SKY HARBOR
CAPITAL MANAGEMENT

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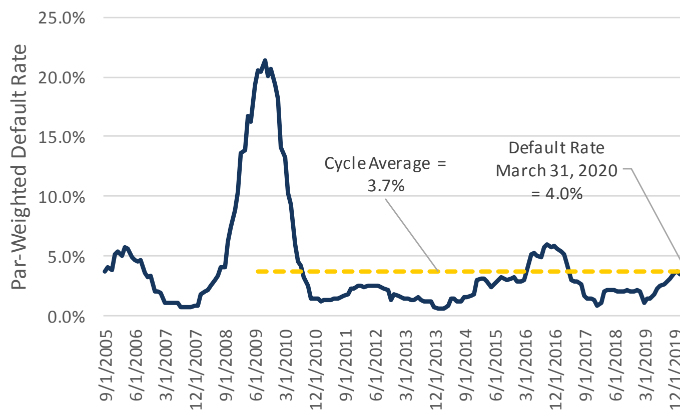
Weekly Briefing

SKYView: Default Risk

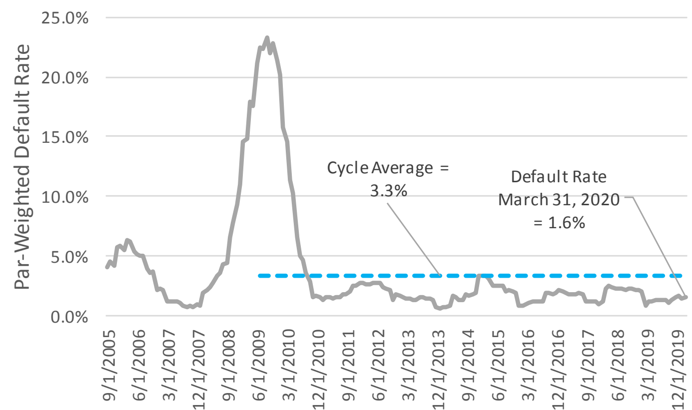
Default rates among US high yield issuers ticked up modestly in March, but our internal projection model and a rapid increase in the amount of distressed securities (bonds trading wide of 1,000 bps) in the index point to a more material rise in bankruptcies through the balance of the year. In this *Weekly Briefing*, we revisit our 2020 default estimate, and identify sectors with, in our view, mispriced risk. In particular, **we now project a default rate range of ~ 8.0% to 8.5% (~ 5.5% to 6.0% excluding Energy)**, up from the pre-coronavirus estimate of ~ 4.0% published in our 2020 US High Yield Outlook.

At the end of March, the BofA LTM par-weighted default rate for US high yield increased to 4.0%, up from 3.4% in February and 3.5% at the start of 2020. Importantly, the trailing default rate has now eclipsed the cycle average, having last been this high during a period of acute commodity-related stress in 2016. Excluding Energy, the epicenter of stress over the last several years, the default rate has remained steady in the 1.6% context, and less than half the cycle average.

BofA LTM Par-Weighted Default Rates Beginning to Rise
monthly data, trailing 15 years



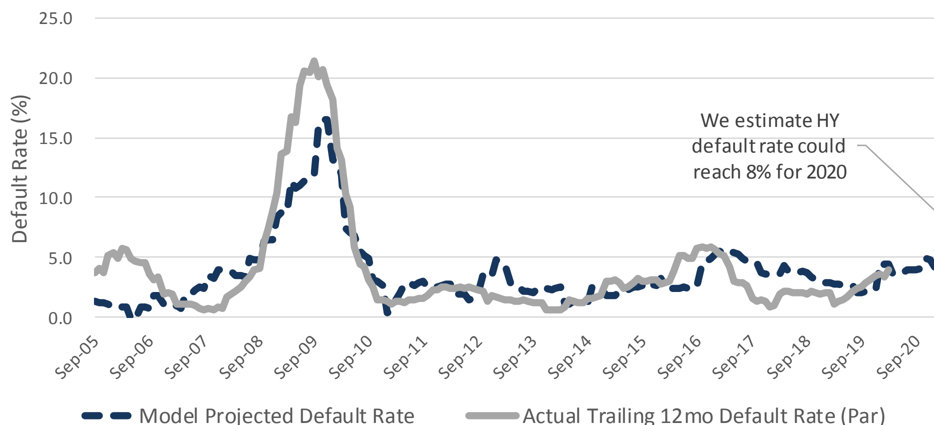
Ex-Energy Par-Weighted Default Rates Stable
monthly data, trailing 15 years



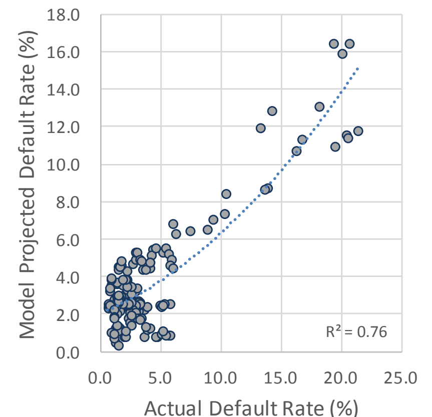
Source: SKY Harbor, BofA Merrill Lynch

As the market is typically forward-looking in nature, we employ our internal default projection model, which utilizes three key inputs in estimating a default rate 12 months in advance. **The output of this model points to an uptick in defaults into the 8.0% to 8.5% range, largely driven by the anticipation of tighter lending standards in the near term**. If reached, an 8%+ default rate would be the highest registered by the index since the global financial crisis. Excluding Energy – one of the largest sectors in the US high yield index and home to most bankruptcy filings over the last several years – our default rate estimate is in the range of 5.5% to 6.0%.

SKY Harbor Default Projection Model
based on monthly data



Regression Fit
based on monthly data



Source: SKY Harbor, BofA Merrill Lynch, ICE BofA Indices, Federal Reserve

Historically, the market has been effective in identifying default candidates well in advance of an actual filing. With this in mind, and utilizing our top-down default estimate of ~ 8%, we next assume that eventual filers are already priced within the widest 10% of the HY bond index (by spread, on a ticker basis). **Cross-checking these names with our fundamental research analyst group, this somewhat simplified approach closely aligns with the firm's bottom-up view of likely default candidates**. Below, we divide the group of likely default candidates by sector and calculate an implied par-weighted default rate for 2020. Note that Energy makes up the vast majority of likely defaults, followed by Transportation, Telecom (skewed by one large issuer) and Retail.

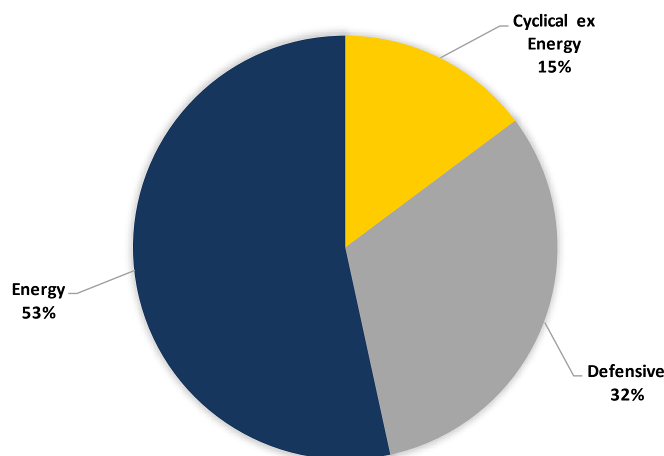
Defaults by Sector (Widest 10% of Index)

data as of April 8, 2020

Sector	Index Face Value of Debt ($mm)	Default Universe Face Value of Debt ($mm)	Implied Default Rate	Actual (LTM) Default Rate
Automotive	23,471	400	2%	0%
Banking	19,022	308	2%	0%
Basic Industry	121,906	2,771	2%	4%
Capital Goods	77,637	725	1%	1%
Consumer Goods	63,326	1,988	3%	4%
Energy	174,103	66,131	38%	16%
Financial Services	52,186	1,105	2%	0%
Healthcare	123,830	4,502	4%	2%
Insurance	12,555	0	0%	0%
Leisure	63,254	2,470	4%	0%
Media	127,327	450	0%	1%
Real Estate	21,097	1,375	7%	1%
Retail	61,021	7,038	12%	5%
Services	71,188	6,184	9%	1%
Technology	60,615	414	1%	1%
Telecom	124,571	24,859	20%	0%
Transportation	12,189	3,114	26%	4%
Utility	30,878	0	0%	0%
Index	**1,240,175**	**123,832**	**10%**	**4%**
Index ex Energy	1,066,071	57,702	6%	2%

Default Breakdown by Cyclicality

see definitions below



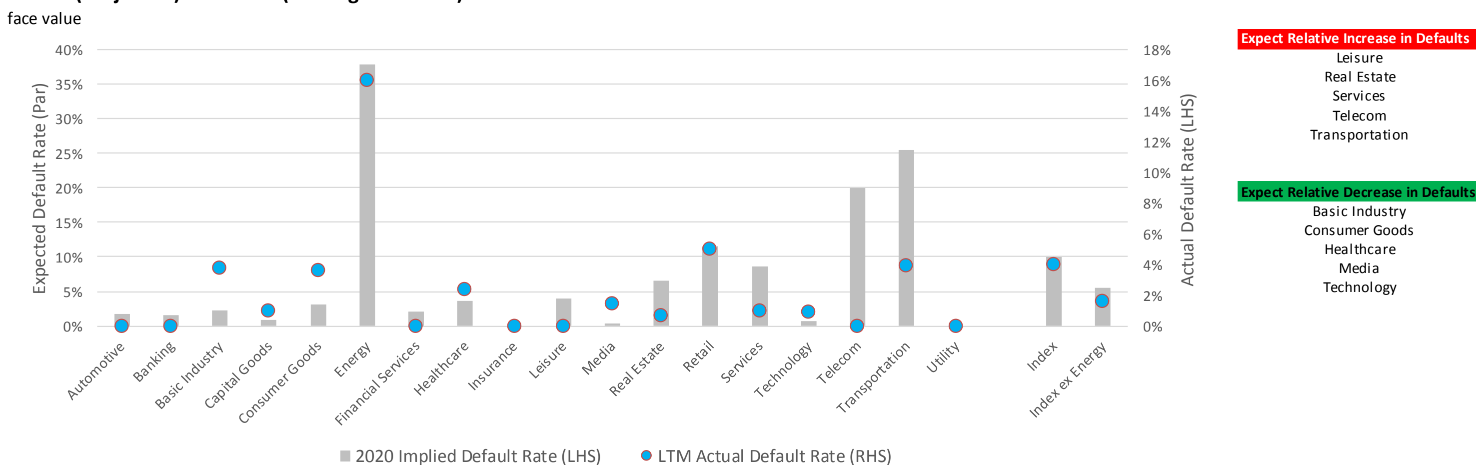
Note: Automotive, Basic Industry, Capital Goods, Leisure, Real Estate, Retail, Technology and Transportation assumed to be "Cyclical"; Banking, Consumer Goods, Healthcare, Financial Services, Insurance, Media, Services, Telecom and Utility assumed to be "Defensive."

Source: SKY Harbor, ICE BofA Indices

Plotting implied 2020 sector default rates derived from the above analysis (LHS below) with actual sector default rates over the trailing-12-month period (RHS), we can get a sense of which sectors are likely to experience relative increases and decreases in default concentrations (note that we scale both metrics so that implied and actual HY Index defaults are aligned). For example, the 2020 implied and LTM actual default levels for Basic Industry suggest a relative reduction in default concentration over the coming quarters, and vice versa for Transportation.

Model (Projected) vs. Actual (Trailing 12-month) Defaults

face value

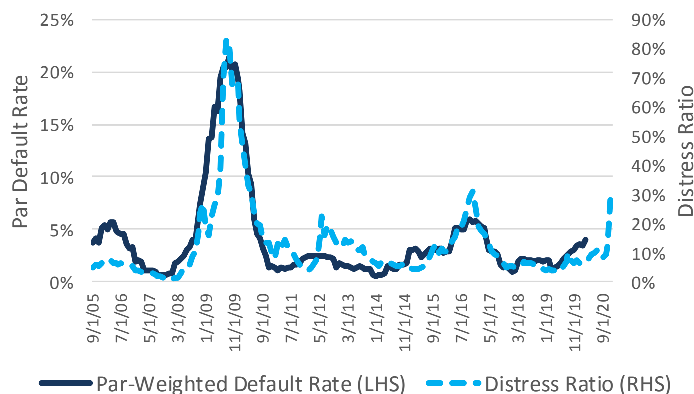


Source: SKY Harbor, ICE BofA Indices

As a sanity check to our regression-implied default rate estimate, we look at the relationship between index distress ratios and subsequent default rates. The ICE BofA US High Yield Index (H0A0) distress ratio increased to ~ 29% by the end of March 2020, up from ~ 12% in February and ~ 8% at the start of the year. **A 29% distress ratio, based on monthly data going back fifteen years, implies an 8.5% default rate by the end of December 2020**, a level quite similar to our regression model output. As demonstrated below, an uptick in distress typically precedes an uptick in defaults approximately nine months in advance (in our analysis, a nine-month lag achieves the greatest correlation).

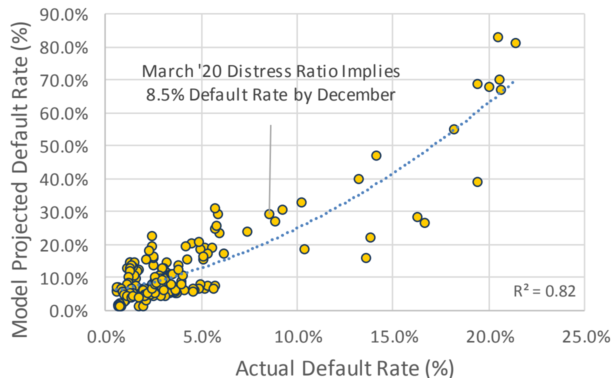
Distress Ratio Correlated With Default Rate in 9 Months

monthly data



Distress Ratio Implies 8.5% Default Rate by December

regression fit

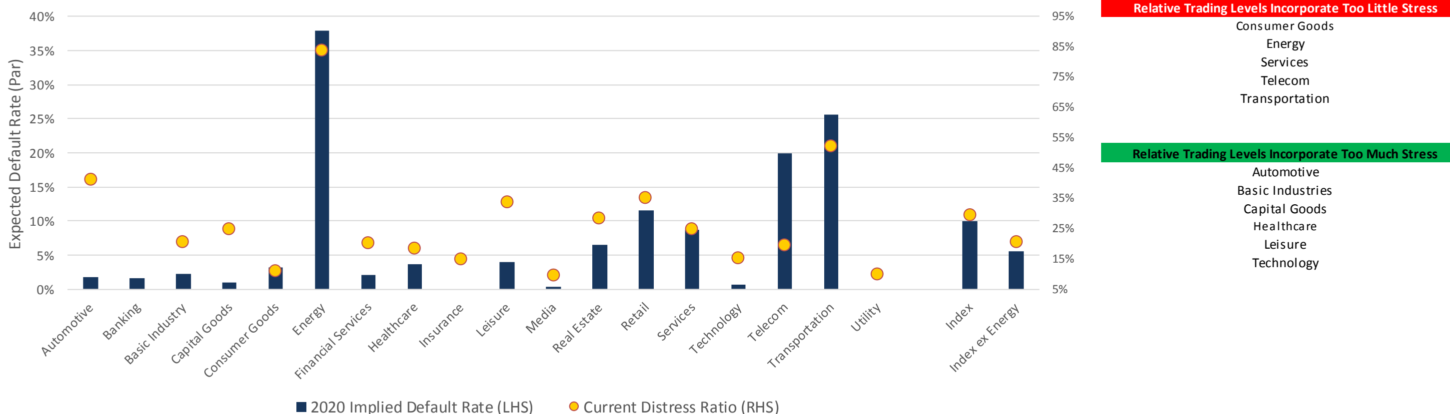


Source: SKY Harbor, ICE BofA Indices

Given the strong relationship between distress ratios and subsequent default rates, we compare both measures on a sector basis below. Similar to our earlier analysis, we chart 2020 implied default rates (LHS) against distress ratios at present (RHS), again scaling the axes so that both measures align for the HY Index. In this simulation, market spreads appear to be pricing in risk in excess of expected default rates for Automotive, Basic Industry, Capital Goods, Financial Services, Healthcare, Leisure and Technology. Consumer Goods, Energy, Services, Telecom and Transportation appear to be pricing in too little distress relative to model-implied default risk through the balance of the year.

Model (Projected) Defaults vs. Distress Ratios

face value



Source: SKY Harbor, ICE BofA Indices

In conclusion, US high yield default rates ticked up modestly in March, but our internal default projection model implies a more significant increase is likely to materialize over the next several quarters. In particular, our top-down model projects a default rate of 8.0% to 8.5% in 2020 (5.5% to 6.0% excluding Energy), below global financial crisis peaks but well in excess of levels seen over the last decade. Furthermore, an analysis of spread-implied default candidates is consistent with results generated on a bottom-up basis from our internal research team, with Energy, Transportation, Telecom and Retail most at risk. Finally, we find several areas of disconnect between sector distress ratios and implied 2020 sector default rates, with Automotive and Leisure potentially trading too wide, and Telecom and Transportation potentially trading too tight.

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