

Agenda

- ESG and State Street introduction
- Why does it matter?
- What link could exist between ESG factors and performance?
- Risk models and ESG factors
- Reconciling some of the contradictions
- Conclusion

Environmental, Social & Governance (ESG) Factors

Nonfinancial factors that potentially impact the risk & return of portfolios



ESG at State Street

Helping the world's investors achieve better outcomes for the people they serve by incorporating ESG value drivers into everything we do

ALPH C

As one of the world's largest asset servicers, we help investors measure and report on their ESG risks and opportunities across multiple data and analytics By the Numbers

ESG Analytics for

\$36.6 trillion

AUC/A¹

\$374 billion

ESG AUM

ESG expertise dating to 1985

PRI Leaders
Group of 20
for climate reporting best practices







Providers through our State Street Alpha platform ■ As the world's third-largest asset manager and ETF provider, we drive ESG action on three fronts: a systematic approach to asset stewardship; active and index-based ESG investment strategies; and helping clients incorporate ESG across their entire investment programs.

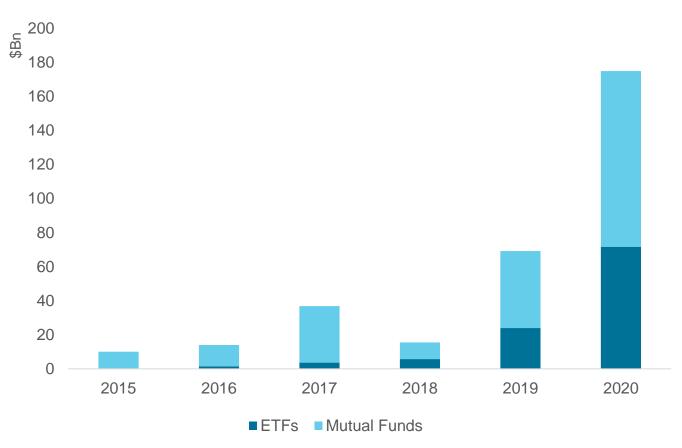
 We partner with the world's leading ESG experts from industry and academia to provide decisionuseful research and thought leadership

ESG is part of our long-term strategy as we engage with all of our stakeholders to drive a more resilient, sustainable, and inclusive future. Our partnerships are designed to achieve a multiplier effect to maximize the scale of our ESG impact.

¹ Figures as of September 30, 2020

ESG LANDSCAPE

Flows into ETFs & Mutual Funds globally (\$bn)



Source: Morningstar, 31 December 2020. Analysis contains >5400 funds. Flows are of the date indicated and should not be relied upon thereafter

Accumulating Evidence

Materiality:

 Khan, Mozaffar, George Serafeim, and Aaron Yoon. "Corporate Sustainability: First Evidence on Materiality." Accounting Review 91, no. 6 (November 2016).

Corporate Purpose and Financial Performance:

 Gartenberg, Claudine Madras and Prat, Andrea and Serafeim, George, <u>Corporate Purpose and</u>
 <u>Financial Performance</u> (October 9, 2018). Organization Science, 30(1), pp.1-18.

Corporate Strategy Differentiation and Financial Performance:

 Ioannou, Ioannis, and George Serafeim. "Corporate Sustainability: A Strategy?" Harvard Business School Working Paper, No. 19-065, January 2019.

Accumulating Evidence

ESG News and Stock Performance:

- Serafeim, George and Yoon, Aaron, Which Corporate ESG News does the Market React to? (April 22, 2021).
- Serafeim, George, <u>Public Sentiment and the Price of Corporate Sustainability</u> (October 12, 2018). Financial Analysts Journal, 76 (2): 26-46.
- Serafeim, George and Yoon, Aaron, <u>Stock Price Reactions to ESG News: The Role of ESG Ratings and Disagreement</u> (January 13, 2021). Harvard Business School Accounting & Management Unit Working Paper No. 21-079.

ESG Disclosure and Rating Disagreement:

Christensen, Dane M. and Serafeim, George and Sikochi, Anywhere, Why is Corporate Virtue in the Eye of the Beholder? The Case of ESG Ratings (February 26, 2021). The Accounting Review,

Outcomes vs Inputs:

Freiberg, David, DG Park, George Serafeim, and T. Robert Zochowski. "Corporate
 Environmental Impact: Measurement, Data and Information." Impact Weighted Accounts

 Research Report. 2020.

Accumulating Evidence

- Here's a paper from NYU that summarizes ESG and financial performance based on recent studies: <u>ESG AND FINANCIAL</u>: <u>Uncovering the Relationship by Aggregating Evidence from</u> 1,000 Plus Studies <u>Published between 2015 – 2020</u>.
- Six Key Takeaways from the NYU Research:
 - 1. Improved financial performance due to ESG becomes more noticeable over longer time horizons.
 - 2. ESG integration as an investment strategy performs better than negative screening approaches.
 - 3. ESG investing provides downside protection, especially during a social or economic crisis.
 - 4. Sustainability initiatives at corporations appear to drive better financial performance due to mediating factors such as improved risk management and more innovation.
 - 5. Managing for a low-carbon future improves financial performance.
 - 6. ESG disclosure without an accompanying strategy does not drive financial performance.

The Link To Performance: An Assumption of Inefficiency

- ESG aspects of a corporate are often not easily linked to short run performance.
 - But under SASB framework, nevertheless financially material.
- Investors recognize the importance but have difficulty in weighing the sailience of ESG factors against more visible ones.
 - Example: human capital management
- Returns could be realized as "shocks"
 - Some evidence that low rated companies have higher volatility, prevalence of drawdowns
- Returns could be steady accrual of better corporate performance
- Potentially low cross-sectional correlation at a point in time.

Exploring Efficiency Explanations

- Should investors be rewarded for assuming ESG risk i.e. a negative premium?
 - Sin stocks would therefore out-perform.
- More limited capital available for fossil fuel companies cited as a factor in driving up CoC, and changing behaviour.
- But is the information inefficiency rendering the market inefficient in respect of ESG factors?
 - Low correlation between ESG data providers;
 - Few mandated requirements for data disclosure or verification and audit

The Implications for Performance Measurement

- Few, if any, widely accepted frameworks used to account for performance relating to ESG decisions.
- Fund level data, and academic evidence cited previously suggests a long term premium for E, S and G.
- Measurement by managers might not attain the level of universal credibility investors seek?
- But the framework and mapping to investment process is critical.
 - If a process is designed to exploit an inefficiency relation to ESG, for example
- It is also critical that independent performance measurement is used to prevent confirmation bias.

Why Do Risk Models not have ESG Factors?

- Some have started to do so, but have observed that:
 - The data/consistency problems are not going away
 - The ESG factor returns are quite weak as a means of explaining residual cross sectional risk, and therefore weak in the time series.
- A Darwinian approach to risk models would likely filter them out.
 - Anomaly 1: Managers are taking positions which amount to an aggregated "bet" on E, S or G, but it is not recognized in risk model frameworks (but would be in exposure based systems)
 - Anomaly 2: Management fees for ESG reflects the skills needed to research and take positions

But the risk of taking those positions seems negligible

What could be Happening?

- ESG Supporters position: -
 - ESG factors take longer to play out, e.g. build-up of intangible value, employee engagement slowly affect earnings.
 - The opposite of "excess volatility" cited by Shiller
 - Volatility of longer term returns higher than volatility of short run: a dream?
- Is this a special category, or are there many other "long term" common factors affecting performance?
 - Alpha / Beta separation requires a timeframe for disaggregation
 - With a long enough history, could different models of return and risk emerge?

Conclusion

- ESG is an enormous focus for the industry, both in manufacturing and distribution.
- Yet there is great diffusion of data, and no common framework for assessing whether it "works", therefore undermine the customer value proposition.
- Time frame is critical, and merits some more serious examination.

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