ESG
Data Products

February 2022

BLUEDOT
CAPITAL

ESG and impact investing advisory with the goals of risk management and value enhancement

Blue Dot Capital is a sustainable finance consultancy. We partner with investors and investment managers to support the end-to-end development and execution of ESG and impact investing capabilities across asset classes. Our clients and partners include asset management, alternative investment, and wealth management firms.

Snapshot:
ESG Data Products
February 2022

Introduction

We are pleased to share our latest 'Snapshot: ESG Data Products' that maps the scoring methodologies, data sources, and use cases of ESG and climate data products across select major providers.

In introducing our previous Snapshot in December 2020, we acknowledged that although much had been said about the divergence of ESG scores and ratings, we believe that the inherent complexities of identifying, gathering, and distilling ESG data render the hopes of a perfectly aligned ESG scoring system misplaced and premature.

Since then, newer ESG and climate data products have been launched and the scrutiny of the ESG data patchwork has heightened. This growing scrutiny is reflected in the final report[1] on ESG ratings and data from International Organization of Securities Commissions (IOSCO) that recommends that regulators could consider focusing more attention on the use of ESG ratings and data products in their jurisdictions. In January, in a global first, India's capital markets regulatory body, Securities and Exchange Board of India (SEBI), released a consultation paper[2] seeking to regulate ESG ratings providers, mandate disclosures, and allow listed companies, registered funds, or index-providers to use only accredited ESG raters.

We see providers addressing the persistent criticism of 'black box' methodologies through enhanced disclosures. However, perfect alignment among data products and their assessments is still years away and practitioners are leveraging data products with complementary use cases to hone a comprehensive understanding of ESG opportunities and risks.

We will continue to closely track the maturing ESG data product landscape as coverage expands, transparency improves, and more players enter the market.

1. hhttps://www.iosco.org/library/pubdocs/pdf/IOSCOPD690.pdf
2. https://www.sebi.gov.in/reports-and-statistics/reports/-jan-2022/consultation-paper-on-environmental-social-and-governance-esg-rating-providers-for-securities-markets_55516.html

New York, NY   www.bluedotcapital.co   hello@bluedotcapital.co

MSCI defines a risk as material to an industry when it is likely that companies in that industry will incur substantial costs in connection with the identified risk.

Implied Temperature Rise

MSCI Implied Temperature Rise (°C) demonstrates temperature alignment of companies, investment portfolios, funds, and indexes with the goal of limiting global warming in 2100 to below 2°C compared to pre-industrial levels.

Scoring Methodology: To evaluate alignment, MSCI allocates enterprise-level budget for each company based on the remaining global carbon budget. Based on a firm's emissions track record, stated emission reduction targets, and other data, MSCI estimates calculates the projected emissions over the next five decades. Projected emissions below budget would imply an 'undershoot', while projected emissions above budget would imply an 'overshoot'. Assuming the whole economy is subjected to the same carbon budget over/undershoot level as the company (or portfolio) under consideration, MSCI calculates the global implied temperature rise in year 2100 or later.

Issues Evaluated	Coverage	Data Sources
Climate change	10,000 public companies, including those within the MSCI ACWI Investable Market Index	Public data on companies' current emissions and stated decarbonization targets

ESG Ratings

CCC to AAA

MSCI ESG Ratings evaluate a company's resilience to long-term, industry material ESG risks based on its ESG risk exposure and management in comparison to peers. The ratings range from CCC (laggard) to AAA (leader).

Scoring Methodology: Leveraging the collective expertise of over 200 research analysts in addition to artificial intelligence, machine learning, and natural language processing, MSCI assesses industry-specific ESG Key Issues based on a rules-based methodology to calculate a weighted overall ESG rating.

Issues Evaluated	Coverage	Data Sources
37 ESG Key Issues most material to a GICS® sub-industry or sector reviewed weekly	Over 8,500 companies and over 680,000 equity and fixed income securities	Over 1000 data points including over 100 specialized datasets (government, NGO, models), company disclosures, and over 3400 daily media sources

ESG Fund Ratings

ESG Fund Ratings apply MSCI ESG Ratings on a fund level, enabling users to evaluate how mutual funds and ETFs address ESG risks and opportunities. The ratings range from CCC (laggard) to AAA (leader).

Scoring Methodology: Leveraging its ESG ratings database comprising over 8,500 companies and over 680,000 equity and fixed income securities, MSCI calculates weighted average scores of fund holdings for 53,000 multi-asset class mutual funds and ETFs globally.

Issues Evaluated	**Coverage**	**Data Sources**
37 ESG Key Issues most material to a GICS® sub-industry or sector reviewed weekly	53,000 mutual funds and ETFs	Over 1000 data points including over 100 specialized datasets (government, NGO, models), company disclosures, and over 3400 daily media sources

Sources

- https://www.msci.com/our-solutions/climate-investing/net-zero-solutions/implied-temperature-rise
- https://www.msci.com/our-solutions/esg-investing/esg-ratings
- https://www.msci.com/our-solutions/esg-investing/esg-fund-ratings

ISS ESG ▷

ISS ESG refers to the Sustainability Accounting Standards Board (SASB)'s definition of materiality. SASB identifies financially material issues as those that are reasonably likely to impact the financial condition or operating performance of a company and therefore are most important to investors. SASB standards are market-informed and industry-specific.

ESG Corporate Rating
D- to A+

Taking a sector-specific and materiality-focused approach, ISS ESG Corporate Rating assesses companies' management of ESG issues on a forward-looking basis. The rating ranges from D- (poor) to A+ (excellent). Additionally, a decile ranking from 10 (low) to 1 (high) helps users discern relative performance against rated entities.

Scoring Methodology: ISS ESG assigns industry-specific weights at topic and ESG pillar level based on a pool of over 800 indicators. Specific to each industry, it identifies five most material sustainability issues that account for over 50% of the overall rating weight. ISS ESG evaluates corporate sustainability performance on an absolute best-in-class basis. The Corporate Rating is further complemented by an analyst's qualitative commentary on results across the dimensions of sustainability opportunities, sustainability risks, and governance. Companies that outperform the sector-specific Prime threshold are awarded 'Prime' status.

Issues Evaluated	Coverage	Data Sources
Over 100 ESG criteria, most of which are sector-specific	9,700 issuers	Media and other public sources, stakeholder interviews, and company policies and practices

ESG Country Rating
D- to A+

ISS ESG Country Rating evaluates sovereign issuers on sustainability performance and risks. The twelve-point rating ranges from D- (poor) to A+ (excellent). Additionally, a decile ranking from 10 (low) to 1 (high) helps users discern relative performance against rated entities.

Scoring Methodology: ISS ESG benchmarks countries' performance on more than 100 qualitative and quantitative indicators against global best practices and material normative considerations to arrive at the Country Rating. The rating is further complemented by an analyst's qualitative commentary on results across the E, S, and G dimensions. Companies that outperform the Prime threshold of B- are awarded 'Prime' status.

Issues Evaluated	Coverage	Data Sources
100 social and environmental criteria	More than 120 countries, 96% coverage of global sovereign debt issued	Media and other public sources, stakeholder interviews, and country policies and legislatives

ESG Fund Rating

ISS ESG Fund Rating helps investors assess the ESG performance of equity and bond funds. Key fund rating signals include a 1-5 Relative Star Rating, a 0-100 ESG Performance Score, and a Prime Signal for ESG leaders.

Scoring Methodology: The key fund rating results primarily draw from ISS ESG Corporate and Country Ratings. The Relative Star Rating indicates the ESG Rating performance against peer funds, while the ESG Performance Score is a weighted average of the ISS ESG Corporate and Country Rating Performance Scores. Funds that outperform the ESG Performance Score of 50 while underperforming disqualifying criteria are awarded 'Prime' status.

Issues Evaluated	Coverage	Data Sources
ESG issues that are primarily evaluated under ISS ESG Corporate and Country Ratings	2,000 fund managers and 25,700 funds	Data and insights gathered and aggregated from a variety of research products within the ISS ESG universe

Issuer Level Net Zero Alignment Data (Expected Launch Q1 2022)

ISS ESG Issuer Level Net Zero Alignment Data is an integral component of the ISS ESG Net Zero Solutions suite announced to be launched in Q1 2022. The data evaluates companies on several climate metrics to identify positive and negative performers. As part of its Net Zero alignment assessment, ISS ESG looks at a company's net zero commitments, interim targets, and decarbonization strategy to evaluate whether the company is on track to achieving net zero emissions by 2050. At launch, ISS ESG Net Zero Solutions suite is expected to cover 29,000 issuers for carbon and climate data, 23,000 issuers for energy and extractives data, and over 8,000 issuers for EU Taxonomy eligibility data.

Sources

- https://www.issgovernance.com/esg/ratings/corporate-rating/
- https://www.issgovernance.com/esg/ratings/country-rating/
- https://www.issgovernance.com/esg/fund-rating/
- https://www.issgovernance.com/esg/climate-solutions/net-zero-solutions/

SUSTAINALYTICS
a Morningstar company

Sustainalytics defines an ESG factor as material if it is likely to have a significant effect on the enterprise value of a company within a subindustry, and if the presence or absence of a material ESG issue in financial reporting is likely to influence the decisions made by a reasonable investor.

ESG Risk Ratings

0 to 100

Sustainalytics ESG Risk Ratings provide an indication of an issuer's exposure to and management of material, industry-specific ESG risks. The ratings comprise five risk levels – negligible, low, medium, high, and severe – and range from 0 (negligible risk) to 100 (severe risk).

Scoring Methodology: ESG Risk Rating score is determined by aggregating unmanaged risks for each of a company's material ESG issues (MEI). For every MEI, unmanaged risk is calculated as the difference between risk exposure and managed risk. The higher the unmanaged risk, the higher the ESG Risk Rating score. Sustainalytics benchmarks each company's ESG Risk Rating against industry peers. On an annual basis, Sustainalytics research analysts review sources, assess management indicators, process issuer feedback on draft ESG report, and conduct quality and peer review.

Issues Evaluated	Coverage	Data Sources
Over 350 ESG indicators underpin 20 material ESG issues	Over 12,000 companies	1,300 datapoints including corporate publications and regulatory filings, news and other media, multi-sector information sources, and company feedback

Corporate Governance Ratings

0 to 100

Sustainalytics Corporate Governance Ratings assess companies on their corporate governance structures, practices, and behaviors. The ratings range from 0 (laggard) to 100 (leader).

Scoring Methodology: Companies are evaluated on six key corporate governance pillars – Board & Management Quality and Integrity, Board Structure, Ownership and Shareholder Rights, Remuneration, Audit & Financial Reporting, and Stakeholder Governance.

Issues Evaluated	Coverage	Data Sources
Corporate governance	4,200 companies	Company data via public disclosures, media, and reports

Carbon Risk Ratings

Sustainalytics Carbon Risk Ratings measure a company's exposure to and management of material carbon issues, both related to its operations and its products and services. The ratings comprise five risk levels – negligible, low, medium, high, and severe – and range from 0 (negligible risk) to 100 (severe risk).

Scoring Methodology: Carbon Risk Rating score is determined by aggregating unmanaged risks for each of a company's material carbon issues (MCI), that are a subset of material ESG issues (MEI) evaluated by ESG Risk Ratings. For every MCI, unmanaged risk is calculated as the difference between risk exposure and managed risk. The higher the unmanaged risk, the higher the Carbon Risk Rating score. Sustainalytics benchmarks each company's Carbon Risk Rating against industry peers. On an annual basis, Sustainalytics research analysts review subindustry level assessments and underlying model components.

Issues Evaluated	Coverage	Data Sources
Carbon – Own Operations, Carbon – Products and Services, and Carbon Finance	Over 12,000 companies	Companies' incidents/events track record, structured external data, company reporting, and third-party research

Sources

- https://www.sustainalytics.com/corporate-solutions/esg-risk-ratings
- https://www.sustainalytics.com/investor-solutions/esg-research/corporate-governance-research-ratings
- https://connect.sustainalytics.com/carbon-risk-rating

S&P Global

> **S&P Global identifies financially material factors as those that may have a present or future impact on a company's value drivers, earnings capacity, competitive positioning, or long-term value for its shareholders and if those factors have a significant impact on society or the environment.**

ESG Scores

`0 to 100`

S&P Global ESG Scores provide users with ESG scores on a company, dimension, and criteria level. The scores range from 0 to 100. Companies are ranked against peers in their industry.

Scoring Methodology: S&P Global ESG Scores are determined based on the S&P Global Corporate Sustainability Assessment (CSA). The CSA annually evaluates companies' sustainability practices and focuses on industry-specific and financially-material sustainability criteria. The ESG Scores draw inputs from verified company disclosures, media and stakeholder analysis, and in-depth company engagements. S&P Global aggregates approximately 1,000 datapoints on a weighted basis to calculate up to 130 questions level scores. Weighted question scores are further condensed to 30 criteria scores, and again to 3 top-level dimension scores. S&P Global ESG Score is estimated by combining the materiality-weighted scores for the Environmental, Social, and Governance & Economic dimensions.

Issues Evaluated	**Coverage**	**Data Sources**
130 sustainability topics covered under Environmental, Social, and Governance & Economic dimensions	Over 8,000 companies (S&P Global invites full coverage universe of companies to take part in the CSA, of which more than 1,900 choose to participate)	1,000 data points based on non-public data directly submitted by companies, annual and sustainability/CSR reports, company websites, regulatory filings, and news

Carbon Earnings at Risk

The Trucost Carbon Earnings at Risk dataset helps users evaluate company-level exposure to current and future carbon pricing scenarios. Investors can utilize the data set to conduct stress tests and assess their portfolio companies' ability to absorb future carbon prices and identify potential earnings at risk from carbon pricing on a portfolio level. Unpriced Carbon Cost – the difference between current carbon price and future carbon price given the sector, operations, and climate change scenarios – is an integral component of the analysis.

Issues Evaluated	**Coverage**	**Data Sources**
Climate change	Over 15,000 companies with history dating back to 2017	Company reported data, climate models, and other scientific data sources

Paris Alignment

Trucost Paris Alignment dataset helps users determine the scale of emission reductions required by 2025 and beyond to align with the Paris Agreement. The dataset allows investors to gauge whether their portfolios and benchmarks are on track to limiting global warming as per 1.5°C and 2°C climate change scenarios. To evaluate alignment, Trucost conducts a transition pathway assessment, examining whether emissions reductions over time are enough to meet a 2°C carbon

Issues Evaluated	Coverage	Data Sources
Climate change	Over 14,000 companies with history dating back to 2017	Company reported data, climate models, and other scientific data sources

Physical Risk `1 to 100`

Trucost Physical Risk Analytics takes both company and asset level approach to assessing physical risks related to climate change. The composite physical risk scores – quantifying a company's exposure to key physical risks – range from 1 (lowest risk) to 100 (highest risk).

Scoring Methodology: To estimate a company's exposure to physical risks, Trucost evaluates the sensitivity of its assets to seven key climate hazards – Water Stress, Heatwave, Coldwave, Hurricane, River Flood, Coastal Flood, and Wildfire. Analysis is conducted across three climate change scenarios (RCP 2.6, RCP 4.5, and RCP 8.5 as defined by IPCC) and three future time periods (2020, 2030, and 2050). For each physical risk indicator, company scores are calculated by combining asset scores. Aggregating results for all seven risk indicators, Trucost determines Equal Weighted Composite Physical Risk score (Composite Score) and Sensitivity Weighted Composite Physical Risk score (Sensitivity Weight Adjusted Composite).

Issues Evaluated	Coverage	Data Sources
7 climate change physical risk indicators	Over 15,000 companies with history dating back to 2019, mapped to over 2 million assets	Climate models and other scientific data sources

Sovereign Carbon Exposure

Trucost sovereign dataset includes territorial and import-export greenhouse gas (GHG) emissions data for 170 countries across all GHG Protocol gases in addition to country-level socio-economic and energy data. Investors can leverage the dataset to understand their sovereign bond portfolio's carbon exposure, benchmark performance, and align with climate reporting requirements.

Issues Evaluated	Coverage	Data Sources
Climate change	170 countries with history dating back to 2000	Socio-economic and environmental datasets and other scientific data sources

Sustainable Development Goals Analytics

The Trucost SDG Analytics dataset measures the alignment of a company's products and services with the SDGs. Metrics tracked include:

- **SDG Additionality (0-200%):** % of additional benefit the revenue segment provides to the SDGs, calculated based on the country where revenue is generated
- **SDG Revenue Alignment (0-100%):** % of revenue generated in a revenue segment that aligns with SDGs according to the Trucost Positive Impact Taxonomy
- **SDG Risk Exposure (0-100):** Potential exposure to risks related to SDGs that the company directly impacts or is directly impacted by for all value chain strategies

Issues Evaluated	Coverage	Data Sources
17 Sustainable Development Goals (SDGs)	Over 15,000 companies across 464 different business activities and 189 different geographies with history dating back to 2019	Company reported data and other scientific data sources

Sources

- https://www.marketplace.spglobal.com/en/datasets/s-p-global-esg-scores-(171)
- https://www.marketplace.spglobal.com/en/datasets/trucost-carbon-earnings-at-risk-(184)
- https://www.marketplace.spglobal.com/en/datasets/trucost-paris-alignment-(186)
- https://www.marketplace.spglobal.com/en/datasets/trucost-physical-risk-(148)
- https://www.marketplace.spglobal.com/en/datasets/trucost-sovereign-carbon-exposure-(190)
- https://www.marketplace.spglobal.com/en/datasets/trucost-sustainable-development-goals-analytics-(163)

arabesque

> **For their ESG data products, Arabesque leverages the US Supreme Court's materiality definition that states that information is material when there is a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the total mix of information made available.**

ESG Scores

`0 to 100`

Arabesque S-Ray ESG Scores help users identify best-performing sustainable companies in the long-term in terms of financial materiality. The score ranges from 0 to 100.

Scoring Methodology: Overall ESG Score is a weighted sum of feature scores applying materiality-based weights. Sustainability topics – referred to as features – with higher materiality are over-weighted and weights are rebalanced on a rolling quarterly basis. Materiality is calculated by first assigning static materiality and then making data-based materiality adjustments.

Issues Evaluated	Coverage	Data Sources
22 sustainability-related topics and 11 business involvements	8,000 public companies	Over 250 metrics from non-financial reports, over 30,000 news sources published across 170 countries daily, and NGO campaign activity across over 400 sustainability issues

ESG Book

In November 2021, Arabesque announced the launch of ESG Book – a data platform that aims to 'disrupt' the market by offering ESG data as a 'public good' for companies and investors. Companies can use ESG Book at no cost to disclose, manage, and keep ownership of their ESG data in real-time. ESG Book's founding partners include a diverse group of institutions including IFC, Global Reporting Initiative, HSBC, and the Hong Kong Exchanges and Clearing. The platform aligns with the UN Global Compact principles and offers a range of ESG data solutions, ESG scores, regulatory solutions, climate data solutions, and corporate solutions.

Sources

- https://www.arabesque.com/s-ray/our-scores/
- https://www.esgbook.com/

RepRisk

RepRisk Rating

D to AAA

The RepRisk Rating (RRR) benchmarks corporate ESG risk exposure against a peer group and sector and facilitates the ESG and business conduct risk integration. The rating ranges from D (very high ESG risk exposure) to AAA (low ESG risk exposure).

Scoring Methodology: Leveraging a rules-based research process and AI and machine learning combined with human intelligence, RepRisk evaluates both company-specific ESG risk and country-sector ESG risk to determine RRR.

- The Company-specific ESG risk
  - Provided by the Peak RepRisk Index (RRI)
- The Country-sector ESG risk

  Provided by the Country-sector Average of the company, calculated by:
  - The Headquarters ESG Risk Exposure value (weighted 50%): The Country-sector value of the company's country of headquarters and primary sector
  - The International ESG Risk Exposure value (weighted 50%): The average of all Country-sector values of the country-sector combinations where the company has been linked to ESG risk incidents

Issues Evaluated	Coverage	Data Sources
101 ESG risk factors, including 28 ESG Issues and 73 Topic Tags comprising ESG hot topics and key themes	Over 190,000 public and private companies, over 50,000 infrastructure projects across various sectors and countries around the globe, over 25,000 NGOs, and over 18,000 governmental bodies	Over 100,000 public sources in 23 languages, including print media, online media, social media, government bodies, regulators, think tanks, newsletters, and other online sources

Sources

- https://www.reprisk.com/news-research/resources/methodology#a-what-is-the-reprisk-rating

TRUVALUE LABS
A FACTSET Company

> **Truvalue Labs introduced the concept of Dynamic Materiality, according to which 'every company, industry, and sector has a unique materiality signature that evolves over time based on factors like emerging technologies, new knowledge, and new regulations.'**

ESG Ranks

Laggard to Leader

Truvalue ESG Ranks indicate a company's ability to manage ESG risks and capitalize on opportunities in comparison to its peers. Based on an industry percentile, Truvalue Labs assigns five ranks – laggard, below average, average, above average, and leader.

Scoring Methodology: Truvalue Labs processes over 100,000 unstructured data sources and leverages artificial intelligence to uncover hidden ESG risks and opportunities. Based on the 26 ESG categories defined by SASB, an industry percentile is calculated, and an overall company rank is assigned accordingly.

Issues Evaluated	Coverage	Data Sources
26 ESG categories defined by SASB	More than 20,000 companies with over 13 years of history	Unstructured text from over 100,000 sources

Sources

- https://developer.truvaluelabs.com/data/esg-ranks

DOW JONES

Sustainability Data

Launched in January 2022, Dow Jones sustainability data set provides sustainability scores and sentiment for more than 6,000 publicly traded companies.

Scoring Methodology: The scoring model – developed by the Wall Street Journal's editorial team together with Arabesque S-Ray – combines machine learning techniques with human expertise and is aligned with the SASB Standards, covering five sustainability dimensions and 26 categories.

Issues Evaluated	Coverage	Data Sources
26 ESG categories defined by SASB	Over 6,000 publicly traded companies	Company-reported data and daily analysis of media coverage by over 9,000 English-language sources available via Factiva

Sources

- https://www.dowjones.com/professional/newswires/sustainability-data/

Contributors:

Bhavana Poosarla, Senior Associate
Dana Hummel, Senior Associate
Sebastianne Kent, Associate