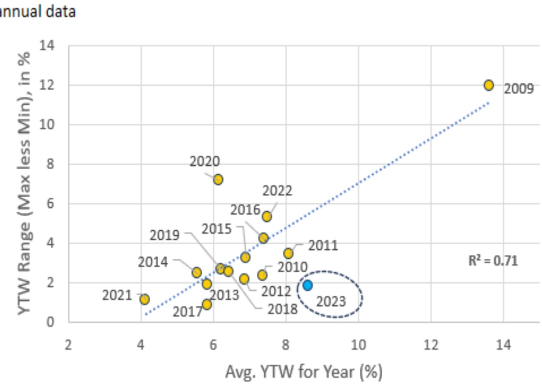
Source: SKY Harbor, ICE Data Indices

Technicals also had a significant impact on market behavior in 2023. Despite a number of risk factors arising during the year (bank failures, Fed uncertainty, geopolitical tensions, a debt ceiling bill, a budget impasse amidst House leadership changes, etc.), **the yield-to-worst of the high yield bond index was confined to a relatively tight band** (~ 175 bps, or roughly 20% of the average YTW level for the year), well below historical relative norms. A shrinking of the high yield bond index for a second consecutive year – driven by limited new issuance and over $100bn of net rising stars – balanced an otherwise weak demand backdrop (negative fund flows), contributing to market resiliency.

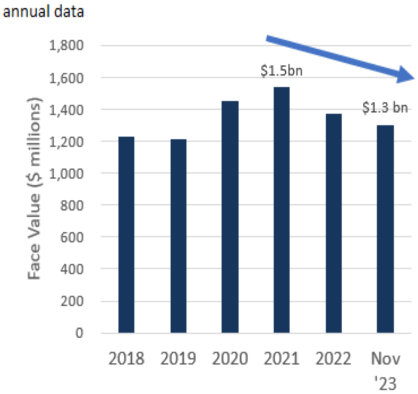
Index Yields Were Range-Bound in '23
annual data



Relative YTW Variation Trended Well Below Historical Norms
annual data



Size of US HY Bond Market Contracted (Again)
annual data



Source: SKY Harbor, ICE Data Indices

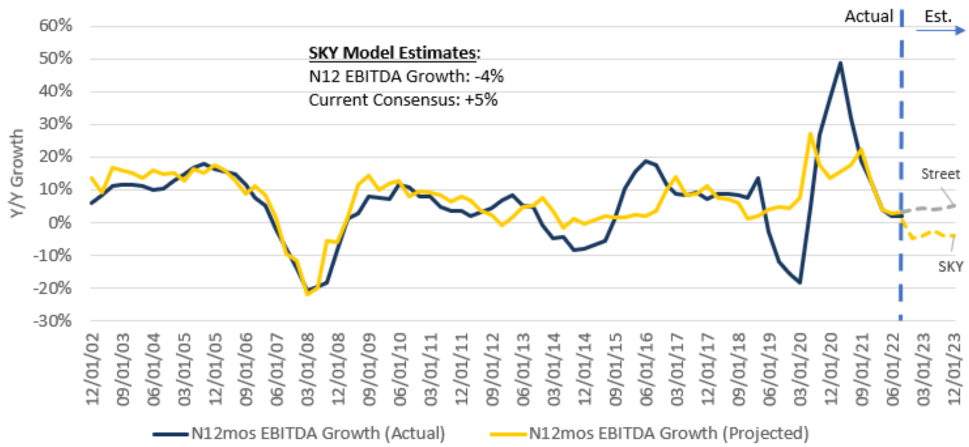
Fundamentals to Weaken Toward Long-Run Averages

High yield issuer EBITDA growth exceeded our original projections this year, due in large part to resilience among US consumers. In fact, consumers continued to spend in the face of inflation, bolstered by higher wages and excess savings that diminished the impact of rising shelter and auto-related costs. Though we continue to think elevated disposable income can partially offset the burden arising from the resumption of student loan payments and rising credit card debt, **output growth is likely to remain muted in 2024, in our view**.

Various measures of CEO confidence have fluctuated over the last several months, with expectations for overall business conditions in the coming year becoming less predictable despite a more sanguine view of the economy relative to Q4’22. Additionally, though the Fed is likely near (if not there already there) the end of their rate hiking campaign, concerns surrounding “long and variable lags” associated with monetary policy have served to dampen otherwise upbeat economic data releases of late. Despite powerful offsets – including the expectation for increased infrastructure spending and continued supply chain repair – we anticipate negative EBITDA growth over the next 12 months. Though quite manageable in absolute terms, our estimates fall below that of the consensus view, and as such we remain somewhat cautious on the most speculative parts of the high yield index constituent set given greater bond price sensitivity to earnings growth. Updating our four-factor regression model below, **we now anticipate HY issuer EBITDA growth in the coming year to decline by approximately 4%, below a matched-sample consensus view of +5% growth**.

EBITDA Growth: Actual vs. Next 12mos SKY Model Projection

quarterly data, trailing 20 years

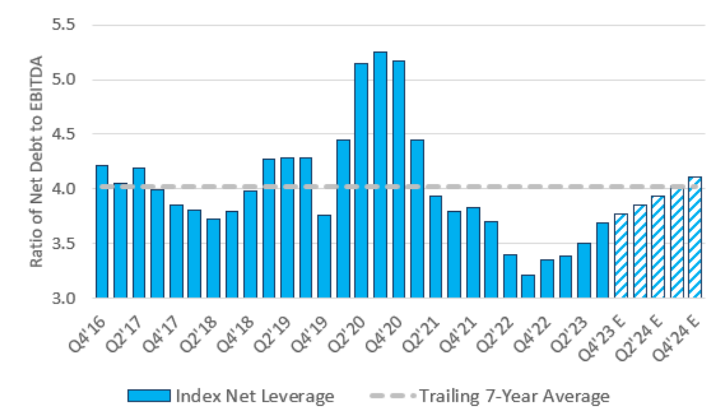


Source: SKY Harbor, Federal Reserve, Baltic Exchange, Chief Executive Magazine, Bloomberg

At the time of publication – we use metrics through Q3’23 – average high yield net leverage and interest coverage ratios were 3.7x and 4.6x, respectively, both stronger than trailing 5-year averages, albeit off all-time dataset best levels achieved in late 2024. If we overlay our estimation of EBITDA growth over the next year (-4%), assume an 80/20 average fixed/floating debt mix, assume no rate cuts before mid-2024, and force companies to refinance fixed-rate debt 1 year ahead of maturity dates (with an interest expense uptick equal to the difference between current coupons and prevailing market yields), we can clearly see credit metrics eroding over the next five quarters. With that said, and **under our current set of assumptions, leverage and coverage ratios barely weaken below their trailing 7-year average by the end of 2024**. Acknowledging that underlying assumptions are quite sensitive to any changes in the economic outlook, we nevertheless reiterate that strength in corporate balance sheets better position high yield index constituents to weather a recession (should one occur in ’24, though not our base case) than in recent years, in our view. Notably, interest coverage is now at a better starting point (4.6x) than in quarters leading up to the Global Financial Crisis (3.9x), largely on greater conservatism demonstrated by management teams in recent years.

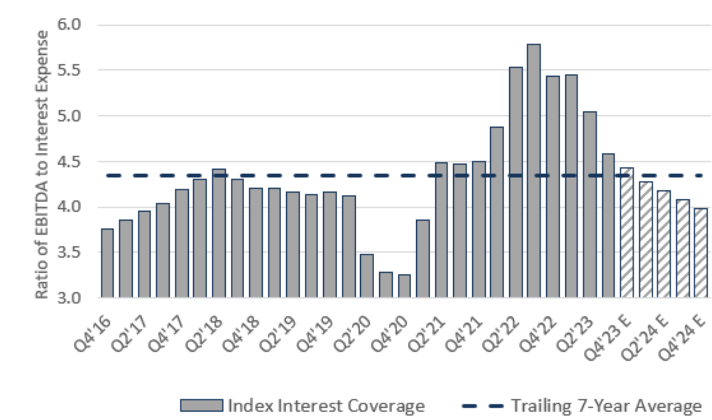
Net Leverage Set to Rise but Remain Below Average Until Mid-2024

quarterly time series; striped bars are SKY Harbor projections



Interest Coverage Set to Fall but Remain Above Critical Levels

quarterly time series; striped bars are SKY Harbor projections

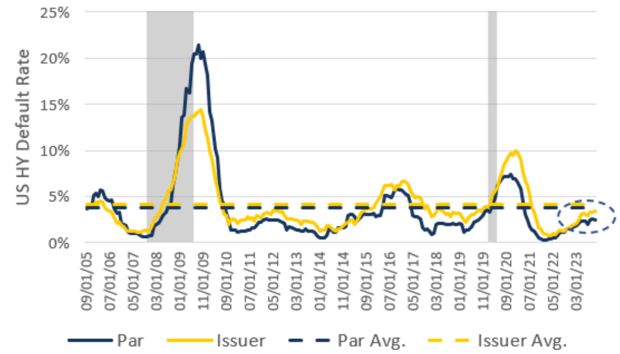


Source: SKY Harbor, BofA Merrill Lynch, Bloomberg, Capital IQ

Having avoided a recession and with constituent EBITDA growth more resilient than originally anticipated, the HY bond index default rate moved up but remained below long-run average levels in 2023. This led to minimal index principal losses, despite recovery rates coming in below historical norms. More specifically, **trailing-12-month issuer and par-weighted default rates were 2.4% and 3.4%, respectively, while recoveries have been approximately seven percentage points below the long-run average.**

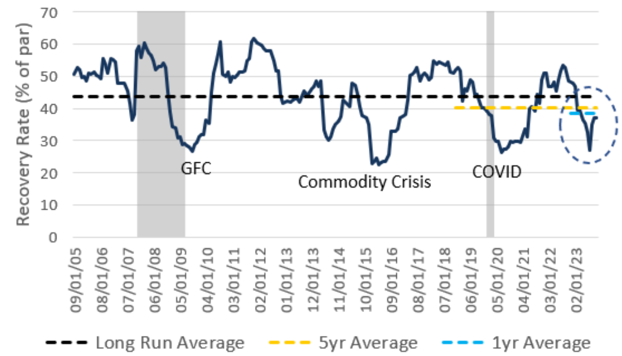
US High Yield Default Rate

monthly data, recessions shaded grey



US High Yield Recovery Rates

monthly data, recessions shaded grey

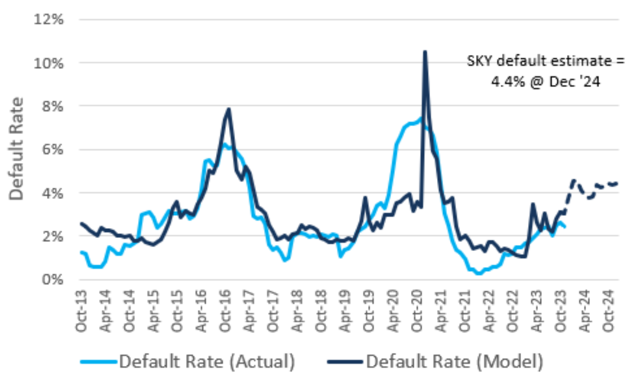


Source: SKY Harbor, BofA Merrill Lynch, National Bureau of Economic Research, Moody's

Lending standards have been on the rise since the end of 2021, a function of both economic uncertainty and the tightening of monetary policy conditions. Though this trend was largely expected to persist given our position in the business cycle, bank sector stress in March exacerbated the situation. A pullback in lending was compounded by the outsized role small- and medium-sized banks play (50% of US commercial and industrial loans come from banks with assets of less than $250bn) against a backdrop of disproportionate deposit flight from those institutions, particularly in the wake of Silicon Valley Bank's collapse. Such pressure has been partially offset, however, by the rise in alternative sources of funding, more specifically with a tripling of the size of the private debt market in less than a decade, and more recently by the willingness of private equity sponsors to inject cash into portfolio companies. Updating these and other factors that inform our default and recovery rate projections models, **we now expect a 4.4% default rate by the end of 2024, merely average by historical standards, though up from trailing twelve month levels**. At the same time, an uptick in the number of absolute defaults, as well as credit metric degradation (albeit manageable, in our view), likely cause recovery rates to remain below long-run average levels. More specifically, **our internal model anticipates a 2024 recovery rate of 35%, below the 43% long-run average**.

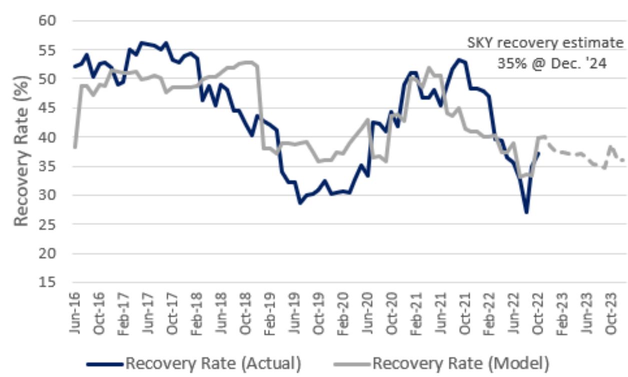
SKY Default Rate Projection Model

monthly data, dotted lines are forward projections



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

From a sector basis, we aggregated trends associated with earnings, credit metrics, defaults, recoveries, and distress ratios. While fundamentals have modestly degraded since record levels of strength (late 2022), the index in general remains in good shape. More specifically, we find that **Consumer Goods, Transportation, and Leisure demonstrated the strongest performance** on a relative basis in '23, bolstered by a still healthy consumer and shift toward services over durable goods. At the same time, **Media, Basics, and Tech have demonstrated relatively weak performance,** hampered by a slowdown in global growth, destocking, and secular challenges. Looking forward into 2024, we think fundamental momentum will favor defensive sectors (should demonstrate more resilient EBITDA growth), sectors that did not benefit from a boost in post-COVID demand (easier prior year comps), beneficiaries of a further push away from remote working, and those with less onerous near-term maturity profiles.

Sector Trends

YTD trends

Sector	EBITDA Growth	EBITDA Growth vs. Index	Net Leverage	Interest Coverage	Default Rate (issuer)	Default Rate (par)	Recovery Rate	Distress Ratio
Automotive	-	=	-	-	-	-	+	+
Basic Industry	-	-	-	-	=	=	=	-
Capital Goods	=	=	+	+	+	=	-	=
Consumer Goods	+	+	+	+	=	=	=	+
Energy	+	+	=	-	+	+	=	=
Healthcare	-	-	=	=	+	-	-	+
Leisure	+	+	+	+	=	-	+	=
Media	-	-	=	=	-	-	-	-
Retail	-	-	=	-	-	-	+	+
Services	=	=	=	+	+	+	+	=
Technology & Electronics	=	=	=	-	-	-	-	=
Telecommunications	-	-	-	=	+	+	+	-
Transportation	+	+	+	+	=	+	-	=
Utility	-	=	-	=	+	+	=	+

Source: SKY Harbor, BofA Merrill Lynch, Bloomberg, and company filings

Sector Leaders & Laggards

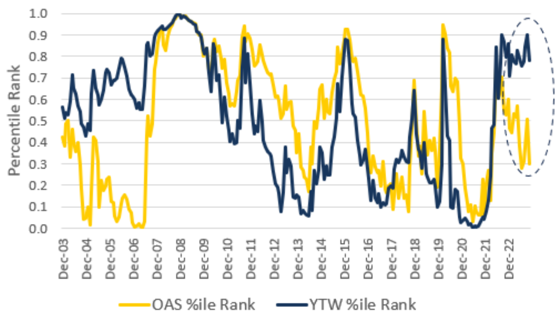
cumulative directionality through 2023

Superior Sector Trends	Inferior Sector Trends
Consumer Goods	Media
Transportation	Basic Industries
Leisure	Tech

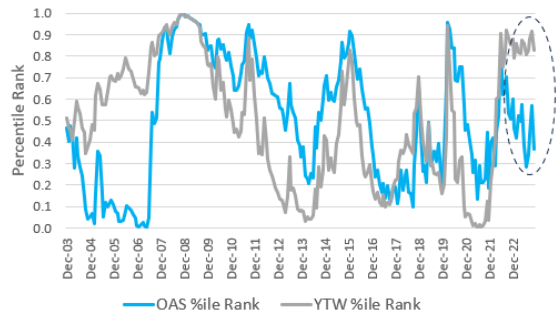
Asset Valuations Appear Somewhat Stretched; Expect 75 bps of Spread Widening

Valuations are perhaps the topic of greatest debate among investors, largely owing to the dichotomy between option-adjusted spread (OAS) and yield-to-worst (YTW) levels. As of November 30, OAS levels for both the broad high yield index (H0A0) and the short duration subset (JVC4) remain inside long-run median levels (30th and 37th percentiles, respectively), in large part due to higher overall quality relative to historical norms (BBs make up 47% of the index, over 300 bps above the trailing 20-year average, while CCCs make up a mere 13% of the index, 400 bps below the trailing 20-year average). At the same time, index YTW levels look compelling in our view, still top quartile despite an aggressive November rally (78th and 83rd percentile for H0A0 and JVC4, respectively).

ICE BofA US High Yield Index (H0A0)
monthly data, trailing 20 years



ICE BofA 1-5 Yr BB-B US High Yield Constrained Index (JVC4)
monthly data, trailing 20 years



Source: SKY Harbor, ICE Data Indices

Given a "soft landing" base case amidst an a uncertain global economic outlook, and owing to an array of geopolitical threats on the horizon, we attempt to estimate fair value of spreads on a go-forward basis using several different approaches. First, we look to our macro regression models.

Historically, we have found our internal spread regression model – which utilizes six key economic indicators to drive an estimate of OAS fair value – to be a reliable gauge of index directionality on a go-froward basis. **At present, the model finds the broad high yield index (H0A0) to be nearly 75 bps "rich," with an implied fair value of ~ 460 bps vs. a November month-end OAS of 384 bps**. The model finds the short duration high yield subset (ticker JVC4) to be similarly tight to fair value. We would highlight, however, that these models fail to take improved index quality into consideration, and that elevated carry can easily absorb spread widening without giving up all return potential. Finally, we would also note that wider spreads may come from lower risk-free rates, consistent with prior ends to rate hiking periods, and eliminating the need for high yield bond prices to decline to reach our estimate of fair value (see our *Weekly Briefing* entitled "The Final Hike?" for additional details).

SKY Harbor US High Yield Spread Model

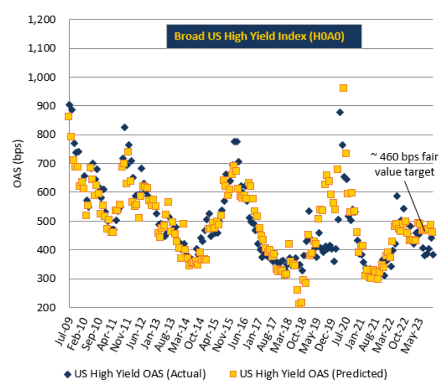
Index	Ticker	Actual (Nov 30)	Model Predicted OAS
ICE BofA US High Yield Index	H0A0	384	460
ICE BofA BB US High Yield Index	H0A1	236	324
ICE BofA Single-B US High Yield Index	H0A2	398	531
ICE BofA CCC & Lower US High Yield Index	H0A3	976	1,234
ICE BofA 1-5Yr BB-B US High Yield Constrained Index	JVC4	312	380

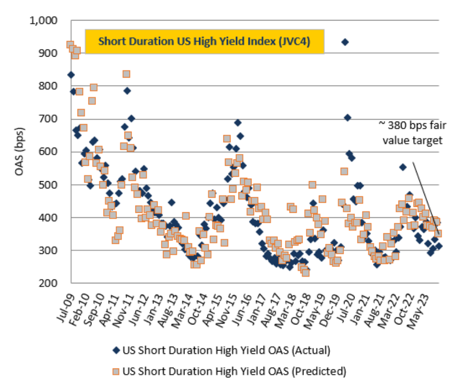
US High Yield Regression Model Coefficients

St. Louis Fed Financial Stress Index
Capacity Utilization
US Industrial Production
ISM Purchasing Managers Index (PMI)
CBOE Volatility Index
Senior Loan Officer Opinion Survey on Bank Lending Practices

As of November 30, 2023. Ratings classes use the same factors as the HY Index regression.
Source: SKY Harbor, ICE BofA Indices, Federal Reserve and Bloomberg
Variable definitions available upon request

This multivariate linear regression analysis is for information purposes only. This analysis uses historical month-end data for the four factors shown and is not intended as the basis of a model portfolio or buy/sell decisions on any particular security. The analysis is one of many inputs in our investment decision-making process. High R^2 values are not intended to be taken as a guarantee of future results as differences in any of the four factors going forward can result in significant departures from predicted values. See additional disclaimers included with this presentation.





A second approach is presented below, which lays out an admittedly wide range of potential scenarios, anchored by long-run spread averages across different economic growth environments observed in the past. **On a weighted-average basis, our scenario analysis below puts fair value of spreads in the 470 bps range on a quality-adjusted basis,** and very much in-line with our regression based estimate of fair value of ~ 460 bps.

	US High Yield Index @ Nov 30, 2023	Scenario #1 "Soft Landing"	Scenario #2 "Elevated Inflation, Modestly Positive Growth"	Scenario #3 "High Inflation, Modestly Negative Growth	Scenario #4 "Moderate Recession"	Scenario #5 "Severe Recession"	Weighted Average Base Case
Index OAS	384	350	450	700	820	1,125	500
Est. Chance of Occurring		35%	35%	20%	10%	0%	470
Notes		Recession avoided, spreads revert to tightest quartile	Inflation persists, rates stay elevated, but econ. 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)	(quality-adjusted)

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

To get a better sense of general valuations, we present below current levels of OAS and YTW percentile rankings by index and rating buckets, as well as relative spread differentials for adjacent rating classes. In general, **we highlight that YTW levels appear attractive for BB-rated credit in general, with 7%+ carry available for issuers that remain, in our view, bankruptcy remote**. Aggregate YTW levels for both broad and short duration high yield look similarly attractive, while recent underperformance has improved relative attractiveness for CCCs relative to Bs.

Name	Ticker	as of November 30, 2023 OAS	YTW	OAS %ile Ranking 5yr	10yr	20yr	YTW %ile Ranking 5yr	10yr	20yr
Absolute Levels									
US High Yield	H0A0	384	8.50	0.29	0.34	0.30	0.81	0.88	0.78
Short Duration High Yield	JVC4	312	7.90	0.37	0.42	0.37	0.80	0.89	0.83
BB	H0A1	236	7.02	0.19	0.19	0.17	0.81	0.91	0.75
B	H0A2	398	8.65	0.25	0.36	0.34	0.76	0.86	0.80
CCC	H0A3	976	14.39	0.46	0.58	0.59	0.75	0.81	0.82

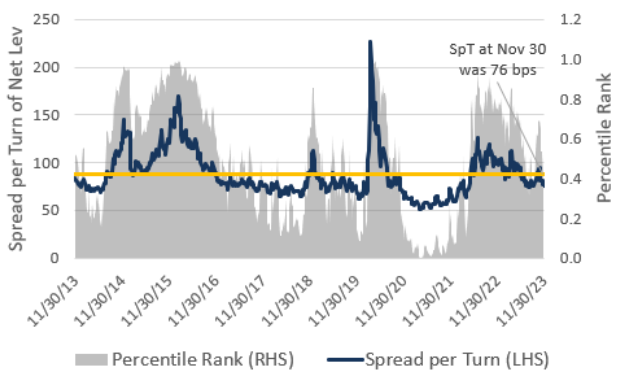
Name	Ticker	as of November 30, 2023 OAS Differential	OAS %ile Ranking 5yr	10yr	20yr
Relative Levels					
HY to IG	H0A0 less C0A0	273	0.34	0.41	0.33
BB to BBB Ratio	H0A1 less C0A4	97	0.24	0.29	0.20
B to BB Ratio	H0A2 less H0A1	162	0.39	0.49	0.55
CCC to B Ratio	H0A3 less H0A2	578	0.63	0.68	0.79

Source: SKY Harbor, ICE Data Indices

Balance sheet damage was significant in 2020, as the near halting of economic activity weighed heavily on EBITDA generation (turned negative for many issuers). As a result, net leverage increased to recessionary peak levels in the >5x range, up significantly from a conservative pre-pandemic 3.8x ratio. Significant balance sheet improvement throughout 2021 and 2022 brought index net leverage down below pre-COVID levels, with some reversion to the mean thus far in 2023. **At present, spread per turn of gross leverage is approximately 76 bps, below the 87 bps long-run average, and ~ 38th percentile based on data over the last decade**. Assuming 460 bps of fair value spread and an uptick of gross leverage to the 4.7x range (based on our earlier simulation), spread per turn would improve to ~ 98 bps by the end of next year, a 74th percentile observation in our dataset.

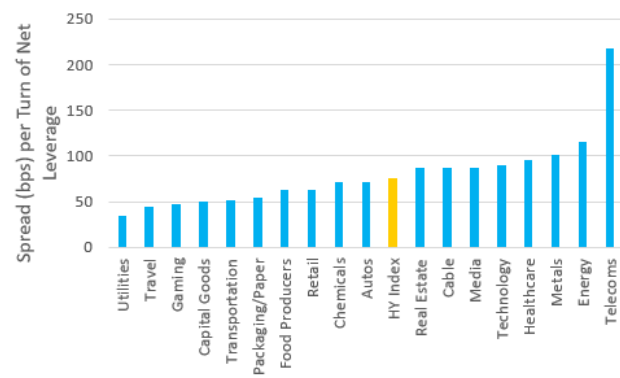
US High Yield Index: Spread per Turn of Net Leverage

weekly data



Sector Spread per Turn Range-Bound, Telecom an Outlier

data at November 30, 2023

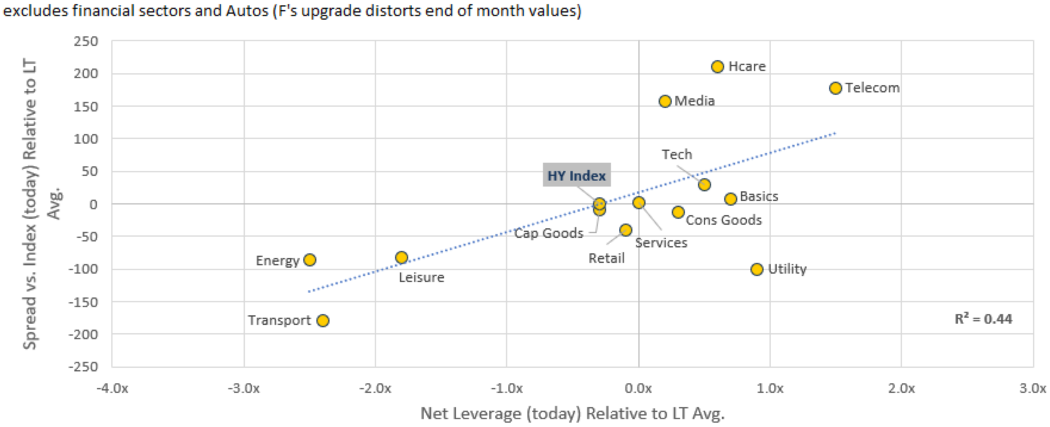


Source: SKY Harbor, BofA Merrill Lynch, ICE Data Indices

The index has changed considerably over the last several years, not only in quality (well above normal) but also in cyclicality. In general, **earnings volatility has declined as issuers have become larger and increasingly multi-national in nature**. On a sector basis, however, there have been some outliers. More recently, Healthcare, Media, and Telecom have become less "defensive," while Energy, Leisure, and Transportation have become less "cyclical." To better gauge value on a sector basis, we calculated sector spread levels relative to the index – both at present and over the long run – and also measured how financial leverage at present differs from historical norms. For example, Healthcare trades 117 bps wide of the HY Index at present, though historically the sector has traded ~ 94 bps tight to the overall market. As such, the relative relationship to the index is now 211 bps wide of historical levels. At the same time, net leverage for Healthcare is 4.8x, which is 0.6x above long-run average levels. These same calculations, conducted across the index and plotted on the scatterplot below, show that (all else being equal) Utilities look somewhat unattractive at present (nearly a turn more leverage than normal, yet trading 100 bps inside the historical relationship to the HY Index), while Healthcare, Media, and Telecom appear attractively positioned.

Relative Spread vs. Relative Leverage

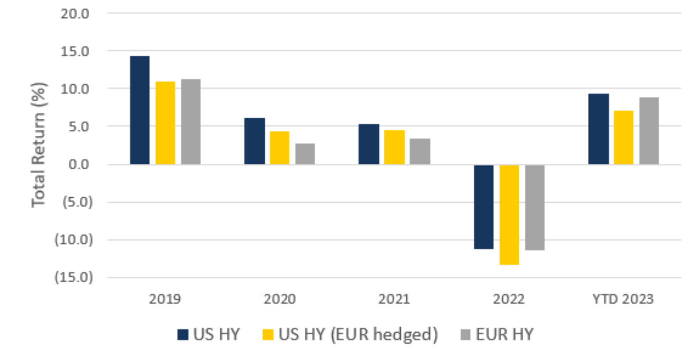
excludes financial sectors and Autos (F's upgrade distorts end of month values)



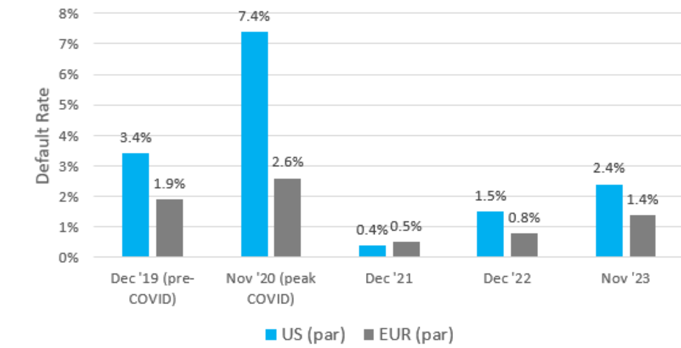
Source: SKY Harbor, BofA Merrill Lynch, ICE Data Indices

Since the start of 2020, US high yield has outperformed EUR high yield in local currency, but has lagged by ~ 35 bps on a EUR-hedged basis. Thus far in 2023, EUR-hedged US HY returns have lagged the EUR HY index by ~ 180 bps, supporting our overweight of more Euro-centric capital structures at the beginning of the year. At the same time, default rates have converged at very low levels, though a greater amount of stress was evident in US HY indices at the height of the pandemic. Since the beginning of 2023, annualized USD-EUR hedging costs have moderated by approximately 100 bps, though they remain somewhat elevated in the 150 bps context.

Currency Influential in Recent US vs. EUR HY Returns
annual data



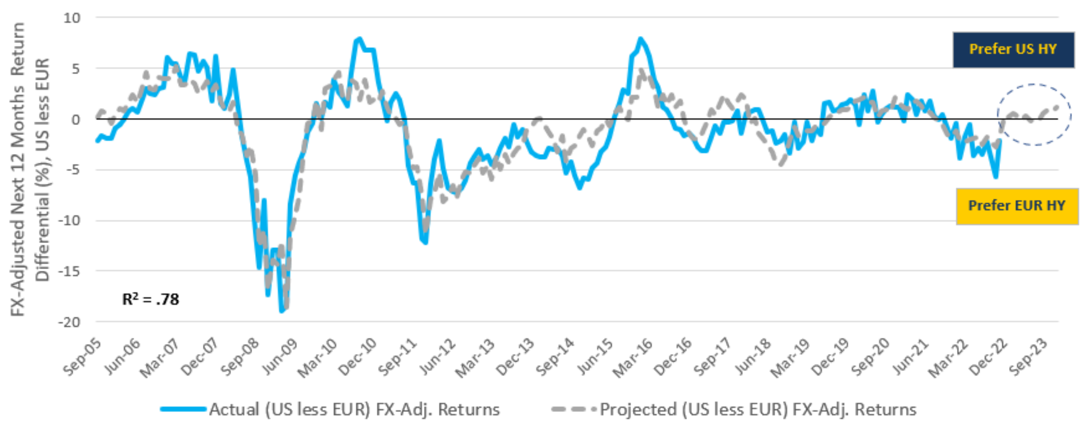
Post-COVID Default Rates Low In Both Indices
month-end data



Source: SKY Harbor, Bloomberg, ICE Data Indices

We utilize a multi-pronged approach when gauging relative value between US and EUR high yield indices on a forward-looking basis. More specifically, we run an internally generated regression model that projects a next twelve months total return advantage (US vs. EUR High Yield) based on expected geographical differences in economic growth, short-term interest rates, and par-weighted default rates, all in the context of starting FX-adjusted yield and spread differentials. **After two years of FX-hedged EUR high yield outperformance, we believe even currency-adjusted yields in the context of a stronger expected domestic economic growth outlook would support an overweight of US high yield in 2024**.

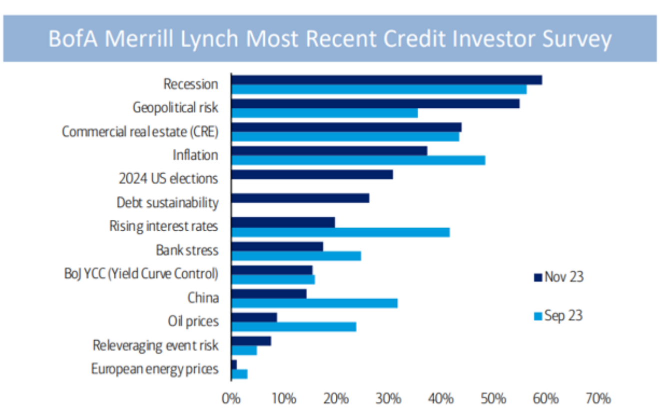
Next 12 Month Returns: US High Yield (H0A0) less EUR High Yield (HE00)
actual and projected data (all FX hedged)

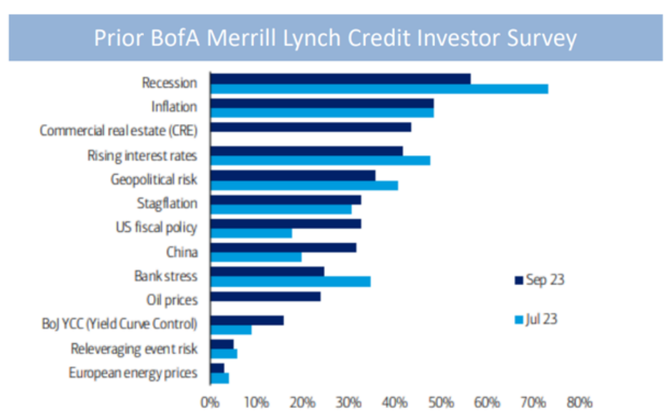


Source: SKY Harbor, Federal Reserve Bank of St. Louis, Federal Reserve Bank of New York, Bundesministerium fur Wirtschaft und Arbeit, Institute for Supply Management, ICE Data Indices, Bloomberg

Sentiment Proving Resilient Due to US Consumer

As a participant in the BofA Merrill Lynch Credit Investor Survey, we actively monitor the sources of greatest concern among high yield investors, as well as their associated changes every other month. **Recession risks remains at the top of the list despite greater adoption of the "soft landing" narrative, while threats stemming from geopolitical uncertainty have replaced rising rates given continued progress on the inflation front**. Additionally, concerns over deficit spending in the US, particularly as we head into a Presidential election year, have led to recent additions to the survey, with both likely to induce periods of volatility in the coming year.





Source: SKY Harbor, BofA Merrill Lynch Global Research; The BofA survey queries a range of institutional investors, including money managers, hedge funds insurance companies, banks and pension funds.

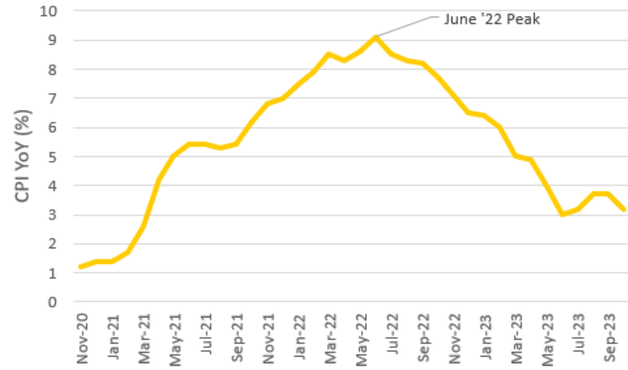
Russia's invasion of Ukraine and less "transitory" than expected inflation introduced heightened concerns of a recession in early 2022, with both risks scoring prominently in the BofA Merrill Lynch credit investor survey. More recently, **conflict in the Middle East and uncertainty with regard to China's intentions with Taiwan have weighed on sentiment, though Fed action to stymie inflation has served to alleviate some concerns**. At present, economists put a 50% chance of a US recession in the coming year, elevated on an historical basis but down meaningfully over the last six months.

Probability of US Recession Has Declined...

monthly data since 2008, actual recessions shaded grey

...As Inflation Data Continues to Normalize

monthly data, trailing 3 years

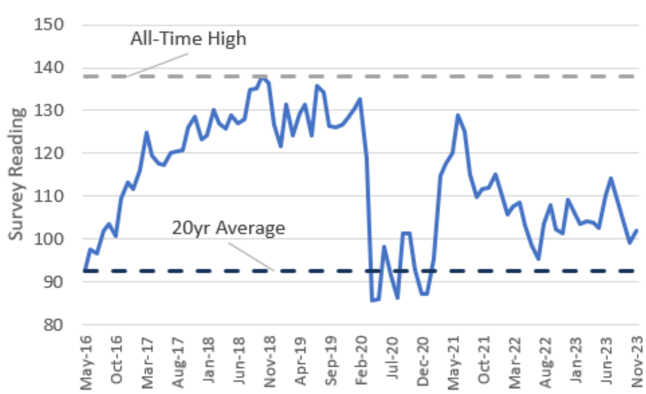


Source: SKY Harbor, Bloomberg, NBER, Bureau of Labor Statistics

Economist projections aside, we encountered a more optimistic than expected client base during our most recent European roadshow, with fewer expecting the US to fall into a recession than we would have otherwise expected. **The most commonly cited rationale for this viewpoint was the strength of the US consumer – most recently exemplified by better than expected post-Thanksgiving sales – providing significant economic tailwinds given the group's ultimate impact on GDP growth**. Still lofty consumer confidence readings have at times over the last few years been at odds with CEO confidence, the latter of which currently hovers around long-run average levels.

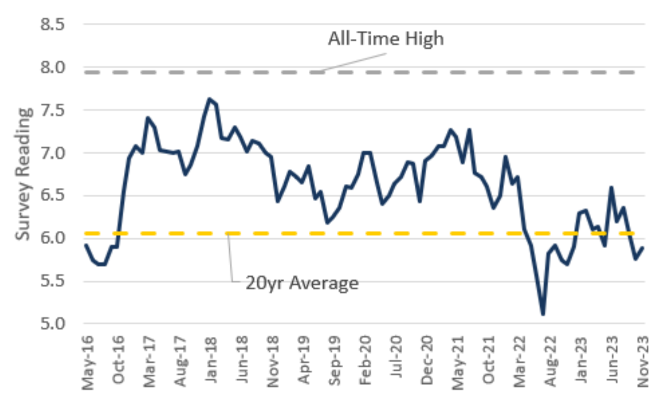
Conference Board Consumer Confidence

monthly data



CEO Confidence In Economy 1 Year From Now

monthly data

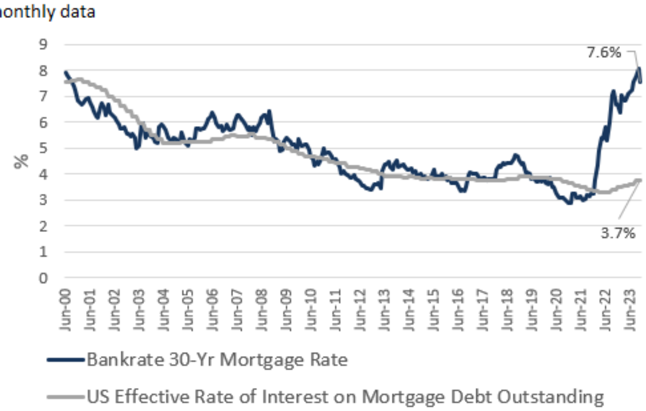


Source: SKY Harbor, The Conference Board, Chief Executive Magazine

Going forward, a drawdown in excess savings may begin to weaken consumer spending habits, particularly if optimism in the job market declines. As demonstrated below, **consumers will also have to contend with higher costs associated with shelter, auto loans, credit card debt, and student loans, though rising wages** (and, as a result, higher disposable income) and limited re-setting of mortgage rates likely cushion the impact. As such, though we expect consumer spending habits to weaken in '24, we do not see enough pressure to turn output growth negative in the near term.

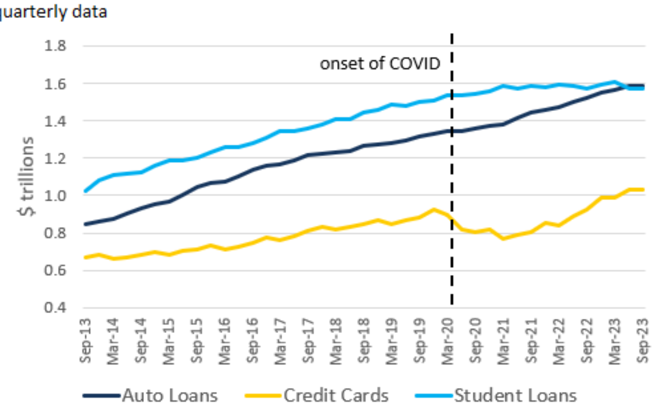
Mortgage Rates Hit Two Decade High; Effective Rates Low (for now)

monthly data



Non-Mortgage Debt on the Rise, Partially Offset by Higher Wages

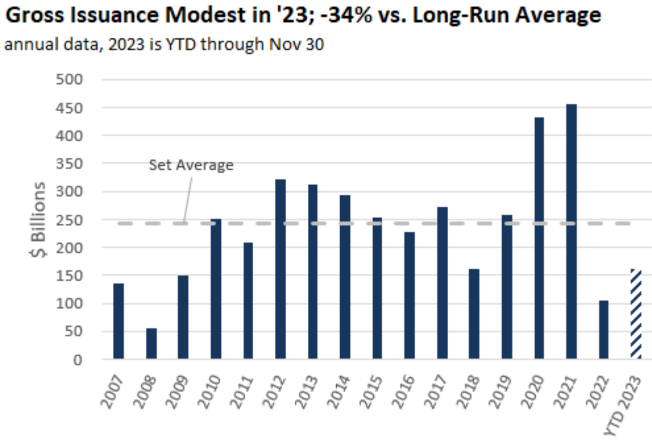
quarterly data

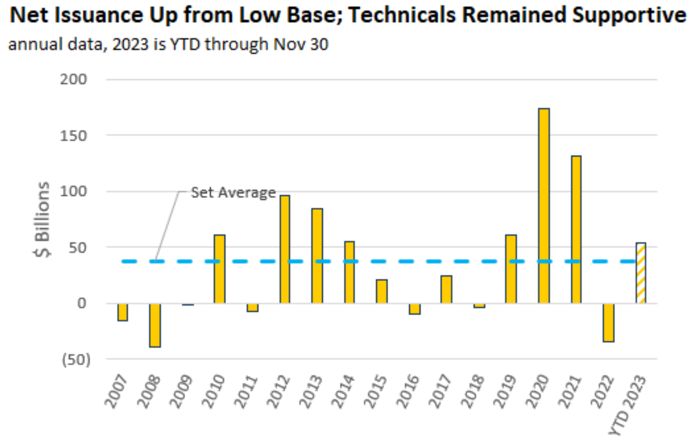


Source: SKY Harbor, Bankrate.com, Bureau of Economic Analysis, Federal Reserve Bank of St. Louis, Federal Reserve Bank of New York

Technicals to Remain Supportive

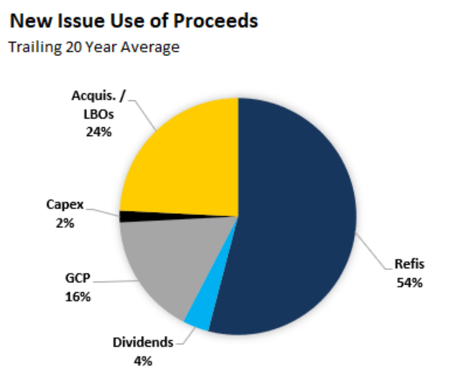
New issuance slowed substantially from record-setting years in 2020 and 2021, resulting in a 77% sequential decline in gross primary market activity in 2022. **Macroeconomic uncertainty, higher interest rates (making in-place coupons appear relatively attractive), limited amounts of debt trading to a near-term call, and over $12bn of retail outflows from the asset class led to a second consecutive below-average issuance year in 2023**, which though up from 2022 is still tracking nearly 40% below the post-GFC annual average. On a net basis (gross issuance less calls, tenders, and maturities) issuance is running at approximately +$54bn on a year-to-date basis (through November 30, 2023), up sequentially from a 2022 that registered an all-time low based on our dataset that goes back to 2007. **Factoring in coupon income and net rising stars, supply will easily register as a shortfall in 2023 for the third consecutive year, implying technical tailwinds for the asset class**.

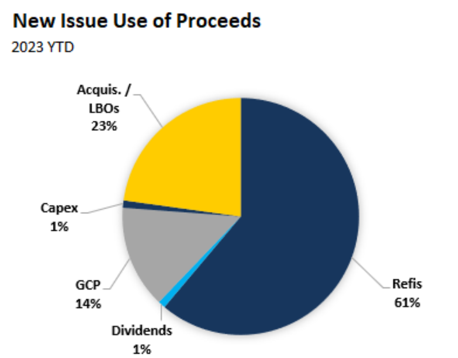




Source: SKY Harbor, BofA Merrill Lynch

Aggregate use of proceeds changed materially from recent years. Among the most notable deviations was the percentage of issuance used for refinancing activity, which increased to 61%, or ~ 700 bps above the trailing 20-year average. **Rapidly rising rates disincentivized issuers from borrowing to support dividends, acquisitions, and LBO's, leaving what little primary issuance was done in '23 to address near-term maturities**. With all categories other than refinancing trending below the two decade average, we would say management teams largely avoided aggressive issuance in 2023.

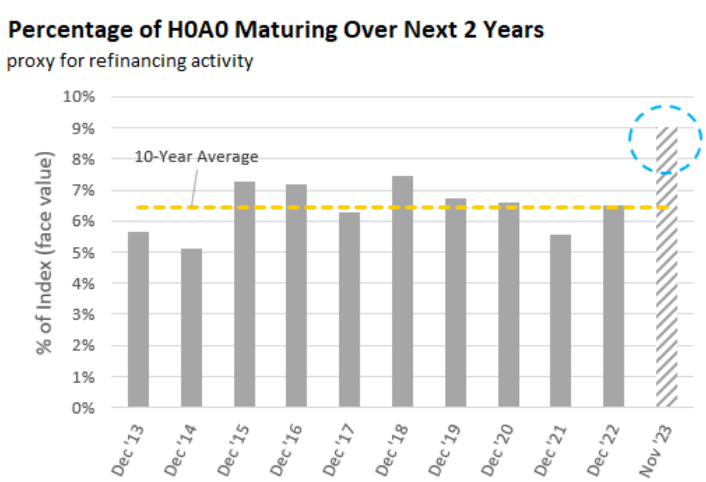


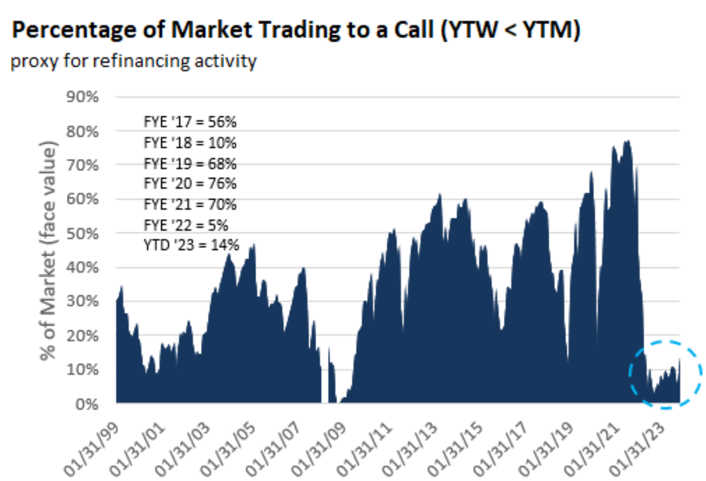


	Percent of All Proceeds		
Use:	Prior 20yrs	2023 YTD	Trend
Refis	54%	61%	Higher
Dividends	4%	1%	Lower
GCP	17%	14%	Lower
Capex	2%	1%	Lower
Acquis. / LBOs	24%	23%	Lower

Source: SKY Harbor, BofA Merrill Lynch

In projecting market technicals for 2024, we break down the key elements of high yield bond supply and demand. Historically, a strong indicator of future refinancing activity is the absolute amount of debt due in the next 12-24 months (above average), the percentage of the market trading to an early call (well below average), and the relative abundance of securities with coupons that exceed their market yield (well below average).



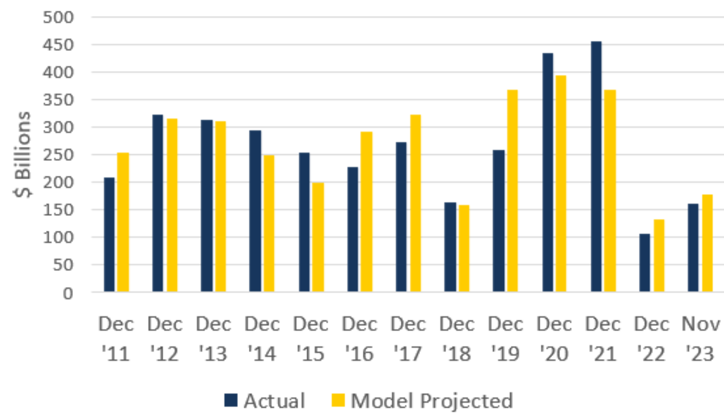


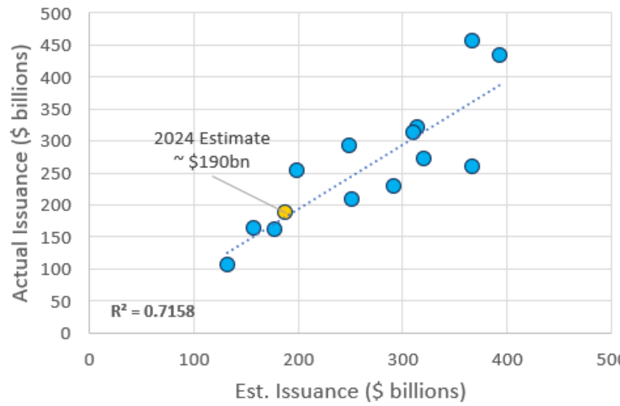
Source: SKY Harbor, ICE Data Indices

Running data through our regression model (using the factors noted above), we anticipate issuance in 2024 should come in at approximately $190bn, below the long-run average of approximately $250bn, but up nearly 20% from year-to-date activity through November 30.

Expect Gross Issuance to Pick up in 2024, But Remain Below the Trailing 10-Year Average

annual data





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

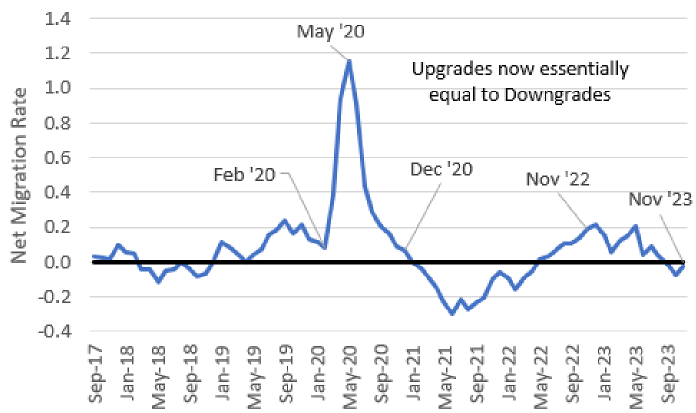
Equity dividends have historically made up a very small portion of new issuance (< 4% of primary market activity over the last twenty years), and we do not expect 2024 to come in materially different (implies perhaps $5bn or less in gross proceeds). Degradation of issuer fundamentals, a higher cost to execute, and limited investor appetite likely put a cap on this type of issuance over the next twelve months.

We find acquisition and LBO activity to be more difficult to predict, but note that this cohort has historically been highly correlated to CEO confidence (which is below average), the amount of regulatory uncertainty (perhaps exacerbated in an election year), enterprise value multiples (relative attractiveness has degraded via the equity rally), and prevailing Treasury yields (economic health offset by the impact to financing costs). Putting these factors together, **we forecast below-average Acquisition/LBO financing needs in 2024 (call it less than $40bn, which by percent of proceeds would be below the 24% 20-year average)**.

Fallen angel volumes, net of rising stars, have typically been driven by the prevailing upgrade/downgrade ratio (net neutral at present, but likely to skew toward downgrades in '24 based on our regression model), net leverage metrics (likely to weaken in the coming quarters), and earnings trends (we expect high yield constituent EBITDA growth to be -4% in '24). **Note that the flood of fallen angels from a lockdown-impaired 2020 have now been fully offset by net rising stars from Jan '21 through Sep '23**.

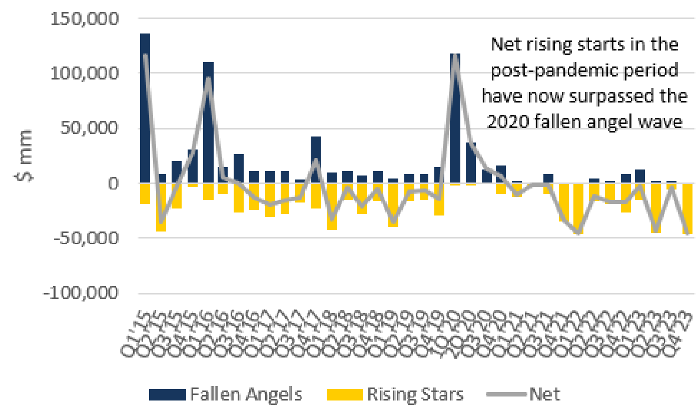
US High Yield Rating Migration Rates

trailing-3-month rates



Rising Stars vs. Fallen Angels

upgrades vs. downgrades

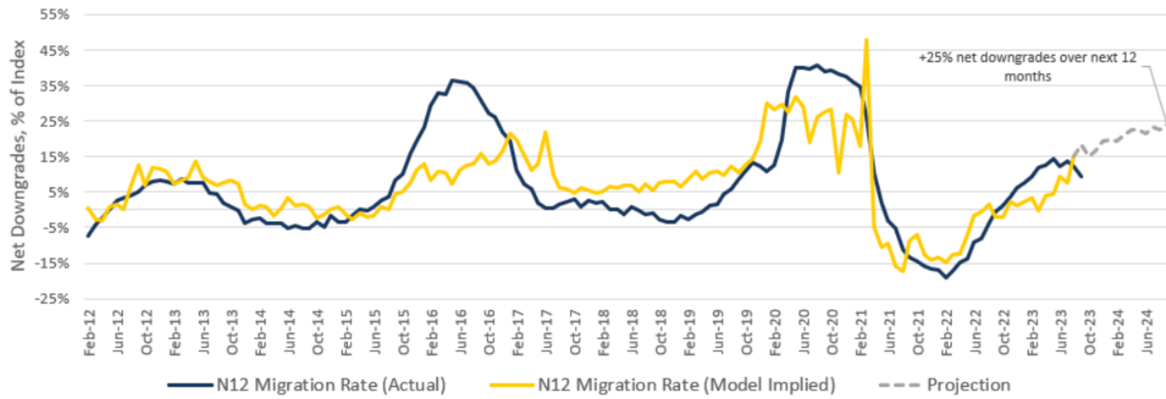


Source: SKY Harbor, BofA Merrill Lynch

As noted in our recent *Weekly Briefing* entitled "A Downgrade Wave, not a Tsunami," the recent relationship breakdown between bank lending standards and upgrade/downgrade volumes (as non-bank institutions have begun to play an outsized role in credit markets) has fundamentally altered our framework for estimating rating migration trends on a go-forward basis. As such, we turn to an alternative methodology for insights into future trends. Leveraging a database of key economic indicators, fundamental credit ratios, and various high yield and ancillary asset class metrics, we updated our multivariable regression model to project credit rating migration rates (i.e., the rolling 12-month measure of downgrades vs. upgrades relative to index size, with positive rates indicating a greater proliferation of downgrades). Due to an elevated probability of recession, modestly higher gross leverage ratios, and a modest expected uptick in the unemployment rate, and partially offset by resilient consumer sentiment and output growth readings, the model projects the net downgrade rate reaching 25% over the next year – worsening, but stopping well short of recent peaks over the last decade.

Our Migration Model Remains in Net Downgrade Territory

monthly data, since 2011

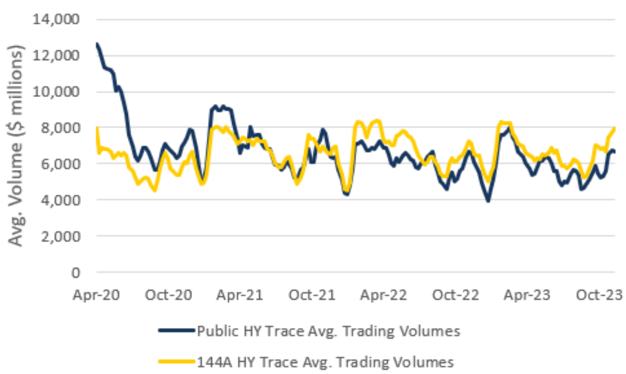


Source: SKY Harbor, BofA Merrill Lynch, Univ. of Michigan, Bloomberg Economics, Bureau of Economic Analysis, Bureau of Labor Statistics, ICE Data Indices

Trading activity has been resilient over the last several quarters despite slowing new issuance, retail outflows, and overall macroeconomic uncertainty. **A recent uptick in activity (since Q3'23), as demonstrated below, becomes even more noticeable when normalizing volumes by the size of the index (which has shrunk)**. In our view, an uptick in gross issuance in 2024 (albeit remaining below the trailing 10-year average), along with the potential for increased demand for the asset class (based on top quartile yields, falling rate volatility, and less onerous FX hedging costs) should improve overall market liquidity.

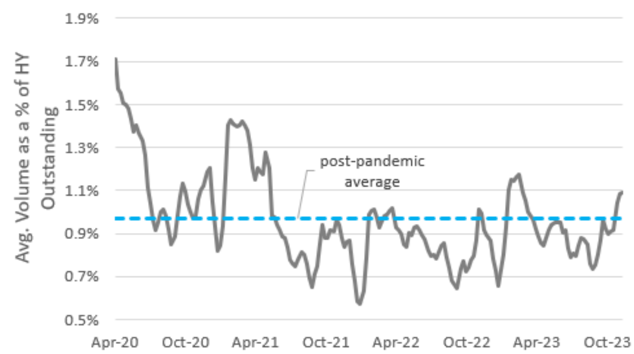
Trading Activity Has Rebounded

weekly data, since pandemic



3Q'23 Rebound More Noticeable Normalizing Activity by Index Size

weekly data, since pandemic



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

Preferred Positioning

Weighing the risks and opportunities outlined in this outlook report, and recognizing that portfolio positioning is a highly iterative process that evolves throughout the year, we nevertheless identify our key over-weights and under-weights as we head into 2024.

1) Prefer Higher-Rated Credits

While overall yields appear attractive across the rating spectrum, they remain top decile among BBs on a trailing 10-year basis. In fact, yields above 7% look increasingly attractive to us in the context of economic uncertainty, particularly given our expectation of spread widening. As demonstrated below, **BBs have the highest starting duration relative to other rating buckets (which could prove meaningful if the Fed cuts rates, which is the consensus view), and the lowest spread change beta (also meaningful in the context of our expectation for spreads to widen in 2024).**

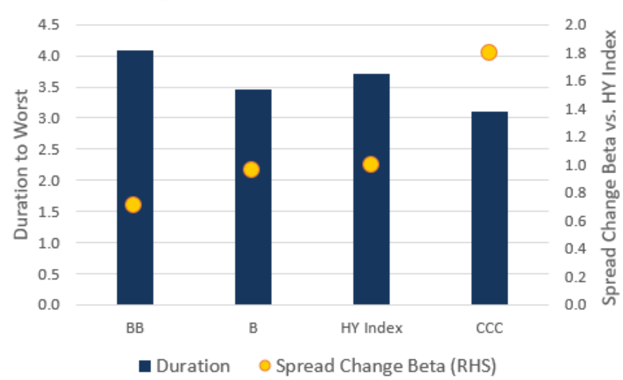
Overall Yields Look Attractive, Particularly BBs

data as of November 30, 2023

			YTW %ile Ranking		
Name	Ticker	YTW	5yr	10yr	20yr
US High Yield	H0A0	8.50	0.81	0.88	0.78
Short Duration High Yield	JVC4	7.90	0.80	0.89	0.83
BB	H0A1	7.02	0.81	0.91	0.75
B	H0A2	8.65	0.76	0.86	0.80
CCC	H0A3	14.39	0.75	0.81	0.82

BBs Have Highest Starting Duration, Lowest Spread Change Beta

betas based on trailing monthly data

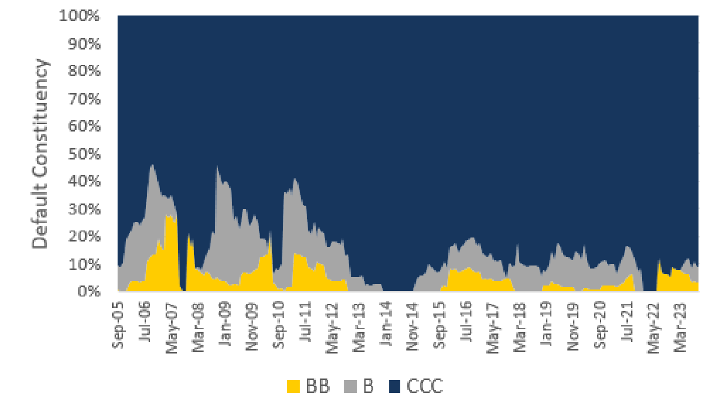


Source: SKY Harbor, ICE Data Indices

Furthermore, lower-rated credit has historically demonstrated greater sensitivity to earnings (we forecast modestly negative EBITDA growth in '24, which would represent downside surprise vs. consensus expectations) and defaults (which we expect to rise, albeit to merely average levels). As demonstrated below, and assuming an historical 90% capture rate, almost 30% of the CCC universe could default over the next twelve months, introducing significant risk of principal loss for those overweight the rating cohort.

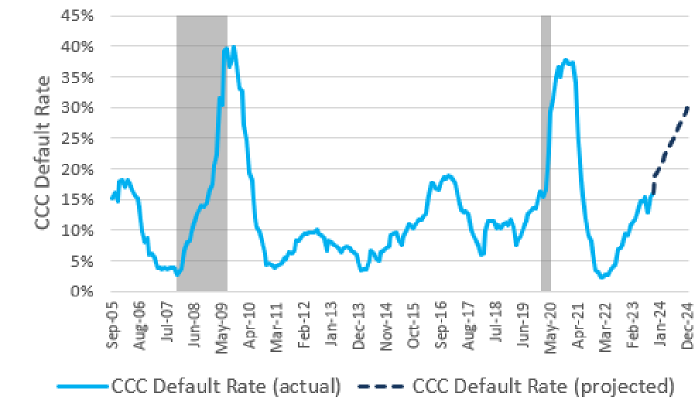
CCCs Typically Make up ~90% of Index Defaults

rolling 12 month data



Under Our Base Case Outlook, ~30% of CCCs Default in 2024

rolling 12-month data, recessions shaded grey



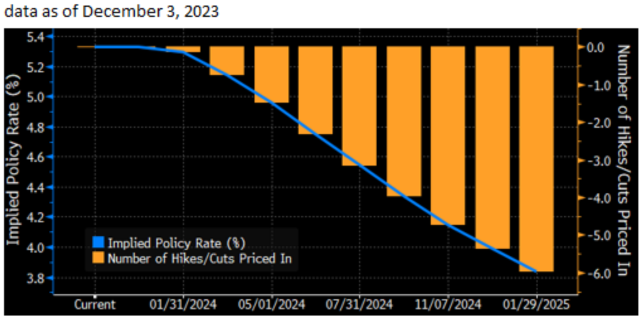
Source: SKY Harbor, ICE Data Indices, BofA Merrill Lynch

2) *No Longer Underweight Duration*

Rate volatility has been elevated since the Fed began hiking in March '22, a dynamic that has led to duration penalization for the high yield bond index over the last several quarters. However, and as discussed in a September *Weekly Briefing* entitled "[A Rates Story]()," we anticipate volatility will decline given greater conviction that monetary policy tightening is nearing an end. In fact, Fed Funds Futures imply 4 to 5 cuts in 2024 as policy rates normalize, consistent with further cooling of Core PCE.

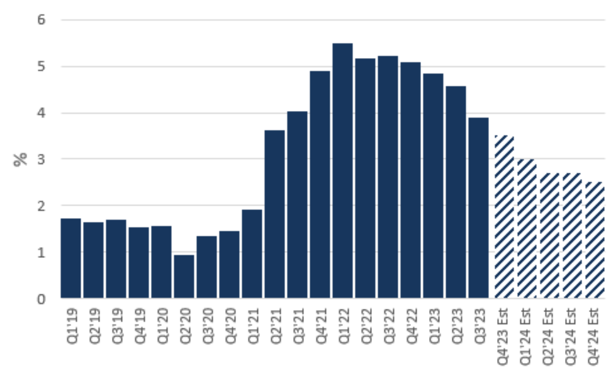
Implied Overnight Rate & Number of Hikes/Cuts

data as of December 3, 2023



Economists See Core PCE (YoY) Falling

solid bars = actual data, striped bars = consensus

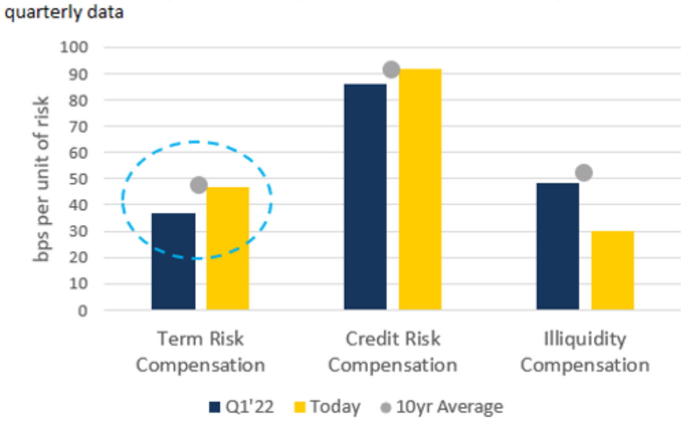


Source: SKY Harbor, Bloomberg, Federal Reserve

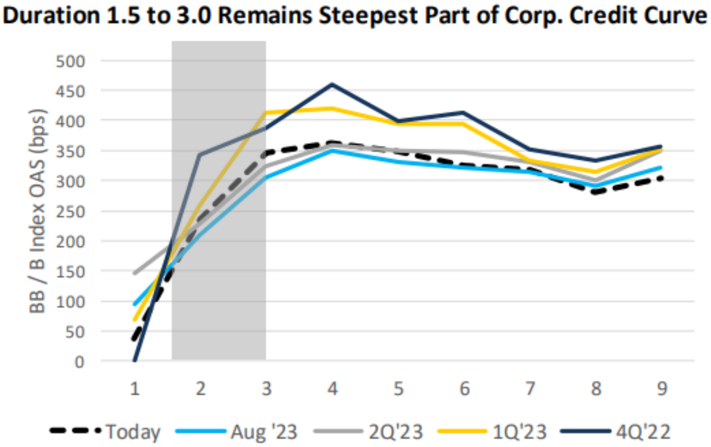
Additionally, and unlike conditions immediately preceding initial Fed hikes (early Q1'22), investors are being compensated to take on term risk at historically average levels. This, coupled with a base case view of rate cuts in 2024, give us greater comfort to take on duration. That said, the corporate credit curve is exceptionally flat beyond a duration of 3, somewhat tempering our enthusiasm to extend much longer.

Term Risk Compensation Up From Start of Hiking Cycle

quarterly data



Duration 1.5 to 3.0 Remains Steepest Part of Corp. Credit Curve

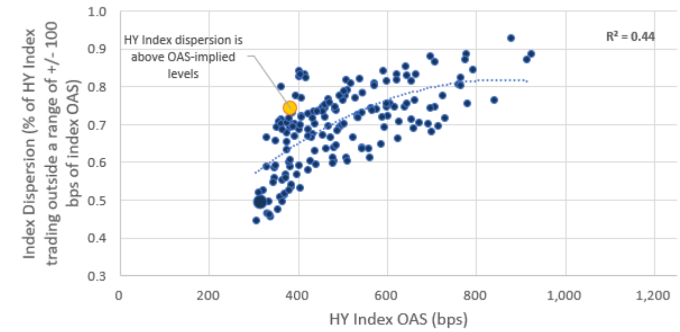


Source: SKY Harbor, ICE Data Indices

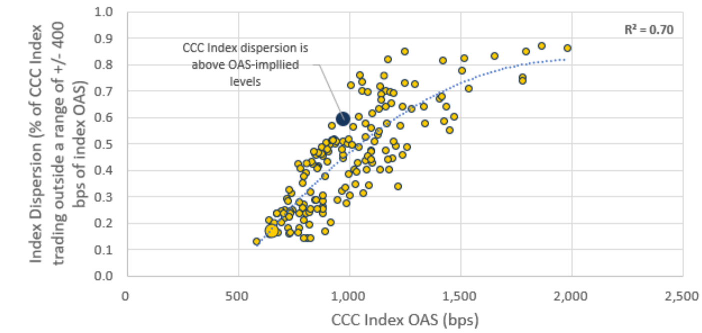
3) Focus on Idiosyncratic Return Opportunities

Historically, issue dispersion has been highly correlated to index spread levels, with wider OAS typically coinciding with a greater range of bond trading levels. Dispersion at present – both for the index as a whole and the CCC portion of the market in particular – is elevated relative to spread levels. In our view, **this dynamic presents an attractive backdrop for credit picking**. Though we think an overweight to higher-rated credit relative to the most speculative parts of the high yield market is merited, opportunities for alpha generation via security selection remain across all rating buckets.

% of US High Yield Market Trading Outside +/- 100 bps of Index OAS
monthly data, since July '09



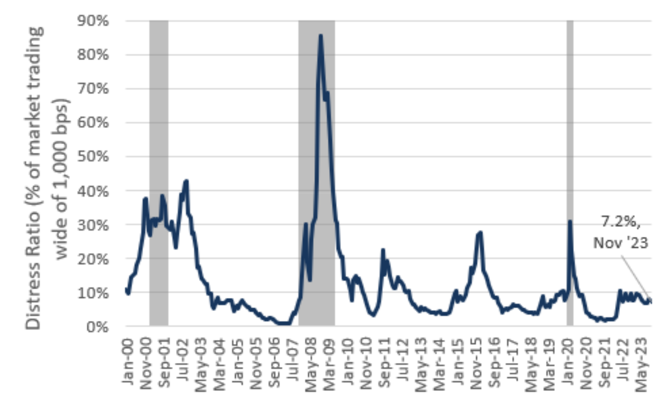
% of US CCC High Yield Market Trading Outside +/- 400 bps of Sub-Index OAS
monthly data, since July '09



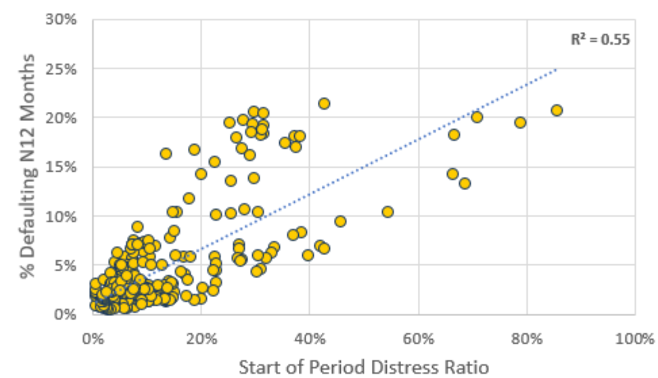
Source: SKY Harbor, ICE Data Indices, BofA Merrill Lynch

Recall, as well, that though we believe the default rate will ratchet up in 2024, it likely only reverts to long-run average levels (our estimate is ~ 4.4%). Additionally, the market tends to consistently overestimate the risk of default, with 35% of distressed credits typically filing for bankruptcy in subsequent 12-month periods. Again, though cognizant of risk factors on the horizon and potential headwinds stemming from principal loss, opportunities remain even in the more speculative parts of the high yield market.

Distress Ratios Have Come Down Since Start of Year
monthly data, since 2000; recessions shaded grey



~35% of Distressed Issues Typically Default Within 12 Months
monthly data, since 2000



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

Additionally, we have generated a number of fundamental themes that have the potential to differentiate high yield issuers in the coming year, perhaps allowing for EBITDA growth (or at least relative resiliency) and credit metric improvement in an environment where most are likely to move in the opposite direction. Such themes are as follows:

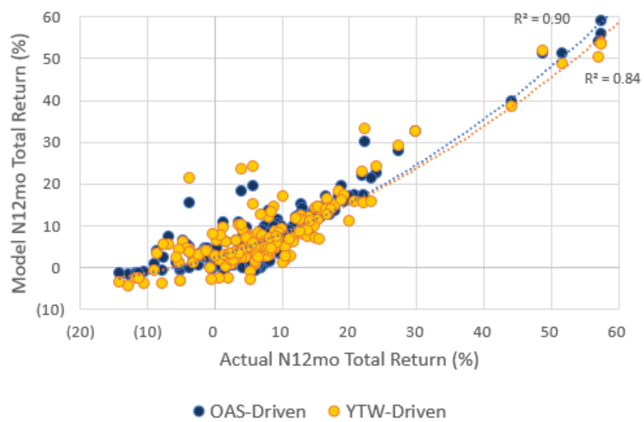
- Issuers that can gain share or pick up volumes as a beneficiary of **trade-down behavior**, particularly if persistent inflation and erosion of personal savings rates force the US consumer to cut back on expenditures
- A (potentially contentious) Presidential election in '24 likely leads to increased **infrastructure and political ad spending**, both of which could benefit several areas of the high yield market
- Beneficiaries of a **sustainable product focus**, particularly as ESG awareness begins to have a greater impact on competitive positioning and consumer choice
- Issuers that can benefit from a continued **normalization away from the work-at-home trend**, as a boost in organic volumes against lackluster 2020 through 2023 results may allow for attractive growth amidst an otherwise subdued earnings backdrop
- Business models that can incorporate **a greater degree of automation** as a means to alleviating wage inflation pressures, as well as companies manufacturing such equipment; overall **productivity improvements** due to labor market stability can be meaningful in '24
- **Self-help stories**, such as issuers still able to pare down operating expenses and/or working capital, improving free cash flow despite macroeconomic headwinds, and those able to capture integration synergies
- Issuers with **conservative management teams**, particularly those who have demonstrated a willingness to reduce debt and hold back on share repurchases given rapidly rising interest expense and less accommodative primary markets; opportunistic repurchases of near-term debt trading below par could improve our return outlook given little market convexity at present.
- Business models expected to rebound following **supply chain normalization / onshoring** will likely see earnings improve beyond index averages
- Finally, given looming risks associated with an uptick in interest expense as historically low coupons are refinanced, we view **issuers with longer-dated capital structures** as best positioned given comparatively little to disrupt free cash flow profiles in the near term.

Return Expectations Trending in the 7% Range

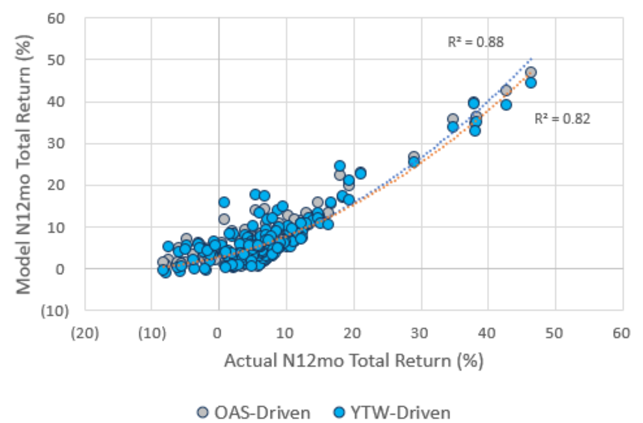
Before we get into estimates, a cautionary note: returns for an asset class are dependent on many variables, most of which are difficult to estimate on their own. Additionally, banks typically employ different methodologies to generate their expectations, all of which are subjected to debate by the investing public. Furthermore, high yield bond return estimates cannot be estimated in isolation, as changes in sentiment in other asset classes during the year can prompt funds to flow across strategies, causing technical implications that impact performance. Despite these pitfalls, return expectations remain one of the more popular questions from investors. As such, we aim to provide our best estimates below.

To frame expectations, we first look to correlation-driven return estimates, as they have historically provided reasonable goalposts on which to base more specific forward-looking projections. Assuming 2024 begins with spreads and yields similar to levels in the market on November 30, 2023, **we believe total returns in the 7% range would be consistent with historical trends**. More specifically, using an equal-weighted model and a starting point of option-adjusted spread (OAS) and yield-to-worst (YTW) levels of 384 bps and 8.50%, respectively, subsequent 12-month returns have been approximately 7.1% for the broad high yield market (index ticker H0A0). For short duration high yield (index ticker JVC4), the implied next 12-month return is approximately 7.0%.

	Starting OAS (bps)	Model N12 Tot Ret (%)	Starting YTW (%)	Model N12 Tot Ret (%)	Average Method
Broad HY Index (H0A0)					
Month End (Nov 30, 2023)	384	1.3	8.50	12.8	7.1



	Starting OAS (bps)	Model N12 Tot Ret (%)	Starting YTW (%)	Model N12 Tot Ret (%)	Average Method
Short Duration HY Index (JVC4)					
Month End (Nov 30, 2023)	312	2.3	7.90	11.7	7.0



Source: SKY Harbor, ICE Data Indices

For the sake of transparency, we also provide a more nuanced return model, utilizing the BofA Merrill Lynch index return framework as we believe it strikes the appropriate balance between complexity and transparency. As always, we augment this model with our own variable estimates, with further explanation below. Also, note that these return projections are for the broad US high yield market (the ICE BofA US High Yield Index, ticker H0A0) and the short duration US high yield market (the ICE BofA 1-5 Year BB-B US Cash Pay High Yield Constrained Index, ticker JVC4) and not our internal portfolios.

For H0A0:

- **Treasury Yield Target** – We use consensus expectations contained within Bloomberg as our estimate of 5yr Treasury yields by the end of 2024; at the time of publishing this outlook, the median 5yr Treasury yield estimate for Q4'24 was 361 bps.
- **Index Default Rate** – Utilizing our multi-factor regression model, we anticipate that tightening lending standards, weaker free cash flow via the re-setting of existing coupons, and lower (albeit manageable) interest coverage metrics will modestly increase the index default rate, which we project will rise to ~ 4.4% by the end of 2024.
- **Recovery Rate** – Utilizing our multi-factor regression model, we anticipate that weakening but still strong credit metrics in the context of only moderate but rising defaults (see above) should put downward pressure on recovery rates relative to historical norms, and expect modest degradation to ~ 35% in 2024.
- **Spread Target** – Based on our internal macro spread regression model, which uses key economic indicators to estimate spread fair value, we anticipate index OAS will widen to approximately 460 bps by the end of 2024. Higher conviction with regard to recession avoidance could significantly tighten this estimate.

For JVC4:

- **Treasury Yield Target** – We use consensus expectations contained within Bloomberg as our estimate of 3yr Treasury yields by the end of 2024; at the time of publishing this outlook, the median 3yr Treasury yield estimate for Q4'24 was 380 bps.
- **Rating Migration Rate** – Due to an elevated probability of recession, modestly higher gross leverage ratios, and a recent uptick in the unemployment rate, and partially offset by resilient consumer sentiment and output growth readings, we expect downgrades to outpace upgrades in the coming year.
- **Downgrade Loss** – We assume that the market is correct in proactively anticipating downgrades, and so expect that issues likely to be cut by rating agencies in 2024 already trade among the widest decile of their respective rating buckets. At the time of publication, the average price of those downgrade candidates is ~ 83, and we expect a dollar loss commensurate with recent migration trends as spread levels adjust to new rating comparables.
- **Spread Target** – Based on our internal macro spread regression model, which uses key economic indicators to estimate spread fair value, we anticipate index OAS will widen to approximately 380 bps by the end of 2024. As with H0A0, a higher degree of conviction with regard to recession avoidance could significantly tighten this estimate.

Using these inputs, as well as various index measures on November 30, 2023, **we arrive at an estimated return for both broad market and short duration high yield of ~ 7% over the next twelve months**, nearly identical to our correlation-driven projections.

ICE BofA US High Yield Index - H0A0	HY	5yr Trsy
Current Spread	384	429
Target	460	361
Predicted Change	76	-68
Duration	3.4	
Index Price	89.9	
Avg Par Coupon	606	
Tsy Change	-68	
Total Change in Yield	8	
Capital Gain	-26	
Period Multiplier	1.00	
Index Yield	854	
Default Rate	4.40	
Price (default universe)	50.1	
Credit Loss	133	
Expected Periodic Return (next 12 months)	7.0 %	

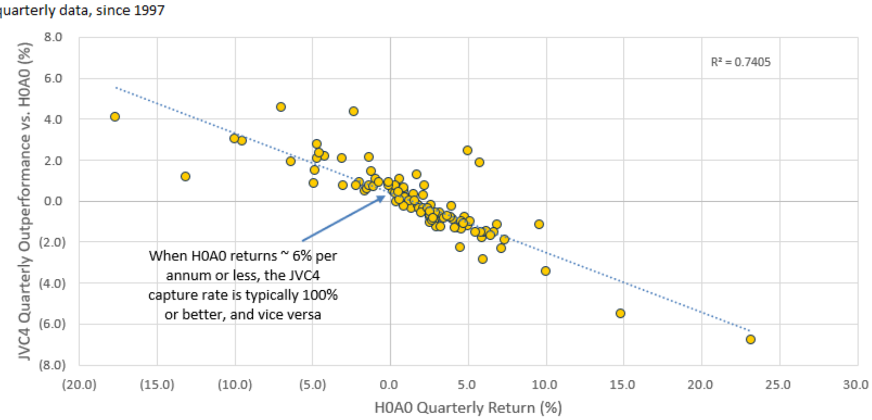
ICE BofA 1-5 Year BB-B US Cash Pay High Yield Constrained Index - JVC4	SD HY	3yr Trsy
Current Spread	312	447
Target	380	380
Predicted Change	68	-67
Duration	2.4	
Index Price	94.3	
Avg Par Coupon	607	
Tsy Change	-67	
Total Change in Yield	1	
Capital Gain	-2	
Period Multiplier	1.00	
Index Yield	794	
Rating Migration Rate	12.00	
Price (downgrade universe)	83.1	
Downgrade Loss	95	
Expected Periodic Return (next 12 months)	7.0 %	

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.

As a side note on 2024 total returns, we highlight that our expectation for short duration high yield is essentially the same as for broad market high yield in the coming year, despite our historical two-thirds capture target through the business cycle. **Historical analysis would suggest that the quarterly return advantage for broad high yield over short duration shrinks to essentially breakeven levels in the 1.5% per quarter context (or ~ 6.0% on an annualized basis)**. Given our expectation of 2024 total returns in a similar range, we think the tradeoff between broad market and short duration high yield returns will be muted in our base case scenario. If the "soft landing" narrative persists and credit risk proves more resilient than currently anticipated, broad high yield would likely outperform short duration high yield by a greater margin. Conversely, if returns undershoot our base case estimate, short duration high yield performance would likely exceed that of broad high yield.

Short Duration US High (JVC4) Outperformance vs. Broad US High Yield (H0A0) Quarterly Total Returns

quarterly data, since 1997



Source: SKY Harbor, ICE BofA Indices

If we further nuance our total return model by rating bucket, **BB-rated credit appears to have an edge in our base case outlook, though returns are admittedly clustered tightly**. Using historical rating bucket capture rates of H0A0 spread changes, an approximation of ratings-based default rates from the start of 12-month periods (based on historical data), and recovery rates based on trends over the last decade, we see higher-quality credit as generating stronger risk-adjusted returns in 2024. Note, however, that the greatest opportunity for alpha generation via credit loss avoidance comes from the CCC portion of the index, bringing some balance to our higher-quality preference.

BB Index	HY	5yr Trsy
Current Spread	236	429
Target	291	361
Predicted Change	55	-68
Duration	3.7	
Index Price	92.7	
Avg Par Coupon	542	
Tsy Change	-68	
Total Change in Yield	-13	
Capital Gain	48	
Period Multiplier	1.00	
Index Yield	702	
Default Rate	0.50	
Price (default universe)	74.0	
Credit Loss	26	
Expected Periodic Return (next 12 months)	7.3 %	

B Index	HY	5yr Trsy
Current Spread	398	429
Target	475	361
Predicted Change	77	-68
Duration	3.1	
Index Price	91.3	
Avg Par Coupon	639	
Tsy Change	-68	
Total Change in Yield	9	
Capital Gain	-27	
Period Multiplier	1.00	
Index Yield	865	
Default Rate	3.25	
Price (default universe)	63.5	
Credit Loss	146	
Expected Periodic Return (next 12 months)	6.9 %	

CCC Index	HY	5yr Trsy
Current Spread	976	429
Target	1090	361
Predicted Change	114	-68
Duration	2.9	
Index Price	75.9	
Avg Par Coupon	734	
Tsy Change	-68	
Total Change in Yield	46	
Capital Gain	-105	
Period Multiplier	1.00	
Index Yield	1439	
Default Rate	22.00	
Price (default universe)	49.5	
Credit Loss	644	
Expected Periodic Return (next 12 months)	6.9 %	

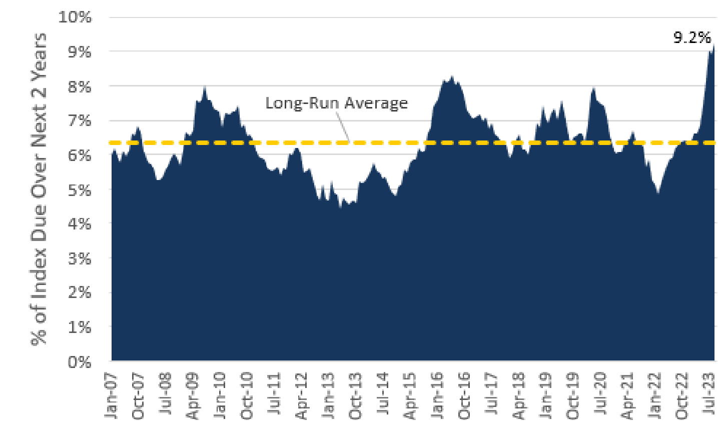
BofA Merrill Lynch Model, SKY Harbor variable estimates. The predictions herein are forward-looking statements, subject to change without notice due to changing market conditions, expectations, or judgments that could cause actual results to differ materially from those contained herein.

Key Risks & Opportunities

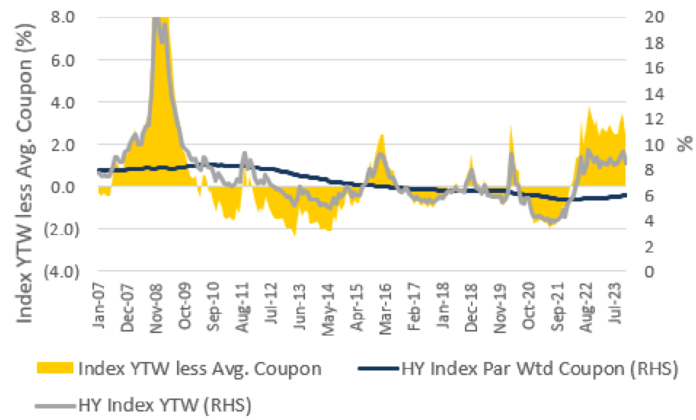
The thoughts presented in this report thus far represent our base-case view of the market risks and opportunities as we head into 2024. However, we are cognizant of significant tail risks associated with the current market environment. Should such risks come to fruition, a re-visit of our investment thesis would likely be warranted. We list these risks and opportunities, in no particular order, below:

- **The Maturity Wall** – A rapid repricing of rates since the Fed embarked on an aggressive hiking cycle back in March '22 has made existing high yield coupons (~6%) look attractive to issuers. This dynamic has significantly contributed to the falloff in primary market activity since a record-setting 2021, with year-to-date figures implying another year of sub- $200bn issuance. As a result, **the amount of debt maturing over the next two years has hit a multi-decade high**, in sharp contrast to below-average starting points in both '22 and '23. Time to wait for elevated rates to subside is now dwindling, and funding costs are set to rise across the high yield index as a greater portion of coupons will reset higher. Note, as well, that **the difference between existing coupons and market yield-to-worst (YTW) levels are at post-GFC highs**.

Maturity Wall is Getting Closer
monthly data



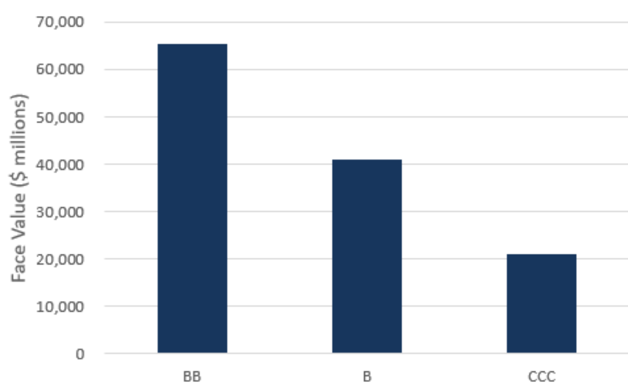
Yields Significantly Higher Than In-Place Coupons
monthly data



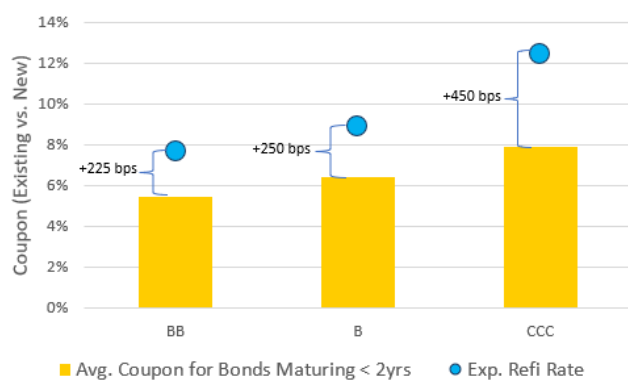
Source: SKY Harbor, ICE Data Indices

Accordingly, we estimate that approximately $130bn of high yield debt will need to be refinanced in 2024, assuming issuers remain averse to letting bonds go current on their balance sheets. With this in mind, we broke down the universe of bonds maturing in < 2 years (period ending November 30, 2025) by rating (left chart below), and found them to skew higher quality in nature (~ 85% of likely refi candidates are non-CCCs). **Comparing average coupons of bonds likely to be refinanced to market yields for paper with similar ratings and of a tenor commensurate with primary market activity (5 to 7 years) we find an implied average cost uptick of ~ 280 bps, with CCCs facing the most daunting step change (+450 bps).** At best, we think issuers and private equity sponsors will be highly incentivized to conserve cash at the expense of shareholder friendly initiatives, as the penalty for a lower credit rating becomes increasingly severe. At worst, the ability to generate positive free cash flow is impaired among lower-rated credits given more substantial increases in funding costs. In either case, the timing of Fed cuts will influence the severity of the adjustment.

Nearly 85% of Debt Due Over Next 2Yrs is Rated BB or Single-B
maturities through November '25, by face value



Expected Coupon Uptick Most Severe for CCCs
maturities through November '25, by face value



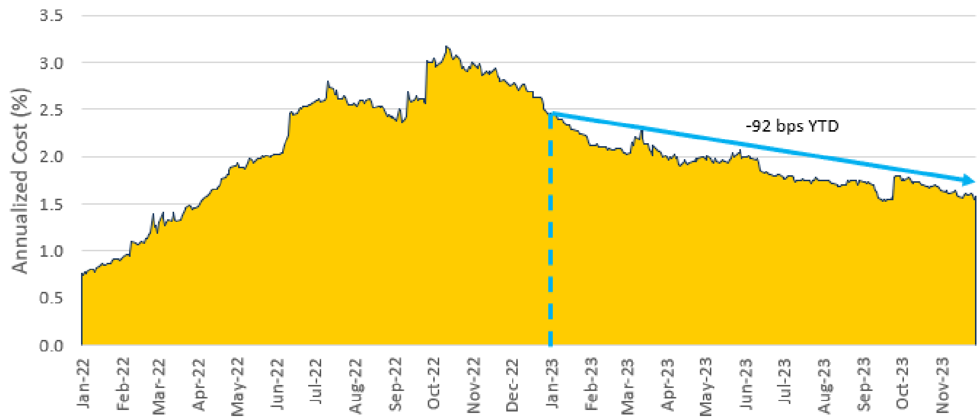
Source: SKY Harbor, ICE Data Indices

- **Geopolitical Developments** – Geopolitical tensions have been on the rise for years, and we see greater risk to the downside as 2024 approaches. Rumors of a truce in Ukraine have seemingly lost steam, with Russia now potentially waiting for US Presidential elections before settling on a path forward. Additionally, at the time of writing, a cease fire between Israel and Hamas has expired, with ever-looming concerns that the conflict could expand throughout the Middle East. **The potential for China to show aggression toward Taiwan likely represents the most significant net new geopolitical risk in the coming year,** while the recent launch of a North Korean spy satellite – in direct violation of a UN resolution – has the potential to expand tensions in the region. Finally, expectedly contentious elections in the US are likely to grab headlines, particularly in light of increased deficit spending and threats of further rating agency cuts.

- **Foreign Ownership of US High Yield** – We noted during our recent European roadshow that demand for high yield might be at a cyclical trough, with asset class flows in negative territory for the second consecutive year. What might turn this around? Some of our more recent work has demonstrated that **allocations typically come back to the asset class when yields rise and/or when rate volatility declines, both of which appear in play at present**. Additionally, given the importance of European investor demand for the asset class as a whole, we note that FX hedging costs (in this case, the dollar hedge cost for euro-based investors) have moderated by nearly 100 bps since the start of the year, in our view making US high yield comparatively attractive vs. its EUR counterpart.

USD-EUR Annualized Hedging Cost Elevated but Moderating

daily data, since 2022



Source: SKY Harbor, Bloomberg

- **An End to the Fed Rating Hiking Cycle** – As discussed in a *Weekly Briefing* from April entitled "The Final Hike," there have been five rate hiking cycles going back to the late 1980s, a period that effectively covers the history of the high yield market. Across those observations, the median timeframe between the final Fed rate hike of a cycle to the first rate cut is approximately 7 months, a period relatively consistent with consensus expectations this time around. These prior observations, which we will refer to as "transition" periods, have coincided with strong high yield total returns. More specifically, and upon further examination of the three most recent cycles (the extent of our historical index data), we find that **the ICE BofA US High Yield Index has, on average, generated 10% returns in the twelve months following the end of hiking cycles, a figure over 300 bps above the average rolling 12-month return of all periods since the beginning of 2000**. Additionally, we would note that BB credits have historically performed best among all rating cohorts during such periods, at least partially driven by modestly higher starting duration (in these observations, 5-Year Treasury yields have declined by an average of 77 bps and 87 bps, respectively, in the 6 and 12 month periods following a Fed pause). At the time of publication, consensus expectations envision 5-Year Treasury yields declining 68 bps between now and the end of 2024, only moderately below the "transition" set average.

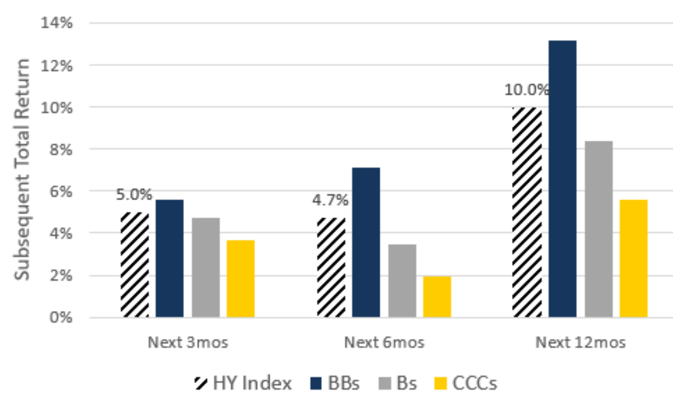
Total Returns Typically Strong After Fed Stops Hiking

monthly data; ICE BofA US High Yield Index (H0A0)

			Subsequent Total Return		
Last Hike	Index OAS	Index YTW	3mo	6mo	12mo
May '00	616	12.6	3.5%	-4.5%	3.7%
Jun '06	335	8.6	4.1%	8.4%	11.7%
Dec '18	533	8.0	7.4%	10.2%	14.4%
Set Average	495	9.7	5.0%	4.7%	10.0%

BBs Generate Highest Average Subsequent Returns

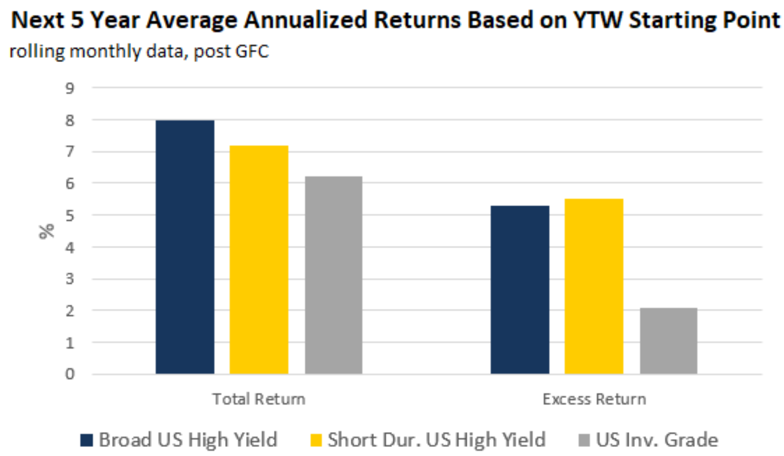
monthly data



Source: SKY Harbor, ICE Data Indices, Bloomberg

Based on results above, BB-rated would appear poised to outperform in 2024. We would note, however, that in the 12 months that followed the three "last hike" dates mentioned above, the high yield index default rate increased, on average, by ~ 70 bps. As such, we think credit loss avoidance – via our bottom-up security selection – could otherwise mitigate some of the implied return disadvantage for lower-rated credit.

- **Strong Carry Reduces Need to Time Market** – Near-term uncertainty, particularly given a non-zero chance of an exogenous shock to the market, typically makes returns over the short run increasingly difficult to predict. As such, though our next 12-month return estimate (~7%) appears justifiable based on two different methodologies discussed previously, average annualized returns projected over a longer period of time should support a higher degree of conviction. Below, using data since the end of the global financial crisis, we find that current YTW levels offered by the high yield bond market (~ 8.5%) have typically resulted in subsequent 5-year average annualized total returns in the 8% range (5% to 6% on an excess return basis).



Source: SKY Harbor, company filings, Bloomberg, FactSet

On balance, we maintain a cautiously optimistic view of the high yield asset class as we enter 2024. First, we think most of the pain associated with central bank tightening is now behind us. Second, though likely beyond peak earnings growth for this cycle, persistent balance sheet repair in the post-pandemic period and improved index quality (partially at the expense of leveraged loan and private debt markets, in our view) should translate into a relatively benign default rate environment in 2024. Finally, top quartile yields should provide cushion in the event of spread widening, with elevated carry positioning the index for attractive risk-adjusted returns over the intermediate term.

In conclusion, we present below key elements of our 2024 outlook in the context of work done by credit strategists who have recently published their own reports.

2024 US High Yield Projections

SKY Harbor estimates vs. selected strategists

Spread Target (bps)	
Morgan Stanley	475
JP Morgan	475
Barclays	463
SKY Harbor	460
BofA	450
Goldman Sachs	369
Group Avg. (ex SKY)	**446**

Total Return	
JP Morgan	11.0%
Goldman Sachs	8.6%
SKY Harbor	7.0%
Morgan Stanley	6.9%
BofA	6.6%
Barclays	5.0%
Group Avg. (ex SKY)	**7.6%**

Bond Default Rate (par)	
SKY Harbor	4.40%
Morgan Stanley	4.25%
Goldman Sachs	3.50%
Barclays	3.50%
BofA	3.40%
JP Morgan	2.75%
Group Avg. (ex SKY)	**3.48%**

Loan Default Rate	
SKY Harbor	--
Goldman Sachs	5.20%
Barclays	5.00%
Morgan Stanley	4.75%
BofA	4.60%
JP Morgan	3.25%
Group Avg. (ex SKY)	**4.56%**

Recovery Rate (%)	
Morgan Stanley	--
BofA	41
JP Morgan	40
SKY Harbor	35
Goldman Sachs	35
Barclays	23
Group Avg. (ex SKY)	**35**

Gross Issuance ($ bn)	
Morgan Stanley	230
JP Morgan	225
Barclays	215
Goldman Sachs	205
SKY Harbor	190
BofA	165
Group Avg. (ex SKY)	**208**

Note that not all banks use the same underlying high yield bond index; also, when ranges were provided, we use the midpoint as the estimate.

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