

Rethinking ESG

Performance Measurement Forum
April 26, 2023

IMPORTANT INFORMATION: For use in professional roundtable discussion context only. Not intended as sales/marketing collateral.

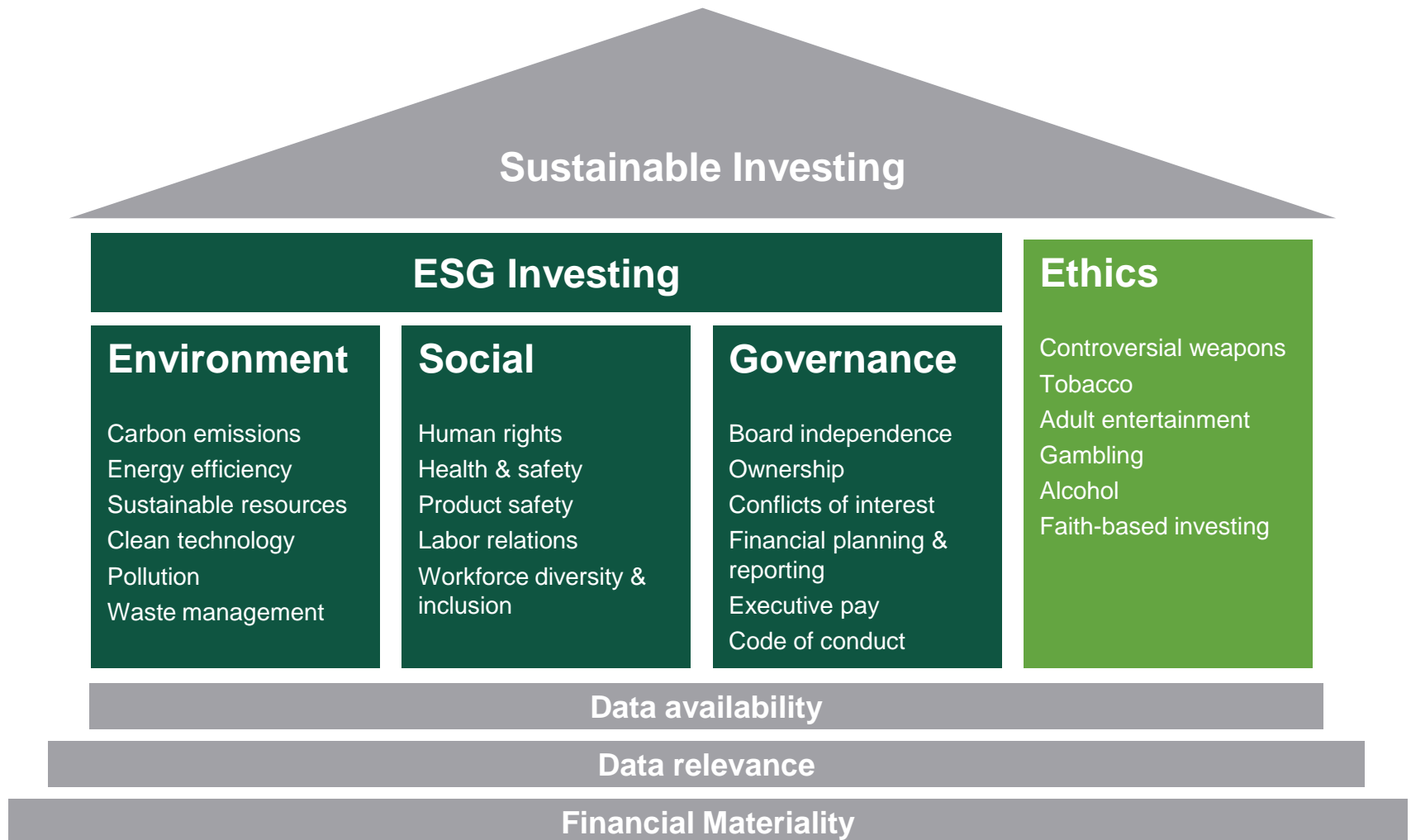


NORTHERN TRUST

BACKGROUND / LEVEL-SETTING: WHAT IS “ESG”?

- The letters stand for Environmental / Social / Governance
- Investing in a manner that’s mindful of ESG factors in the management of a portfolio/strategy
 - NB: Encompasses both risk-management signals and potential alpha-generation signals
- Key factors driving interest/growth in “sustainable investing”
 - Client demand
 - Public sentiment
 - Regulatory pressure

ESG (SUSTAINABLE) INVESTING



WHAT TODAY'S DISCUSSION WON'T FOCUS UPON:

- The numerous papers which have been written, based upon analysis of whether ESG-related investments generate superior results to non-ESG ones (or vice versa)
- I also want to steer clear of the politics involved with certain perspectives

WHAT TODAY'S DISCUSSION WILL FOCUS UPON

- What's the same about doing performance/risk/analytics work for ESG strategies
- What's different about doing performance/risk/analytics work for ESG strategies
- Challenges to measuring and reporting performance/risk/analytics according to ESG factors

QUESTIONS FOR DISCUSSION

- What are different firms doing?
 - How does your firm look at performance and do attribution for ESG factors?
 - How do you define the different factors?
 - From where (and how) do you source data?
 - What systems/platforms do you use for any unique calculations/reporting?

QUESTIONS FOR DISCUSSION (CONTINUED)

- Should there be different peer universe for these strategies (e.g., US core equity) or not (e.g., US core equity with ESG orientation), with whatever set of permutations may be sought?
- Should these strategies be benchmarked against standard indices (e.g., S&P 500) or against custom indices (e.g., S&P 500 excluding XYZ)?
- What do clients and prospects (and internal colleagues) want to see within the reports they receive?
- What does your firm find to be the biggest challenge regarding performance/analytics for ESG strategies?

IMPORTANT INFORMATION

The information contained herein is intended for use with current or prospective clients of Northern Trust Investments, Inc. The information is not intended for distribution or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation. Northern Trust and its affiliates may have positions in and may effect transactions in the markets, contracts and related investments different than described in this information. This information is obtained from sources believed to be reliable, and its accuracy and completeness are not guaranteed. Information does not constitute a recommendation of any investment strategy, is not intended as investment advice and does not take into account all the circumstances of each investor. Opinions and forecasts discussed are those of the author, do not necessarily reflect the views of Northern Trust and are subject to change without notice.

This report is provided for informational purposes only and is not intended to be, and should not be construed as, an offer, solicitation or recommendation with respect to any transaction and should not be treated as legal advice, investment advice or tax advice. Recipients should not rely upon this information as a substitute for obtaining specific legal or tax advice from their own professional legal or tax advisors. References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. Indices and trademarks are the property of their respective owners. Information is subject to change based on market or other conditions.

All securities investing and trading activities risk the loss of capital. Each portfolio is subject to substantial risks including market risks, strategy risks, adviser risk and risks with respect to its investment in other structures. There can be no assurance that any portfolio investment objectives will be achieved, or that any investment will achieve profits or avoid incurring substantial losses. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Risk controls and models do not promise any level of performance or guarantee against loss of principal. Any discussion of risk management is intended to describe Northern Trust's efforts to monitor and manage risk but does not imply low risk.

Past performance is no guarantee of future results. Performance returns and the principal value of an investment will fluctuate. Performance returns contained herein are subject to revision by Northern Trust. Comparative indices shown are provided as an indication of the performance of a particular segment of the capital markets and/or alternative strategies in general. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. Net performance returns are reduced by investment management fees and other expenses relating to the management of the account. Gross performance returns contained herein include reinvestment of dividends and other earnings, transaction costs, and all fees and expenses other than investment management fees, unless indicated otherwise. For additional information on fees, please refer to Part 2a of the Form ADV or consult a Northern Trust representative.

Forward-looking statements and assumptions are Northern Trust's current estimates or expectations of future events or future results based upon proprietary research and should not be construed as an estimate or promise of results that a portfolio may achieve. Actual results could differ materially from the results indicated by this information.

An Environmental, Social and Governance (ESG) strategy's use of ESG factors and screening process may screen out certain companies and industries and/or affect exposures to certain companies or industries. An ESG strategy utilizes ESG analytics as a risk mitigation tool not as an alpha driver and may cause the strategy to forego certain investment opportunities. Investors can integrate ESG data to create a more holistic view of risks and opportunities — resulting in more informed investment decisions and resilient portfolios.

This information is intended for purposes of Northern Trust marketing of itself as a provider of the products and services described herein and not to provide any fiduciary investment advice within the meaning of Section 3(21) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). Northern Trust is not undertaking to provide impartial investment advice or give advice in a fiduciary capacity to the recipient of these materials, which are for marketing purposes and are not intended to serve as a primary basis for investment decisions. Northern Trust and its affiliates receive fees and other compensation in connection with the products and services described herein as well as for custody, fund administration, transfer agent, investment operations outsourcing and other services rendered to various proprietary and third party investment products and firms that may be the subject of or become associated with the services described herein.

Northern Trust Asset Management is composed of Northern Trust Investments, Inc., Northern Trust Global Investments Limited, Northern Trust Fund Managers (Ireland) Limited, Northern Trust Global Investments Japan, K.K., NT Global Advisors, Inc., 50 South Capital Advisors, LLC, Northern Trust Asset Management Australia Pty Ltd, and investment personnel of The Northern Trust Company of Hong Kong Limited and The Northern Trust Company.

About Sustainable Investing

At Northern Trust Asset Management ("NTAM"), we define Sustainable Investing as encompassing all of NTAM's investment strategies and accounts that utilize values based and norms based screens, best-in-class and ESG integration, or thematic investing that may focus on a specific ESG issue such as climate risk. NTAM's Sustainable Investing includes portfolios designed by NTAM as well as those portfolios managed to client-defined methodologies or screens. As the data, analytical models and aforementioned portfolio construction tools available in the marketplace have evolved over time, so too has NTAM. NTAM's Sustainable Investing encompasses strategies and client assets managed in accordance with client specified responsible investing terms (historically referred to as Socially Responsible), as well as portfolios that leverage contemporary approaches and datasets, including ESG analytics and ESG thematic investing.

