



ESG Investing

Harvard College Consulting Group

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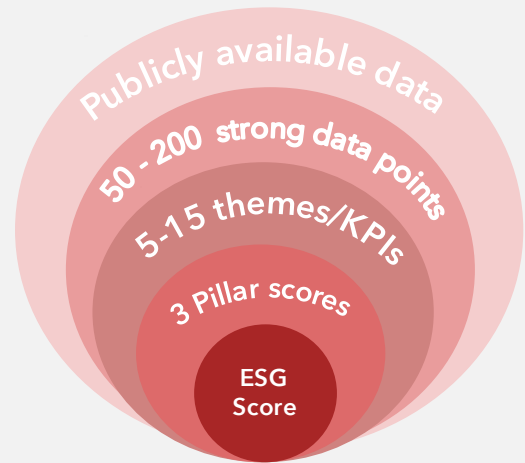
2. Executive Summary

ESG investing is an emerging division of the finance sector. Considering environmental, social, and governance metrics as factors which impact returns and the long-term sustainability of a company is essential to making the most efficient investments. This white paper will explore the processes utilized to measure ESG criteria, industry strategies for boosting ESG scores, and emerging trends in ESG.

Measuring ESG Criteria

When evaluating a corporation to determine a final ESG score, several factors are taken into consideration. **Collecting data from a variety of sources as well as ensuring that data is reliable is essential to obtaining an accurate ESG score.** While challenges such as standardization and industry-based weighting make comparing ESG scores more difficult, the final score (given as either a number or set of letters based on the index) is generally accurate in comparison to companies within the same sector.

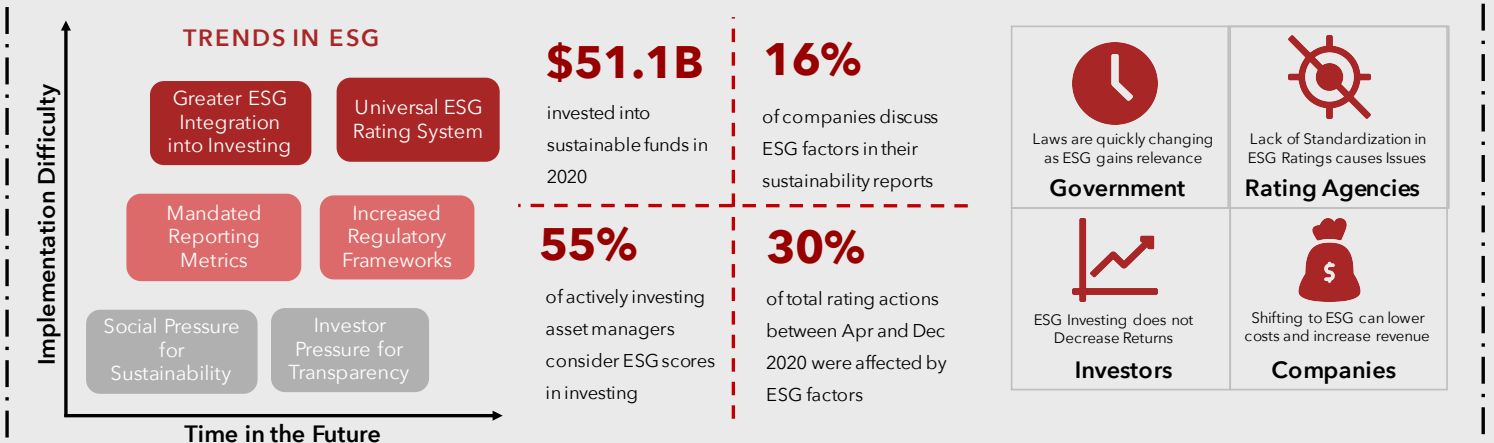
Currently, investors use solutions such as materiality maps to assess the financial viability of ESG investments. **In the future, a universal rating system and greater regulation will lead to more consistency and transparency as it relates to ESG scores.**



Boosting ESG Scores

The Future of ESG

Mapping Key Takeaways



3. Methodology

To examine the various components of ESG investing, the HCCG team divided the topic into four primary modules. First, the team conducted market research on the history and process of ESG evaluation and analyzed secondary literature to clarify the purpose of components in the ESG space. Next, the team compared various ESG rating agencies and identified gaps in their methodologies to compile a list of key criticisms of ESG evaluation. From there, the HCCG team selected 7 of the highest scoring companies on the MSCI ESG Ratings Index using MSCI’s ESG Ratings Corporate Search Tool and ESG Industry Materiality Map. Post-selection, the team analyzed each company’s environmental, social, and governance performance through case studies to develop a list of key strategies private sector corporations as well as NGO entities can utilize to boost their own ESG scores.

In order to evaluate the relevance of ESG metrics to investors and the public, the HCCG team conducted independent data analysis. Measuring the correlation between ESG scores and various metrics, including profitability, volatility, and industry/sector, the team summarized insights focused on the overall impact of ESG scores. All of this data was then synthesized into an individual module to provide a detailed picture of the ESG landscape as it pertains to investors, corporations, and rating agencies.

Finally, the HCCG team conducted 7 expert interviews with professors, consultants, and other leaders in sustainable development to determine defining trends in the ESG space over the next 15 years.



Exhibit 1: The various components of ESG investing across multiple stakeholders.

4. Introduction

ESG investing focuses on finding best practices within a corporation that maximize profit through an ESG framework of environmental, social, and governance factors. With ESG reporting, companies inform investors and the general public about their short and long-term performance as it relates to sustainability, climate change, human rights, bribery and corruption, and other metrics. ESG investing stems from progressive efforts to prioritize sustainability in the private sector by making companies disclose their practices that may be harmful and evolved from Socially-Responsible Investing (SRI). Both ESG and SRI aim to improve corporate sustainability, however ESG metrics do so through a slightly different process that is more procedurally-oriented as opposed to values-based.

4.1 Contextualization

Investors use ESG metrics as a tool to appraise risk by assessing corporate sustainability. ESG investing is the process of investing (institutional or individual) in companies with high ESG scores - a marker of a sustainable company.

Outside researchers measure certain criteria as KPIs to understand a company's stance on ESG responsibility. Since ESG investing is relatively new, there is not single standardized criterion. Further, since ESG encompasses a multitude of factors, evaluation firms tend to set their own environmental, social, and governance criteria.

Exhibit 2: A general timeline of the transition from Socially-Responsible Investing to ESG Investing

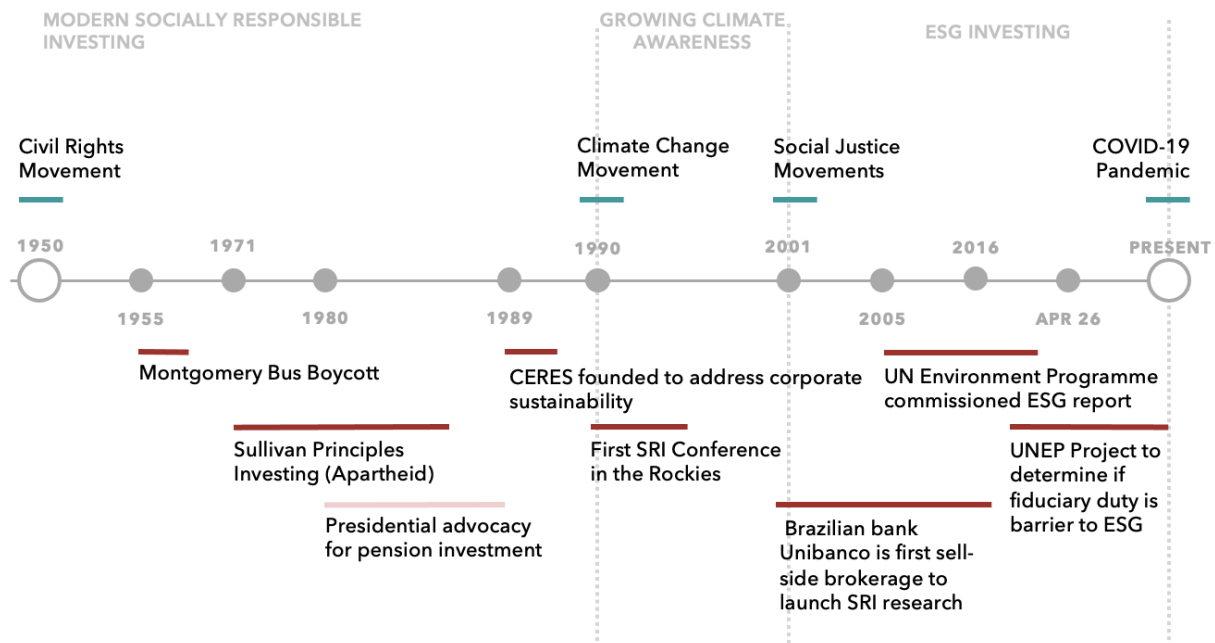


Exhibit 3: Notable criteria for environmental, social, and corporate governance metrics.^{1, 2, 3, 4, 5, 6}

ENVIRONMENTAL, SOCIAL, AND CORPORATE GOVERNANCE METRICS			
	Environmental	Social	Corporate Governance
Summary	<ul style="list-style-type: none"> Examines organization’s environmental impact and sustainability practices 	<ul style="list-style-type: none"> Examines organization’s relationship with various stakeholder groups 	<ul style="list-style-type: none"> Examines organization’s management and decision-making processes
Notable Criteria	<ul style="list-style-type: none"> Greenhouse Gas Emissions: includes all stages of a product or service lifecycle Resource Management: raw material sourcing; energy, water, and natural resource use; waste and pollution management and diversion; etc. Regulation Compliance: includes current and upcoming regulations (e.g., regarding emissions limits, hazardous waste removal, municipality reporting, etc.) 	<ul style="list-style-type: none"> Employees: turnover rates; pay gap; diversity practices; health and safety records; benefits (e.g., healthcare, parental leave) Customers: responsiveness and efficiency; data protection and privacy; consumer protection and satisfaction; etc. Community: impact of operations on community; involvement in community organizations and charities; stance on major social issues; etc. 	<ul style="list-style-type: none"> Transparency and Regulation Compliance: financial and accounting transparency; regulatory failure tracking; risk management; etc. Board Structure and Policies: executive compensation; board composition; policies against unethical behavior; etc. Internal Policy: distribution of rights and responsibilities; cybersecurity; code of ethics; hiring practices; etc.

4.2 Current vs. Emerging Trends

As ESG metrics become a more popular tool for investing and risk evaluation, the way in which stakeholders consider corporate social responsibility has changed over time. In the past, the “E” in ESG was the primary consideration informing a company’s sustainability rating, based on factors such as GHG emissions or resource management. However, as issues such as demographic diversity have become more prominent, so too have the “S” and “G” metrics considered in ESG evaluation.

Millennial and Gen Z Interest

A rise in Millennial and Gen Z interest in investing has seen a corresponding increase in the awareness of ESG. According to Harlin Singh, head of sustainable investments at Citi Private Bank, **9 out of 10 Millennials will respond that they wish to invest in a way that leaves a positive mark, implying the demographic is primarily values-driven.** This sentiment can be shown in the rapid growth of sustainable funds driven by Gen Z investors: investors contributed \$51.1 billion to sustainable funds in 2020, compared to less than \$5 billion five years ago¹. While ESG evaluations initially began with the intentions of targeting the climate crisis, the drastic rise in inequality during the COVID pandemic have reminded investors of the importance of both “S”

¹ [Goby Inc.](#)

² [CFA Institute](#)

³ [Alva Group](#)

⁴ [Corporate Finance Institute](#)

⁵ [The Balance](#)

⁶ [S&P Global](#)

and “G” in ESG. the scale and immediacy of the growing wealth gap, responses will face increasing scrutiny from ESG investors in the near future.

Social Equity and Corporate Transparency

Recently, the Black Lives Matter movement has called to attention persistent racial inequalities. **In June 2020, 128 investment entities signed a public pledge to integrate racial justice into their investment decision-making and engagement strategies**, and to embed a racial equity and justice lens within their organizations⁴. Investors are and will continue to be pressuring companies to mitigate inequality both within the company and beyond. With this social pressure, it is likely that the weight of “S” in calculating ESG scores will continue to increase as it has in recent years, pushing companies to become more socially engaged than ever before.

Furthermore, corporate governance issues such as board diversity, shareholder responsiveness and anti-corruption measures are becoming increasingly important to investors. The role of corporate leadership, particularly political spending and lobbying, has been scrutinized more than ever since the January 6 insurrection at the Capitol. Companies such as Amazon, AT&T, Comcast and Goldman Sachs have announced that they are cutting off all contributions to members of Congress who voted against certifying President Biden’s Electoral College win. Recently, companies’ reaction to laws restricting voting rights in states like Georgia have also come under scrutiny. As consumers and investors become increasingly conscientious of company practices rather than purely products and services, the importance of evaluating corporate governance factors could continue to increase in ESG evaluation.

Emerging Trends

In anticipation of the United Nations Climate Change Conference happening in early November 2021, ESG investors are calling for more transparency regarding climate risk disclosures⁷. In his newsletter to shareholders in January of 2021, Larry Fink relates how he “asked all companies BlackRock is invested in on behalf of [its] clients to disclose a plan for how their business model will be compatible with a net zero economy.”⁸ Responding to pressure from investors, Exxon Mobil released data on indirect emissions resulting from the use of the company's products.⁹ However, simply releasing data is inadequate for many investors; according to S&P Global, **there is a discrepancy between S&P companies’ sustainability reports and factors incorporated into ESG scores. 90% of companies release a CSR report but only 16% of those reports include ESG factors that are evaluated by ESG-metrics.**¹⁰ In a 2020 Ernst & Young survey, **55% of investors reported that they consider ESG as well as financial metrics when deciding to invest.**¹¹ Considering this disparity, there is potential for private sector firms to be more forthcoming with their internal ESG data and sustainability initiatives in the future; this new data may help investors decide who they want to invest in, and it may aid in standardizing ESG metrics as more data is released.

Due to discrepancies in data, there is increased pressure for more regulations surrounding the reporting of ESG factors, which means we will likely see a higher amount of data that is

⁷ [S&P Global](#)

⁸ [BlackRock](#)

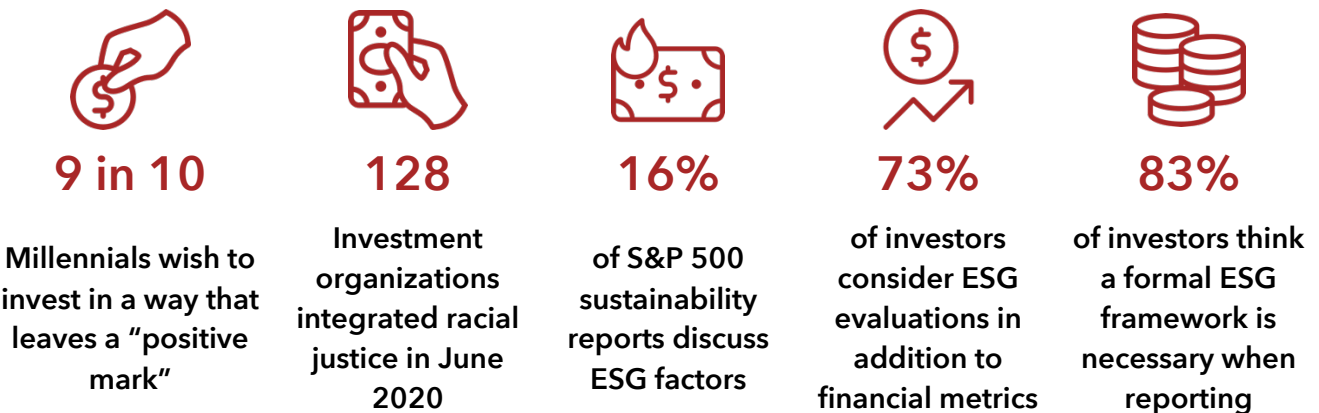
⁹ [Exxon Mobil](#)

¹⁰ [S&P Global](#)

¹¹ [Ernst & Young](#)

released in the future. In March, the International Financial Reporting Standards (IFRS) Foundation announced they were creating a working group to develop standardized global ESG reporting standards to streamline ESG criterion, data, and considerations for both companies and investors.¹² The Task Force on Climate Related Financial Disclosures (TCFD) is another group dedicated to recommending what climate change disclosures must be made; they create broad recommendations of what data should be released by public companies about how they handle climate-related issues as well as specific recommendations for financial and non-financial institutions.¹³ According to an Ernst & Young survey, 63% of investors use ESG disclosures created by the TCFD framework when evaluating potential investments;¹⁴ as this percentage grows over the years, companies may increase the data they release to match demand. **As the number of regulations concerning corporations reporting their internal ESG-oriented policies increase, some required and some that are just recommended, the accuracy of ESG data may increase. With this increase in transparency, we may see more well-informed investments as the ease of reporting ESG-metrics increases with more data availability.**

Countries are beginning to adopt these motivations and create plans to address them. The UK announced in their 2020 Interim Report and Roadmap that they would become the first country to make TCFD reporting mandatory.¹⁵ With international pressure surrounding sustainability and regulations, organizations are beginning to prioritize corporate social responsibility and sustainability to boost their ESG scores and look more appealing to investors. According to the Ernst & Young survey, **83% of investors consider a formal framework on ESG reporting to be necessary for assessing the viability of long-term investments.** As a result, the average ESG scores of various private sector firms will likely increase over time to meet the demands of the public.



4.3 ESG Regulation (through Regional Analysis)

A key aspect of ESG metrics are corporate regulations covering not only operational standards but also reporting and transparency. These standards vary globally: while the

¹² [IFRS](#)
¹³ [TCFD](#)

¹⁴ [Ernst & Young](#)
¹⁵ [Environment Analyst](#)



United States falls behind in areas like voluntary reporting and overall corporate social responsibility, firms in Europe and Asia are performing at higher levels, in part due to stricter regulation.

United States

ESG reporting in the US has always been voluntary, with no real reporting mandates by government or regulatory agencies until very recently. While many institutional investors such as BlackRock, State Street and Vanguard have required companies in their portfolios to release ESG metrics based on SASB or TCFD standards, the government and SEC have opted to allow companies to voluntarily report. Traditionally, the SEC has always maintained focus on only requiring disclosure of financially material information. However, as a trusted regulator, the SEC is optimally positioned to encourage engagement and on the future of ESG reporting and regulation. In March of 2021, former Acting Chair of the SEC Allison Herren Lee announced that the SEC will be “working toward a comprehensive ESG disclosure framework” and pursuing initiatives such as “offering guidance on human capital disclosure to encourage the reporting of specific metrics like workforce diversity and considering more specific guidance or rule making on board diversity.” After recently confirming new Chair Gary Gensler, the SEC doubled down on the focus on ESG, announcing their agenda centered around climate change disclosure, along with diversity, equity and inclusion, and human capital management. The SEC has delivered a public invitation to input on climate change disclosure, which remains open until June. After this period, it is expected that the SEC will make significant changes to corporate reporting on ESG matters. **Investors and companies in the US can expect that reporting climate metrics such as emissions and waste management will be mandatory in the near future.**

Europe

Europe has led and continues to lead the way with respect to ESG investing and regulation. While reporting has been mandatory for a while, the EU’s next target is to reduce greenwashing in companies and investment products. Sustainable investment in the European Union is no longer optional but has instead become a focal point of the asset management industry in Europe. Most recently, the EU Sustainable Finance Disclosure Regulation, SFDR, was introduced as the newest piece of legislation aimed at making ESG investing more accessible and easier to understand. The SFDR is directed towards investment firms and financial advisors to disclose information regarding ESG in respect to the products that they offer. The legislation aims to cut down greenwashing in the finance industry. While many ‘green’ or ‘sustainable’ investments and funds may already provide some of this information, the standardized nature of the SFDR is likely to make it easier to compare products and also potentially for consumers and advocacy groups to hold them to higher standards (JDSupra²). The SFDR comes to the aid of the existing EU Taxonomy regulation, which was established in 2020. The Taxonomy aims to answer what is considered environmentally sustainable activity, providing a reference for companies and investors to filter out “greenwashing” and identify companies which are truly sustainable.

On the non-financial company side, the Non-Financial Reporting Directive, commonly known as the NFRD, has been in place since 2014 and states that corporations have to report on ESG information from 2018 onwards. While the NFRD requires companies to report on ESG, it is rather flexible. The legislation contains many comply-or-explain clauses, stating that companies can either report the required information, or explain why they choose to not disclose it. In April 2021, the European Commission proposed a new package that strengthens the NFRD called the Corporate Sustainability Reporting Directive, CSRD, extending the reporting requirements to all large and listed companies, meaning that nearly 50,000 companies in Europe will now need to follow them according to EnvironmentAnalyst³. The NFRD is then adapted into national legislation in each country, compared to the SFRD and the EU Taxonomy which are both based in European regulation and enforceable without approval in each state.

Asia

ESG has been steadily growing in Asia over the last 5 years. In addition to local asset managers and regulators, pressure from foreign investors have also sped up the adoption of ESG in Asia. Covering many different countries and lacking a central entity like the EU, **Asia differs from the rest of the world in that ESG rules and regulations vary greatly between countries.** In Asia, stock exchanges are more often the entities requiring companies to list their ESG metrics compared to governments or regulations. This is especially prevalent in China, with the Shenzhen Stock Exchange and Shanghai Stock Exchange requiring publicly traded companies to list their ESG metrics before any similar requirements from the government.

Another interesting trend that is unique to Asia is the prevalence of Shariah-compliant funds. Such funds are considered a type of socially-responsible investment following negative screening of certain 'sin stocks' such as alcohol, tobacco, gambling etc. Shariah-compliant funds have a long history. They first appeared in the late 1960s in Malaysia and in the mid-1970s in the Middle East region. Their creation was driven mainly by individuals, who were attracted by the idea of faith-based investments associated with business ethics, anti-corruption, systemic and regulatory risk management and data protection.

USA

- The United States government and the Securities and Exchange Commission (SEC) have opted to allow companies to voluntarily report their ESG metrics
- Traditionally, the SEC has always maintained focus on only requiring reporting of financially material information
 - However, as a trusted regulator, the SEC has the opportunity to encourage engagement on the future of ESG reporting and regulation
- It is expected that the SEC will make significant changes to corporate reporting on ESG matters soon
- Investors and companies can expect that reporting climate metrics such as emissions and waste management will be required in the near future



ASIA

- ESG has been steadily growing in Asia over the last 5 years
- Not only are regulators and asset managers in Asia driving the emphasis towards ESG, pressure from US and EU investors have further spurred the interest in ESG
- Covering many countries and lacking an organization like the EU, ESG in Asia differs from the rest of the world in that the rules and regulations vary greatly between countries
 - Especially prevalent in China (e.g. the Shenzhen Stock Exchange), there is an interesting emphasis on stock exchanges across Asia requiring companies to list their ESG metric as opposed to governments or regulations



EU

- Europe has and continues to lead the way in both ESG investing and ESG regulation
- Sustainable investment in the EU is no longer optional but has instead become a focal point of the asset management industry
- Recently, the EU Sustainable Finance Disclosure Regulation (SFDR) was introduced as the newest piece of legislation aimed at making ESG investing more accessible and easier to understand which is directed towards investment firms and financial advisors
 - The SFDR comes to the aid of the existing EU Taxonomy regulation
 - The Taxonomy aims to identify sustainable companies



5. Landscape Analysis

The ESG space consists of various players, each with their own roles and responsibilities. Investors, corporations, rating agencies, regulatory bodies, and the government all play a role in creating, modifying, and utilizing ESG scores. By understanding how these different players connect, stakeholders can improve not only their understanding of ESG but also their reliance on different metrics as a mode of evaluating risk.

5.1 For Investors

ESG ratings gain internal value depending on how effectively they expose underlying traits about a company. These include anything from giving additional light to regulatory issues or supply chain stability. Therefore, understanding the effectiveness of ESG from the perspective of investors who use it to defend their convictions provides more context to its application and general effectiveness.

For investors, ESG metrics are highly important in predicting risk and evaluating private sector firms. Typically, investors will rely on an ESG score to evaluate a company's present level of sustainability as well as their future potential. As global warming gained public attention in the late 2000s, investors began paying closer attention to ESG factors. In fact, according to Russell Investments' 2019 survey of 300 private sector firms focused on ESG integration, approximately 90% of actively invested asset managers incorporate ESG as an investment consideration.¹⁶ **Studies have shown that the difference between socially responsible investing and profit-driven investing is statistically insignificant.¹⁷ However, there is growing data that supports the claim that ESG investing is less risky than solely profit-driven investing.** In a 2018 study by BAML, it was discovered that if an investor had only held stocks with above average ESG ratings over the period of the study, they would have avoided 15 of 17 bankruptcies that happened during the study.¹⁸

There are multiple theories as to why ESG investors perform similarly to non-ESG investors. When looking at indices, a common assertion is that when screening for ESG stocks, there is a smaller universe of stocks to choose from, and that increases risk and decreases diversification. On the other hand, McKinsey argues that ESG investments yield strong value through 5 facets: top line growth, cost reductions, laxer regulations, improved productivity, and less long-term volatility.¹⁹ **Conclusively, research supports the finding that while investing sustainably does not lead to higher returns than investing on a for-profit basis, it simultaneously does not result in any financial losses.** Where ESG-driven investing is superior, however, is in its role as a promoter of a better, more sustainable future for all stakeholders.

Data shows that ESG investing is becoming much more popular, with 24% of overall flows into U.S. stock and bond funds going into ESG-related funds in 2020. When looking at the most successful ESG investors, they apply an ESG framework through various methodologies. The

¹⁶ [Russell Investments](#)

¹⁷ [RBC Global Asset Management](#)

¹⁸ [Bank of America](#)

¹⁹ [McKinsey](#)

VFTNX Index, which has returned 33% YoY, screens companies by excluding those in sin industries such as tobacco, alcohol, or adult films. The Sheldon Green Alpha Fund, one of the strongest performers on the market with gains of 92% YoY, uses a different approach where the CEO Peter Krull looks for disruptive, clean companies. These include high growth yet somewhat volatile companies such as Quantumscape of Tesla. His forward outlook asserts that he does not look at a company's past to determine its success but instead future initiatives.²⁰ Another popular ETF by Blackrock called "iShares Global Clean Energy ETF" uses yet another approach, where it takes mostly global equities in the clean energy sector, a unique vertical in the ESG industry.²¹ As can be concluded, there is no formula to utilizing high ESG scores to make profits as an investor. Instead, the investor must understand which companies in the ESG sphere are of high growth and demand from a public and investor relations perspective to make the right choices.

5.2 For Corporations

ESG metrics are often used to drive decision making for corporations. It defines how a company is run, and therefore an ESG score often encapsulates how a company operates. The push to increase ESG metrics can, improve a corporation's outlook via multiple levers. These include improvements in revenue, reductions in cost, regulatory changes, productivity increases, and a longer-term allocation of resources.²²

ESG improvements can support revenue growth through better relationships with customers, as ESG products are often regarded as clean and therefore, being a positive light to companies from a public standpoint. This positive outlook builds closer connections to communities resulting in more things being sold. A good example of this can be seen with Canada Goose, which recently announced that it would stop selling products with fur by the end of 2022. As a result, analysts predict higher revenue growth and the stock rose 3.2% on the same day that they announced the changes.²³

Reductions in cost are yet another strong reason that companies focus on ESG. Lower energy consumption reduces the electricity bill. Companies can also achieve reductions of costs through relationships with the government that are driven by ESG factors. They can give less environmentally friendly companies an advantage over competitors if their ESG scores, and their relationship to the public and government, are stronger. An example of this can be seen with companies that extract resources from lands. Often governments are the ones who contract out land to larger companies, so these larger "dirty" companies end up in battles over key areas. Often, at the end of the day the winner of the contract tends to be the cleaner company. By this standard, there are fewer regulatory headwinds when a company does better relative to its peers on their execution of ESG. **Productivity can also be boosted as a company's ESG score rises.** One Harvard Business School research paper states that the rising importance of high ESG scores "improve the ability for the firm to be more selective in hiring, reduce turnover and/or

²⁰ [CityWire](#)

²¹ [iShares](#)

²² [McKinsey](#)

²³ [CBC](#)

induce greater effort by employees."²⁴ It is also argued that the drive towards higher ESG scores pushed initiatives that reduced inequality in firms, which has been proven to improve productivity.²⁵

Finally, the importance of ESG scores can also drive stronger longer-term allocations of resources. This is because creating sustainable outcomes involves higher costs in the short-term that eventually lead to shortened costs in the future. Exxon is an example of improved asset allocation. Over 135 investors pushed the corporation to become cleaner, resulting in Exxon investing more into clean energy.²⁶

Overall, there are multiple pathways to how ESG factors can drive an organization's performance. Inevitably, these scores become very impactful on overall operations, public outlook, and performance and can often improve a company's status financially down the line if executed properly.

5.3 For Rating Agencies

Credit Agencies are crucial to the ESG space as they are the ones who generate their own scores to judge companies. Typically, they are used as a reference point to understand how a company is doing relative to its peers.

ESG became more strongly embedded into credit agencies as social turmoil in 2020 pushed them to take factors other than strictly financials into account. This came mostly from pressure in Europe, where they argued that the financial models that credit agencies were based on were unsustainable. As a result, the three most well-known agencies, Moodys, Standard and Poor's (S&P), and Fitch all had to respond. Each company went at shifting towards ESG differently, but some were more similar than others. Moody's acquired a few companies such as Vigeo Eiris to gain better methodologies as to how they could assimilate ESG into their formulas while S&P acquired RobecoSAM's ESG ratings.²⁷ At Standard & Poor's, 30% of total rating actions in the corporate sector between April and December 2020 were affected by ESG factors, whereas at Moody's this number was 33% and at Fitch it was 25%.²⁸ Through these numbers, it is concluded that ESG ratings are very important for companies as credit agencies take them into account strongly. The impact of this shift towards more ESG-aware credit ratings is that more sustainable causes will gather bonds at cheaper rates, as they will be rated as less risky by the agencies.

Despite these developments, there is still controversy regarding the usefulness of credit ratings. They are often not standardized, which makes it difficult to compare companies and build clear theses as to how companies will perform. This causes confusion for investors and companies alike, neither of which know exactly how they can execute a strong ESG score or understand what exactly goes into it due to some subjective analyses. Jim Nadler at Fortune

²⁴ [Harvard Business School](#)

²⁵ [NN Investment Partners - Integrating ESG Factors](#)

²⁶ [Reuters](#)

²⁷ [Bloomberg](#)

²⁸ [ING](#)

argues that “assessing management’s effectiveness in not only identifying but mitigating and capitalizing on sustainability trends captures the influence of these factors in a clear and concise manner.”²⁹ This echoes the opinions of others, who believe that there is still work to be done until Credit Agencies can determine ESG well.

Overall, credit agencies were pushed into the ESG sphere through a stronger demand for ESG to be factored into scores. Now, as the basis of understanding a company’s riskiness, they are at the forefront of the ESG shift. Their ratings are used to understand how companies function and how well they are adapting to a more sustainable business model. With that said, there is still lots of subjectivity that both investors and companies alike would enjoy to gain more clarity on.

²⁹ [Fortune](#)

6. Analyzing ESG Metrics

As ESG scores becomes a more important influence behind investing decisions, it is critical to understand how they are developed. Various rating agencies, including Bloomberg ESG Data Services, Dow Jones Sustainability Index, MSCI ESG Research, Sustainalytics, Thomson Reuters ESG Research Data, and S&P Global, all offer the same product – ESG scores. However, the way each organization goes about data collection and eventual score production differs across indices, and understanding these differences is key to understanding ESG.

6.1 ESG Evaluation/Measurement

There are many existing systems for how ESG scores are calculated, all of which differ since ESG data systems are largely subjective and ratings are often based on voluntary self-disclosure and partial data.³⁰ ESG data covers a broad range of materials inclusive of millions of public print, news reporting, as well as social media content and blogs, and is calculated through machine learning, particularly through natural language processing. Although the criteria considered and mathematical calculations may vary from agency to agency, most ESG rating agencies generally follow a five-step methodology when developing ESG scores.

As shown in the graphic below, **data is first collected through various sources**, most commonly through public data provided by companies' reports, media, government databases, and any other available postings about a firm. From the thousands of data points collected from these sources, **many ESG rating agencies sort and consider hundreds of factors**, of which most common are climate change, pollution, human capital, stakeholder opposition, corporate governance, resource use, and product responsibility.³¹ **These hundreds of factors can then be sorted into groups of 5-15 themes/key performance indicators (KPIs)**, which are often weighted based on how many of those initial factors are in each theme.³² **These key performance indicators are then often separated into the three pillars of ESG and calculated from there through several high-level mathematical processes**, including using proxy data points and materiality matrices. Across ESG rating agencies, the general process for collecting data is relatively the same, but fundamental differences in analysis create room for discrepancies in ESG evaluation that are worth considering.³³

6.2 Comparing Analysis Methodologies

Below, two different calculation processes for evaluating ESG scores are outlined. The first, utilized by indices such as the S&P 500, creates ESG scores using both categorical and material matrices. The second, utilized by indices such as Thomson Reuters, relies on a more formulaic approach.

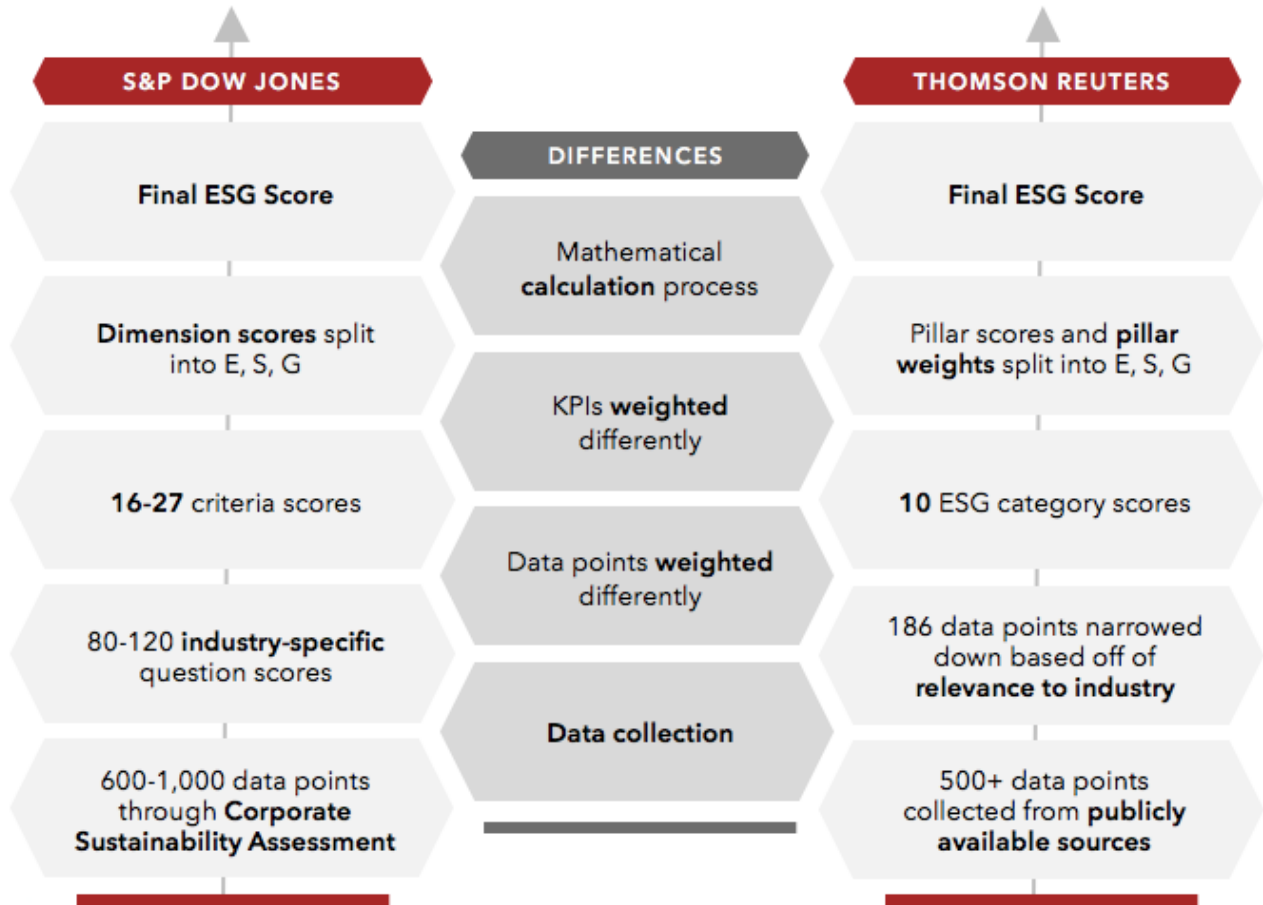
³⁰ [Alva](#)

³¹ [Harvard Business School](#)

³² [Refinitiv](#)

³³ [Thomson Reuters](#)

Exhibit 3: A comparison of ESG analysis methodologies, with key criticisms highlighted in center column.



Calculation Process #1

Step 1: ESG Category Scores

This is where individual data points are converted into one benchmark to represent the theme/key performance indicator they are grouped under.³⁴ Data points are represented as either boolean data or numerical data:

- Boolean Data
 - This is the data that can be answered with a simple “Yes”, “No”, or “Null”. For example, “Does the company have a water efficiency policy?”
 - Each of these questions has a polarity indicating whether or not an answer of “Yes” or “No” is positive or negative.
 - In the case of “Does the company have a water efficiency policy?”, an answer of “Yes” would indicate a good thing, hence a positive polarity.
 - The data points are then assigned either a numerical value of either 0 or 1 to be used in the percentile score calculation following this table:

³⁴ [S&P Dow Jones](#)

Positive	Yes = 1	No/Null = 0
Negative	Yes/Null = 0	No = 1

- Thus, in the case of “Does the company have a water efficiency policy?”, a positive question, an answer of “Yes” would mean this data point would be assigned a 1.
- Numerical Data
 - A relative percentile ranking is applied to numerical data points, again with the same polarity indicating whether a higher value is positive or negative.

These numbers are then taken, and the final key performance indicator score is calculated with the following formula:

$$\text{key performance indicator} = [(\# \text{ of companies with a worse value}) + [(\# \text{ of companies with the same value}) / (2)]] / [\# \text{ of companies with a value}]$$

Step 2: Materiality Matrix

This is where each key performance indicator is properly weighted to get the pillar scores, which are then summed to get the final ESG metric. Each of the category weights are calculated based on an objective and data-driven approach to the relative importance of each theme to the individual industry group. The weights are normalized to percentages ranging from 0 to 100, and a few typical weights include industry median, or the median value for a company in that industry, and transparency weights, or the level of disclosure of each data point in that industry.

Calculation Process #2

Some indicators also use the following equation to calculate ESG scores:

$$ESG \text{ score} = \sum_{j=1}^N w_{I(i)jt} c_{ijt}$$

where

$i = 1, 2, \dots$: denoting the companies in the industry

$t = 1, 2, \dots$: denoting the assessment years

$j = 1, 2, \dots, N$: denoting the question level indicators

$I(i) \in \{1, \dots, n\}$ = the industry of company i from the n industries

c_{ijt} = the normalized indicator j for company i for year t

$w_{I(i)jt}$ = the weight of indicator j for company i for year t , where the sum of all the weights for a specific company in a specific year is one:

$$\sum_{j=1}^N w_{I(i)jt} = 1, \forall i, t.$$

6.3 Challenges and Criticisms

The process of ESG scores being calculated differ in many ways, but mainly surround the core concepts revolving the reliability and origin of data, standardization of calculation methods, and weighting system differences, particularly when it comes to different industry concerns. The biggest difference and most concerning area to investors when looking at comparing such scores comes the standardization of calculation methods, ranging from including little mathematical calculation to being purely math.

Reliability and Origin of Data

Different ESG rating agencies collect data from different sources, ranging from all sorts of publicly available sources to conducting their own surveys. Additionally, they all go through their individual process of checking and standardizing their data. For example, Bloomberg ESG Data Service collects their data through corporate social responsibility or sustainability reports, annual reports and websites, and other public sources such as company direct contact. RepRisk on the other hand, focuses more on relevant data from 80,000 media and stakeholder sources. Looking towards Thomson Reuters, they cover 6,000 public companies across more than 400 different ESG metrics. They go through an extensive data quality process, using a combination of both algorithmic and human processes, going through data entry, post-production, independent audits, and management reviews. This includes going through around 400 built-in error check logics in the collection tools for various data points, 300 automated quality check screeners such as negative screening, inconsistency, and validating completeness of the prior year, and weekly feedback sessions, as well as monthly quality deep dives. On the other hand, S&P Dow Jones derives their scores from RobecoSAM's annual Corporate Sustainability Assessment (CSA), where 2,500 publicly traded companies are invited to participate. An industry-specific questionnaire is sent to participants covering relevant economic, environmental, and social governance topics. They then go through a mathematical process to screen and normalize the data. **None of these methodologies are necessarily the most or least accurate, but the lack of consistency as it relates to the way different rating agencies collect data creates room for error that must be addressed.**

Standardization of Calculation Methods

Calculation methods tend to vary from rating agency to rating agency, most of them being incredibly complex. Giving a brief overview of two agencies that differ quite a bit, Thomson Reuters takes a more conventional approach by dividing data into quantitative and qualitative categories, and then further categorizing and weighting the data. S&P Dow Jones on the other hand takes a very mathematical heavy approach. Thomson Reuters begins by dividing the underlying data points between boolean and numeric data, assigning each data point with a certain number. Then, they take these data points and create a category score by plugging the previously calculated numbers into a formula. These categories are then grouped and weighted through using a materiality matrix, where the magnitude values are automatically and dynamically adjusted as ESG corporate disclosure evolves and matures. S&P Dow Jones begins by plugging in their data collected through the CSA process into a weighted sum equation, where each indicator has a different weight and the ESG score is calculated as the weighted sum of the

indicators. This data is then normalized through a sigmoid-function on a standard z-score, and the final ESG score is the weighted sum of these normalized indicators. Missing data is a source of differences, where S&P Dow Jones has a framework where CSA questions are deemed mandatory if the information is found by analysts for more than 50% of companies. Bloomberg will penalize companies for missing data.

Industry-Specific Criteria Differences/Weighting System Differences

Weighting systems differ from agency to agency, as well as within the agencies from industry to industry. Most weights are based on how data heavy each category is, or how many issues each category has. For example, in Thomson Reuters' calculation process, the "Management" category contains multiple issues (composition, diversity, independence, committees, compensation, etc.) as opposed to Human Rights, which contains less issues. In addition, the overall pillar and ESG scores are calculated through applying category weights per industry through data-driven and objective logic in terms of the size and relevance of each category. Specifically, Thomson Reuters looks at indicators, some of which are industry specific and thus not relevant for all companies. If an indicator is not relevant, then it is excluded from the calculation and its value will be considered "Not Relevant". For example, the indicator Environmental Assets Under Management is relevant to only the financial sector and would be deemed "Not Relevant" for any other sector. S&P Dow Jones' weights are defined in the CSA and reviewed each year based on the financial materiality of each data point in each specific industry. Because of this, weights are dependent on the specific S&P Global Industry since this is already accounted for in the industry-specific approach in the CSA process. If an indicator is not relevant for a particular industry, the corresponding industry weight is zero.

6.4 Solutions for Risk Mitigation

Due to the subjective nature of the ESG scoring processes, as well as the challenges described above regarding consistency and standardization, it becomes hard for investors to accurately project returns and to generally accurately and easily compare scores and generate information from that comparison. In particular, approaches to ESG reporting often do not specify what information is specifically financially related, which allows for a difficult process for investors to identify specific information and get a clear picture of whether the information contributes positively or negatively to financial performance. Thus, financial investors often make sure to look through the details, particularly to specific financial material frameworks, such as the materiality map, which maps issues that are reasonably likely to directly impact the operating performance of a company.³⁵ However, with the lack of standardization and clarity, the process is still quite difficult and investors remain having reservations using ESG scores, and there

“

It seems people will get better at answering questions on the Sustainalytics questionnaires rather than get better at improving their performance on the ground.

”

³⁵ [OECD](#)

are still challenges associated with streamlining ESG scores as described above involving a lack of standardization in reporting and existing diverse ways to measure and communicate key aspects for each industry.

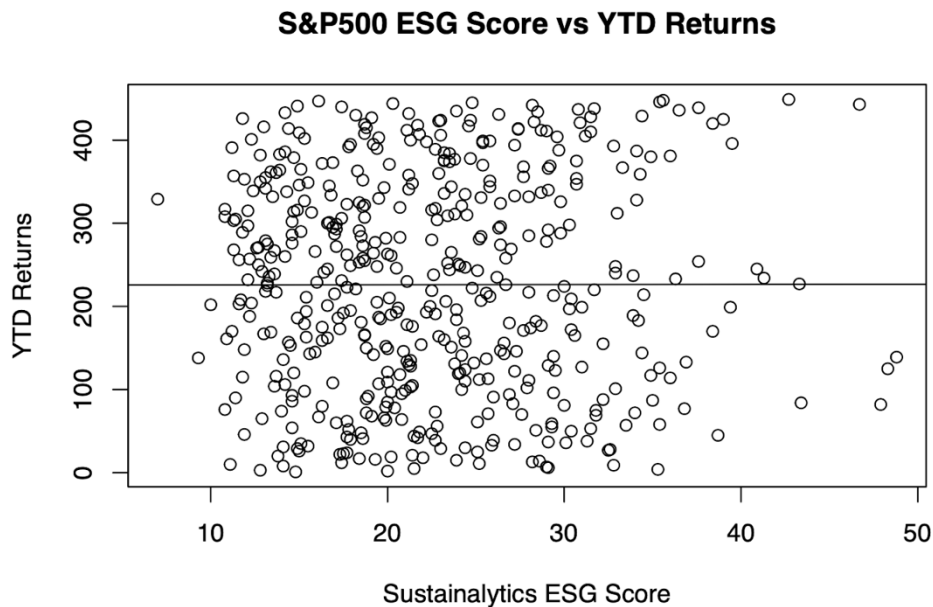
In order to combat this, **with consistency comes transparency**. Greater transparency that applies to all ESG issuers, tiers of metrics within sectors and industries, and core metrics would allow for greater usage of ESG usage, as such metrics can then be standardized, promoted, and shared across exchanges and framework providers. With this comes specifying and standardizing the differences between each sector, the details within each sector, and the weightings of each sector, while also focusing on maximizing data accessibility and availability while ensuring the data is trustworthy to such ESG rating agencies. **In a higher-level view, this means creating a universally accepted set of principles and guidelines for consistent and meaningful ESG reporting.** While calculation methods have their own reasons to be different, creating and maintaining transparency is ultimately the most important.

7. Relevance: ESG Scores and Returns

To investigate the relationship between ESG scores and the success of stocks, we engaged in an analysis of the relationship between ESG scores and YTD returns of S&P 500 companies based in America (we eliminated companies based in other countries because business regulations vary widely from country to country and may impact ESG ratings in that manner). First, we created our own data set using Sustainalytics ESG ratings (where a higher rating indicates a higher ESG risk) and the researched YTD returns of the 475 S&P 500 stocks that were based in the US (excluding Class B and Class C stocks to avoid repetition, using data as of 7/7/2021).

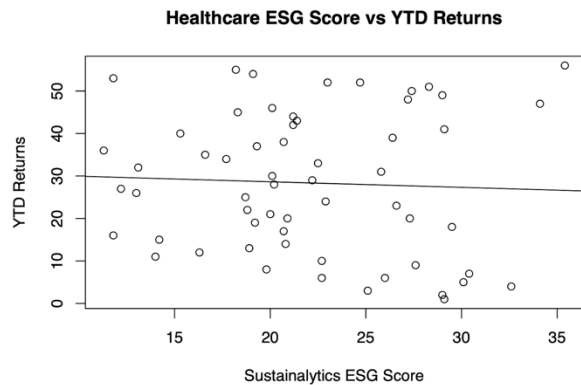
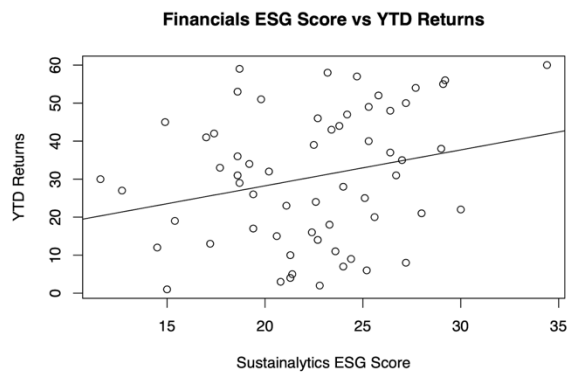
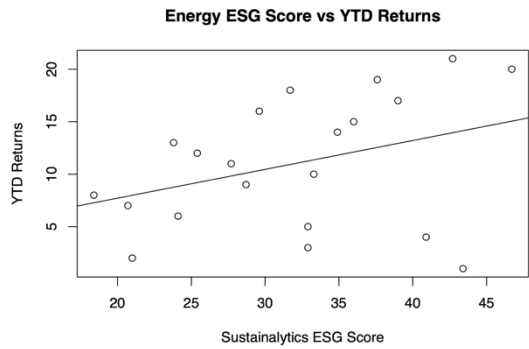
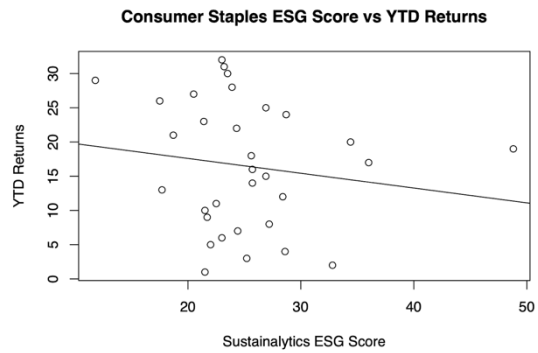
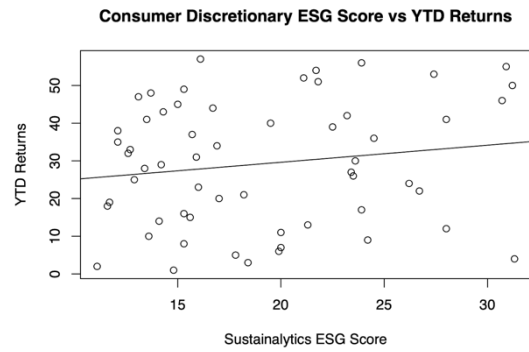
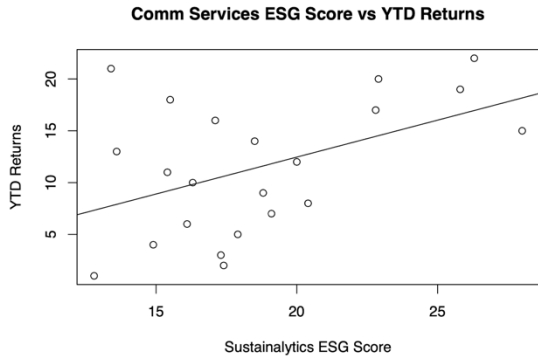
7.1 Data Analysis

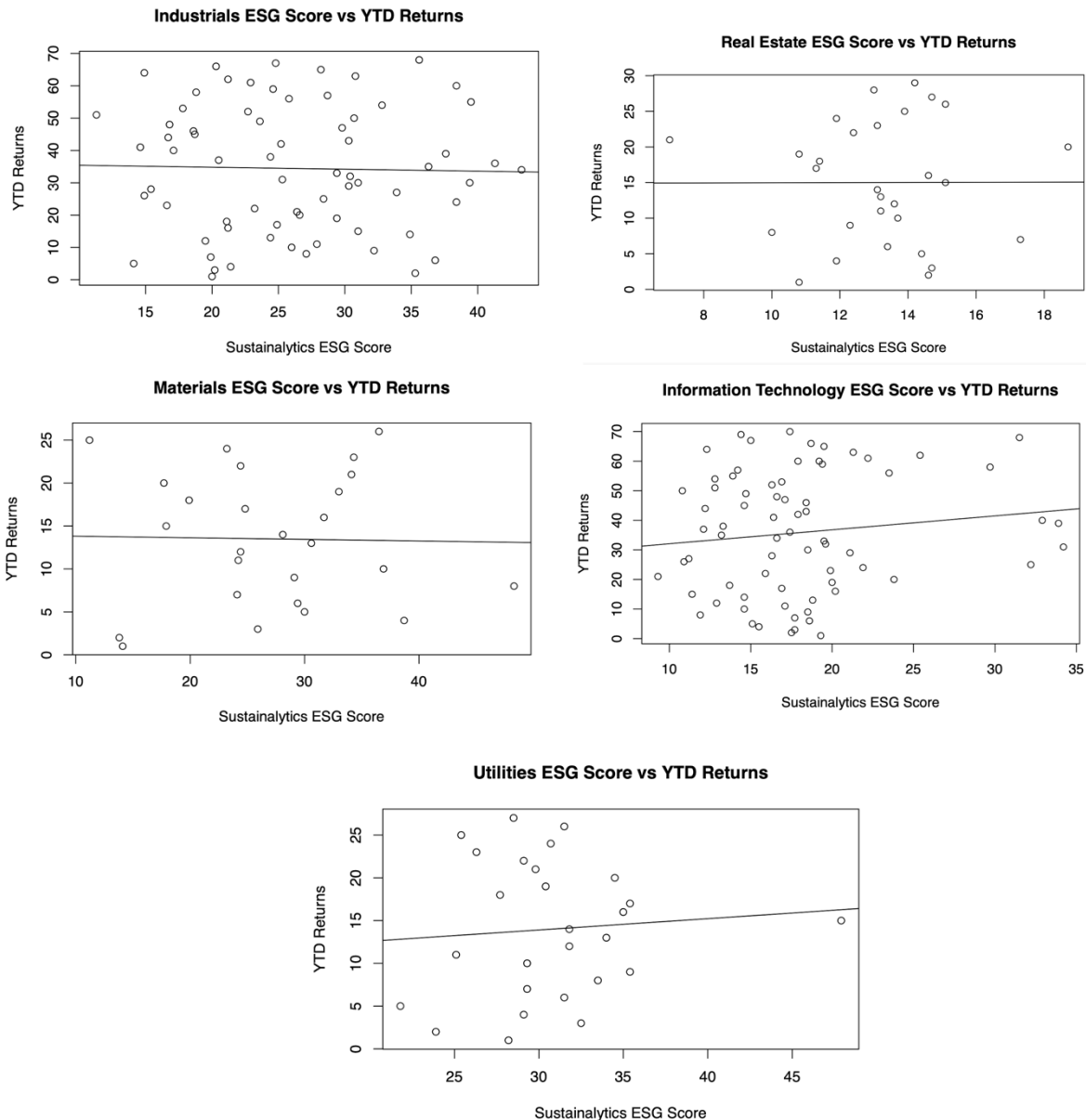
Overall, using a linear regression model, we found insufficient evidence for correlation between ESG score and YTD returns.³⁶ In other words, on average, there is not a statistically significant relationship between ESG scores and YTD returns. As is apparent below, the line of best fit for data points of ESG scores versus YTD returns practically runs down the center of the graph.



Because of the lack of conclusive evidence from this graph alone, we decided to split up the companies into their industry groups. **All companies in the S&P500 fall into eleven broad categories: industrials, healthcare, information technology, communication services, consumer discretionary products, utilities, financials, materials, real estate, consumer staple products, and energy.** Below are the graphs for the S&P500 companies in each of the eleven industries.

³⁶ HCCG Data Analysis





As is apparent from the graphs above, different industries display different correlations. Industrials and consumer discretionary display a virtually flat line of best fit, real estate and IT display slightly negative slopes, and healthcare displays a clear negative slope in its line of best fit. Materials, financials, energy, and consumer staples display slight positive slopes in their lines of best fit, while utilities and communication services display strong positive slopes in their lines of best fit.

7.2 Trends and Conclusions

These correlations would suggest that in the real industrials and consumer discretionary industries, ESG rating is not correlated with stock returns. Additionally, they would suggest that stocks in the real estate and IT industries have a slight negative correlation between ESG ratings

and returns, meaning that companies with higher (and thus worse) ESG ratings tend to have lower stock returns. This trend appears to be particularly strong in the healthcare industry. Meanwhile, stocks in the materials, financials, energy, and consumer staples industries display a slight positive correlation between ESG ratings and returns, meaning that companies with higher (and thus worse) ESG ratings actually tend to have higher stock returns in these industries. This positive correlation is even stronger in the communication services and utilities industries.

We speculate that the strongest of these relationships, particularly, the correlations in the utilities and communication services industries, might have arisen in part due to the type of products these industries typically produce.

Companies in the communication services industry may display the opposite relationship between ESG and YTD returns because their products typically fall into the category of luxury goods, which means that consumers do not purchase them often and prioritize brand name more often when purchasing these goods than they might for products such as consumer staples. Because of this, consumers will flock to name brands (such as Netflix in the communication services industry) because they are widely used, offer unique products, or carry some value in their brand. Because these brands offer such unique products and such unique brands, reputability of these companies may not be a concern for consumers as often because there are not as many close substitutes for the products and services these companies provide. The attractiveness of these stocks as securities of unique name brands is undeniable and may explain the positive correlation between ESG rating and YTD returns displayed in the graphs above.

The correlation between ESG scores and YTD returns in the utilities industry can be explained by the fact that within certain geographic areas, certain companies tend to form natural monopolies over utility services (for example, Eversource is the primary energy provider in the Boston area). This is because in many cases, having multiple utility companies is impractical due to the amount of infrastructure and distribution networks that need to be developed for each competing company.

To simplify this analysis, it seems that the rarer the product offered is, the less of a threat ESG scores seem to be to a company's profitability and returns.³⁷

Though individual industries display stronger correlations between ESG ratings and YTD returns, the stocks within the S&P500 as a whole did not display a strong correlation between these two factors. This may be for several reasons: perhaps the selection of stocks used in this analysis was too limited, or perhaps trends in the relationship between ESG ratings and YTD returns are truly industry specific. Another factor to consider in this analysis is that ESG ratings are not widely available to the general public: accessing them often requires overcoming a paywall, so ESG ratings cannot be used as a common statistic to assess the attractiveness of a

³⁷ HCCG Data Analysis

brand's stock. Rather, news about ESG-related events surrounding that company may have more impact on the attractiveness of their stock than the ESG rating itself, as this news is more readily available to consumers than ESG scores are. It will be intriguing to see how these trends change if ESG scores become more widely available.

On average, there is no statistically significant relationship between ESG scores and YTD returns in the market as a whole, but there may be trends between ESG scores and YTD returns within individual industries.³⁸

³⁸ HCCG Data Analysis

8. Strategies for Boosting ESG Scores

In addition to evaluation, another critical component of ESG metrics is the way private sector corporations institute and implement sustainable policies. These solutions often lead to more environmentally-friendly, equitable, and transparent operations that lead to higher ESG scores. Through case studies of high-scoring firms on both the MSCI and S&P Global ESG rating indices, the HCCG team highlighted three key strategies that can both boost a company's ESG score and improve overall efficiency.

8.1 Materiality

Many companies implement strategies to improve operational efficiency, such as by using environmental, water, or waste-management systems; however, it is easy for competitors to do the same. **To boost their ESG scores, companies should focus on finding approaches that can establish a competitive advantage, and they can do so by focusing on material ESG factors that have the most impact on their businesses and sectors.**^{39, 40, 41, 42}

Material ESG factors are those that have a significant impact on a company's finances or operations.⁴³ Companies should start by determining a few ESG issues that have the most material impact, which can vary significantly based on industry.³⁹ For example, a material factor for a financial company might be cybersecurity whereas an immaterial factor is greenhouse gas emission levels, and a material factor for the food and beverage industry can be product quality and safety whereas an immaterial factor is customer privacy.⁴⁴ Companies can do so by researching industry trends and engaging their stakeholders to determine practices that will most significantly affect their efficiency and performance.⁴¹

Benefits/Drawbacks

Research has shown that there is a direct relationship between materiality and performance. First, companies that have strong material ESG ratings outperform competitors that have weak material ESG ratings. Second, companies that have strong immaterial ESG ratings do not outperform competitors that have weak immaterial ESG ratings. Finally, companies with strong material ESG ratings and weak immaterial ESG ratings have the best performance.⁴⁵

The main drawback to this strategy is that materiality may differ from person to person and therefore may lead to errors in judgment. To gain a competitive advantage, companies must gain foresight on industry drivers before their competitors and determine what interventions are

³⁹ [Harvard Business Review](#)

⁴⁰ [JP Morgan](#)

⁴¹ [Nasdaq](#)

⁴² [Goby Inc.](#)

⁴³ [Alva-Group](#)

⁴⁴ [SASB](#)

⁴⁵ [Harvard Business School](#)

appropriate. Companies may need to hire professionals and consult external stakeholders to determine what material factors to target; this may necessitate additional costs as well as time.

Case Studies

Taiwan Semiconductor Manufacturing Company

One way that Taiwan Semiconductor (TSMC), the world's largest contract chipmaker, has maintained high ESG ratings is by focusing on water management efficiency and water recycling measures.⁴⁶ Semiconductor manufacturers are notoriously dependent on ultraclean water, and the amount of water needed per unit wafer of production for semiconductors continues to increase over time in the industry. Furthermore, Taiwan is a water-stressed region and has been undergoing a water scarcity crisis.⁴⁷

TSMC has developed a water reporting system to continuously monitor water quantity and quality to better respond to abnormalities. Furthermore, TSMC has also strengthened its wastewater classification and resourcing system, allowing them to reclaim hydrofluoric acid wastewater, acidic and caustic wastewater, chemical mechanical polishing wastewater, and high-concentration liquid waste. Finally, they have expanded their use of diverse water sources such as tap water, air conditioning condensate water, and rainwater. These practices not only help with water management but also reduce input costs and decrease the likelihood of manufacturing disruptions.⁴⁶

Between 2016 and 2019, TSMC's water withdrawal intensity was 21% below its competitors.⁴⁶ Since 2017, TSMC's MSCI ESG ratings have been consistently high, scoring AA until December 2020 when its rating went up to AAA.⁴⁸ TSMC's stock prices have increased over 300% over the last 5 years, especially accelerating between 2020 and 2021.⁴⁹

Microsoft

Microsoft has maintained high ESG ratings by focusing on top issues in its Corporate and Social Responsibility materiality assessment, such as accessibility, applying technology for environmental and social good, and climate change and energy.⁵⁰

One way Microsoft has responded to the issues of accessibility and applying technology for environmental and social good was by establishing AI for Earth, an initiative that aims to leverage artificial intelligence to address sustainability issues such as agriculture, water, biodiversity, and climate change. Through the initiative, Microsoft has on-boarded several petabytes of environmental and Earth observation data that is free for use, partnered with 19 organizations, and provided over 700 grants to projects of impact.⁵¹

⁴⁶ [TSMC](#)

⁴⁷ [Fitch Ratings](#)

⁴⁸ [MSCI](#)

⁴⁹ [Google Finance](#)

⁵⁰ [Microsoft](#)

⁵¹ [Microsoft](#)

To respond to climate change and energy concerns, Microsoft has targeted carbon emissions and resource management. Microsoft has been carbon neutral since 2012 by purchasing clean energy to offset its global electricity consumption.⁵² In 2020, Microsoft announced that it would be investing \$30 million in Closed Loop Partners' funds to aid in its circular economy initiatives, building Microsoft Circular Centers to reuse and recycle parts from its e-waste, and eliminating the use of single-use plastics in its packaging.⁵³

Microsoft's MSCI ESG rating has remained consistent at AAA since 2017 and is a leader in the software and services industry in ESG.⁵⁴ Over the last 5 years, Microsoft's stock price has increased by more than 400% and its annual earnings per share and revenue have been consistently increasing.⁵⁵

8.2 Creating a Sustainable-Oriented Culture

To improve ESG scores, companies must begin with reshaping the company culture to value and promote sustainability and increase CSR—corporate social responsibility. This goes beyond charity events and pushes for a more diverse approach to CSR. Reshaping culture takes time and diligence; there must be a consistent effort made from all levels. A portion of this is creating systems for all employees to contribute. This can be through donating, mentorship, service, creating new sustainability initiatives, and more.⁵⁶

Furthermore, companies should invest more in their employees, which directly impacts social factors such as employee engagement, level of turnover, pay, benefits, diversity, and equity. For existing employees, companies should compensate their workforces competitively and can invest in employee skills training and development by providing employees with training programs, paid working time for education, and other stipends or benefits.^{57, 58} Companies can also create more accommodating policies, such as flexible work arrangements to accommodate working parents. Furthermore, companies should adopt strong diversity and equity policies by training their employees and management on diversity and equity issues.⁵⁸ Companies can also create mentoring programs, networking opportunities, and employee resource groups to help diverse employees feel more included and increase their professional development.⁵⁸ Companies should also actively maximize the cognitive diversity of their workforce by adopting recruiting policies that remove bias.^{57, 58}

Cultural shifts need to come from the top-down, starting with upper management.⁵⁹ There needs to be a clear message behind the shifts and consistent effort on all fronts to work towards this change. Creating this new culture plays a large role in shifting focus towards ESG-boosting initiatives and will make transitioning from old to new practices easier.

⁵² [Microsoft](#)

⁵³ [Microsoft](#)

⁵⁴ [MSCI](#)

⁵⁵ [Macrotrends](#)

⁵⁶ [Forbes](#)

⁵⁷ [KKS Advisors](#)

⁵⁸ [ACC Docket](#)

⁵⁹ [Innovation-MC](#)

Benefits/Drawbacks

In shifting towards creating new cultures that value creativity and openness and investing in their employees, companies can improve their S-factor, the social side of operations. **By listening to all employees and creating an environment in which employees' health and well-being are valued, companies can not only improve their ESG-scores but also boost employee happiness and loyalty, which improves worker productivity by 13%.⁶⁰** Furthermore, by promoting upskilling, employees will have a wider range of skills and experiences, which can help companies deal with new and complex situations and lead to more innovation. Additionally, by having a more diverse workforce, companies are more likely to know what their audience wants, needs, and dislikes and are more likely to be supported by diverse clients.⁶¹ In terms of recruiting, having a more diverse workforce can help attract a wider range of jobseekers, leading to even more opportunities for diversity. Finally, shifting company culture can indirectly impact other ESG categories as sustainable initiatives become more valuable to a company.

However, shifting towards a new, sustainable-oriented culture is not an easy feat. First off, these changes must be initiated top-down, thus upper management needs to create a plan first before they can implement it to the entire company. Secondly, some employees may push back against changes to the current culture which can hinder the process. These pushbacks may be due to people being accustomed to old norms or being afraid of failure in a new environment. Additionally, there are likely to be some expenses. For instance, speaking about employee training alone, the 2014 Training Industry Report from Training magazine estimated that small businesses in the United States spent approximately \$1,200 per employee with an average of \$308,000 total.⁶² There are likely also hidden costs such as loss of productivity and time while training for both employees that are being trained as well as supervisors and mentors.⁶² Finally, a lack of reinforcement can halt the momentum of new practices. A study by McKinsey showed that only 37% of respondents feel that the most recent change effort at their organization was successfully implemented.⁶³ To counter this, there needs to be clear consistent communication as new strategies are put in place, explanations of the purpose behind these changes, and follow-ups ensuring new practices are being followed.⁵⁹

Case Studies

Shopify

Shopify is an online platform that has fostered a new, positive company culture and has improved their ESG scores in the process.

⁶⁰ [Oxford](#)

⁶¹ [Marsh McLennan](#)

⁶² [Forbes](#)

⁶³ [McKinsey](#)

Shopify helps you run your business through managing sales, finding customers, and organizing day-to-day tasks.⁶⁴ It allows users to sell products however they please, whether that is online, or in person. Shopify has worked on a positive culture since their founding in 2006, but when they scaled up their employee count in 2015, they honed in on this. The CEO began receiving leadership training, the management staff had weekly two-hour leadership meetings in which they broke down all aspects of their business model, and they wrote a new employee handbook.⁶⁵ In doing all this, Shopify has fostered an open, collaborative culture, valuing empathy and acceptance. They put people first: employees have reported that in addition to healthcare and dental, they attend company social outings, get reimbursed for gym memberships, have maternity and paternity leave, have financial benefits, and more.⁶⁶ Shopify also supports diversity –removing as many barriers as they can so all voices can be heard– and autonomy –giving employees the freedom to be resourceful and solve problems in their own way.

Though Shopify began their journey in 2015, they did not see an improvement in MSCI ESG-rating until 2020; before 2020 they had a consistent rating of BBB, then in 2020 they improved this score to A, and in 2021 it continued to improve to a rating of AA.⁶⁷ Furthermore, based on MSCI reportings, they are a leader in corporate governance. In 2020, Shopify had a S&P ESG score of 38.⁶⁸ After making this shift, Shopify’s revenue increased greatly; in the final quarter of 2015 Shopify’s revenue grew 99% from the previous year,⁶⁹ and in 2016 their final quarter revenue was an 86% increase from the previous year.⁷⁰

Adobe

Though a plethora of company benefits, Adobe has created a sustainability-oriented culture that helped improve their ESG scores.

Adobe is a computer software company; some of their main services are their Creative Cloud, which is made for individuals, and Experience Cloud, which is made for businesses.⁷¹

Adobe values employees' overall well-being: in addition to healthcare, they offer wellness incentives, programs to help employees quit smoking, employee assistance programs, and more. They offer and encourage time off to recharge, some locations pay for sabbatical after a certain amount of time spent at the company.⁷² In addition to this, Adobe helps employees to manage their finances to achieve their financial goals. They also encourage consistent learning and offer reimbursement for educational courses their employees take. Finally, they match donations of time or money that employees make to schools or nonprofit organizations.

⁶⁴ [Shopify](#)

⁶⁵ [Shopify - Employee Scaling](#)

⁶⁶ [Comparable](#)

⁶⁷ [MSCI](#)

⁶⁸ [S&P](#)

⁶⁹ [Shopify - 2015 Financial Results](#)

⁷⁰ [Shopify - 2016 Financial Results](#)

⁷¹ [Adobe](#)

⁷² [Adobe - Careers](#)

Adobe is a leader on the MSCI metric in corporate governance, corporate behavior, and human capital development. Since 2018 they have earned a rating of AA, making them a leader in their industry in ESG ratings. In the past year, Adobe has also earned an S&P ESG score of 68.⁷³ Adobe has won a plethora of awards for team culture and employee satisfaction: they have been on Fortune's top 100 companies for the past 20 years, in Glassdoor's and LinkedIn's top companies to work at list, they were ranked the best place to work at by the Economic Times in India and Japan and Germany and the UK, and many more awards.⁷² These awards for their team culture help Adobe recruit the best of the best.

Square

Square has put their company culture first since they were founded, and by creating an open environment, their ESG scores have improved.

Square is an American digital payment company that sells hardware and software.⁷⁴ Square has focused on creating a well-rounded company and community culture. They have a plethora of employee benefits, one of which is funded mental health services to ensure employees are taking care of themselves. They also offer up to sixteen weeks of paid parental leave to all employees. To ensure all company employees are continuously growing, square offers funded learning programs.⁷⁵ In addition to the benefits, Square is hiring a more diverse workforce, and in 2020 41% of employees were women and 21% were underrepresented minorities (URM); they are working to reach 50% women and 30% URM as this is the national distribution per the US census.⁷⁶ To create a more accepting workforce, Square made Juneteenth and the International Day for the Abolition of Slavery annual holidays for all employees.

In 2020, Square increased their rating from a BBB to an A rating on the MSCI scale in software and service industries and is a leader in human capital development.⁷³ In addition to this increase in their ESG score, Square also grew year-to-year profits by 52%.⁷⁷

8.3 Democratizing Purposes and Practices

In shifting towards a more sustainable culture, it is important to allow individuals, both employees and customers, to advocate for causes that matter to them. With this information, corporations can assess where to focus their efforts in creating more ESG-programs within their market. While promoting flexibility and creativity towards sustainability-initiatives within the culture of a company, it is important to be specific with which initiatives the company takes on when evaluating their employees' wants. These initiatives should be articulated well to both employees and the public. Additionally, there should be short-term and long-term goals with specific steps outlined on how those goals will be reached.

⁷³ [MSCI - ESG Ratings and Climate Search Tool](#)

⁷⁴ [Square](#)

⁷⁵ [Square - Careers](#)

⁷⁶ [Square - 2020 CSR Report](#)

⁷⁷ [Square - Q4 2020 Shareholder Letter](#)

The technology industry is significantly affected by democratization; as social media becomes more popular, technology companies have relied more on democratization. Consumers of technology can be vocal on social media platforms about how content they are with companies' ESG-practices, and enough negative feedback can greatly tarnish a companies' reputation. **Due to this, 74% of tech-CEOs feel responsible to uphold the values of their customers and ensure their internal ESG policies reflect these values, which often concern climate-risk and fair workforce demographics.**⁷⁸ Furthermore, the pandemic has been an opportunity for these companies to improve their ESG practices by incorporating feedback from customers. Particularly for the tech field, the continuation of utilizing employee and consumer feedback towards their ESG initiatives will help improve their ratings.

Benefits/Drawbacks

Allowing space for this democratization can help companies increase their ESG ratings while also increasing their employee happiness and market attractiveness; **Forbes found that engaging employees in community service programs reduced turnover rates by 57%.**⁷⁹ Allowing more democracy and open communication around ESG-initiatives from employees and customers can help companies create the most valuable internal ESG practices.

One of the drawbacks of this strategy is the vast amount of input a company may receive; everyone has different causes that matter to them. Companies should analyze the feedback and focus their energies on no more than five programs at once;⁸⁰ this ensures that a company's resources are not stretched too thin, and that they can continue to have a specific purpose. Furthermore, ESG-programs are most effective when they integrate into a business's current market; for instance, an agriculture company that fights hunger.⁸⁰ Thus, corporations must find the balance between creating a democratic approach to new initiatives while maintaining their companies' values and creating specific, powerful plans.

Case Studies

Best Buy

Best Buy continuously incorporates company and customer feedback into their sustainability-initiatives.

Best Buy is a technology retailer that sells appliances, electronics, smart home devices, and other tech devices.⁸¹ In 2018, Best Buy reassessed their corporate sustainability to see how they could lower their carbon footprint. To do this, they elicited feedback of many forms from consumers, employees, and experts. They began by trying to figure out what issues to focus their efforts on, and to do this they interviewed internal executives, members of teams within the organization, as well as external stakeholders.⁸² **After completing their report and**

⁷⁸ [Assets - ESG Imperative for Tech Companies](#)

⁷⁹ [Forbes - How to Boost Your Company's ESG Profile](#)

⁸⁰ [McKinsey - Five Ways that ESG Creates Value](#)

⁸¹ [Best Buy](#)

⁸² [Best Buy - 2018 CSR Report](#)

identifying areas of improvement, Best Buy surveyed internal and external stakeholders for feedback so they could continue to improve ESG-initiatives that were important to members of the institution.⁸² In addition to this specific instance, Best Buy continuously surveys customers to ask for feedback on their overall satisfaction with the company. In their 2021 ESG report, Best Buy announced that they continue to use feedback from employees, customers, and stakeholders to improve their ESG-initiatives. They survey employees each year to gain baseline feedback to better understand employees' needs, but they also elicit real-time feedback for specific areas in which Best Buy is looking to improve; for example, they continue to survey field employees to ask how to improve the stores response to Covid-19.⁸³

Best Buy's MSCI ESG rating has remained constant since 2018 at a score of AAA, putting them in the upper 3% of retail companies.⁷³ They are a leader in corporate governance, labor management, corporate behavior, privacy and data security, and supply chain labor standards. In 2018 after completing the surveys Best Buy's total revenue increased by 7%.⁸⁴ Furthermore, in 2020 they continued to increase sales by 2.6%.⁸⁵

Nvidia

Nvidia has boosted their ESG-metric through incorporating company and consumer feedback into their business model.

Nvidia is a global technology company that produces processing units for gaming and professional industries and chip units for personal devices and vehicles.⁸⁶ In their 2019 CSR report, Nvidia executives explained that they were using feedback from external stakeholders to help assess risk and opportunities in their internal ESG-initiatives.⁸⁷ In the report itself, they encouraged readers to send it any feedback they have on initiatives that have been created thus far. Nvidia also uses data from customer surveys to continuously improve on what the customer wants—both with their products and with ESG-initiatives. In addition to customer feedback, Nvidia elicits employee feedback so that they can improve working conditions that promote the health and well-being of employees; in doing so, Nvidia can improve the S-factor in their ESG ratings.

Nvidia has an AAA rating on the MSCI ESG ratings, putting it in the top 5% of semiconductor companies.⁷³ They are leaders in corporate governance, corporate behavior, and human capital development.⁷³ Nvidia also has a rating of 74 on the S&P Global ESG evaluation; based on this rating they are ranked 10th in the industry in the governance and environmental categories and 11th in the social category.⁸⁸ In 2018 Nvidia's quarterly profits were increasing, however in 2019 their stock price dropped by about 35%; this was partly due to the fact that they increased their R&D expenses.⁸⁹ Then in the first quarter of 2020, their revenue increased

⁸³ [Best Buy - 2021 ESG Report](#)

⁸⁴ [Best Buy - 2018 Annual Report](#)

⁸⁵ [Best Buy - 2020 Annual Report](#)

⁸⁶ [Nvidia](#)

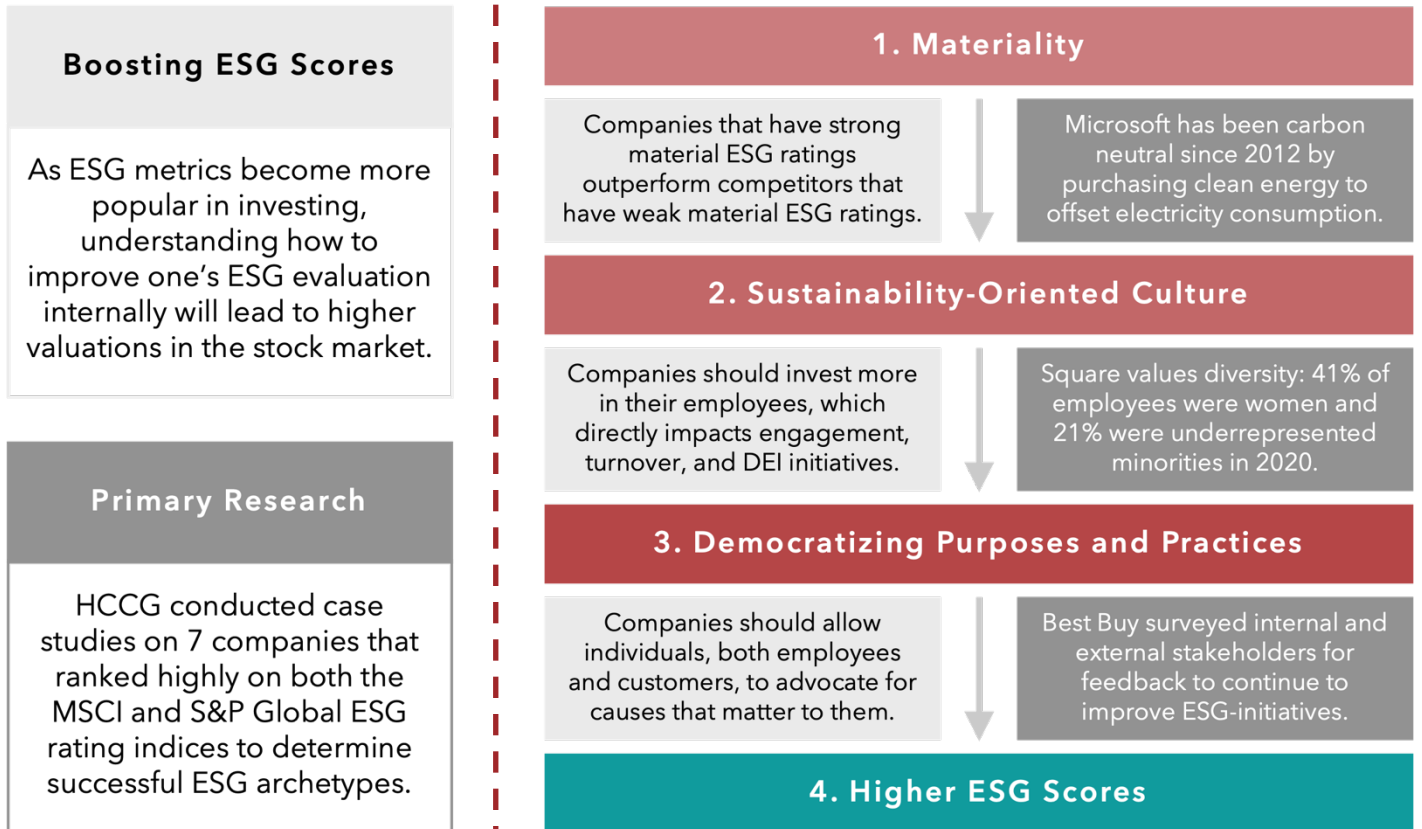
⁸⁷ [Nvidia - 2019 CSR Report](#)

⁸⁸ [S&P Global ESG Index](#)

⁸⁹ [Forbes](#)

by 42% from the previous quarter.⁹⁰ During these fluctuations, the Nvidia MSCI and S&P ESG scores remained relatively constant.

Exhibit 4: A summary of key strategies for boosting ESG scores, with research methodology outlined on the left and strategy definition and case study details on the right.



⁹⁰ [Macrotrends](#)

9. The Future of ESG

As the ESG space continues to evolve, new trends and patterns in corporate social responsibility are emerging along with it. Companies are utilizing new methods to boost their ESG scores while rating agencies are simultaneously changing the way they evaluate these companies based on changing frameworks and government regulations. All of this uncertainty creates room for confusion as it relates to ESG. HCCG interviewed 8 experts in the field of ESG across education, law, consulting, and sustainable practices to determine the path ESG is on long term.

9.1 Future Trends

The growth and development of ESG investing has increased exponentially over the last couple of years, leaving no doubt the future importance of ESG to both companies and investors alike. **As the investor demographic gradually shifts towards Millennials, value-based investing principles generally associated with Millennials will cement the widespread adoption of ESG investing.** However, before ESG becomes as essential as fundamental analysis, there are several major hurdles and questions that need to be answered. Mainly, who should and who will be regulating and requiring companies to report ESG metrics and the standardization across industries for investor convenience. Additionally, there remains a stark polarization between asset managers in the US who believe that ESG are beneficial for long term returns, and asset managers who do not believe that ESG correlates to returns. **About one-third of millennials often or exclusively use investments that take ESG factors into account, compared with 19% of Gen Z, 16% of Gen X and 2% of baby boomers according to a survey conducted by The Harris Poll.**⁹¹

The current main frustration with ESG reporting is the lack of consistency between regions and industries. For example, Europe has required companies to report various ESG-related metrics for nearly five years now, whereas companies in the US were not obligated to report any metrics until very recently. However, governments and financial regulators in all regions in the world are beginning to require ESG metric reporting, showing signs of a universal disclosure system. When it comes to what exactly will comprise the list of universal disclosures, there is no real alignment except for one issue agreed upon by all parties—climate change. Financial regulators across America, Europe and Asia have all shown to prioritize climate change and therefore it is reasonable to expect environmental metrics such as carbon footprint and waste processing to become standard across all regions.

A study done by RBC Global Asset Management showed that asset managers increasingly believe that integrating ESG analysis into the investment process will have a material impact on investment risk and/or returns.⁹² However, the study revealed that institutional investors have a persistent fear that a non-financial investment factor will lead to lower returns. The study highlights a significant divide between investors, with only 5% of respondents from the

⁹¹ [CNBC - Millennials Spurred Growth in ESG Investing](#)

⁹² [RBC Global Asset Management - ESG Integration](#)

US believing that ESG investments are likely to perform better than non-ESG investments, while 26% believed that ESG investments are bound to perform worse. However, this trend is isolated to the US alone as RBC determined that over 80% of respondents worldwide believe that in the long term, ESG investments will yield better results. The next step that ESG needs to take especially in the US is to dispel myths that considering ESG factors means that investors need to sacrifice risks. Although many high performing ESG funds seemingly dispel this myth already, a longer track record of success is needed to convince investors that are doubtful of the financial benefits of ESG.

9.2 Future of Evaluation

Currently, the process of ESG evaluation is less than methodical. Non-reliable data, a lack of standardization, and inconsistent weighting systems across industries make ESG comparison difficult and inefficient. As a result, there is a clear demand for a new system of ESG evaluation that addresses those challenges and makes ESG scores more reliable in the future.

In terms of data reliability, the future is optimistic. Dr. Robert Pojasek, Harvard Extension School Professor and Director of the Center for Corporate Performance and Sustainability, acknowledges the challenges ESG evaluation comes with but thinks long-term ESG evaluation will improve. **“Although sustainability data is poor, I think a future trend is that ratings are going to get a lot better.** Today, rating agencies are not hiring their representatives from the international sustainability standards board (ISSB), even though the board will choose parameters they will eventually rate on.” **One solution Dr. Pojasek presented for the problem of data reliability is more communication between rating agencies and organizations creating frameworks.** In his opinion, this will ultimately force the ESG landscape to improve the standardization of ESG rating, bridging the gap between rating agencies, corporations, and regulatory bodies creating frameworks like the IFRS.⁹³

According to Harvard Kennedy School Professor Matthew Kiefer, **“The trend toward standardization is key. Today, most ESG enforcement is not conducted by the state, but larger, global, sustainable investing networks that are attempting to become more systematic. The question of what metrics need to be reported and how an index is going to quantify them is critical to achieving a more accurate system of evaluation.”** In other words, defining what metrics are most important and designing a system that adequately weights them across categories is essential to standardize the process of ESG evaluation.⁹⁴

On the other hand, Harvard Kennedy School Professor David Wood has a different perspective on ESG evaluation. In his opinion, the larger problem is the way companies report, not the way indexes collect data, stating that **“It seems people will get better at answering questions on the Sustainalytics questionnaires rather than get better at improving their performance on the ground.”** There is a lack of standardization in terms of calculating ESG scores. Different indices

⁹³ HCCG Expert Interview with CCPS Director Dr. Pojasek

⁹⁴ HCCG Expert Interview with HKS Professor Matthew Kiefer

have different frameworks and different investors have different goals. For instance, KSL Analytics (which was bought by MSCI and was the first company to sell corporate information to investors) utilized public information and a questionnaire to collect ESG data from companies. In this example, “BP can describe themselves well, but does that match their true behavior? A company can learn to report on ESG the right way, but that does not prevent the bad trend of declining safety measures leading to Deepwater Horizon,” said Professor Wood.⁹⁵

9.3 Future of Regulation

Regulatory measures surrounding ESG are different across industries and across countries.

These varying regulations in terms of government mandates and ESG frameworks like the IFRS make it difficult to not only compare ESG scores but accurately rely on them for risk mitigation in investing. For many experts, the future of regulation requires standardization and universal reporting standards.

The first step to effective regulation of ESG reporting is through the creation and integration of universal reporting standards across businesses. Dr. Pojasek described this vision as follows: **“International standards are best. We don’t want US standards vs. European standards vs. other standards. This makes ESG comparison difficult. Currently, there is a regulatory environment for companies, and a non-regulatory environment for ESG rating. They’re run differently, but a future solution could be an international compliance program for all publicly traded companies.”** In this scenario, sustainability would become a regulatory program, with an environmental manager, health and safety manager, and economic manager all at the same level for all corporations, helping to enforce ESG standards set by the IFRS, IONESCO, and IFAC. By creating an overarching system that governs ESG reporting as well as appointing a leader who ensures proper ESG compliance, private sector companies will not only be better able to follow ESG protocol but improve their transparency simultaneously.⁹⁶

Separately, while some see government mandates as the key to ESG standardization, other experts see more effective ways of regulating the process of ESG metric disclosure. Professor Kiefer believes that **“there are methods governments can take to promote ESG short of mandating ESG reporting and performance. Government support/intervention to promote ESG is key and is coming. The battle between governments enforcing ESG versus governments encouraging ESG will be key in years to come.”** In the future, the question of what form these incentives take will become critical when defining how corporations approach reporting on ESG metrics. Will the government provide tax benefits for reaching a certain level of CO2 emissions? Will publicly-traded companies be offered some sort of employee supplemental income for scoring above a certain percentile in the “S” category of ESG? Questions like these are yet to be answered and will become clearer as ESG regulation evolves over time.⁹⁷

⁹⁵ HCCG Expert Interview with HKS Professor David Wood

⁹⁶ HCCG Expert Interview with CCPS Director Dr. Pojasek

⁹⁷ HCCG Expert Interview with HKS Professor Matthew Kiefer

Harvard Law School Professor Robert Sitkoff sees an additional concern as it relates to ESG reporting standards from a corporate perspective. When asked about the primary challenges associated with considering ESG an accurate measure of CSR or not he explained that, **“Another challenge in this space is what we call a ‘defiled furnace distinction.’ Owing to the lack of consensus that’s out there a lot of the data that’s out there is furnished not filed. ESG is used in so many different domains for different purposes. We don’t have a good track record of recording ESG policies. Requiring ESG disclosure for security markets, to ensure data is filed not just furnished is one strategy for improving regulation.”**⁹⁸ This perspective supports the idea that creating accountability measures for corporations and standardizing not only what metrics are reported but how they are reported are two essential pathways to better ESG reporting.

9.4 Future of Motivation

At first glance, ESG seems like a method for improving corporate social responsibility. Providing companies a score based on how they manage environmental, social, and governance risks leads investors to value a company as more or less sustainable. However, critics of ESG point out a major flaw in this theory, the reason ESG came to be in the first place has nothing to do with the holistic term sustainability. While ESG began as a way for investors to prioritize corporate impact on climate change, many experts believe ESG became an umbrella term for more complex investment issues that can’t be easily quantified.⁹⁹ As Professor David Wood puts it, **“ESG is the way you translate social problems into investor-speak.”**

In the present, greenwashing is one of the largest negative trends plaguing the ESG space. Greenwashing refers to the unethical strategy businesses use to disseminate disinformation so as to present an environmentally responsible public image. According to Dr. Pojasek, **“when organizations do ESG, it really isn’t ESG. They only report on what they have to or what is mandated, doing the minimum in terms of transparency.”** With this mindset, the corporate motivation for boosting ESG scores has nothing to do with social well-being and everything to do with financial returns.¹⁰⁰ And while it is possible ESG’s past was defined by the eyes of the stakeholder, it is even truer that ESG’s present is covered by the same lens. Take for instance the impact Black Lives Matter had on corporate social responsibility. After the murder of George Floyd, American companies pledged \$50 billion toward racial equity initiatives. This rapid uptake and investment in the “S” of ESG begs the question: Are companies’ commitments to diversity, equity, and inclusion (DEI) solely driven by the buzzing hot topics of racial equity and gender equality pushed by 21st century youth? Or are companies’ commitments to DEI here to stay? Some experts believe it is both. Professor David Wood explains that **“Corporate motivation for valuing the “S” in ESG is first-order--driven by a social movement and second order--looking for long-term change. Companies reacted to movements such as BLM and**

⁹⁸ HCCG Expert Interview with HLS Professor Robert Sitkoff

⁹⁹ HCCG Expert Interview with HKS Professor David Wood

¹⁰⁰ HCCG Expert Interview with CCPS Director Dr. Pojasek

political voting rights with financial claims and promises they now have to back up, but that doesn't mean they aren't here to stay. Decision-making can be led by social pressure and social changes. The optimistic view of ESG long term and the reason it is likely here to stay is because of the uptake by policymakers."¹⁰¹ More generally, Professor of Finance at the University of Chicago Booth School of Business Luigi Zingales predicts that, "ESG is going to continue to evolve, and it isn't going away anytime soon."¹⁰² In fact, of the 8 experts HCCG interviewed, all 8 agreed with the statement that "ESG is not going away any time soon.

As ESG continues to expand, investors, policymakers, and CEOs will have to continually shift their perspective on what it means to be "sustainable." Professor Matthew Kiefer summarized the path private sector corporations should take as such, **"A culture of learning and improving in developing best practices is where businesses need to go so ESG becomes more widespread. Providing a chance for companies to respond and adapt is key to improving performance. ESG is a model, it will never be 100% right, but it doesn't have to be. It just has to be a useful guide to decision-making."**¹⁰³

9.5 Future of the ESG Landscape

With all of these changes in ESG evaluation, regulation, and motivation, the relationships between significant players in the ESG space will inevitably change as well. While investors, corporations, rating agencies, and society will all have similar responsibilities in the future as it relates to ESG, the way each party engages with one another may change over time.

In a conversation about the accuracy of ESG scores, Professor Sitkoff mentioned the lack of consensus surrounding the term ESG itself. **"It's not obvious that ESG is meant to capture the same notion as CSR... You have to make subjective judgements about which way any specific ESG factor points. You could imagine a pro ESG person saying, 'I'm going to sell all my fossil fuels,' or also see them buy all fossil fuels and talk with those companies to do better."**¹⁰⁴ This distinction between how investors will interact with corporations in the future to demand better ESG performance was discussed in further detail by Harvard Economics Professor Oliver Hart.

He described the first method of improving sustainability efforts like this: "The landscape is in flux; it is hard to know where they are going to end up. There's increasing pressure on companies to do things consistent with ESG. **Two mechanisms at work I wrote about with co-authors are exit versus voice. The exit mechanism is 'We're going to put pressure on companies by divesting.' If we [investors] sell shares in those companies, they will feel the pressure through lower share prices and force them to act better.** That can also be powerful in principle on the consumer side when consumers say, 'We're not going to buy products from dirty companies.' Or workers saying, 'We're not going to work for dirty companies.' Those are

¹⁰¹ HCCG Expert Interview with HKS Professor David Wood

¹⁰² HCCG Expert Interview with University of Chicago Booth School of Business Professor Luigi Zingales

¹⁰³ HCCG Expert Interview with HKS Professor Matthew Kiefer

¹⁰⁴ HCCG Expert Interview with HLS Professor Robert Sitkoff

all mechanisms that can in principle work and people are trying those right now. I know Harvard students have been very active in pushing Harvard to divest from undesirable companies.”¹⁰⁵ And while divestment is a popular approach to improving sustainability and through a chain of events improving ESG performance, there are other strategies available. As Professor Hart describes, **“Another mechanism I emphasize in my work because I think it can be more powerful and it doesn’t get as much attention is voice--engaging with companies, not boycotting them or divesting from them but actually sticking with them and trying to improve them. Shareholders have the ability to do that because they have votes, and companies are meant to act on their behalf.** That’s a pretty uncontroversial position. That has been taken in the past as maximizing profit or share price because the idea has been what do the shareholders want, they want as much wealth as possible.” In this strategy, there is continual dialogue between investors and proponents of ESG metrics and corporations who are responsible for their impact long term. **In the future, increased dialogue between investors and companies in combination with increased transparency may increase ESG scores.**¹⁰⁶

The changing ESG landscape has even impacted the way the general public sees the value in sustainability.¹⁰⁷ According to Harvard Graduate School of Design Professor Holly Samuelson, the shift toward ESG has also created an infrastructural shift in businesses and a perspective shift in the community. For instance, when it comes to green building design standards, “The trend was moving towards health even before the pandemic, and now the general public is suddenly aware of health in a new way, starting to care more about toxic materials.” Additionally, an increase in the salience of ESG investing has been simultaneously met with an increase in sustainable development. Professor Samuelson spoke with the HCCG team about LEED, “a voluntary ratings system for buildings, very popular for companies and their headquarters. It consists of checklists where companies earn points for sustainability to incentivize being LEED-certified.” Similar to the way ESG developed because of the need for greater focus on the way environmental factors impacted returns, programs such as LEED, the Living Building Challenge, or WELL “gained popularity because before they existed someone could say they had a green building because they recycle while another person could say they have a green building but have photovoltaics.” **In general, standardization appears to be a major problem across various sectors that relate to ESG, not just investing.**¹⁰⁸

Just as there will be future communication between investors and corporations, Professor Samuelson predicts there is a need for future communication between the government and the entities designing regulatory frameworks. “Currently, some mandates use LEED standards, but there is not so much communication between the nonprofit voluntary programs creating standards for green buildings and the governments creating the mandates for new buildings.” Here, we see that the governments responsible for mandating sustainable practices by corporations are not communicating with the parties most educated on the topic,

¹⁰⁵ HCCG Expert Interview with Harvard FAS Professor of Economics Oliver Hart
¹⁰⁶ Ibid.

¹⁰⁷ HCCG Expert Interview with Harvard GSD Professor Holly Samuelson
¹⁰⁸ Ibid.

drawing a clear parallel with the same governments mandating ESG reporting without first consulting regulatory bodies like the IFRS or SEC.

Overall, increased communication and stronger relationship across the ESG landscape will create a more reliable environment for ESG investors. **Greater transparency from companies leads to more accurate ESG scores by evaluators, more accurate scores from rating agencies leads to better decision-making and risk management by investors, and better investments leads to positive valuations, which makes high-scoring ESG companies attractive in the eyes of the general public.** This ESG feedback loop will only continue to circle over time, and the more ESG performance becomes a priority the more streamlined the process will become: from reporting to evaluation to valuation.

10. Conclusion

Overall, ESG investing is rapidly evolving and has implications for investors, corporations, and rating agencies alike. **For investors, ESG investing does not decrease returns and can be profitable. For corporations, shifting to ESG can lower costs and increase revenue. And for rating agencies, lack of standardization in ESG ratings causes inconsistencies in the evaluation process, which must be addressed through increased transparency and greater regulations for ESG reporting.** The landscape of ESG analysis consists of not only the set of criteria utilized to score individual companies across environmental, social, and governance metrics but also the processes rating agencies use to calculate ESG scores, the strategies companies use to boost their own ESG scores, as well as emerging trends in the industry that are changing the way all stakeholders approach ESG investing.

For measuring ESG criteria, the HCCG team found that there are many existing systems for how ESG scores are calculated, all of which differ since ESG data systems are largely subjective. Ratings are often based on voluntary self-disclosure and partial data, so inconsistency is a huge challenge faced by ESG investors looking to rely on multiple indices. **By standardizing the calculation methods for determining ESG scores, increasing transparency in reporting from companies either through calculation-based incentives or government regulations, and more consistency between industries both in terms of reporting and scoring, ESG indices will become much more reliable for investors and better predictors of profitable investments.**

In addition to evaluation, another critical component of ESG metrics is the way private sector corporations institute and implement sustainable policies. **These solutions often lead to more environmentally-friendly, equitable, and transparent operations that lead to higher ESG scores.** Through case studies of high-scoring firms across ESG indices, HCCG identified three key strategies for boosting ESG scores: materiality, creating a sustainable-oriented culture, and democratizing purposes and practices. For materiality, companies like Microsoft excel by prioritizing ESG criteria that establish a competitive advantage. By focusing on material ESG factors that have the greatest impact on their sector, private sector firms can continually increase their ESG scores. When shifting company culture, companies must begin by reshaping their values, promoting sustainability and increasing CSR. Finally, companies can democratize their purposes by prioritizing initiatives that are important to their employees.

Finally, observing the future of ESG metrics reveals trends in both rating agency evaluation and private sector internal strategy. From HCCG's expert interviews, the team gathered that as the ESG space continues to evolve, new trends and patterns in corporate social responsibility are emerging along with it. **With time, ESG evaluation will become more systemic and standardized, regulatory standards will become international in scope, and increased communication between stakeholders will create a stronger, more reliable environment across the ESG landscape** for ESG investors.



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