

What Does ESG Investing Really Mean?

MEASURING MATERIALITY

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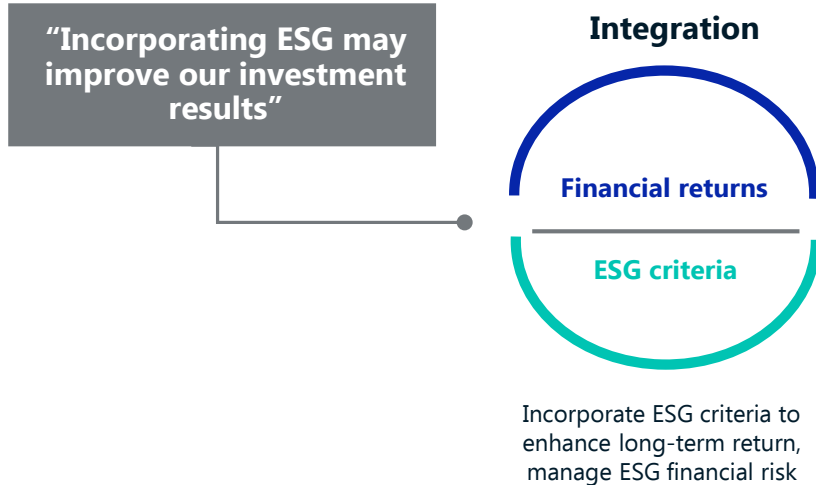
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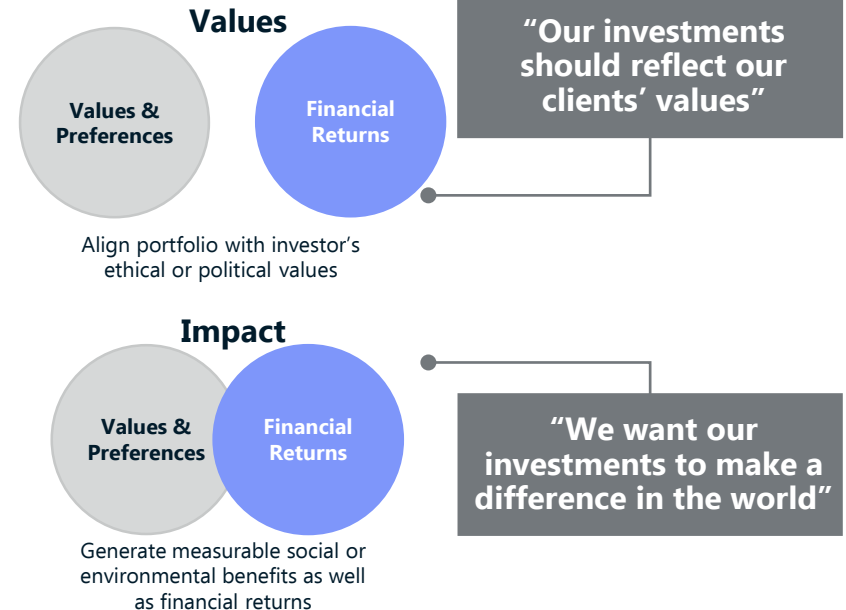
Why the confusion? ESG is multi-faceted but well-delineated

Incorporating ESG into investment strategies starts with understanding investor objectives, which may combine elements of managing long-term risk, reflecting values and positive impact.

Investment Objectives



Individual Objectives



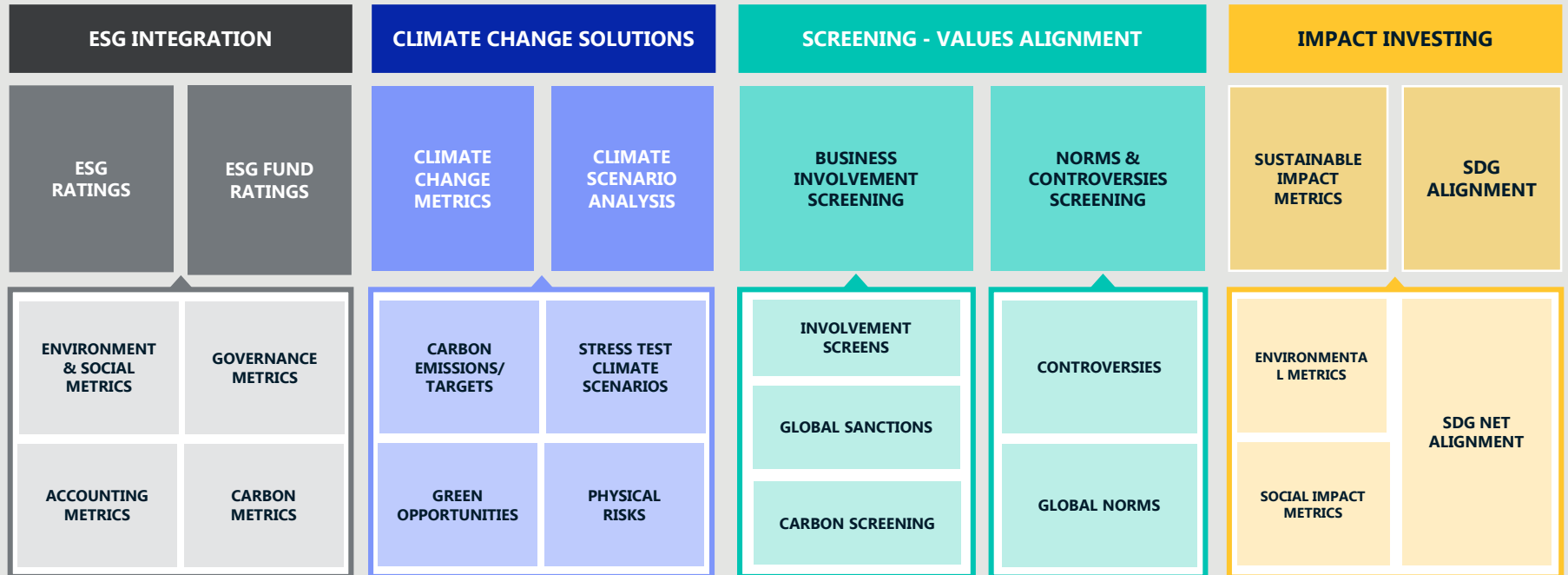
ESG data: What are you trying to measure?

- **Aggregate confusion or confused aggregates?**
 - ESG data are ingredients that can be selected and constructed to reflect different dimensions of ESG. However, they typically cannot reflect these multiple dimensions *at the same time*, in a single score or rating.
- **Why do ESG ratings differ?**
 - Do differences arise from *differences in intention* (i.e., they aim to capture varying dimensions of ESG) or *differences in effectiveness* (i.e., they aim to capture the same dimension of ESG, but use competing methodologies with different levels of effectiveness)?

ESG investment objectives drive investors' ESG data needs

MSCI ESG Research rates 8,500 companies (14,000 issuers including subsidiaries) and more than 680,000 equity and fixed income securities globally (as of October 2020)

MSCI ESG RESEARCH



Sources of ESG data

There is more ESG data *about* a company than *from* a company

– Corporate disclosures

- Caution! Too much reliance on corporate disclosures in the construction of any ESG signal can lead to size and geographic bias.

– Media sources

- Caution! Artificial intelligence can produce a lot of noise. Confirming veracity and identifying bias in media content require systematic, quality-control processes involving expert human intelligence.

– Alternative data sources

- Can you shape and match the data to specific entities or issuers?

– Models & estimated data

- Historically used for filling gaps in disclosure. More sophisticated modeling techniques can allow for more forward-looking projections on ESG exposures.

Emerging evidence on ESG & materiality

- Using MSCI ESG Ratings and inputs

- *Finding 1:*

- *ESG has impacted company financial performance through three economic transmission channels: cash flow; systematic risk; and idiosyncratic risk. From December 2006 to December 2019, higher ESG-rated companies were more profitable than their industry peers, paid more dividends to investors and experienced lower earnings volatility.*

- *Finding 2:*

- *Extending our analysis to corporate bonds, we found that ESG considerations have been more helpful in mitigating downside risk than in capturing upside gains. We also found that ESG added value beyond credit ratings.*

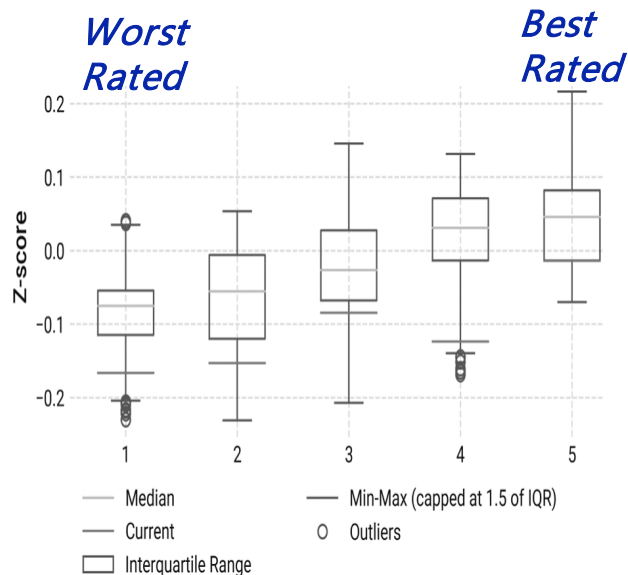
- *Finding 3:*

- *Companies with high ESG scores, on average, experienced lower costs of capital compared to companies with poor ESG scores (in developed markets during a four-year study period). We found a similar relationship between company ESG scores and the cost of both equity and debt.*

Impact through three economic transmission channels

#1: Cash-Flow Channel

Gross Profitability



Gross profitability (z-score) of size-adjusted ESG quintiles is computed as most recently reported sales less cost of goods sold, divided by most recently reported company total assets. Data from Dec. 31, 2006, to Dec. 31, 2020. Distribution of monthly averages by quintiles.

#2: Idiosyncratic Risk

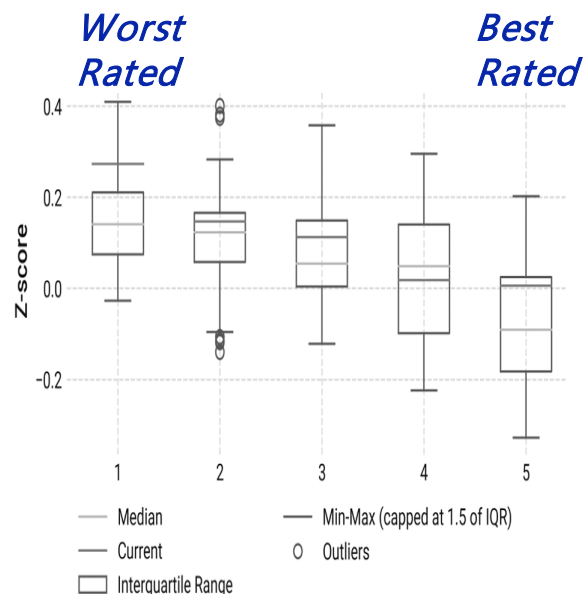
Drawdown Incidents



For each month, we report the number of stocks that realized a more than 95% cumulative loss over the next three years, taking the price at month end as the reference point for return calculation. Data from Dec. 31, 2006, to Dec. 31, 2020.

#3: Systematic Risk

Residual Volatility



Systematic risk (or common factor risk) of size-adjusted ESG quintiles is computed as the volatility predicted by all the factors of the GEMLT model. Data from Dec. 31, 2006, to Dec. 31, 2020. Distribution of monthly averages by quintiles.

Lessons for constructing an ESG rating

- *Lesson 1: Over-reliance on data inputs from corporate disclosures could yield a size and geographic bias, potentially detracting from the rating's financial relevance.*
- *Lesson 2: Different risks have materialized over different time horizons. Hence, giving more weight to some issues than others in the rating construction will impact the time horizon over which a rating might indicate financial relevance.*
- *Lesson 3: Weights play a big role: Static, uniform weightings across E, S, G have not captured financial relevance as effectively as a weighting scheme that is industry-specific and dynamically evolving.*

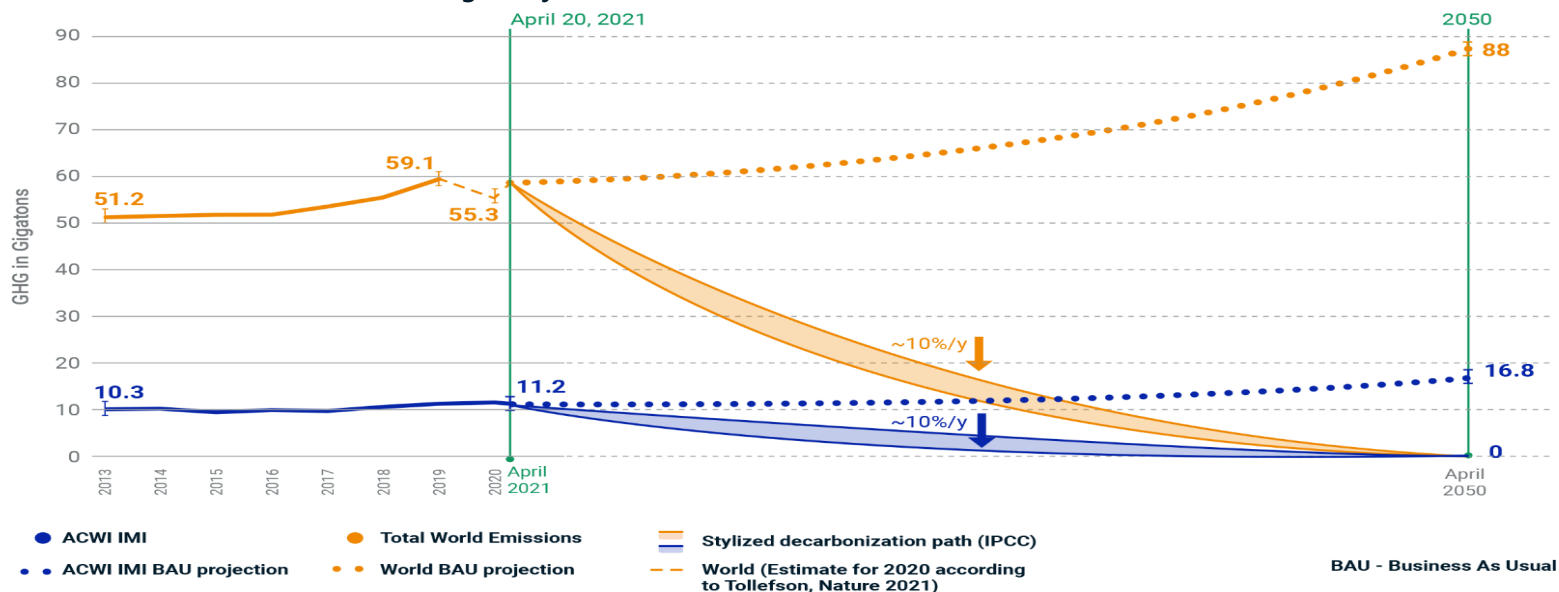
Lessons for integrating ESG in portfolio construction

- *Lesson 1: ESG policies or mandates that require a limited number of values-based exclusions have not incurred large tracking error.*
- *Lesson 2: Portfolio construction methods that select or overweight better ESG performers within industries (i.e., best-in-class approaches) can lead to unintended factor exposures that may impact portfolio risk and return.*
- *Lesson 3: While various ESG concepts are often correlated, targeting a desired outcome requires using as specific an input as available.*
- *Lesson 4: Allocators can choose between 'bottom-up' and 'top-down' approaches in integrating ESG across their total equity portfolios.*

Climate risk requires urgent and special attention

- **MSCI's Call to Action:** [The Role of Capital in the Net-Zero Revolution](#)

- **Current Emission Trajectories:** The chart shows the historical and potential future trajectories of the world's total greenhouse gas emissions, measured in metric tons of CO₂ equivalent emissions relative to the history of the sum of scope 1 emissions of all MSCI ACWI IMI constituents (without index weight adjustments).



The total emissions of the world are sourced from annual UNEP Emissions Gap reports. World emissions for 2020 are estimated to be 6.4% below their previous year levels and to rebound in 2021 towards pre-pandemic levels (J. Tollefson, "COVID curbed carbon emissions in 2020 — but not by much," Nature 2021). The BAU projections are based on the realized 1.4% annual growth rate in historical world emissions as reported by UNEP Emissions Gap Report 2020. The required annual decarbonization rate according to IPCC ranges between 5% and 15% per year, depending on the shape of the decarbonization trajectory and the use of carbon capture. Source: UNEP data from 2013 to 2019; MSCI illustration from 2020 until 2050.

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