Market Volatility



Agenda

- 1. 6 Risks that Matter More Now
- 2. Oil and Gas Rating Trends
- 3. Remaining Q&A

Poll Question: Which of these Investment Risks are you most concerned with now?

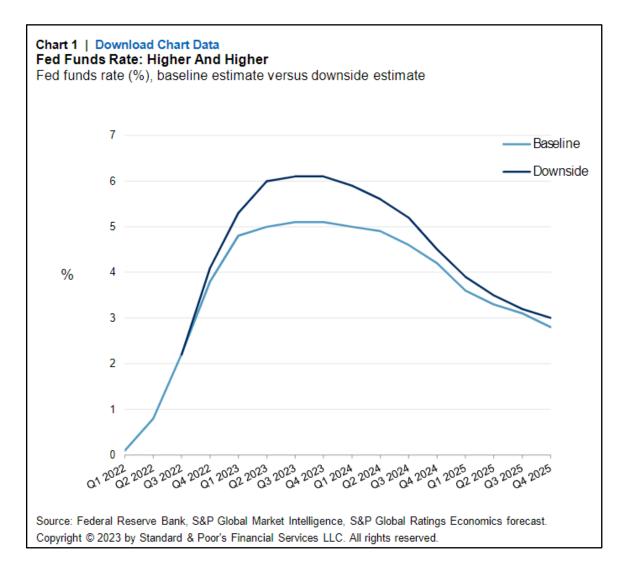
- 1. Interest Rate Risk
- 2. Liquidity Risk
- 3. Credit Risk
- 4. Market Risk
- 5. Concentration Risk
- 6. Climate Risk

Interest Rate Risk - Key Questions

1. What is Interest Rate Risk?

2. What's driving higher interest rates?

3. What is the near-term outlook for the Fed Funds Rate in 2023?



Why does Interest Rate Risk Matter More Now

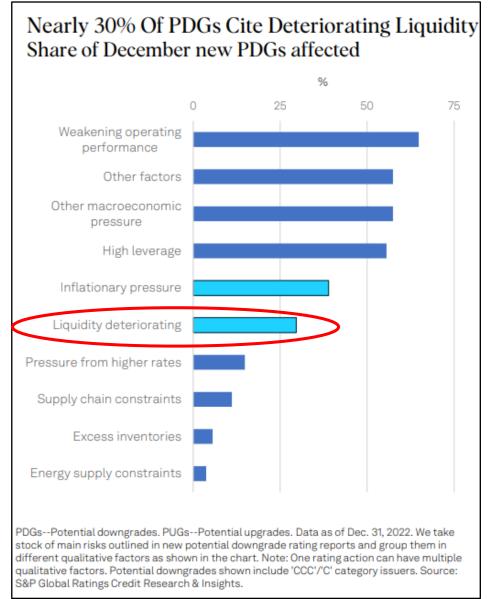
- 1. Helped trigger last month's second and third largest banking failures in US history
- 2. Generally troublesome for stocks and bonds
- 3. Poses near term risk to credit quality
- 4. Highly leveraged sectors such as media, technology and telecommunications are the most impacted

Liquidity Risk - Key Questions

1. What is Liquidity Risk?

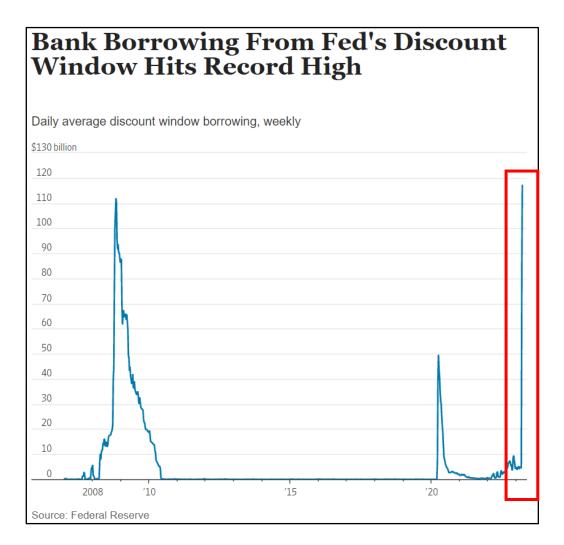
2. Why is Liquidity emerging as a heighted risk factor?

3. What central bank actions are being to taken ensure market confidence?



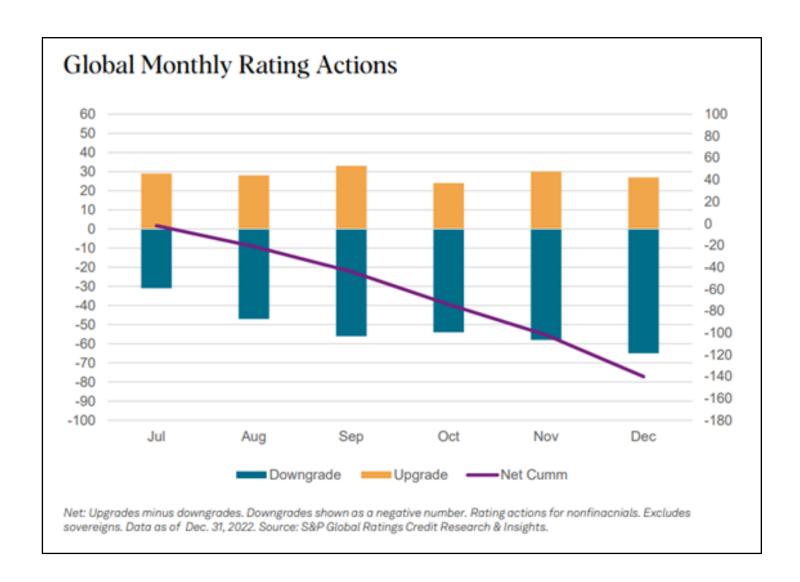
Why does Liquidity Risk Matter More Now

- 1. Liquidity matters more during adverse market conditions
- 2. In March, borrowings from the Fed's discount window hit a record high
- 3. Borrowing from the discount window carries a stigma that a bank is in trouble



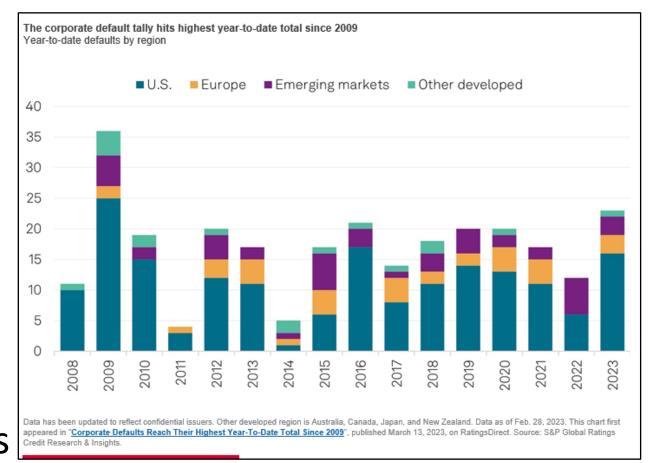
Credit Risk - Key Questions

- 1. What is Credit Risk?
- 2. Is the current credit weakness contained to only banks?
- 3. What is a credit crunch?



Why does Credit Risk Matter More Now?

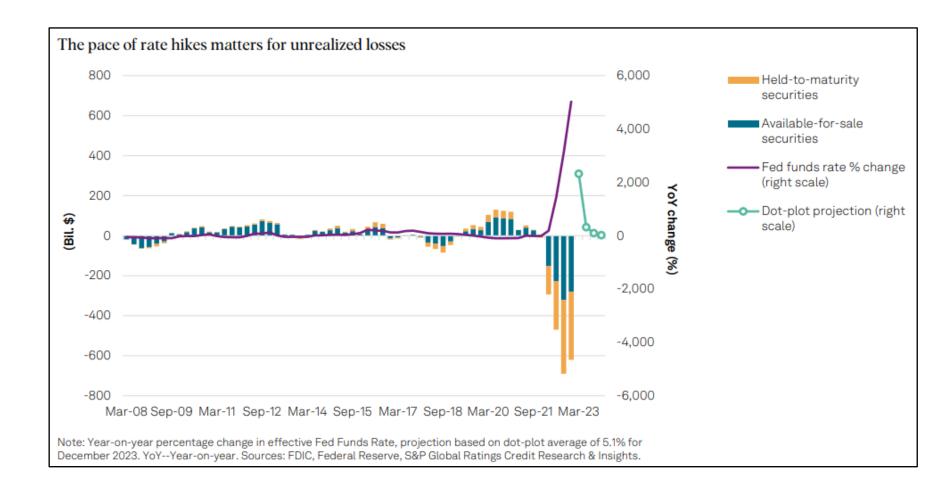
- 1. Means more when there are adverse economic conditions
- 2. Deeply connected with other risks indicated
- 3. Global defaults are on the rise
- 4. Heightened credit risk cuts across all regions & asset classes



Market Risk - Key Questions

1. What is Market Risk?

2. Why has Market Risk accelerated?

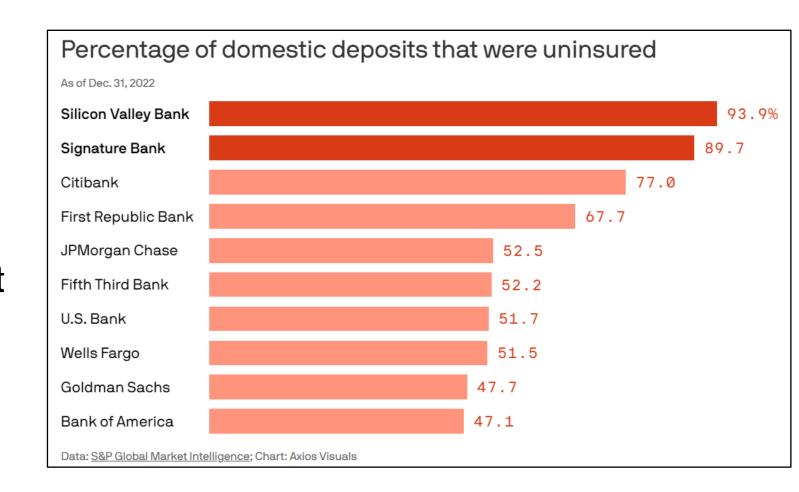


Why does Market Risk Matter More Now?

- Seems to impact banks more because they are highly leveraged, confidence sensitive institutions
- 2. The best-protected banks will continue to avoid market risk concentrations
- 3. Both SVB & Signature Bank were exposed to high market or duration risk.
- 4. Losses materialized as depositors fled both banks

Concentration Risk - Key Questions

- 1. What is Concentration Risk?
- 2. Which type of Concentration Risk helped drive the current banking crisis?



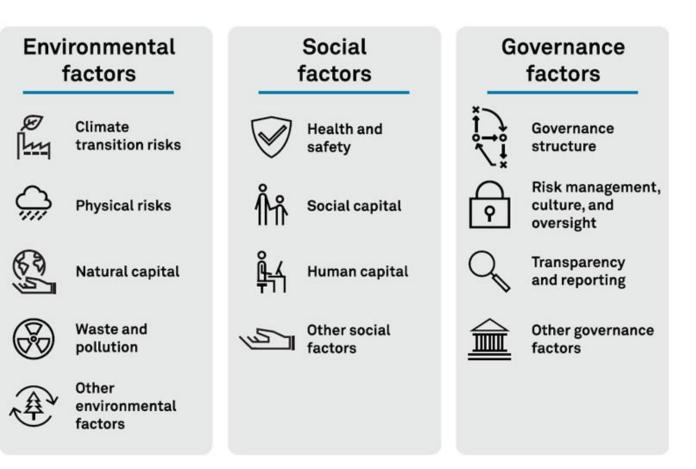
How about other types of Concentration Risk?

- 1. Asset Concentration
- 2. Customer concentration
- 3. Sector concentration
- 4. Product concentration
- 5. Geographic concentration

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Climate Risk - Key Questions

- 1. What is ESG?
- 2. Which is Physical Risk?
- 3. What is Transition Risk?

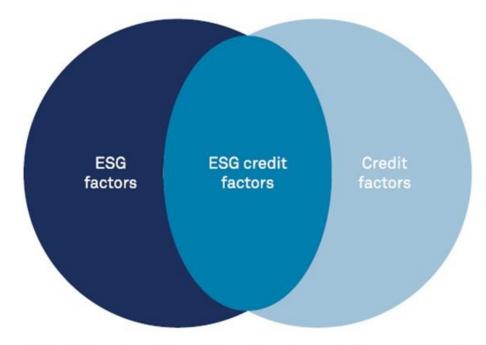


ESG--Environmental, social, and governance. Source: S&P Global Ratings.

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Methodology: The Intersection of ESG and Credit

Measuring the influence of ESG factors on the credit quality



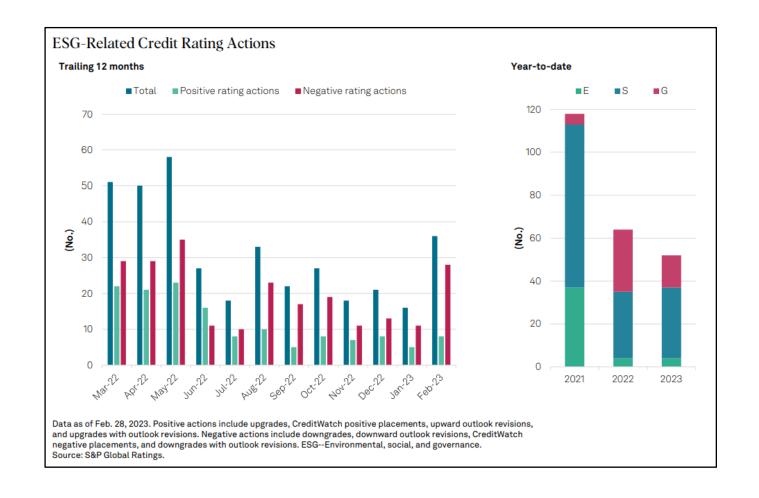
ESG--Environmental, social, and governance. Source: S&P Global Ratings.
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- Not all ESG factors materially influence credit ratings.
- We focus on ESG Credit Factors those that have been shown to be sufficiently material to influence credit ratings across sectors.
- Entities with strong creditworthiness may not necessarily have strong ESG characteristics.

5 Ways ESG is Transforming Traditional Credit Analysis

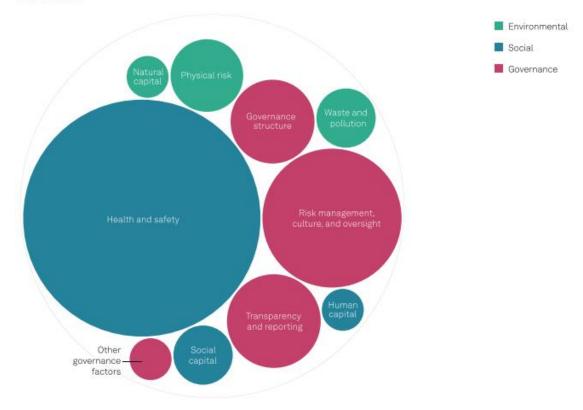
- 1. ESG Matters More Now
- 2. ESG Factors are Directly Impacting Credit Quality across All Sectors
- 3. Systemic ESG Country and Industry Risk Factors Take on Added Importance
- 4. Entity-specific Competitive Analysis will further Differentiate ESG Credit
- 5. Isolating the Main ESG Factors is the Key to Understanding the Impact on Credit Quality

ESG Related Credit Rating Actions



ESG Factors Driving Credit Rating Actions

Leading ESG Factors Driving Credit Rating Actions As A Proportion Of Total Tagged Factors Year-to-date



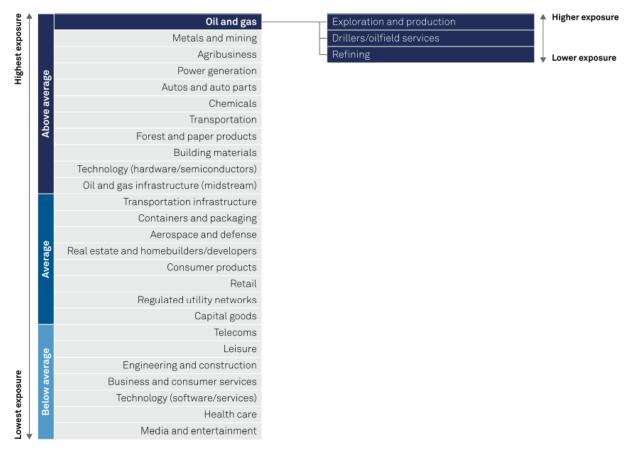
Data as of Feb. 28, 2023. Bubble size is determined by the occurrence of factors between January and February 2023. In instances where multiple ESG factors were recorded as the main drivers of the credit rating action, each is counted for the purposes of this infographic. ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Climate Exposures by Industry

Chart 1

Qualitative Sector Listing Of Relative Environmental Exposure: Oil And Gas

Greenhouse gas emissions, waste, pollution, and land use



Source: S&P Global Ratings.

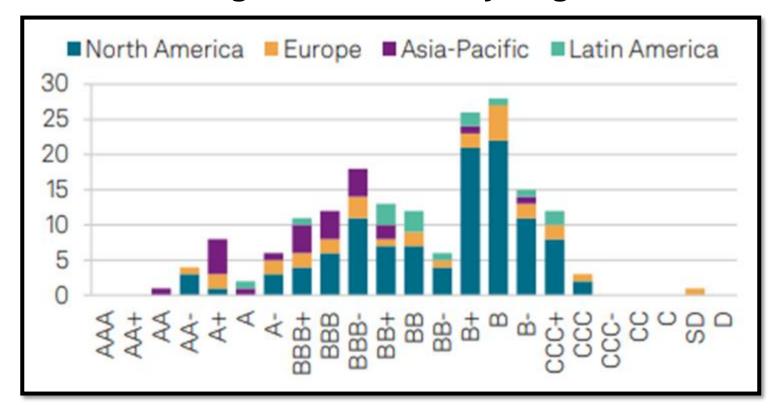
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Poll Question: Which of these Risks are you most concerned with now?

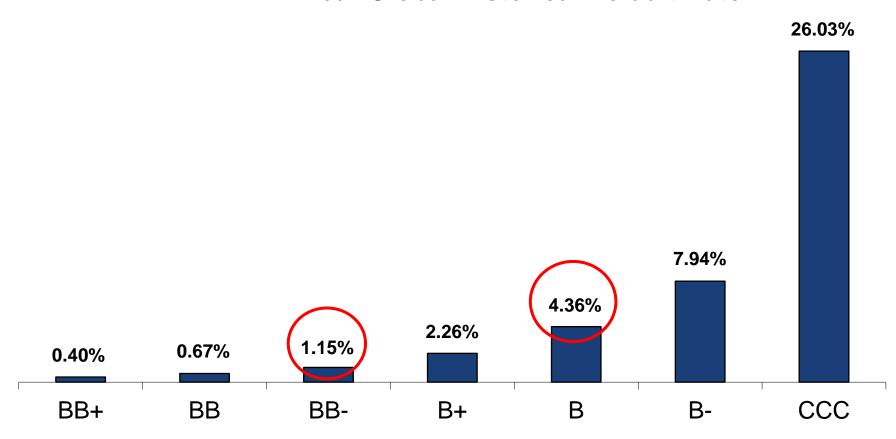
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Ratings Distribution by Region



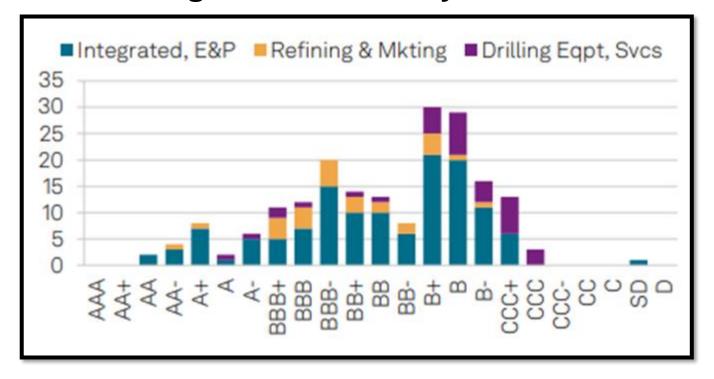
Granularity Matters

1-Year Global Historical Default Rate*



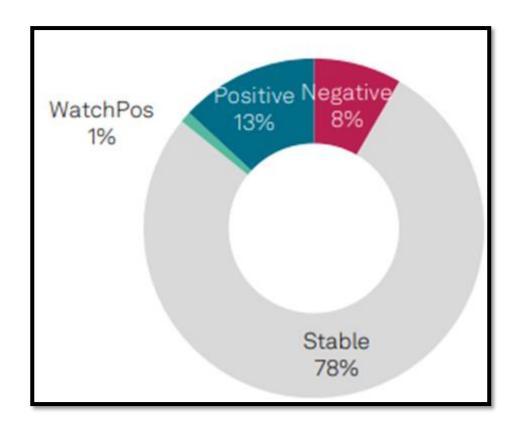
*Based on CreditPro default rates,

Ratings Distribution by Subsector



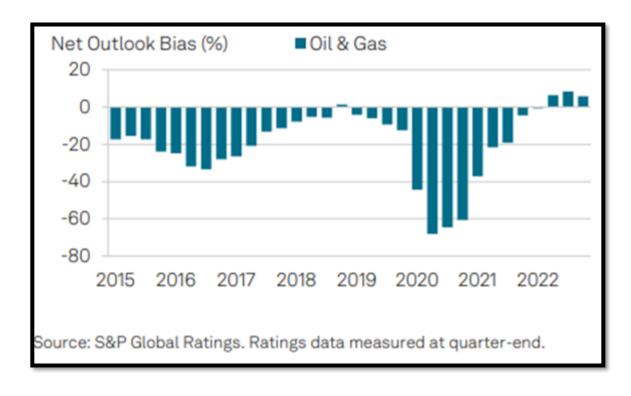
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Oil and Gas Ratings Outlook

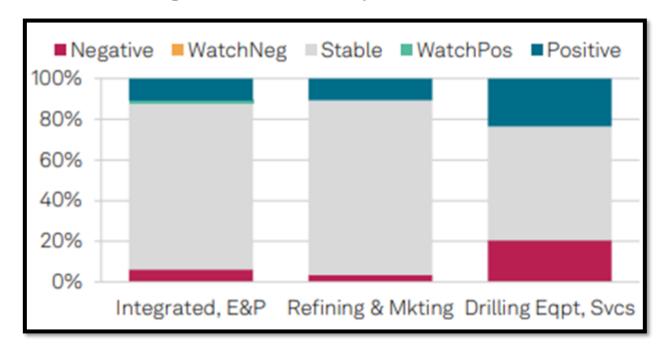


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Ratings Outlook Net Bias



Ratings Outlook by Subsector



APPENDIX

Early Warning Signals: Using Credit Metrics

Early Warning Signal Credit Metrics

EBIT Margin

Interest Coverage (EBIT/Interest Expense)

Return on Capital

Net Income / Total Liabilities

Debt to Total Capital

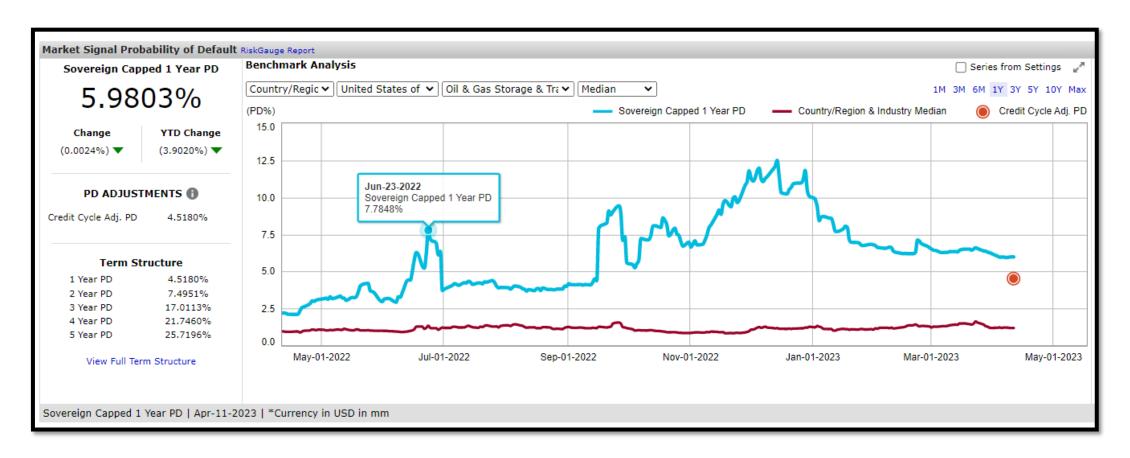
Early Warning Signals: Using Credit Metrics

Credit Metric Deterioration Before Downgrade

Chart Selected Items		Most			
		Recent 3 Yrs.	12 months	12 months	12 months
For the Fiscal Period Ending		Unweighted Avg.	Mar-31-2020	Mar-31-2021	Mar-31-2022
Currency		USD	USD	USD	USD
Adjustment Status	9		Reviewed	Reviewed	Reviewed
[10096]					
Profitability Metrics [10456]					
EBITDA Margin (%) [45281]	4	8.16	7.84	10.27	6.37
Return on Capital (%) [45254]	d)	2.23	4.63	0.48	1.60
EBIT Margin (%) [45285]	4	1.56	3.21	0.48	0.98
Other Sector Specific Ratios 10458					
Debt/Debt and Equity (%) [45272]	4	81.76	72.09	84.50	88.69
Debt/Debt+Equity(undepreciated basis) ([48916]	- 4	75.89	65.86	73.12	88.69
Debt Fixed Charge Coverage (%) [48909]	40	2.04	3.07	1.74	1.30
ROCE (%), Adj. For AFUDC [45251]	4	(53.02)	(21.45)	(75.37)	(62.25)
ITV (%) [48911]	(4)	NM	NM	NM	NM
EBIT Interest Coverage (x) [45258]	4	0.51	1.26	0.08	0.20

Early Warning Signals with Equity-Driven Credit Models

S&P's Market Signal Probability of Default Model indicated potential credit deterioration as early as Q2 2022.



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Early Warning Signals

S&P Ratings Actions

- 1. Downgraded from B to B- on August 31, 2022
- 2. Downgraded from B- to CCC+ on November 23, 2022



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Thank You