

Making an Impact: Earning Returns on Sustainable Terms



Introduction

In 1970, Nobel laureate Milton Friedman wrote that “there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game.”¹ Since then, the world has changed in ways that few could have possibly foreseen. Today, businesses confront rapidly growing movements advocating that they also focus on promoting desirable outcomes relating to environmental, social, and governance (“ESG”) objectives...in addition to profit.

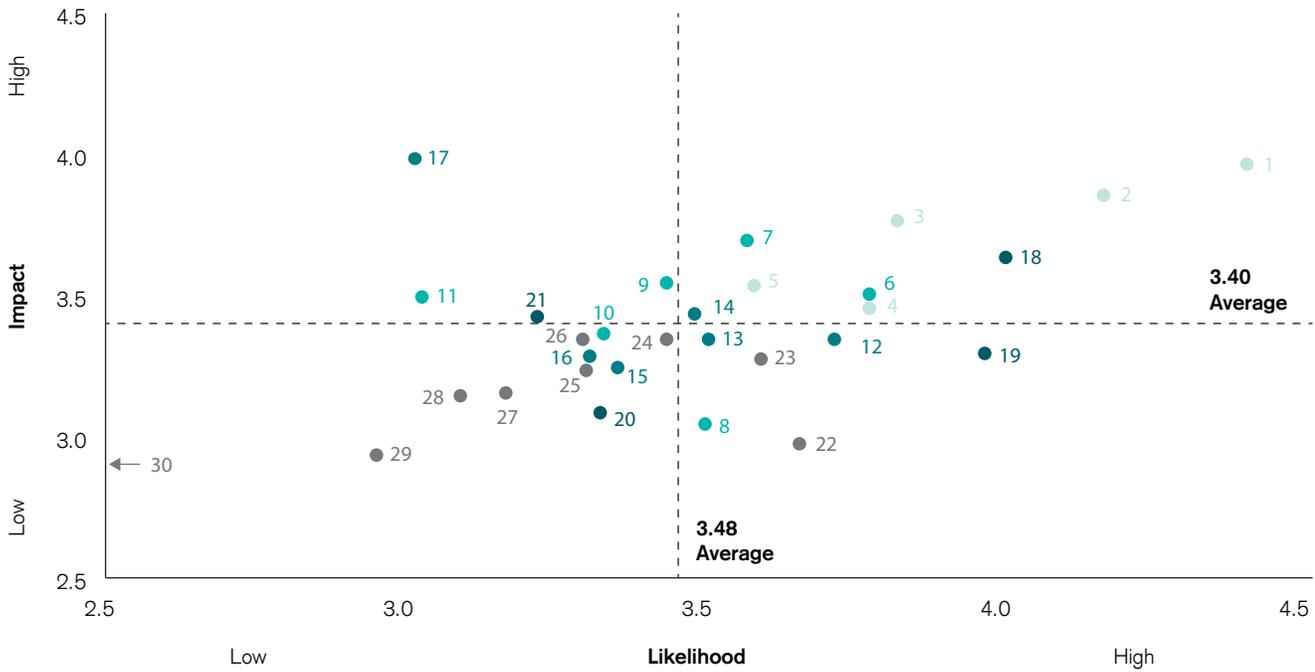
These movements arose in response to the growing realization that a focus on ESG objectives can mitigate critical global risks. The World Economic Forum reckons that the risks with the highest impact and likelihood are increasingly related to sustainability in some way: extreme weather events, natural disasters, failure of climate-change mitigation and adaptation, among others.² Whether they are environmental issues such as climate change, water scarcity, or overpopulation; social issues encompassing unfair labor practices, product safety concerns, and data security; or governance matters involving business ethics and management incentive structures, these movements are increasingly attuned to companies’ performance in these areas.

Given these circumstances and the attention now paid to them, those companies best able to address

and mitigate these risks through ESG-focused programs and initiatives can attract new investors, access new and growing sources of capital, and ultimately lower their funding costs. All of which underscores the fact that ESG should be an integral component of enterprise risk management. In other words, *caring about ESG is good business.*

This paper, the thirteenth in our ongoing series of **Credit Suisse Corporate Insights**, provides context to the emerging ESG movement which is grabbing headlines and attracting the attention of government regulatory bodies and corporate executives, as well as capital from institutional investors. We shed light on the development of the ESG ecosystem, so that our clients are better informed and can adopt appropriate strategies to tackle the challenges that will accompany the rapid growth of ESG.

Exhibit 1: The World Economic Forum’s Global Risks Landscape 2019



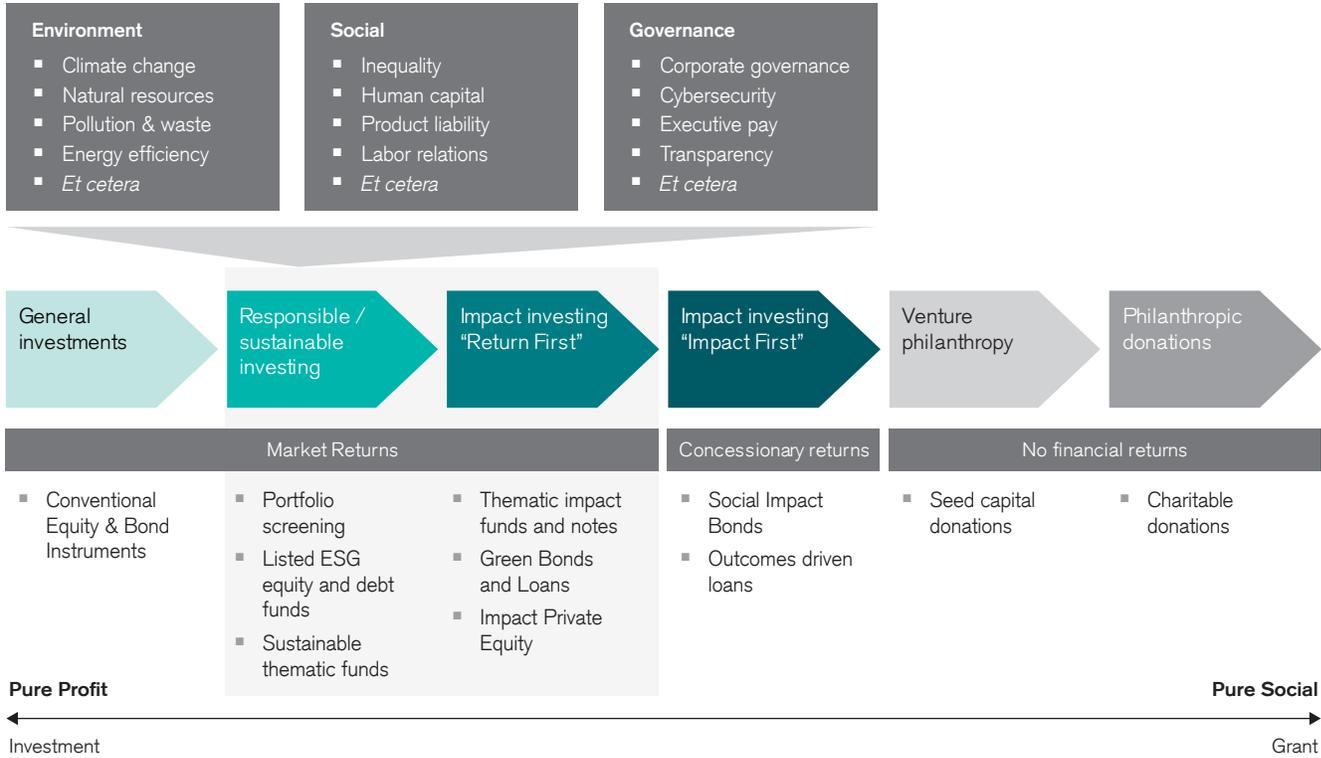
Environmental factors	1 Extreme weather events 2 Natural disasters 3 Failure of climate-change mitigation and adoption 4 Man-made environment disasters 5 Biodiversity loss and ecosystem collapse
Natural resources	6 Large-scale involuntary migration 7 Water crises 8 Failure of urban planning 9 Food crises 10 Profound social instability 11 Spread of infectious diseases
Human conflict	12 Terrorist attacks 13 Failure of national governance 14 Interstate conflict 15 State collapse or crisis 16 Failure of regional or global governance 17 Weapons of mass destruction
Information security and technology	18 Cyber attacks 19 Data fraud or theft 20 Adverse consequences 21 Critical information infrastructure breakdown
Financial system risk	22 Illicit trade 23 Asset bubbles in major economy 24 Unemployment or underemployment 25 Failure of critical infrastructure 26 Fiscal crises 27 Failure of financial mechanism or institution 28 Energy price shock 29 Deflation 30 Unmanageable inflation

The ABC's of ESG

ESG investing has garnered considerable media attention and interest from investors, increasingly leaving corporate management and investor relations teams exposed to questions about ESG concerns. However, the exponential growth of this ESG trend has resulted in a lack of standardization in both terminology and quantifying methodologies, all of

which can be overwhelming and confusing to the uninitiated. As the pressure intensifies for companies to develop and disclose ESG strategies and performance, our corporate clients must achieve fluency in these topics. First, let's address terminology of the ESG landscape and the investing strategies it comprises.

Exhibit 2: Definitions³



Insight:
Impact investing encompasses the key tenets of returns, measurement, and intentionality.

ESG investing is an umbrella term encompassing all investment-related activity that accounts for some type of environmental, social, or governance consideration. ESG investing encompasses many

investing strategies. Although these strategies vary in terms of their ultimate goal, they can be categorized into seven thematic approaches:

Exhibit 3: ESG investing strategies⁴

- 1 Negative / exclusionary screening**
Eliminating companies in industries or countries deemed objectionable
- 2 Norms-based screening**
Eliminating companies that violate norms such as the Ten Principles of UN Global Compact
- 3 Positive / best-in-class screening**
Selecting companies with especially strong ESG performance
- 4 Sustainability-themed investing**
Focusing on topics like access to clean water or renewable energy
- 5 ESG integration**
Including ESG factors in fundamental analysis opportunities
- 6 Active ownership**
Engaging deeply with portfolio companies on ESG principles
- 7 Impact investing**
Looking for companies that make a positive impact on ESG issues while still earning a market return

Insight:

Impact investing has emerged as a distinct sub-component due to its differentiating strategy and surging popularity.

These investment strategies are not the same and understanding how they differ is important. However, for simplicity and for the purposes of this paper, we

use “ESG investing” as a generalizing term to describe all of these approaches.

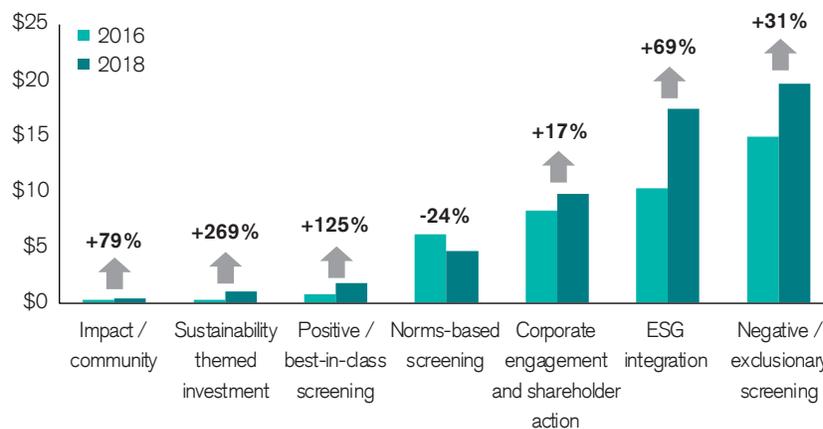
ESG investing demand is high and growing

Within this broad umbrella of ESG investing, the size and growth of assets under management in each thematic strategy varies (Exhibit 4). This pool of capital is being deployed primarily in public equity

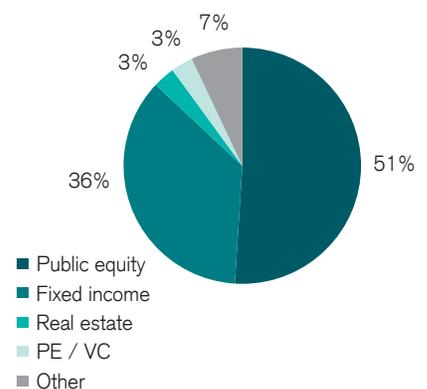
and fixed income. Therefore, it is clearly important for firms accessing these capital markets to be conversant about this changing landscape.

Exhibit 4: Growth varies widely by ESG investing strategy, but ESG asset allocation remains primarily in public equity and fixed income⁵

Global growth of sustainable investing strategies 2016-2018 (in trillions)



Global sustainable investing asset allocation



Insight:

ESG integration, and negative / exclusionary screening have absorbed the most capital in the last few years. With over 75% of ESG assets allocated to public equity and fixed income, corporates are primed to access this growing pool of capital.

In terms of money flows, sustainable and impact investing have garnered immense popularity. Funds focused on these themes have experienced astonishing 100%+ and 6000%+ growth rates respectively.⁶ A study into the size of the impact investing market identified that at the end of 2018, there was roughly \$500 billion in impact investing

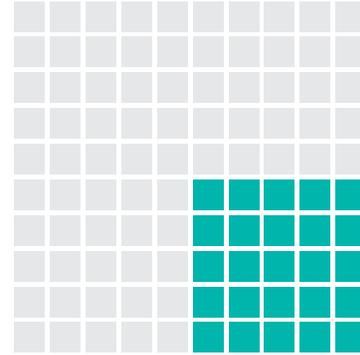
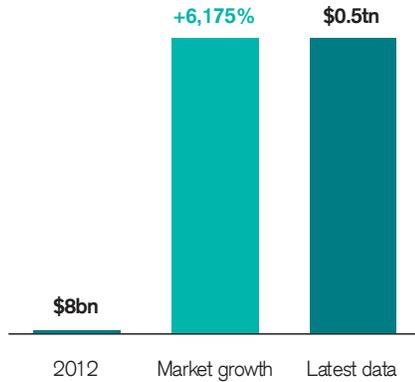
assets worldwide from over 1,340 organizations,⁷ and this pool of capital will grow considerably in the coming years given institutional investors “are seeing a surge in clients’ and portfolio managers’ interest in incorporating sustainability-related insights into their investment” and that they expect the demand to “accelerate.”⁸

Exhibit 5: The market for ESG-focused investment is growing rapidly⁹

Sustainable investments



Impact investments



ESG, sustainable, and impact investing assets now account for **one in four dollars** under professional management in the US

Insight:

ESG, sustainable, and impact investing are areas with which a growing body of investors are obsessed; shareholder activism is increasing and regulatory interest is solidifying, so corporates need to be conversant in this new arena.

A driving force behind the growth is the UN's Sustainable Development Goals (SDGs) which have become a leading framework for impact investing.

Exhibit 6: UN Sustainable Development Goals¹⁰



Broadly speaking, the framework encompasses 17 ESG goals for governments and companies to target. These goals aim to achieve, by 2030, a “world free of poverty, hunger, disease and want, where all life can thrive.” As of 2018, approximately 40% of the world’s largest 250 companies acknowledge these UN SDGs in their corporate reporting and include the global goals in their Chief Executive or Chair’s message. In order to achieve these goals, the UN estimates that there is a current funding deficit of \$2.5 trillion per year in developing countries alone.¹¹ Impact funds set up by certain large private equity names already aim to address these challenges – and the opportunities – presented by the UN SDGs.

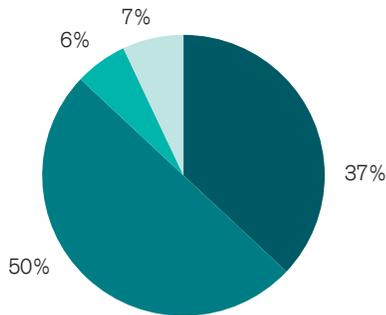
In response to sweeping movement in money flows to ESG and impact investing: global governments, NGOs, international development organizations,

consultancies, the private sector and even central banks have developed a voice about ESG themes. BlackRock CEO Larry Fink’s 2019 letter to CEOs “calls to action” the world’s business leaders. In this letter, Fink (echoing Milton Friedman) declares, that “profits and purpose are inextricably linked” and, in the absence of government leadership, corporates of the 21st century must “address pressing social and economic issues.”¹²

Despite such calls to action, many corporates still underestimate the magnitude of investor interest in ESG opportunities. For example, 87% of CEOs of major U.S. companies estimate that only 5% or fewer of their shares outstanding are managed by ESG-focused investors; in reality, more than 25% of institutional investors claim to formally use ESG in their security selection process.¹³

Exhibit 7: Companies underestimating level of ESG interest¹⁴

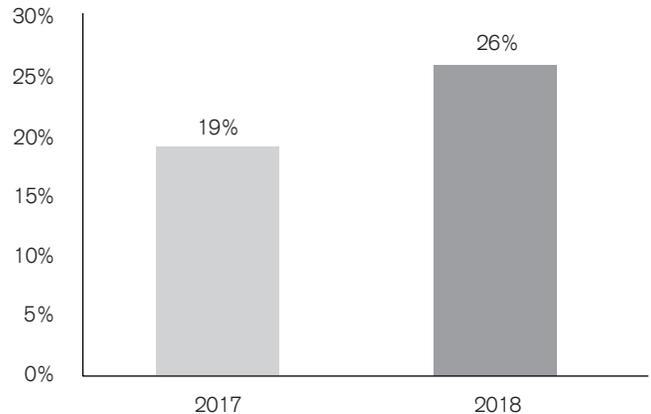
Breakdown of CEO estimates of % of market cap held by ESG investors



Estimates of company’s market cap held by ESG investors

- <1%
- 1-5%
- 6-10%
- 10%+

% of respondents using ESG in their investment process



Although some corporates have yet to realize ESG's major strides towards the mainstream, the capital devoted to the ESG space is growing rapidly. In 2018, \$12 trillion was invested globally in socially responsible funds (up 38% from 2017), which now represents 25% of \$46 trillion of assets in the US under professional management. Some conservative estimates even predict that total flows into ESG-type funds over the next few decades will equal the market value of the entire S&P 500 today.¹⁵

Millennials are set to inherit \$24 trillion of wealth in the US alone over the next 15 years¹⁶, and 75% believe their investments can influence climate change and 84% believe their investments can help lift people out of poverty.¹⁷ For the sake of argument, if we assume that a third of Millennial wealth is allocated to sustainable investments over this period, it could mean over \$6 trillion of ESG asset inflows from just US investors. This massive wealth transfer from Baby Boomers to more sustainability-focused Millennials suggests that the explosive rise of ESG investing is not an anomaly but will likely be a prominent feature of the investor base of tomorrow.

Demographic shifts in the socio-economic makeup of the population certainly play a significant role in the huge quantities of monetary assets flowing towards ESG. Scientific discoveries and growing awareness of the challenges that global warming will likely bring with it undoubtedly has also served as a wake-up call to many segments of the population. Climate change-related events, such as Hurricane insurance payouts and California wildfire damages, already cost the U.S. economy north of \$300 billion in 2017 alone. Federal agencies expect the occurrence of such natural disasters to continue to increase in frequency and severity, exacerbated by ongoing changes in climate patterns. Further into the future, the economic loss will be even greater. Led by the National Oceanic and Atmospheric Administration (NOAA), scientists from 13 additional U.S. federal agencies put a price tag on potential U.S. losses in agriculture, trade and energy generation at over \$500 billion per year by 2090.¹⁸

Climate change and the ESG investing trend will both impact the global business community, and corporates that are proactive in integrating ESG into their corporate strategy today will have greater access to this ballooning pool of capital in the future, while those who don't will be playing catch-up.

ESG investments pay off with outperformance

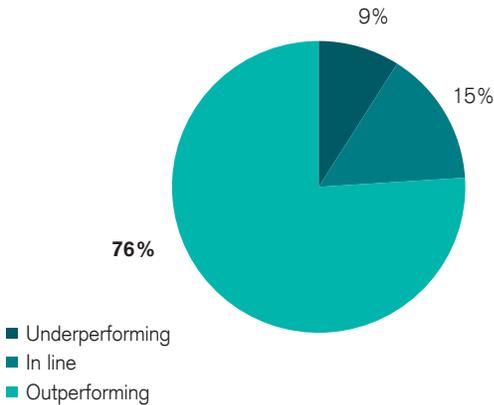
Is ESG and impact investing a “cost-free” way of creating positive social impact? Can it also enhance financial returns? A lack of standardized and robust measures of ESG impact and historical data make these questions difficult to answer. However, a growing body of research points to a link between asset performance and ESG-focused activity. Companies that manage sustainability risks and opportunities well tend to have stronger cash flows, lower borrowing costs, and higher valuations.

For example, one study found that S&P 500 stocks with high ESG scores outperformed those with low scores by approximately three percentage points of total shareholder return (“TSR”) per year in the last three years. Furthermore, high sustainability companies (defined as having substantial number of environmental and social policies adopted since the early 1990s) significantly outperformed low sustainability companies over the long-term, both in terms of stock and accounting performance.²⁰

Exhibit 8: Financial performance of Impact Investing vs. expectations^{21, 22}

Do impact investing strategies outperform?

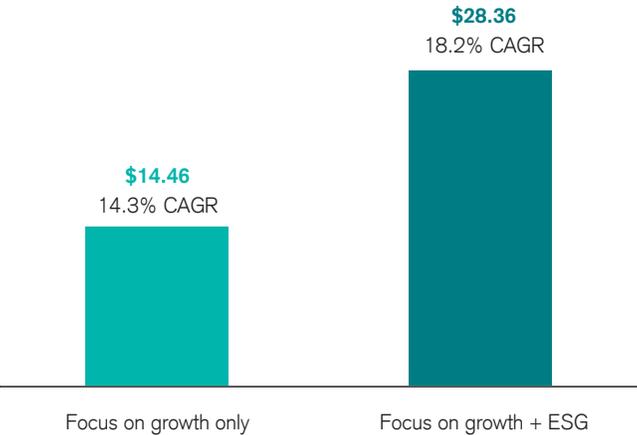
Summarizing the research to-date from the academic / practitioner community



One aggregation of studies found that over 90% of contemporary research focusing on the link between ESG and cost of capital supports the thesis that investments in sustainability correlate with reduced costs of capital. Companies with strong ESG performance are perceived by investors as less risky. A lower risk premium associated with strong ESG performance translates into a lower cost of capital. In other words, there are already observable benefits to corporates that have been proactive in improving how they stack up through an ESG lens. The potential reductions in the cost of capital achievable by taking an ESG focus should give companies

What is it worth to investors?

Estimating the value in 20 years of \$1 invested today for businesses that:



comfort that capital allocated towards ESG initiatives are not philanthropic contribution, but strategic corporate investments expected to drive long-term shareholder value.²³

These studies emphasize that it is still difficult to demonstrate a direct causal relationship between ESG factors and performance. Perhaps ESG criteria are just a proxy for good corporate management and stewardship. In addition, there is no “one-size-fits-all” approach to integrating ESG factors and a sector-specific framework and approach are critical in terms of measuring ESG and performance.²⁴

Quantifying ESG outperformance

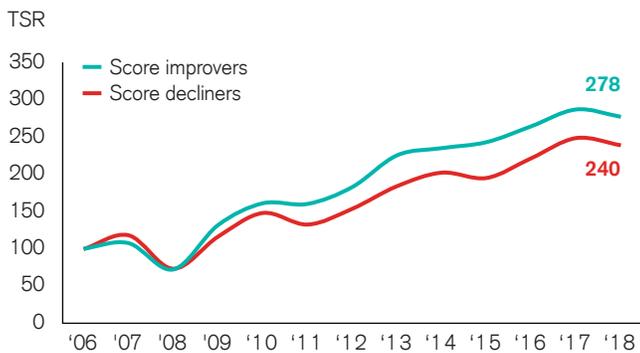
To investigate the “connection” between ESG and shareholder value creation, we utilized the most widely-accessible ESG metric currently available – Bloomberg ESG disclosure scores – and examined their impact on metrics of corporate performance such as total shareholder return (TSR) and return on capital (CFROI). Interestingly (but not surprisingly), our results suggest that there is a positive correlation between ESG disclosure and superior performance which has strengthened since the 2008 Financial Crisis.

The Bloomberg ESG disclosure scores consist of numeric rankings from 1 to 100 that assess individual companies on their disclosure and transparency regarding environmental, social, and governance characteristics. Disclosure scores are provided for “E”, “S”, and “G” individually, which are averaged into an “ESG” composite as well.

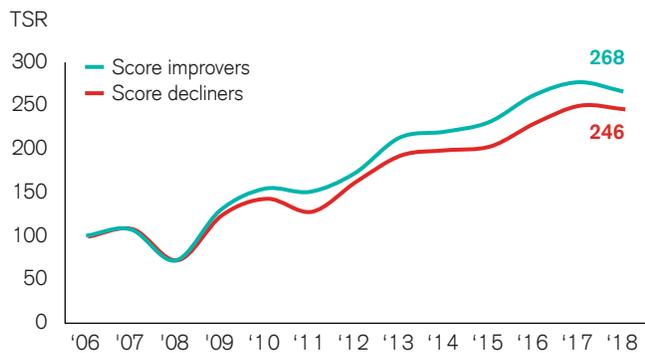
We found that companies with improving “ESG” and “E” scores (i.e. making more environmentally-related disclosures over time relative to their respective industry) outperformed, in terms of TSR and CFROI²⁵, both those that saw no change in their disclosure scores and those that disclosed less relative to peers over time. By consequence, companies with improving ESG scores also outperformed the rest of the sample. In other words, companies with positive ESG momentum have performed considerably better than those with negative ESG rating momentum. This result suggests that to create alpha, companies should consider quantifying and articulating improvements in material ESG factors, as these may not yet have been priced in. We believe that positive ESG momentum represents a transition period where alpha is generated (Exhibit 9).

Exhibit 9: TSR and ESG score disclosure

TSR performance vs “E” disclosure scores



TSR performance vs “ESG” disclosure scores



Insight:

Companies who have actively enhanced their disclosures around ESG performance have seen their TSR outperform peers with static or falling ESG disclosure strength, especially since the 2008 Financial Crisis.

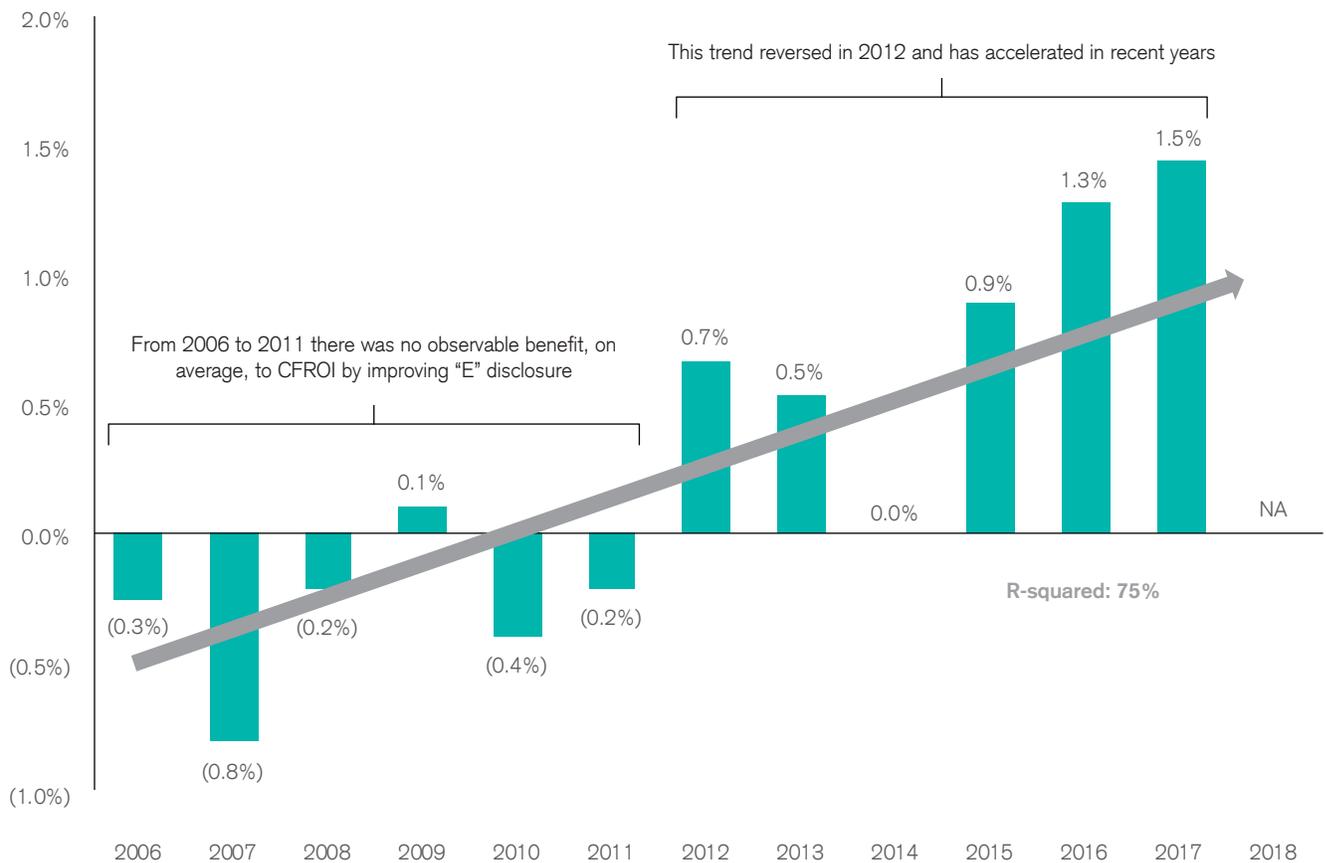
As shown above, companies with improving “E” scores have generated outsized returns relative to their peers which had either static or falling scores²⁶ compared to “ESG” score.²⁷ Because improving “E” scores seem to matter more than improving “S” or “G” scores and therefore the composite, we looked

more intensely at that “E” score, which shows a positive trend²⁸ in profitability spread when comparing average expected CFROI between companies with increasing disclosure and those getting relatively less transparent (Exhibit 10).

Exhibit 10: Difference in returns on capital by environmental disclosure momentum

CFROI vs “E” disclosure

Δ in forecast CFROI between “E” score improvers and decliners

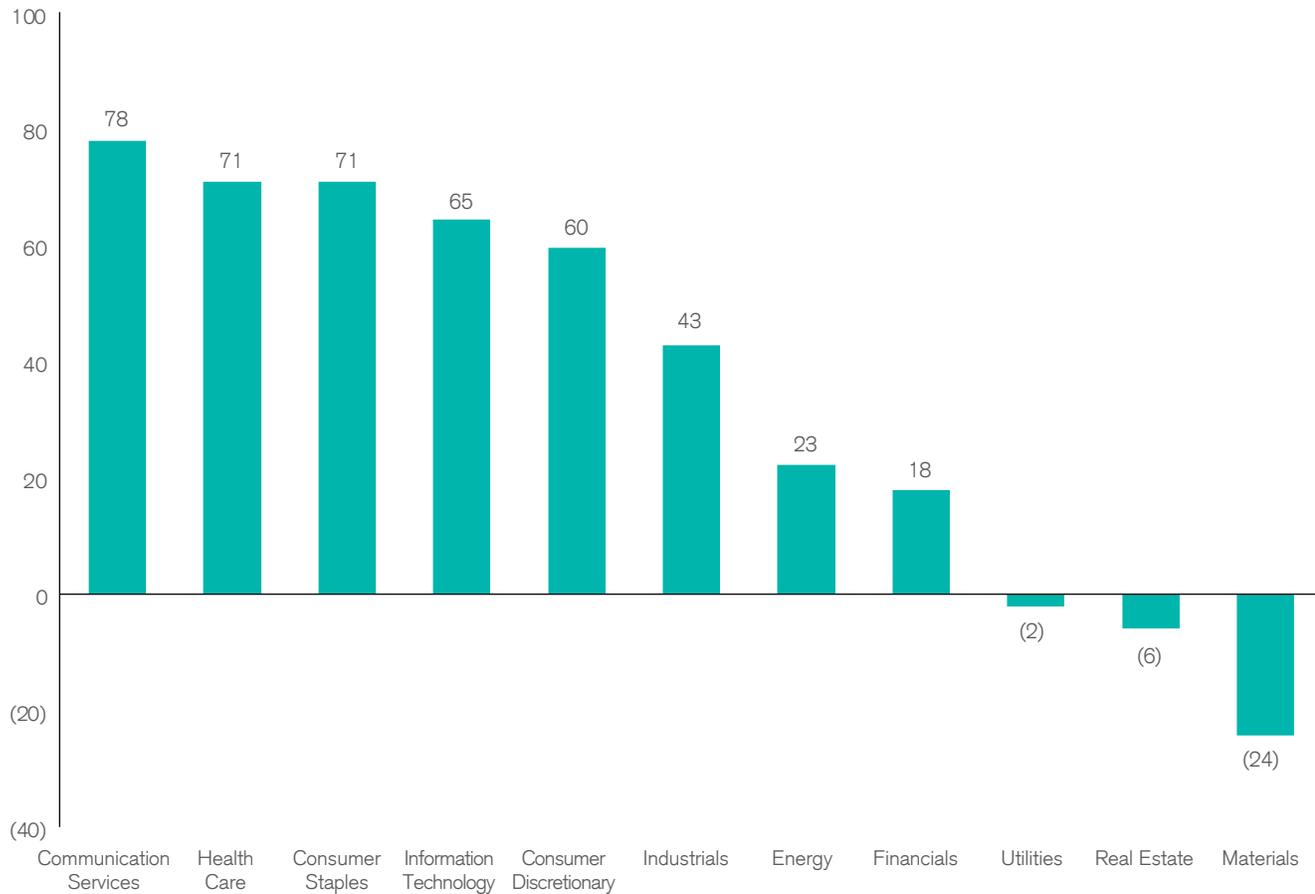


Unsurprisingly, sectors with the highest elasticities of demand for their products (in addition to having freely substitutable goods) are the ones exhibiting the strongest positive correlations between ESG disclosure and TSR performance. This suggests

consumers are paying more and more attention, and choosing to do business with companies that are more transparent and focused on ESG-related matters (Exhibit 11).

Exhibit 11: Sector specific disclosures have varying degrees of correlation between “E” score disclosure and TSR²⁹

TSR since 2006



Insight:

Consumer-focused sectors have witnessed the strongest positive correlation between TSR performances and “E” score disclosure, indicating that consumers are favoring ESG focused firms.

These results do not prove that there is a robust correlation between higher ESG disclosures and alpha, but they do suggest that firms disclosing more about

ESG seem to generate outsized returns during the transition period – and this relationship has strengthened since the 2008 Financial Crisis.

Regulatory interest and shareholder activism

A focus on strengthening governance is value-additive for many corporates – and regulatory pressure has followed. However, environmental factors have only recently garnered regulatory attention and focus. For example, the meteoric rise of ESG investing has forced governments and industry organizations around the world to change their views toward ESG investing in ways that we expect will contribute to the growing interest in ESG investing. ESG investing is now becoming institutionalized by regulators, indices, and exchanges.

The Sustainability Accounting Standards Board (SASB) is developing industry-specific disclosure standards for sustainability that covers accounting metrics, technical protocols, and application in a

company's financial statements while the EU Action Plan on Sustainable Finance has proposed requirements for all EU/EEA regulated financial institutions to integrate consideration of ESG factors into client advisory relationships, product development, and disclosures.³⁰

At the forefront of the ESG regulatory debate is the Task Force on Climate-related Financial Disclosure (TCFD) – an key industry-led group led by former New York City Mayor Michael Bloomberg and Bank of England Governor Mark Carney. The TCFD has become the leading corporate reporting disclosure advocate covering climate-related risks and opportunities related to governance, strategy, risk management, metrics, and targets.

Exhibit 12: TCFD supporters³¹

Number of TCFD supporters



Insight:

By mid-2018, 513 organizations had expressed their support for the TCFD recommendations, signaling growing momentum for climate-related disclosures.

Credit rating agencies are also increasingly viewing risks through an ESG lens. Pushed by investors who believe that ESG credentials help companies avoid expensive crises, the three biggest agencies are working to explain how issues such as the move to a low-carbon economy and good governance inform their own decision-making. For example, one of the major credit rating agencies announced plans to publish ESG “relevance scores,” which will show how ESG factors affect individual credit-rating decisions. Another agency acquired an ESG analytics vendor, initiating consolidation in the booming but fragmented world of ESG research and ratings.³²

While the regulatory environment is still in its infancy, the 2019 U.S. proxy season demonstrates the relevance of ESG as a central topic at shareholder meetings, as environmental issues were among the top concerns for activist investors (accounting for 21% of 400 proposals filed³³). While target companies may believe that ESG activists are motivated by altruism or a desire to enhance their public images, the reality is that these investors believe that ESG changes can drive long-term shareholder value. Certain funds set up to specifically deploy capital towards ESG activism believe that impact investing will lead to outsized returns over the long run, either due to increased

government regulation, changing consumer preferences or technological innovation. ESG activists continue to find increased backing from mainstream investors, with support for ESG-related proposals rising from 8% in 1999 to 27% in 2018. This groundswell of support is driven by index funds, which are under pressure from shareholders to evaluate ESG issues and voice concerns through their stewardship groups and voting as they are “near-permanent capital” and often cannot sell their position.³⁴

Historically, companies may have dismissed ESG activism as a marketing ploy or a niche area limited to particular industries; however, the market is changing and boards should proactively prepare to meaningfully engage with shareholders regarding ESG-related issues. In addition, activist investors’ focus on ESG points to the fact that some investors are increasingly viewing government policy on the matter is yet to be sufficient. This will eventually result in a more tangible regulatory rules surrounding ESG. It is hard to predict what the future landscape may look like, but, similar to IFRS and U.S. GAAP accounting standards, the aforementioned regulatory bodies seek to develop frameworks that are tailored to interests of different stakeholders around the world with a common goal.

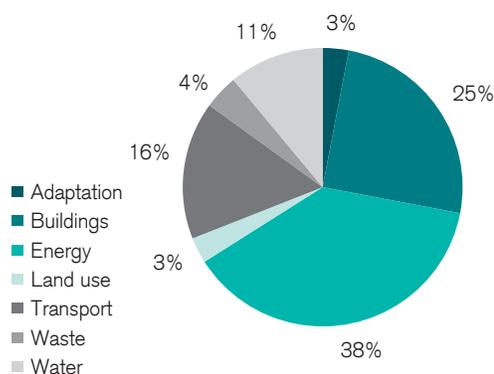
The rise of green bonds for impact investing

Green bonds, a bond specifically earmarked for climate and environmental projects, deserve a special focus due to their extraordinary momentum. They have a relatively standardized framework compared to other ESG-investing instruments. Also, the green bond market has grown from just \$11 billion issued in 2013 to over \$169 billion in 2018 (more than 1500% increase over 5 years). The momentum has continued in 2019, now with over \$500 billion green bond notional outstanding, and issuance expected to reach \$200–250 billion over the remainder of the year. Unlike traditional senior unsecured corporate bonds, green bonds require that proceeds are exclusively applied to finance new or existing “green” projects.³⁵

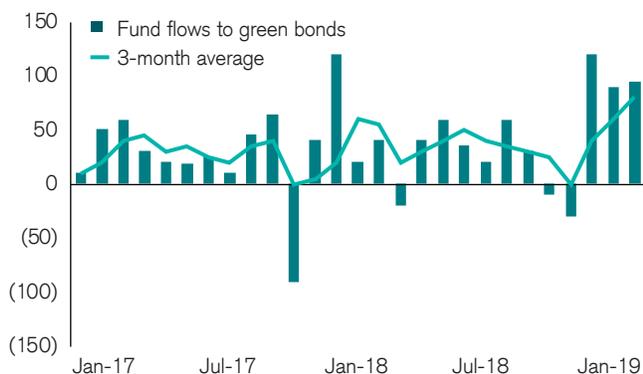
Green bonds enable issuers to diversify their investor mix. Dedicated green bond focused investors buy, on average, 40–50% of any given green bond issuance, and top holders of corporate green bonds significantly increased their holdings over the past year. In terms of pricing, there are signs of the “green premium” (advantageous pricing through tighter spreads or smaller new issue concessions) evident in some market segments and most green bond investors usually have a “hold-to-maturity” approach. Issuance of green bonds can also provide a signaling effect to investors, for example, that a company is thoughtful around sustainability issues.³⁷

Exhibit 13: Green bond market development³⁶

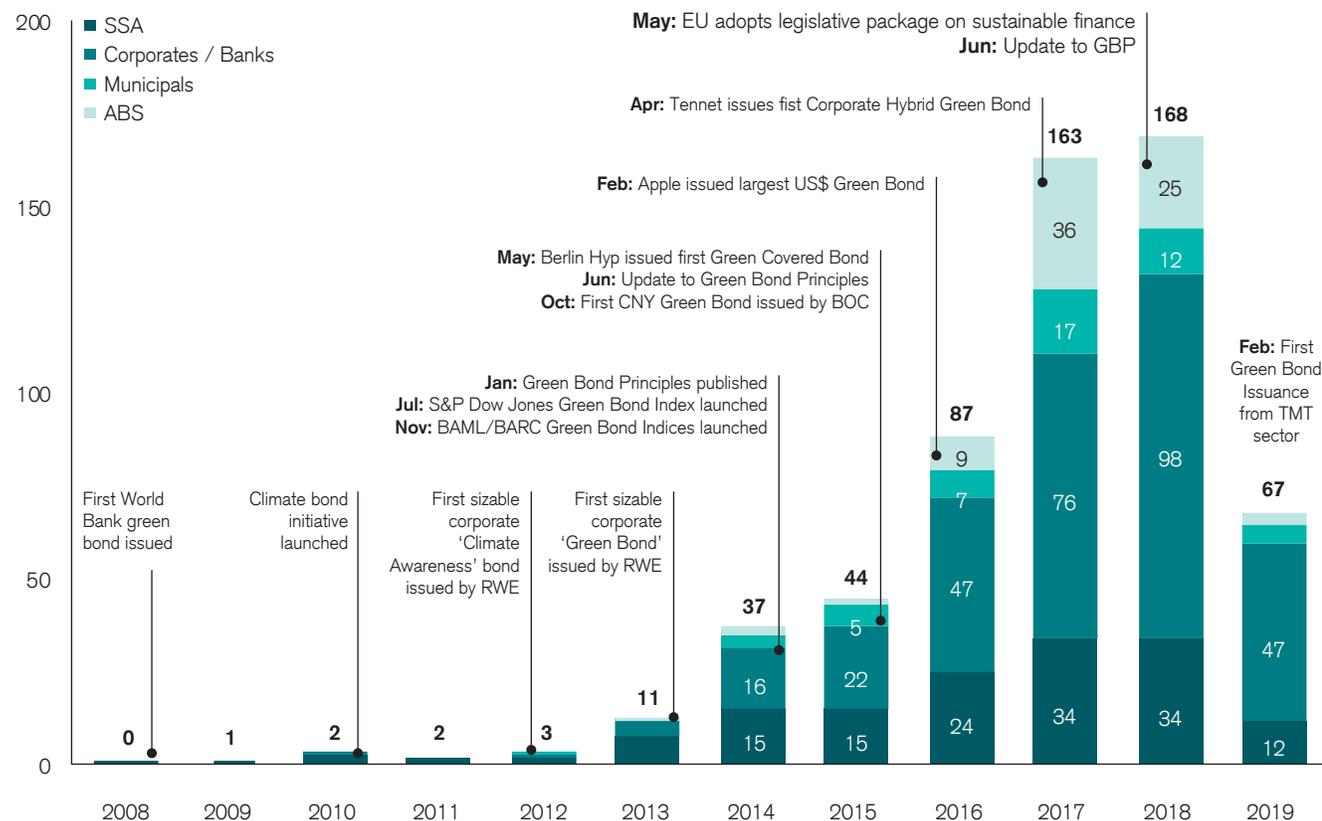
Green bonds issued in 2019YTD – Use of proceed split



Green bond fund flows – Strong Q119



Annual green bond issuance (US\$ in billions)



Remaining challenges and debunking ESG skeptics

The world of ESG and impact investing is witnessing major and ongoing growth and attention. Still, certain challenges remain. Three of the greatest issues include: 1) the lack of standardization of ESG metrics, 2) rating services and 3) disclosure formats. Quality data about companies' ESG practices is critical for effective investment analysis; however, the lack of standardization and transparency in ESG reporting and scoring presents major obstacles for investors. Third-party ESG data providers play an important role, but there are limitations. Asset owners should understand that differing methodologies lead to different scores. Moreover, there is a lack of market infrastructure to give companies insights into how they are evaluated with respect to ESG scoring. For example, the TCFD highlights that relatively few companies disclose the financial impact of climate change in their financial reports and they conclude that climate-related financial disclosures are still in their early stages. This limited disclosure hinders the ability to analyze companies based on certain ESG metrics. Still, given the increasing attention drawn to ESG metric dis-harmonization, many regulatory and industry bodies are working towards a solution.³⁸

A large number of asset owners, managers, and investment intermediaries are engaging with the whole value chain on ESG-related issues, although many of them still perceive ESG investors as providers of concessionary capital that does not

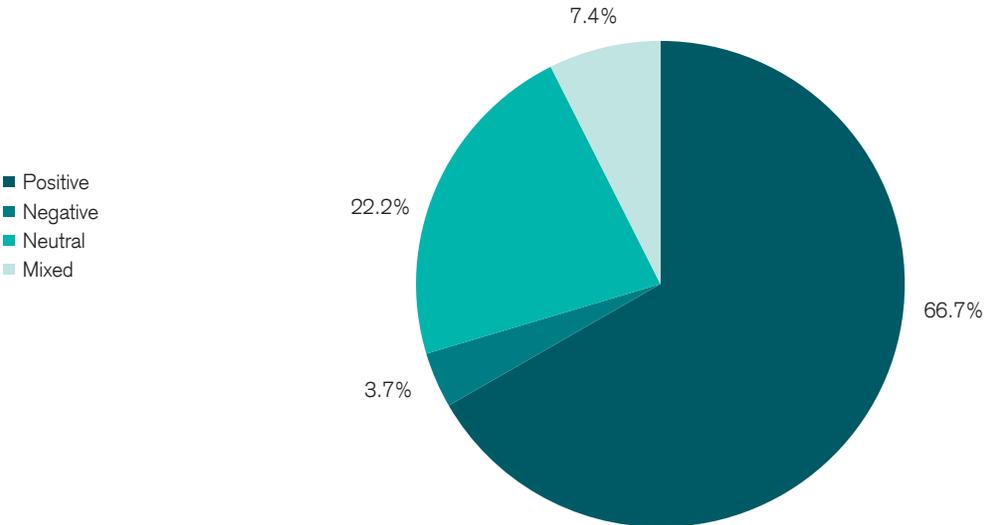
need to earn market rents. Simply put, for some investors ESG creates a stigma - a sense of being "soft," or not a good investor, or someone more socially- than financially-minded. However, there are fundamental reasons as to why this skepticism is unfounded.³⁹

1. First, forward-thinking corporates that seek to implement long-term initiatives into their corporate strategy recognize that buy-side investors are not only devoting more attention to ESG investing, but are also actively allocating more capital into it. Corporates that avoid short-termism and focus on long-term trends tend to be the winners when it comes to value creation; hence those that recognize wealth is passing to a younger generation more concerned about sustainability are actively re-orienting their focus on ESG.
2. Second, skeptics argue that integrating ESG issues into investment decisions will sacrifice economic returns. However, a growing body of evidence suggests that incorporating ESG issues into capital-allocation decisions makes financial sense. It will take more work to understand which environmental, social, and corporate governance issues are financially material for each industry. Still, no recent evidence suggests that ESG would hurt performance.⁴⁰

3. Last, skeptics believe the data is not available or reliable, or that they do not have the expertise to evaluate it. In addition, some companies that have, at face value, understood the financial relevancy of ESG have begun to engage in “greenwashing” – falsely claiming to be “green” through advertising and marketing instead of actually implementing practices to minimize negative ESG impact. This is partly due to the fact that lack of ESG data harmony still presents a major obstacle: but, the reality is that the information infrastructure has improved

dramatically over the years. A lot of good ESG data is out there; now it’s a matter of standardizing it. For example, an ever-growing number of corporates now release figures on carbon emissions and other similar data. As the financial community’s understanding of ESG investing matures, and as progress is made further in the fields of artificial intelligence and Big Data, solutions are growing to close these informational gaps as well as ability to differentiate true ESG-focused corporates versus “greenwashers.”⁴³

Exhibit 14: Summary of academic studies' results on ESG materiality and criteria on financial performance of IG bonds and equity portfolios^{41, 42}



Insight:

The research analyzed shows evidence that markets are in the process of rewarding higher ESG performing companies with higher credit contingency, a lower cost of refinancing (i.e. smaller credit spreads and higher credit ratings), as well as showing a forward looking ESG momentum strategy (i.e. improvements of material ESG factors at a corporate issuer or industry level that may not been priced in yet) appears to be a promising approach to creating alpha.

Conclusion

ESG, sustainable, and impact investing are areas investors care about now. Corporates are more closely following it, shareholder activism is increasing, and regulatory scrutiny is intensifying. All of this will force business models to change; simple green “window dressing” will not cut it. ESG importance will increase as the buy-side asset allocations towards ESG investing continue to ramp up. If a corporate hopes to make strategic decisions to enhance long-term profitability and shareholder value, then a focus and action on ESG is unavoidable.

It is a fast-changing and exciting field, so keeping up to date on ESG is important. Individual investors are increasingly convinced of ESG factors' value in identifying sources of premium market returns. Simply put, ESG must be considered as part of business strategy and purpose. With ESG now

emerging from its infancy and starting to take its first steps coupled with a lack of standardization in the market, it is important for our corporate clients to be in the market telling their own story. If they aren't, someone else will.

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Endnotes

- 1 Source: Bloomberg.com, Bloomberg, www.bloomberg.com/quicktake/sustainable-investing.
- 2 Source: "The Global Risks Report 2019." *World Economic Forum*, www.weforum.org/reports/the-global-risks-report-2019.
- 3 Source: Klimenko, Svetlana, Eccles, Robert G. "Shareholders Are Getting Serious About Sustainability." *Harvard Business Review*, 26 Apr. 2019, hbr.org/2019/05/the-investor-revolution.
- 4 Source: Klimenko, Svetlana, Eccles, Robert G. "Shareholders Are Getting Serious About Sustainability." *Harvard Business Review*, 26 Apr. 2019, hbr.org/2019/05/the-investor-revolution.
- 5 Source: "Trends Report 2018." GSIA, www.gsi-alliance.org/trends-report-2018.
- 6 Source: "Annual Impact Investor Survey 2018." *The GIIN*, thegiin.org/research/publication/annualsurvey2018.
Note: GIIN numbers on impact investing are self-reported from member organizations, and the number of member organizations has increased significantly in recent years.
- 7 Source: "Roadmap for the Future of Impact Investing: Reshaping Financial Markets." *The GIIN*, thegiin.org/research/publication/giin-roadmap.
Note: GIIN numbers on impact investing are self-reported from member organizations, and the number of member organizations has increased significantly in recent years.
- 8 Source: "Sustainability: The Future of Investing." *BlackRock*, www.blackrock.com/us/individual/insights/blackrock-investment-institute/sustainability-the-future-of-investing.
- 9 Source: "Annual Impact Investor Survey 2018." *The GIIN*, thegiin.org/research/publication/annualsurvey2018.
Note: GIIN numbers on impact investing are self-reported from member organizations, and the number of member organizations has increased significantly in recent years.
- 10 Source: "SDGs .:. Sustainable Development Knowledge Platform." United Nations, *United Nations*, sustainabledevelopment.un.org/sdgs.
- 11 Source: "SDGs .:. Sustainable Development Knowledge Platform." United Nations, *United Nations*, sustainabledevelopment.un.org/sdgs.
- 12 Source: "Larry Fink's Letter to CEOs." *BlackRock*, www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter.
- 13 Source: "Environmental, Social & Governance: How ESG Policies Impact Businesses." *Bank of America Merrill Lynch*, www.bofaml.com/en-us/content/environmental-social-governance-ESG.html.
- 14 Source: "Environmental, Social & Governance: How ESG Policies Impact Businesses." *Bank of America Merrill Lynch*, www.bofaml.com/en-us/content/environmental-social-governance-ESG.html.
- 15 Source: "Environmental, Social & Governance: How ESG Policies Impact Businesses." *Bank of America Merrill Lynch*, www.bofaml.com/en-us/content/environmental-social-governance-ESG.html.
- 16 Source: "The Future of Wealth in the United States." *Deloitte Insights*, www2.deloitte.com/insights/us/en/industry/investment-management/us-generational-wealth-trends.html.
- 17 Source: "New Threshold for Sustainable Finance." Morgan Stanley, www.morganstanley.com/ideas/sustainability-morgan-stanley-audrey-choi.
- 18 Source: USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018.
- 19 Source: Eccles, Robert G., Ioannis Ioannou, and George Serafeim. "The Impact of Corporate Sustainability on Organizational Processes and Performance." *Management Science* 60, no. 11 (November 2014): 2835–2857.
- 20 Source: Eccles, Robert G., Ioannis Ioannou, and George Serafeim. "The Impact of Corporate Sustainability on Organizational Processes and Performance." *Management Science* 60, no. 11 (November 2014): 2835–2857.
- 21 Source: Serafeim, G. (2014). *Turning a Profit While Doing Good: Aligning Sustainability with Corporate Performance*. Brookings Institution. Khan, M. Soon, Serafeim. (2015). *Corporate Sustainability: First Evidence on Materiality*. Cambridge: Harvard Business School.
- 22 Source: "GIIN Perspectives: Evidence on the Financial Performance of Impact Investments." *The GIIN*, thegiin.org/research/publication/financial-performance.
Note: GIIN numbers on impact investing are self-reported from member organizations, and the number of member organizations has increased significantly in recent years.
- 23 Source: Kölbel, Julian & Busch, Timo. (2017). The link between ESG, alpha, and the cost of capital: Implications for investors and CFOs. *corporate finance biz*. 3/4. 82 - 85.
- 24 Source: "Environmental, Social & Governance: How ESG Policies Impact Businesses." *Bank of America Merrill Lynch*, www.bofaml.com/en-us/content/environmental-social-governance-ESG.html.
- 25 Credit Suisse HOLT CFROI (cash flow return on investment) compares a fiscal year's operating cash flow (essentially EBITDA less taxes plus rent expense, R&D expense, and stock-based compensation) to that year's gross plant, adjusted for inflation, to make the plant value current, plus capitalized leases and R&D, plus cash and net working capital.
- 26 Relationship demonstrates a statistical significant relationship with a p-value of less than 0.05.
- 27 Relationship demonstrated a statistical significant relationship with a p-value of less than 0.05.

- 28 Relationship demonstrated robust R-squared at 75%.
- 29 All GICS sectors demonstrate statistically significant relationships with p-values of less than 0.05 except for Information Technology, Materials, and Utilities.
- 30 Source: "Sustainable Finance." *European Commission - European Commission*, 10 May 2019, ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en.
- 31 Source: "2018 Status Report (September 2018)." TCFD, www.fsb-tcdf.org/publications/tcdf-2018-status-report.
- 32 Source: Thompson, Jennifer. "ESG Rating Agencies Fulfil the Need for Knowhow." *Financial Times*, Financial Times, 12 May 2019, www.ft.com/content/2cd37df8-a973-3f94-b498-09ee1a6ba53b.
- 33 Source: "Shareholder Activism Trends in the 2019 Proxy Season." Insights | Skadden, Arps, Slate, Meagher & Flom LLP, www.skadden.com/insights/publications/2019/04/quarterly-insights/shareholder-activism-trends-in-the-2019-proxy.
- 34 Source: Grewal, J., Serafeim, G., & Yoon, A. (2016). Shareholder Activism on Sustainability Issues.
- 35 Source: "2018 Green Bond Market Highlights." Climate Bonds Initiative, 18 Jan. 2019, www.climatebonds.net/resources/reports/2018-green-bond-market-highlights.
- 36 Source: "2018 Green Bond Market Highlights." Climate Bonds Initiative, 18 Jan. 2019, www.climatebonds.net/resources/reports/2018-green-bond-market-highlights.
- 37 Source: "2018 Green Bond Market Highlights." Climate Bonds Initiative, 18 Jan. 2019, www.climatebonds.net/resources/reports/2018-green-bond-market-highlights.
- 38 Source: Serafeim, George. "ESG Returns Eventually Will Win Over Critics." *Harvard Business School Professor: ESG Will Overcome a Stigma to Succeed - Barron's*, Barrons, 1 Mar. 2019, www.barrons.com/articles/harvard-business-school-professor-esg-will-overcome-a-stigma-to-succeed-51551445224.
- 39 Source: Serafeim, George. "ESG Returns Eventually Will Win Over Critics." *Harvard Business School Professor: ESG Will Overcome a Stigma to Succeed - Barron's*, Barrons, 1 Mar. 2019, www.barrons.com/articles/harvard-business-school-professor-esg-will-overcome-a-stigma-to-succeed-51551445224.
- 40 Source: Serafeim, George. "ESG Returns Eventually Will Win Over Critics." *Harvard Business School Professor: ESG Will Overcome a Stigma to Succeed - Barron's*, Barrons, 1 Mar. 2019, www.barrons.com/articles/harvard-business-school-professor-esg-will-overcome-a-stigma-to-succeed-51551445224.
- 41 Source: "An ESG Framework for EM Sovereign Bonds." *Allianz Global Investors*, uk.allianzgi.com/en-gb/institutional/insights/esg-matters/2019-02-13-esg-framework-for-em-sovereign-bonds.
- 42 Source: "ESG Investing: Deciphering the Labels." *Allianz Global Investors*, www.allianzgi.com/en/home/insights/why-active/esg-investing-deciphering-the-labels.
- 43 Source: Serafeim, George. "ESG Returns Eventually Will Win Over Critics." *Harvard Business School Professor: ESG Will Overcome a Stigma to Succeed - Barron's*, Barrons, 1 Mar. 2019, www.barrons.com/articles/harvard-business-school-professor-esg-will-overcome-a-stigma-to-succeed-51551445224.

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