# Public Markets ESG Rating

June 2023

FOR INSTITUTIONAL, PROFESSIONAL, QUALIFIED AND ACCREDITED CLIENT USE ONLY

## Introduction

At Muzinich & Co. fundamental analysis of corporate credit is the core of our investment process. We distinguish ourselves by the depth of our understanding of companies' financial health. Key to that understanding is a comprehensive grasp of the Environmental, Social and Governance (ESG) factors material to each company's future. The asymmetric risk profile of credit means our primary focus is identifying ESG risks that may impair credit quality. However, we also recognise the urgent need for companies to transition to sustainable business practices to secure their financial longevity.

To support further ESG insight, we have developed a proprietary ESG scoring methodology for corporate bond and leveraged loan issuers. This produces two outputs: the Muzinich Industry Sustainability Rating (ISR), a 0-5 rating that assesses a company's performance *within* its industry, and the Muzinich Global Sustainability Rating (GSR), that converts the 0-5 rating to an A+ to E- scale for comparisons *across* industries.

## Method – Part 1: Industry Sustainability Rating (ISR)

**Step 1.1 – Source relevant data:** Taking a global universe of over 24,000 companies across 45 industries, we source raw data on 160 different ESG Key Performance Indicators (KPIs) from Sustainalytics. These include factors such as hazardous waste, diversity programmes and anti-corruption policies. For certain issuers, we may also include ESG data from Sustainable Fitch, which has more comprehensive coverage of privately held loan issuers. We also source a climate risk metric from our carbon data provider ISS ESG.

**Step 1.2 - Determine Materiality:** Our analysts have determined which underlying KPIs are most material for their industries and have assigned weights accordingly. A minimum of three E, three S, and three G KPIs are required per industry. In addition to the industry-specific KPIs, three universal KPIs, one each for E, S and G, are also included in all industries to reflect their importance. The same industry-specific weights are applied to KPIs for bond and loan issuers.

*Table 1 – Example KPI materiality weights for select KPIs*

| | KPI name | Aerospace & Defence | Food Products | Steel |
|---|---|---|---|---|
| E | Environmental Policy (universal) | 8.7% | 7.6% | 10.3% |
| E | Sustainable Agriculture Programmes | 0% | 7.6% | 0% |
| S | Diversity Programmes (universal) | 5.2% | 2.4% | 7.1% |
| S | Health & Safety Management | 5.2% | 0% | 10.3% |
| G | ESG Reporting Standards (universal) | 8.7% | 2.4% | 10.3% |
| G | Political Involvement Policy | 8.7% | 0% | 0% |

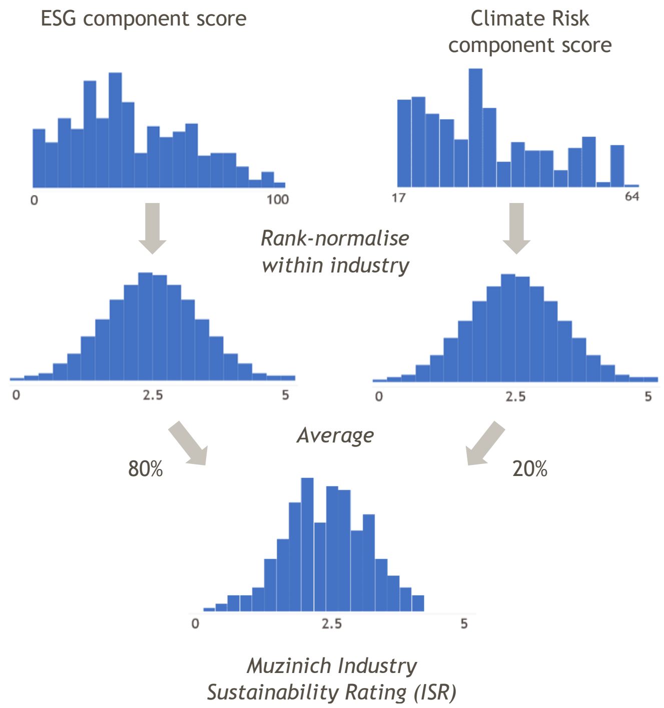
**Step 1.3 – Calculate the ESG Component Score:** Using the proprietary selection of KPIs and their respective weights, we calculate a weighted average ESG score for each company. Missing data points are treated as blanks with the weights rescaled as per Table 2. A minimum of 30% of the KPIs by weight is required for a score to be generated; otherwise the company remains unrated (see section 3.1 on Manual Rating).

*Table 2 - Example of a weighted average score calculation*

| KPI | KPI Score | Weight | Rescaled weight | Weighted Score |
|---|---|---|---|---|
| E.1 | 100 | 15.8% | 18.8% | 18.8 |
| E.2 | 25 | 10.5% | 12.5% | 3.1 |
| E.3 | - | 10.5% | - | - |
| S.1 | 0 | 5.3% | 6.3% | 0 |
| S.2 | 50 | 10.5% | 12.5% | 6.25 |
| S.3 | 50 | 15.8% | 18.8% | 3.75 |
| G.1 | 100 | 5.3% | 12.5% | 12.5 |
| G.2 | - | 10.5% | - | - |
| G.3 | 75 | 15.8% | 18.8% | 14.1 |
| | | 100% | 100% | 58.5/ 100 |

**Step 1.4 – Combine Component Scores:** Although both parts, the *ESG component* and the *Climate Risk component*, are scored from 0-100, these scales are not comparable. To be able to combine them in a way that preserves meaning, we first transform the component scores using a normalisation technique based on each company's rank within its industry. Rank-normalised scores are adjusted to a 0-5 scale, 0 being worst, 5 being best. Where climate risk data is not available, we assume a company is in line with the industry average and is therefore given a *Climate Risk Component* score of 2.5. The normalised scores are then averaged with an 80% weight to the *ESG component* and 20% weight to *the Climate Risk component* to arrive at a 0-5 *ISR* for each company that indicates ESG management versus industry peers.

*Figure 1 - Illustration of Normalising and combing the scores to create the Muzinich Industry Sustainability Rating*




Muzinich views, opinions and investment process described herein are for illustrative purposes only, subject to change and not to be construed as investment advice or an offer to engage in any investment activity.

## Method – Part 2: Global Sustainability Rating (GSR)

Because the *ISR* is an industry-specific rating, a company rated 3.5 in the Oil and Gas industry is not equivalent to a company rated 3.5 in the Software industry due to the considerable difference in ESG risk potential. To make comparisons across industries we must first adjust the rating to account for these differences.

**Step 2.1 – Source Industry ESG Exposure Risk data:** We use the Sustainalytics ESG Risk Exposure Score – a numerical score that quantifies exposure to potential ESG risks – as the basis for our adjustment factor. Averaging across all companies in each industry gives an estimate of overall ESG exposure risk.

**Step 2.2 – Create the Global Sustainability Rating:** Using the industry level ESG Risk Exposure averages, we create an adjustment factor to the *ISR*. The resultant numerical score is then compared to the range of possible scores and ascribed an E- to A+ rating based on its relative position giving the *Global Sustainability Rating*. The *GSR* is centred on the principle that any company can get the best possible rating but only companies in the most ESG risk exposed industries can get the worst rating.

## Method – Part 3: Manual Rating and Notching

**Step 3.1 – Manual Rating:** Some companies cannot be rated within our database, either because they do not meet the 30% assigned weight threshold or third-party ESG data is not available. In this case our analysts, by entering values for unscored KPIs using their knowledge and publicly available ESG data, compute a rating using Muzinich's ***P****roprietary* ***R****ating* ***O****f* ***S****ustainability* ***Per****formance* tool ("PROSPER").

**Step 3.2 – Notching:** A core principle of all our research is that quantitative data does not always tell the whole story. Where analysts feel a rating does not accurately reflect their perception of ESG risk at a company, they can "notch" the *ISR*. The *ISR* can be notched upwards by a maximum of 0.5, and downwards by 1, in 0.25 increments. Analysts notching a rating must, with evidence, justify which of the following categories they are notching for:

- the issuer is associated with significant ESG controversies;
- the median climate score is not representative of perceived risk;
- an engagement has led to meaningful changes in ESG risk;
- evidence of upcoming structural changes to ESG circumstances;
- evidence of inaccurate or significantly lagging raw ESG data.

**Step 3.3 - Periodic Review:** Our ratings are monitored and updated by our analysts as required by significant ESG events or changes in underlying ESG data which is refreshed on a monthly basis. Our analysts naturally cycle through research on companies within their coverage but must review the ESG scores at least every six months. Muzinich's dedicated ESG team work hand-in-hand with the analysts to help ensure data accuracy and consistency.

## Conclusion

Muzinich's ESG Rating system is a two part process that rates a company relative to its industry peers (the *ISR*) then, by adjusting for industry level ESG risk exposure, gives a globally comparable rating (the *GSR*). This system gives us a consistent base for discussions within the credit research team and highlights areas for further engagement with issuers in their transition to more sustainable practices. The ratings are recorded in analysts' research templates and stored in a centrally accessible database.

*Figure 2 – Muzinich Manual Upload ESG Score Calculator*

Muzinich & Co

**PROSPER TOOL**

Date 23-H1 21/06/2023

Machinery
*Heavy Machinery and Trucks* <- 1. Select Industry
<- 3.1 Enter Sub-Industry
NOT LISTED <- 2. Select Company (if not listed, select "NOT LISTED")
EXAMPLE CO <- 3. Enter Corporate Ticker

Search for prior Manual Scores

Minimum Weight Assigned >30% -> 100%

| | KPI Code | Universal KPI Name | Weight | 4. Enter Universal KPI Performance (Mandatory) | Score | Sustainalytics KPI Scores |
|---|---|---|---|---|---|---|
| Definition | E.1.1 | Environmental Policy | 7.3% | The company has a strong policy | 75 | |
| Definition | S.1.3 | Diversity Programmes | 4.9% | The company has an adequate programme | 50 | |
| Definition | G.2.1 | ESG Reporting Standards | 7.3% | The company's ESG reporting is adequate | 50 | |

| | KPI Code | Sector Specific KPI Name | Weight | 5. Enter Sector Specific KPI Performance | Score | Sustainalytics KPI Scores |
|---|---|---|---|---|---|---|
| Definition | E.1.2 | Environmental Management System | 7.3% | The company has an adequate EMS | 60 | |
| Definition | E.1.11 | Renewable Energy Use | 4.9% | Between 5% and 9.9% of the company's primary energy use comes from renewable energy sources | 40 | |
| Definition | E.2.1.7 | Recycled Material Use | 4.9% | Some but less than 10% of the raw material used by the company is made of recycled or re-used material | 30 | |
| Definition | E.3.1.1 | Sustainable Products & Services | 4.9% | Between 5% and 9.99% of the company's annual revenue is derived from sustainability-related products or services | 100 | |
| Definition | E.3.1.6 | Eco-Design | 4.9% | Environmental impact is systematically considered at the design stage of products | 100 | |
| Definition | E.3.1.7 | Product Stewardship Programmes | 4.9% | The company has no programmes for end-of-life product management | 0 | |
| Definition | S.1.1 | Freedom of Association Policy | 7.3% | There is no evidence of a formal policy but the company has a general statement addressing this issue | 20 | |
| Definition | S.1.6.6 | Employee Fatality Rate | 4.9% | The company's fatality rate is average | 50 | |
| Definition | S.2.1 | Scope of Social Supplier Standards | 2.4% | The company has weak social supply chain standards | 25 | |
| Definition | S.2.1.3.1 | Conflict Minerals Programmes | 4.9% | The company has an adequate programme | 50 | |
| Definition | S.2.2.2.1 | Supply Chain Management | 4.9% | The company has a strong management system | 75 | |
| Definition | S.2.2.6 | Contractor Fatalities | 4.9% | Between 5 and 10 fatalities have occurred among contractors in the last three years | 50 | |
| Definition | G.1.1 | Bribery & Corruption Policy | 7.3% | The company has a weak policy or a general statement addressing the issue | 25 | |
| Definition | G.1.2 | Whistleblower Programmes | 4.9% | The company has a very strong programme | 100 | |
| Definition | G.2.5 | ESG Governance | 4.9% | There is no board oversight of ESG issues | 0 | |
| Definition | G.2.9.1 | Board Independence | 2.4% | The company's level of board independence raises minor concerns | 30 | |

Yes <- 6. Select Yes to Calculate Score

3.10 **TOTAL SCORE (0-5)**
C **SECTOR ADJUSTED SCORE (E- to A+)**

Add Notching

Save