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Impactonomics®

Performance Realities: Revisited

June 2020

SUMMARY

Sustainable investing, once considered a niche investment strategy, has continued to grow in its usage and we see it as now being integral to the investment processes used by certain investors—institutions and individuals alike. With increasing demand for sustainable investments and better access to data and analytical tools, sustainable investment criteria may offer a powerful way to evaluate risks and uncover opportunities in the market.

While there are a number of ways to implement a sustainable investment strategy, each comes with its own benefits and challenges. By understanding the range of approaches and how they may affect a larger portfolio strategy, investors can make more informed decisions about the sustainable investments that may help them pursue their financial goals as well as have a positive impact on the environment, society and the world at large.

In 2017, the Bank of America Chief Investment Office (CIO) examined the performance characteristics of sustainable and impact investing in a whitepaper titled *Impact Investing: The Performance Realities*. Since then, the pace of change has accelerated and sustainable investing has become even more widespread and accessible.[1]

While once thought to mainly reflect investor social preferences, with consideration of risk and return as a secondary focus, a significant body of research now points to the ability of sustainable investing to also offer investors competitive returns and act as a useful tool to help manage risk in both public and private markets. In addition, there has been a proliferation of approaches and an increase in the number of strategies that investors can use to move a portfolio towards an overall sustainable profile or explore specific environmental or social themes.

In this paper, we sort through these approaches to help investors understand how to select strategies that align with both their preferences and financial goals, while seeking to dispel some of the misperceptions that continue to exist around risk and return in the sustainable investing space.

Defining sustainable investments

In its simplest terms, sustainable investing is the process of seeking positive social and environmental effects while targeting competitive financial returns. It is most often accomplished by combining traditional investment approaches with ESG (environmental, social and governance) analysis. Sustainable investments span the spectrum of asset classes, such as publicly traded equities, fixed income instruments and private investments.

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KEY POINTS

In this paper we examine a number of factors including:

- The evolution of sustainable investing from niche strategy to critical investment component.[1]
- Using environmental, social and governance (ESG) factors to identify market risks and opportunities.
- Investing for the potential to “do well and do good.”
- Our approach to selecting sustainable and impact investments.

[1] See box titled “Sustainable investing is seeing sustained growth” on next page.

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Drivers of growth in the sustainable space

The sustainable investing space has seen tremendous growth[2] and there are three key drivers that have accelerated—and we believe will continue to accelerate—the increase in the number of sustainable investing strategies and assets under management:

1. **The world is transforming faster than ever before,** changing consumption patterns, transportation, communication, health, wealth and even where and how we live. This, spurred by technological innovation, changes how we understand systemic challenges, including rising sea levels and fires, as well as social issues. These factors, individually and together, introduce new risks that should be evaluated and incorporated into the way investors look at risk and return.

2. **A new generation of investors is emerging** with a desire to understand more about how their capital affects the world around them. According to a recent study by Morningstar, the difference in millennial, generation X and baby boomers preferences for sustainable investments was negligible, debunking the traditional belief that this type of investing is appealing only to millennials and women.[3] We believe that increasing knowledge about investors' environmental and social preferences will spur even greater demand and that this will become widely incorporated into more traditional investment approaches.

3. **Data and analytical capabilities are expanding** and we've seen more data being produced by companies, governments, and non-governmental organizations (NGOs). The advances that we're just beginning to see in the investment community's ability to create and analyze both traditional and non-traditional data sources will both enhance and change the types of information that will be used to make investment decisions in the future.

We believe that this acceleration will continue as six out of 10 institutional investors report that they already incorporate ESG factors into their analysis and a further 65% have stated that they "believe ESG will become a standard practice in the next five years."[4] Furthermore, a record number of investors and asset managers have become signatories of the United Nations-supported Principles for Responsible Investment (PRI),[5] with over 2,250 firms signing up, managing close to $80 trillion as of April 2019.[6]

Sustainable investing is seeing sustained growth

- Sustainable investing in the United States grew by 38% between 2016 and 2018.[7]
- $12 trillion of assets are managed with an overlay that considers ESG factors.[8]
- Mutual funds and exchange traded funds (ETFs) incorporating ESG factors grew by 50% between 2016 and 2018.[9]
- In 2018 alone, 382 "socially conscious" mutual funds were launched.[10]

"A-B-C": A new approach to sustainable investing

The evolving sustainable investing landscape has necessitated a new way to describe the intent of different sustainable approaches to match the motivations that individual or institutional investors might have when selecting these investments. One such framework adapted from The Impact Management Project is the "A-B-C" approach that helps classify the impact objective of a given sustainable investing strategy.[11]

"A significant body of research now points to the potential for sustainable investing to also offer investors competitive returns and a useful tool to help manage risk in both public and private markets."

Examples of sustainability focus areas

Environmental:
Greenhouse gas emissions, energy usage, water usage, waste and pollution, carbon intensity, climate risk mitigation

Social:
Human rights, gender diversity, employee turnover, child & forced labor, local community involvement, working conditions

Governance:
Board independence, board diversity, incentivized pay, data privacy, ethics & anti-corruption, disclosure practices

"Sustainable investing is the process of seeking positive social and environmental effects while targeting competitive financial returns."

2 See box titled "Sustainable investing is seeing sustained growth".
3 Morningstar, *The True Faces of Sustainable Investing: Busting Industry Myths Around ESG*, April 2019.
4 Natixis *Looking for the Best of Both Worlds*, 2019.
5 The PRI in as investor initiative that works to achieve a sustainable global financial system by encouraging adoption of the Principles and collaboration on their implementation; by fostering good governance, integrity and accountability; and by addressing obstacles to a sustainable financial system that lie within market practices, structures and regulations.
6 United Nations Principles for Responsible Investment. Data as of April 2019.
7 *US SIF Foundation 2018 Trends Report*.
8 *US SIF Foundation 2018 Trends Report*.
9 *US SIF Foundation 2018 Trends Report*.
10 Reuters, *'Socially Conscious' mutual fund launches at record high*, February 6, 2019.
11 The "A-B-C" framework that helps classify the impact objective of a sustainable strategy was adapted from The Impact Management Project. The Impact Management Project (IMP) is a forum for building global consensus on how to measure, compare, and report ESG risks and positive impacts.

A: Avoid	B: Benefit	C: Contribute
Strategies that seek to reduce negative social or environmental effects and manage risk by limiting certain exposures.	Strategies that seek to support positive social or environmental practices and enhance potential for long-term competitive financial returns.	Strategies that seek to advance positive, measurable social or environmental outcomes and target opportunities where impact is intrinsic to financial performance.

The original ESG approach: "Avoid"

The first approach investors took was avoiding certain types of companies—for instance, certain religious groups laid out guidelines to their followers over the types of companies in which they should invest.[12] Another example that started in the 1970's was divesting of companies that supported apartheid.[10] The goal of avoiding certain companies was to create more socially responsible portfolios and is still widely used to reflect investors' interests by avoiding certain types of companies or sectors. The "avoid" approach has evolved to also be deployed to help mitigate investment risks, such as screening out bad actors or avoiding an industry that is in structural decline.

As awareness about companies' impacts on the environment and society grows, more and more investors are interested in understanding which companies may not align with their values. This creates demand for investments that screen companies out of their holdings. While avoiding certain investments may provide the benefit of better aligning a portfolio with an investor's beliefs, this can be limiting as an investment approach.

A study by Aperio compared the potential performance of a set of negative screening strategies against the MSCI ACWI index.[13] The table below details the forecast tracking error, or the degree to which removing securities could lead a portfolio to have different results than the market.*

Exhibit 1: Effects of screening on forecast tracking error

Representative Screens	Forecast Tracking Error (%)
MSCI ACWI*	0.0
Aperio Global Tax-Loss Harvesting (No SRI)	0.45
Aperio Strategies	
Adult Entertainment: Exclude at 5% of Revenue	0.45
Adult Entertainment: Exclude at First $1	0.84
Clean Technology Solutions: 10% Weighted-Average Revenue	0.55
Fossill Fuel-Free**	0.63
All Menu Exclusions* **	**1.52**
Islamic Values	1.58

For illustrative purposes only.
Source: Aperio Group, LLC; data as of 03/29/2019 for $10 million all-cash portfolio with asset-based pricing.
* See index definitions at the end of this document.
** Oil, Gas & Consumable Fuels industry and Carbon Reserves exclusion.
***Fracking; Tar Sands; Carbon Reserves; Nuclear; Oil, Gas & Consumable Fuels; Coal Companies; Energy Equipment & Services; Factory Farming; GMOs; Animal Testing: Pharma Only; Animal Testing: Non-Pharma; Fur; Civilian Firearms Production; Civilian Firearms Distribution; Military Weapons; Anti-LGBTQ; Predatory Lending; Private Prisons; Sudan; Iran; No Women on Company Board; No Racial or Ethnic Minorities on US Company Board; Adult Entertainment at first dollar; Alcohol at first dollar; Gambling at first dollar; Life Choice at first dollar; and Tobacco at first dollar.

Removing a large number of securities can result in a portfolio that may have a harder time keeping up with the markets. The "avoid" approach may even amplify risk by eroding diversification through either leaving out certain holdings that could contribute positively to returns or potentially causing unintended concentration risk. While some investors accept this as the price for honoring their beliefs, many do not.

The negative performance impact of avoidance is also why there is still a misperception about sustainable investing requiring investors to give up return—the truth of the matter is more nuanced.

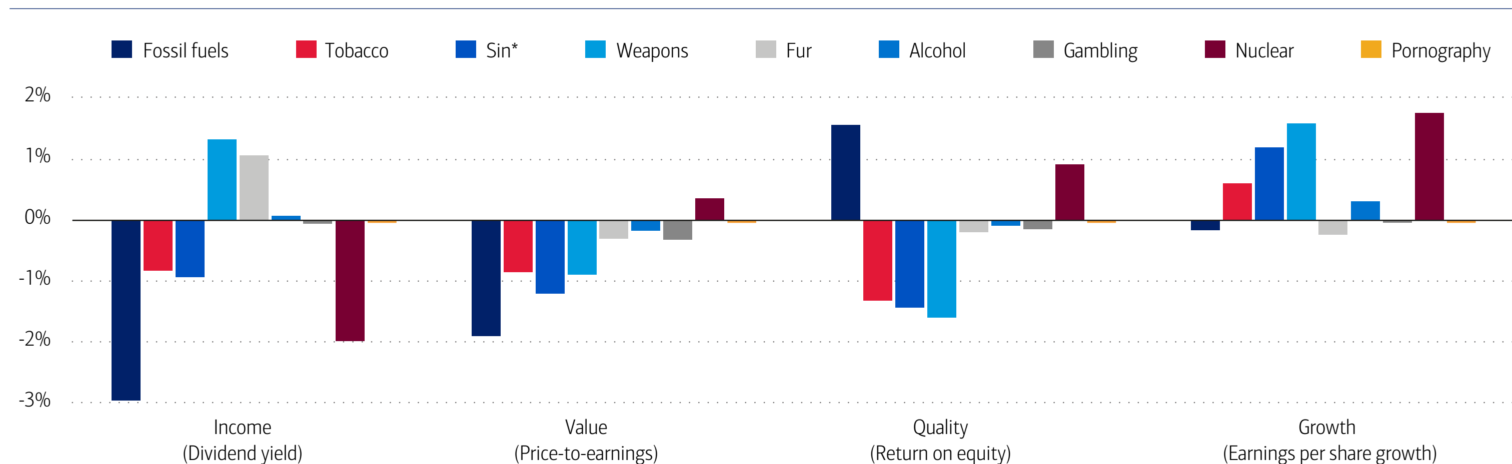
"There is still a misperception about sustainable investing requiring investors to give up return—the truth of the matter is more nuanced."

* The study defined this difference as forecast annualized standard deviation of benchmark-relative returns that investors could likely expect. Standard deviation is a measure of risk, defined as deviation from an investment's benchmark. A smaller standard deviation indicates lower volatility (and lower risk) than higher standard deviation.

[12] Schroders, *A short history of responsible investing*, November 28, 2016.
[13] See index definitions at the end of this document.

A study by Schroders found that while the impact of negative screens may be substantial in the short term reflecting their sensitivity to the macroeconomic factors, the impact over long-term performance is actually much lower.[14] The same study also concluded that negative screening was dependent on the industry being excluded and could have a mixed impact on overall portfolio performance.[15] The chart below details the exact impact of negative screening across a set of industries and reflects how the removal of fossil fuel investments reduced quarterly yield, but increased the quality of the portfolio, with quality defined as return on equity. Further, combinations of negative screens could counteract each other— fossil fuel exclusion has a negative impact on dividend yield, but weapons exclusion has a positive effect.

Exhibit 2: Screens can have a big impact on the characteristics of the investible universe
Percentage change in average quarterly financial ratios of screened MSCI World Index[16] over the latest 15 years



*Sin stocks include tobacco, alcohol, gambling and pornography. Exclusions for fossil fuels and all sin stocks are based on 10% revenue cut off, as defined by MSCI. Exclusions for weapons, fur and nuclear are based on business involvement, as defined by MSCI. Source: Schroders Demystifying Negative Screens 2017.

Exclusions over the long run: The Tobacco Industry

Tobacco is a common exclusion in sustainable portfolios. While on the surface it appears that excluding tobacco firms simply leads to underperformance, the reality is a bit more complex. In a study by the London Business School and Credit Suisse, "tobacco companies outperformed the overall equity market between 1900 and 2014 by an annualized 4.5% in the US and by 2.6% in the UK (over the slightly shorter 85-year period of 1920– 2014)."[17] The study by Shroders showed "although tobacco companies have outperformed the MSCI World[18] global benchmark by 87% over the last ten years, because the sector accounts for just 1.7% of the index, the difference between the standard and tobacco-free index is negligible."[19] Conversely, investors who divested from tobacco industry firms saw an 85-basis points (bps) increase in performance over 2017 through 2018 as that industry entered a period of secular decline in developed markets.[20]

Seeking to "Avoid" real investment risk

In addition to preference based strategies, many investors use divestment to avoid areas that they believe pose a material risk presented by structural changes happening

[14] Schroders *Demystifying Negative Screens* 2017.
[15] Schroders *Demystifying Negative Screens* 2017.
[16] See index definitions as the end of this document.
[17] Schroders *Demystifying Negative Screens* 2017.
[18] See index definitions at the end of this document.
[19] Schroders *Demystifying Negative Screens* 2017.
[20] Credit Suisse *Global Investment Returns Yearbook 2015*, February 2015.

in the world at large. For example, consider the coal industry. A study on coal divestment after the Paris Climate Agreement shows that anticipated structural changes to the coal industry may have actually had a meaningful effect on where investment dollars were directed.[21] While removing coal from a portfolio can be viewed as an investor preference, the reason the majority of investors removed coal was because of investment risk.[19] We have observed natural gas expand as a go-to fuel for power generation, replacing coal because of lower operating costs and significant regulatory changes. Divestment combined with low natural gas prices and advances in renewable energy generation is eroding the value of coal assets and will keep pressure on coal for the foreseeable future. We've seen this result in a lower credit rating for the sector, making it a sector that many institutional investors cannot invest in by policy.

As you might expect, portfolios that seek to address certain ESG risks through screening out issuers that they believe either pose or will be affected by these risks, realize these risks at different rates. For example, a large social networking company lost 19% of its market value over fears around customer privacy in one day.[22] Other risks may take months to surface. A ride sharing company in 2016 paid hackers to cover up a cyberattack that exposed 57 million people's personal data, but did not acknowledge the hack, or the payment, until more than a year later.[23] Some risks may take decades to be recognized. A clear example here is the link between carbon emissions and climate change. That risk has long been acknowledged but we've recently seen investors in larger numbers, including pension managers, consider divesting fossil fuel companies. Notably, MSCI data indicates that investors who divested from fossil fuel companies would have had the potential for higher returns between 2010 and 2019, capturing an annualized return of 12.44% for those who invested in the MSCI ACWI ex fossil fuel index[24] versus 11.66% for the MSCI ACWI index.[25]

While these recent events are significant, investors who are looking to invest only in strategies that seek to avoid companies or sectors they find unacceptable should understand that from time to time these strategies can underperform. To moderate the effect of such underperformance in a portfolio, strategic diversification may be key. Specifically, an investor who uses an "Avoid" strategy might also consider incorporating a "Benefit" strategy, one that seeks beneficial social or environmental outcomes.

"Benefit": Incorporating ESG into the traditional investment selection processes

ESG factors don't just have to be used to identify companies to avoid. They can serve as a powerful roadmap to help guide investors towards companies that may offer a combination of potential competitive long-term returns as well as positive societal effects. By incorporating ESG-based information into a traditional investment approach, investors are adding to the information they use to make better informed investment decisions.

Incorporating ESG data has been shown to have two potential effects on a portfolio by seeking to do the following:

- First, it may help reduce overall portfolio risk.
- Second, it may lead to potential outperformance on a risk-adjusted basis by either reducing the risk (volatility) of an investment, or by identifying more competitive companies that potentially outperform their peers.

A wide range of studies have shown that investors do not have to sacrifice potential returns to create impact with their investment choices. Analysis of firms with good or improving environmental, social or governance characteristics have been shown to perform as well as—and may even outperform—their peers.[26] This offers investors a powerful way to pursue competitive returns while also creating change that addresses the challenges facing the world today.

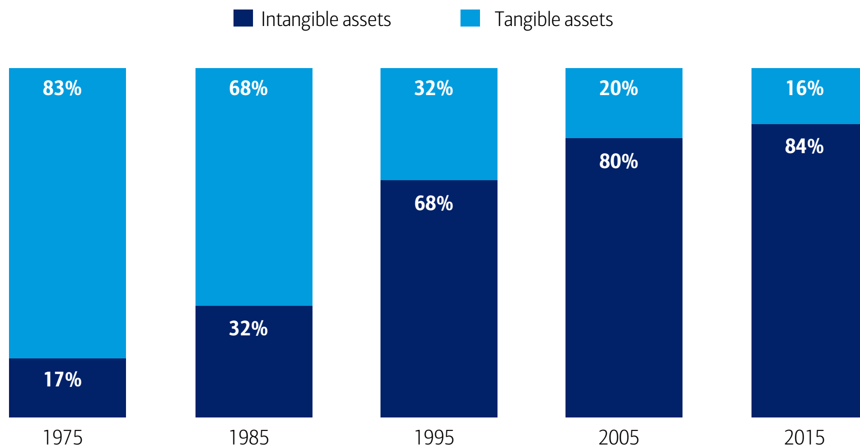
"A wide range of studies have shown that investors do not have to sacrifice potential returns to create impact with their investment choices."

[21] "Paris Agreement Triggers Divestment from Coal" United Nations Climate Change Council Release, January 30, 2018.
[22] Forbes, *Cybersecurity article—Contributor: Zak Doffman*, May 31, 2019.
[23] Bloomberg, *Cybersecurity article by Eric Newcomer,* November 21, 2017.
[24] See index definitions at the end of this document.
[25] Data provided by MSCI as of November 29, 2019.
[26] Hermes Investment Management *ESG investing: A Social Uprising*, 2018.

How managers use ESG to identify risks

Today's firms look very different than they have in the past. Forty years ago, tangible assets—items like property, factories and equipment—made up more than 80% of the value of the S&P 500 companies, while intangible assets represented the remainder.[27] Today, that ratio has been reversed, with more than 80% of value now comprised of intangible assets such as intellectual property, market share, brand awareness and perceptions of a company's effect on society and the environment.[25]

Exhibit 3: Components of S&P® 500 Market Value



Source: Ocean Tomo. "Intangible Asset Market Value Study" 2017.

When most of the valuation of public companies is made up of intangible assets, seemingly nonfinancial measures such as a company's brand and reputation, and how they treat their employees and customers have become key to the financial evaluation of a company. Trust in institutions has fallen, and as more data becomes easily accessible about companies' actions, they now must view their brand and reputation as assets that are increasingly important to investors. Many companies are now prioritizing ESG risks as part of their operational strategy, realizing that a significant ESG event anywhere in the extended enterprise could damage their reputation.[28] This is true across both private and public markets. In a recent poll by PricewaterhouseCoopers, 91% of private equity firms said that they "have an ESG policy in place or in development", up from 80% in 2013. Furthermore, 81% noted that "they report ESG matters to their boards at least once a year."[29] This commitment may offer these private equity investors two benefits: the ability to seek out new opportunities for return generation in the market and the ability to stand out in a crowded investment market.

There are a number of ESG industry studies, and some have found that one of the potential benefits of investing in companies with strong ESG profiles is that it may help decrease the overall risk within a portfolio:

- BofA Global Research[30] identified that during the period from 2005 to 2017, an investor who only bought stocks with above-average Thomson Reuters' Environmental and Social scores five years ahead of a company's bankruptcy would have avoided 90+% of the bankruptcies that occurred.[31] Additionally, analyst Savita Subramanian concluded that ESG is one of the most effective predictors of earnings volatility."[32]

Business Roundtable: Redefining the Purpose of a Corporation[33]

The Business Roundtable, an association of chief executive officers (CEOs) of America's leading companies, has periodically issued Principles of Corporate Governance since 1978. Each version of the document issued since 1997 has endorsed principles of shareholder primacy—that corporations exist principally to serve shareholders.

In August 2019, the Business Roundtable released The Statement on the Purpose of a Corporation, which supersedes previous statements and outlines a modern standard for corporate responsibility. The new statement was signed by 181 CEOs, commiting to lead their companies for the benefit of all stakeholders, including their customers, employees, suppliers, communities and shareholders.

These companies are addressing difficult economic, environmental and societal challenges, and they are starting in their own backyards—partnering with communities to provide the investment and innovative solutions needed to revitalize local economies and improve lives.

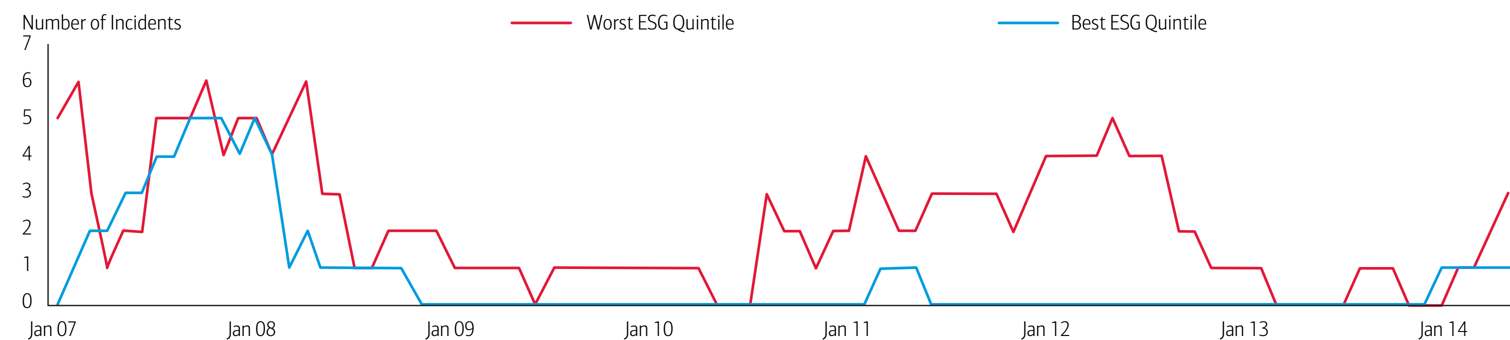
"When most of the valuation of public companies is made up of intangible assets, seemingly nonfinancial measures such as a company's brand and reputation, and how they treat their employees and customers, have become key to the financial evaluation of a company."

[27] Ocean Tomo, *Intangible Asset Market Value Study*, 2017.
[28] Harvard Law School Forum on Corporate Governance, February 2019.
[29] PWC: *The Private Equity Responsible Investment Survey* 2019.
[30] BofA Global Research is research produced by BofA Securities, Inc. ("BofAS") and/or one or more of its affiliates. BofAS is a registered broker-dealer, Member SIPC, and wholly owned subsidiary of Bank of America Corporation.
[31] BofA Global Research, *The ABCs of ESG*, September 2018.
[32] BofA Global Research, "10 reasons you should care about ESG," September 23, 2019.
[33] "Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'", August 19, 2019.

- MSCI ESG Research identified that companies in the bottom fifth of the MSCI World Index, based on ESG rankings, experienced large drawdowns (above 95%) three times higher than those in the top fifth during the period from January 2007 to May 2017. (See Exhibit 4 below)[34]
- A study by Sustainalytics used quantitative analysis to build a portfolio of companies that experienced fewer incidents relative to their peer industry, such as oil leaks, health and safety violations or ethics scandals. This portfolio offered performance 11% higher than the global equity markets for the period of 2014 to 2017.[35]

The MSCI Foundations of ESG Investing study looks at correlation between ESG rating and financial risk over a period of time. To assess the ability of companies' risk management functions to successfully mitigate severe incidents that can lead to financial losses, the study looked at the frequency of large, adverse idiosyncratic stock price moves. To be precise, for the 10-year observation period (2007-2017), they identified companies in the MSCI World Index that have had a drawdown of more than 95% or went bankrupt in that 3-year period after the company was categorized in either the top or bottom ESG rating quintile. For each of these incidents, they looked at each company's ESG rating before the respective 3-year drawdown period started. Over the 10-year period of 2007-2017, higher ESG-rated companies at that time period showed a lower frequency of idiosyncratic risk incidents, suggesting that high ESG-rated companies were better at mitigating serious business risks.

Exhibit 4: Bottom 20% of ESG stocks experienced large drawdowns three times more than top 20% stocks



Source: MSCI World Index, January 2007 to May 2017. Note: MSCI uses a full three-year look-ahead window in reporting results. For each month, MSCI reports the number of stocks that realized a more than 95% cumulative loss over the next three years, taking the price at month end as the reference point for the return calculation. Thus, the last data point is from May 2014. This study validates the three transmission channels using MSCI ESG Ratings for the MSCI World Index universe for the January 2007 to May 2017 time period. The universe contains over 1,600 stocks and is therefore sufficiently diversified for the statistical analysis performed for this time period. All risk and factor calculations are performed using the Barra Long-Term Global Equity Model (GEMLT). Note: These outcomes may differ when market experiences volatility or downturns.

Sustainable practices also influence financing decisions

The benefits of sustainable practices are not limited to share price performance. ESG factors may also have a material impact on a company's operations. A study by Breckenridge found a direct correlation between a firm's ESG rankings and its capital cost of debt.[36] The researchers used options-adjusted spreads in the fixed income space to demonstrate this cost, with the average cost of capital for top-quintile firms coming in a full 48% lower than the average for firms in the bottom quintile. The study showed that firms with higher ESG scores tended to have better balance sheets, higher profitability and lower leverage.[34]

> *"A study by Breckenridge showed that firms with higher ESG scores tended to have better balance sheets, higher profitability and lower leverage."*[34]

Beyond offering a potential return advantage, companies with sustainable practices may actually also be less risky—from a credit perspective, as compared to companies that have poor sustainability practices. Through its Principles for Responsible Investment, an international network of investors has observed that existing academic and market research supports the notion of "a link between ESG factors and creditworthiness."[37] Barclays found this link when looking at U.S. corporate bonds, finding that firms with higher ESG scores "had a better credit rating on average and lower average spreads than their low-ESG-scoring counterparts.[38] The data also showed that between 2009 and 2016, "bonds with high governance scores were subject to fewer downgrades by credit ratings agencies."[39]

One of the largest bond managers, PIMCO, has recently stated, "there is growing recognition in the marketplace that integrating ESG factors into traditional credit analysis adds a holistic and long-term perspective that aligns well with bond investing. Moreover, issuers often return to the bond market—unlike the stock market—in order to refinance old debt or seek new funding, giving bond investors a unique opportunity to identify risks, engage issuers and build relationships that influence change."[40]

[34] MSCI: *Has ESG effected stock performance?* November, 29 2017.
[35] Sustainalytics, *Understanding ESG Incidents: Key Lessons for Investors*, 2017.
[36] Breckenridge Capital Advisors/MIT Sloan, *Evaluating the Relationship Between ESG and Corporate Fixed Income*, 2016.
[37] United Nations Principles for Responsible Investments, *Shifting Perceptions: ESG, Credit Risk and Ratings*, July 2017.
[38] Barclays, *The case for sustainable bond investing strengthens*, October 2018.
[39] Barclays, *The case for sustainable bond investing strengthens*, October 2018.
[40] "Sustainable Investing: Understanding ESG in Bonds," PIMCO, June 2019.

This data helps underscore that using ESG-related criteria may help to augment traditional financial analysis, increasing an investor's ability to assess risks that sit outside of the balance sheet.

Industry is taking note of the role of ESG practices and corporate performance

Both CEOs and investors are beginning to understand that these risks have a direct impact on the stock price or credit quality of a company. Fiduciaries are also increasingly focusing on material risks—risks that have a potentially significant impact on business operations, reputation and, most importantly, valuation at both a sector and company level—to help aid in reducing future portfolio underperformance. For example, for firms in the energy and transportation space, greenhouse gas emissions and air quality are going to play a much larger role than for financial and service firms where good governance and transparency concerns are more important direct risks to the business.

Working with industry experts, the Sustainability Accounting Standards Board, or SASB, has identified material ESG issues across each sector that affect the value of a company. Research by Harvard using the SASB definitions of materiality has shown that "firms with good ratings on material sustainability issues significantly outperform firms with poor ratings on these issues."[41] Additional research using Russell Global Research methodology on the Russell Global Large Cap Index[42] companies was able to show alpha* generation in the period from December 2012 to June 2017 for companies that perform well on ESG factors.[43]

"Firms with good ratings on material sustainability issues significantly outperform firms with poor ratings on these issues."

Exhibit 5: SASB Materiality Map® for financial, technology and transportation industries[44]

ESG Issue Area	ESG Metric	Financial Industry	Technology	Transportation
Environment	GHG Emissions	Not material	<50%	>50%
	Air Quality	Not material	Not material	>50%
	Energy Management	Not material	>50%	<50%
	Water & Wastewater Management	Not material	<50%	Not material
	Waste & Hazardous Materials Management	Not material	<50%	<50%
	Ecological Impacts	Not material	Not material	<50%
Social Capital	Human Rights & Community Relations	Not material	Not material	Not material
	Customer Privacy	<50%	>50%	Not material
	Data Security	<50%	>50%	Not material
	Access & Affordability	<50%	Not material	Not material
	Product Quality & Safety	Not material	Not material	<50%
	Customer Welfare	Not material	Not material	Not material
	Selling Practices & Product Labeling	>50%	Not material	Not material
Human Capital	Labor Practices	Not material	<50%	<50%
	Employee Health & Safety	Not material	<50%	>50%
	Employee Engagement, Diversity & Inclusion	<50%	>50%	Not material
Business Model & Innovation	Product Design & Lifecycle Management	>50%	>50%	<50%
	Business Model Resilience	Not material	Not material	Not material
	Supply Chain Management	Not material	<50%	<50%
	Materials Sourcing & Efficiency	Not material	>50%	<50%
	Physical Impacts of Climate Change	<50%	Not material	Not material
	Business Ethics	>50%	Not material	<50%
Leadership & Governance	Competitive Behavior	Not material	>50%	<50%
	Management of the Legal & Regulatory Environment	Not material	Not material	Not material
	Critical Incident Risk Management	Not material	Not material	>50%
	Systemic Risk Management	>50%	<50%	Not material

(>50%) Issue is likely to be material for more than 50% of industries in sector
(<50%) Issue is likely to be material for fewer than 50% of industries in sector
(Not material) Issue is not likely to be material for any of the industries in sector

[41] "The Sustainable of a Corporate Culture of Sustainability on Corporate Behavior and Performance," by Robert G. Eccles, Ioannis Ioannou and George Serafeim: Harvard Business School Working Paper 12-035, November 25, 2011.
[42] See index definitions at the end of this document.
[43] Russell Investments Research, *Materiality Matters: Targeting the ESG issues that can impact performance—the material ESG score*, February 2018.
[44] SASB Materiality Map, data as of October 2019.
* Alpha is the excess return of an investment over its benchmark or reference index. Alpha is also described as outperformance when compared to peer companies.

A Cautionary Tale: Using ESG ratings as the primary decision-making tool

While looking at a firm's ESG rating is a good starting point for analysis, investors need to take into consideration both traditional financial and other environmental, social or governance-oriented risks to make a holistic investment decision. Take for instance California-based utility company Pacific Gas & Electric (PG&E). Given state law mandating use of renewable energy, the company was rated in the top quintile in the environmental category and had a high overall ESG score relative to peers as of late November 2018. When looking at just these metrics, investing in PG&E would have seemed sound.

If an investor had conducted further analysis that took into account historical data as well as forward-looking analysis about the risk of wildfires due to climate change, they may have been able to determine that historical data alone was no longer enough to account for the actual risk of climate change and actually suppressed the risk of wildfires impacting PG&E's stock performance.

The benefit of deeper analysis was illustrated by the decisions of Pax World, an investment manager who evaluated PG&E and felt that when "it came to measures of climate-change adaptation, or how companies have sought to protect their operations from extreme weather events, PG&E was less than impressive."[45] Pax decided to forego investing in PG&E because of these larger environmental risks—a decision that proved wise when the firm faced a federal court ruling mandating it spend more than $75 billion to prevent outbreak of wildfires related to its electricity transmission activities, a reflection that PG&E had not done enough to prevent past catastrophic blazes.

Strong ESG practices may help drive strong, long-term performance

The most compelling evidence regarding performance of sustainable strategies is that firms that have made a proactive commitment to being environmentally and socially sustainable and keep a high degree of corporate transparency have the potential to exhibit strong, long-term performance results, as described in a number of studies:

- Hermes Investment Management found in 2018 that companies with good or improving environmental, social or governance characteristics outperform companies with poor or worsening characteristics. For example, companies with good or improving corporate governance have tended to outperform companies with poor or worsening governance, by 24bps per month on average, and for social factors this metric was 15bps per month compared to lower-ranked peers, from 31 December 2008 to 30 June 2018.[46]

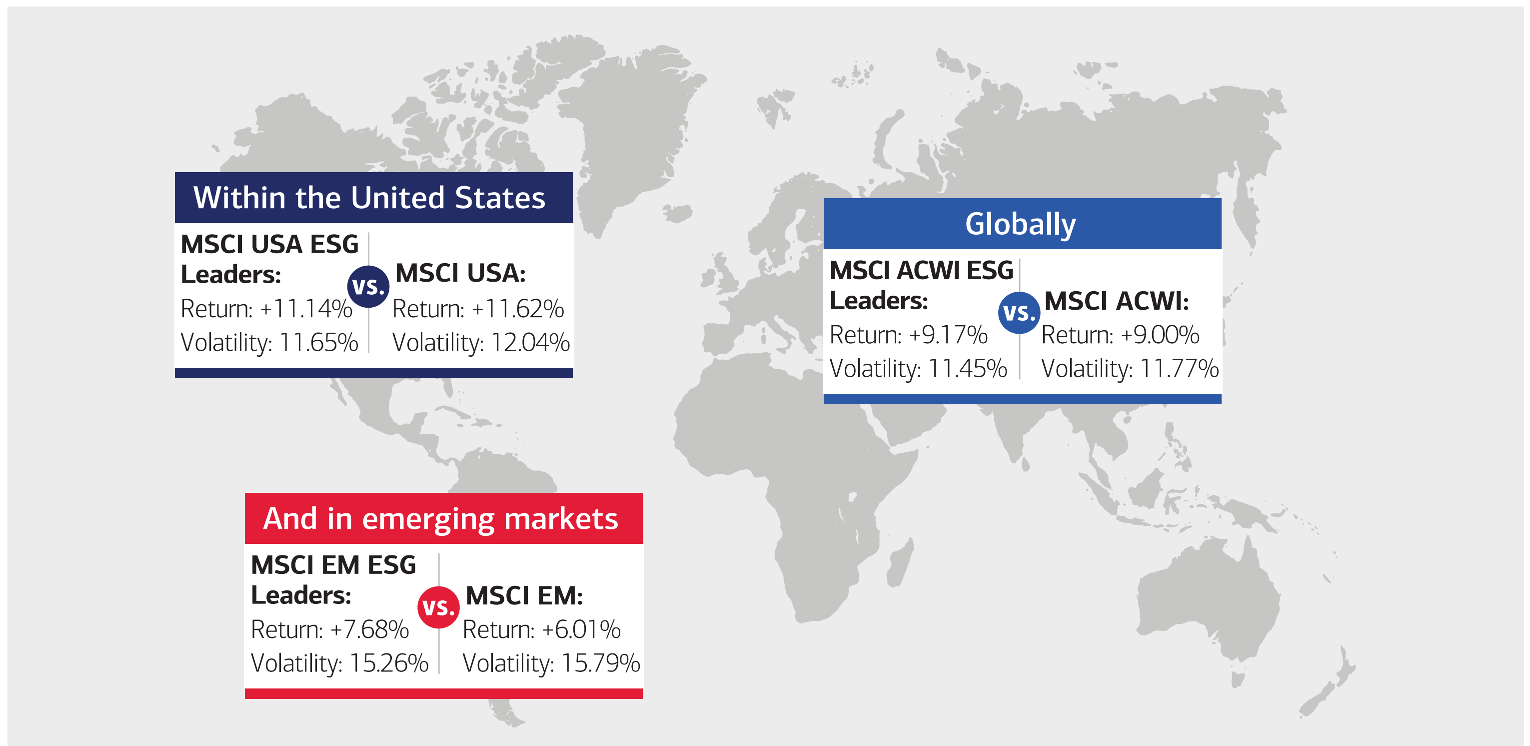
- A study of the software industry revealed that similar to the overall technology sector, social factors, followed by governance factors, have been the strongest signals of future alpha as well as lower risk and improving ratings within both pillars have been a consistently effective signal in the short and long term. Analysis in 2017 showed that the shares of firms that have improved diversity and opportunity have outperformed their peers by 2.3% in the first year and 6.1% over three years.[47]

- A study by MSCI showed that companies with high ESG ratings were more profitable and paid higher dividends.[48]

"Firms that have made a proactive commitment to being environmentally and socially sustainable and keep a high degree of corporate transparency have the potential to exhibit strong, long-term performance results."

[45] MarketWatch.com, "How one investor avoided the PG&E bankruptcy," February 11, 2019.
[46] Hermes Investment Management *ESG investing: A Social Uprising*, 2018.
[47] BofA Global Research "ESG meets Tech: a closer look at the Software industry" November 2017.
[48] MSCI, *Foundations of ESG Investing, How ESG Affects Equity Valuation, Risk, and Performance*, July 2019.

Exhibit 6: A comparison of ESG Leaders and the market at large



Source: MSCI ESG Research, MSCI data showing annualized five-year return through 12/31/2019. See additional annualized returns at the end of this document. See index definitions at the end of this document. **Indices are unmanaged and results shown are not reduced by taxes or transaction costs such as fees. It is not possible to invest directly in an Index. Past performance is no guarantee of future results.**

It is becoming more evident that much of this potential for outperformance can be attributed to a commonly known investment factor called quality. If you think about it in basic terms, high quality management teams that are responsible stewards of investor capital tend to think about both long-term risks and returns as well as opportunities for strengthening their franchise. We've seen these same managers have realized how ESG factors impact their operations, and it is why they are incorporating sustainable behaviors into their corporate practices.

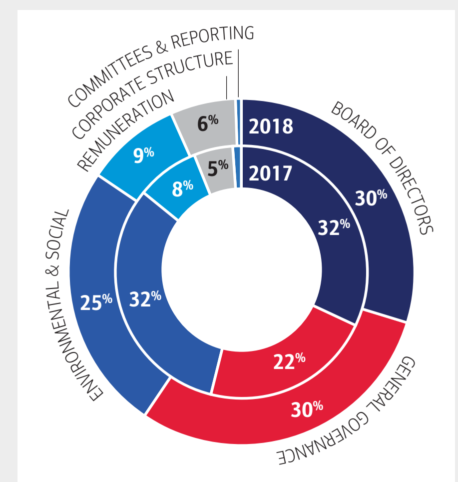
The power of driving sustainability with shareholder advocacy

In addition to looking at ESG factors, many investors are also using their power as a shareholder to drive additional "benefit" through shareholder proposals or proxy voting, and large asset managers are engaging in direct dialogue with firms to help drive ESG impact in addition to pursuing financial returns.

A great example of this activity is Climate Action 100+—a global coalition of investors representing more than $35 trillion under management who have set out to engage with more than 150 of the world's largest corporate greenhouse gas emitters.[49] They seek to encourage "companies to improve board oversight of climate change, curb emissions and strengthen climate-related financial disclosures."[47] These efforts are significant in their scale and also because of the global and nearly universal threat climate change presents to all of us.

Institutional investors have also played a significant role in supporting equal opportunity in the workplace. Since the 1990s, for instance, they have been in dialogue with companies and advancing shareholder proposals to expand non-discrimination policies to include lesbian, gay, bisexual, transgender and queer (LGBTQ) employees.[50] Their engagement efforts have been anchored in economic arguments such as the ability to recruit and retain talent, and research that links diversity to superior corporate performance. When analyzed, 270 companies that provided inclusive LGBTQ work environments were shown to outperform global stock markets by as much as 3% annually.[48]

Exhibit 7: Investor proposals by category



Source: Activist Insight: *The Activist Investing Annual Review*, 2019.

[49] Climate Action 100+: *2019 Progress Report*, October 2019.
[50] Ceres: *The Role of Investors in Supporting Better Corporate ESG Performance*, April 2019.

Sustainable investing may "contribute" both to a portfolio's financial and societal goals

In addition to investments that benefit from companies taking into consideration sustainability factors, investors are also seeking ways to have positive and measurable impact on targeted environmental or social issues. We've observed investors increasingly searching for strategies that provide specific social and environmental outcomes in areas such as climate change, food scarcity, renewable energy and economic empowerment.

"We've observed investors increasingly searching for strategies that provide specific social and environmental outcomes in areas such as climate change, food scarcity, renewable energy and economic empowerment."

In 2015, the United Nations adopted the 2030 Agenda for Sustainable Development, which provides "a shared blueprint for peace and prosperity for people and the planet, now and into the future."[51] This roadmap focuses on 17 Sustainable Development Goals (SDGs) that were developed in conjunction with the private sector to engage in a global partnership to "improve health and education, reduce inequality and spur economic growth—all while tackling climate change and working to preserve our oceans and forests."[49] The SDGs frame a tremendous investment opportunity to address some of the world's biggest challenges.

According to the Better Business Better World report by the Business & Sustainable Development Commission, achieving the SDGs could open up an estimated US$12 trillion in market opportunities in four economic systems: food and agriculture, cities, energy and materials, and health and well-being—representing. around 60 percent of the real economy.[52]

Exhibit 8: Sustainable Development Goals

Source: United Nations Division for Sustainable Development Goals, December 2019.

In addition to helping corporations explain to the market how they are directing capital towards environmental and social issues, the SDGs also provide a way for both public and private markets managers to develop thematic investment strategies that in addition to seeking return and growth potential for a portfolio, offer investors direct impact into the issue areas in which they are interested.

[51] United Nations Division for Sustainable Development Goals, October 2019.
[52] United Nations Division for Sustainable Development Goals Blog, "SDGs Present an Estimated $12 Trillion Market Opportunity," August 25, 2017.

Exhibit 9

Financial inclusion	Affordable housing	Energy access
As of September 2016, some 1.6 billion people lack access to savings, credit, pensions and insurance.[53]	As of December 2019, the number of people living in slums or informal settlements grew to over 1 billion, with 80 percent attributed to three regions: Eastern and South- Eastern Asia (370 million), sub-Saharan Africa (238 million) and Central and Southern Asia (227 million).[54]	840 million people were without access to electricity in 2017. [55]
Food security	**Healthcare**	**Education**
An estimated 821 million people were undernourished in 2017.[56]	In 2018 an estimated 6.2 million children and adolescents under the age of 15 years died, mostly from preventable causes. Of these deaths, 5.3 million occurred in the first 5 years, More than half of these early child deaths are preventable or can be treated with simple, affordable interventions. [57]	Globally, an estimated 617 million children and adolescents of primary and lower secondary school age—more than 55 percent of the global total—lacked minimum proficiency in reading and mathematics in 2015.[58]

Thematic investing: A way to invest in defined impact

In the public markets, thematic investments do differ from the more diversified "benefit-oriented" strategies that have been discussed thus far and tend to have a more defined impact focus. However, due to the fact that they are investing in one or a handful of themes, there can be a smaller universe of companies or issuers in which to invest. As a result, they have the potential for outsized returns as they tend to be in new or higher growth parts of the market, but often with more risk, generally a higher volatility of return, especially in shorter time periods.

Thematic, impact-oriented strategies also may be diversifying to a portfolio, which is why multi-thematic strategies are generally employed to accommodate the fact that different themes will perform better than others in certain market conditions. The chart below shows how many themes can have either low or no correlation to each other.

Exhibit 10: Correlations of impact themes vs global equity market

	Affordable housing	Alternative energy	Clean water and sanitation	Digital divide	Education and job training	Financial inclusion	Health	Resource efficiency	Resource stewardship	Sustainable agriculture and nutrition
Affordable housing	1.00									
Alternative energy	0.35	1.00								
Clean water and sanitation	-0.01	-0.13	1.00							
Digital divide	0.02	0.11	-0.01	1.00						
Education and job training	0.15	0.19	0.04	0.04	1.00					
Financial inclusion	0.45	0.45	0.02	0.05	0.21	1.00				
Health	-0.08	0.02	0.00	-0.01	0.22	0.03	1.00			
Resource efficiency	0.16	0.17	0.09	0.01	0.22	0.07	0.36	1.00		
Resource stewardship	-0.06	0.06	0.17	0.12	0.28	-0.08	0.26	0.33	1.00	
Sustainable agriculture and nutrition	0.26	0.23	0.29	0.26	0.06	0.12	0.17	0.12	0.09	1.00

Source: Wellington Management, 12/1/2015 -12/31/17, updated annually. Equally weighted portfolios were constructed representing each one of the 10 themes in Wellington Management's proprietary impact investing universe which consists of public companies identified as impact companies. The portfolios included each company held in their respective theme. Correlations for each thematic portfolio were determined by calculating the 1-year rolling weekly excess return over the MSCI All Country World Index.[59] Cross correlations of the excess returns were then computed.

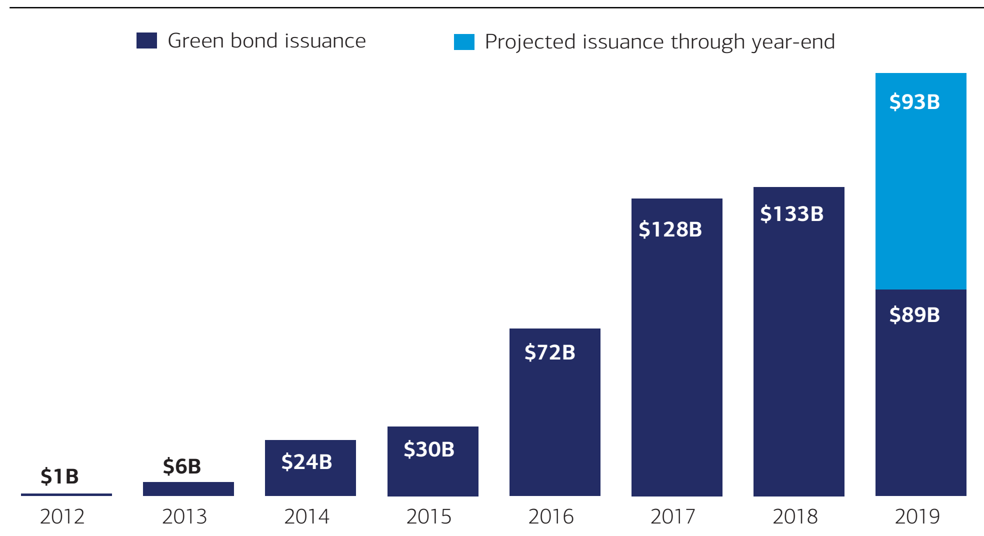
[53] McKinsey & Company, Digital Finance for All: Powering Inclusive Growth in Emerging Economies, September 2016.
[54] United Nations Department of Economic and Social Affairs: Statistics Division, December 2019.
[55] United Nations Department of Economic and Social Affairs: Statistics Division, December 2019.
[56] United Nations Department of Economic and Social Affairs: Statistics Division, December 2019.
[57] World Health Organization, *Children: Reducing mortality*, September 2019.
[58] United Nations Department of Economic and Social Affairs: Statistics Division, December 2019.
[59] See index definitions at the end of this document.

We believe that the challenge posed by a small investable universe likely will fall over time as more companies look to align their strategic goals to address environmental and social transformation. A 2019 report by the Brookings Institute stated that “our findings fit with a PricewaterhouseCoopers survey of more than 700 global companies, which reports that 72% of companies reference SDGs in annual corporate or sustainability reports, 50% identify priority SDGs, and 54% mention them in their business strategy.” This indicates a clear trend as companies are adapting to a marketplace that is focused on sustainable practices, like those of the SDGs.[60]

We’ve seen the fixed income markets have an increase in issuances that target certain issues, including the steady growth of green bonds that raise funds for development with clear environmental benefits, corporate bond funds that invest in high impact issuances, as well as a number of interesting developments in the municipal market. While thematic and SDG-focused investments in the equity universe are generally global in mandate, the US municipal market gives investors a potentially unique way to direct capital to impactful projects in healthcare, education and sustainable cities and infrastructure.

The public companies identified by Fortune magazine on their annual “Change the World” list, comprised of the firms that deliver profit-driven social impact, outperformed the MSCI World Stock Index[62] by an average of 3.9% between 2015 and 2017.[63]

Exhibit 11: Global green-bond issuance shows steady increase

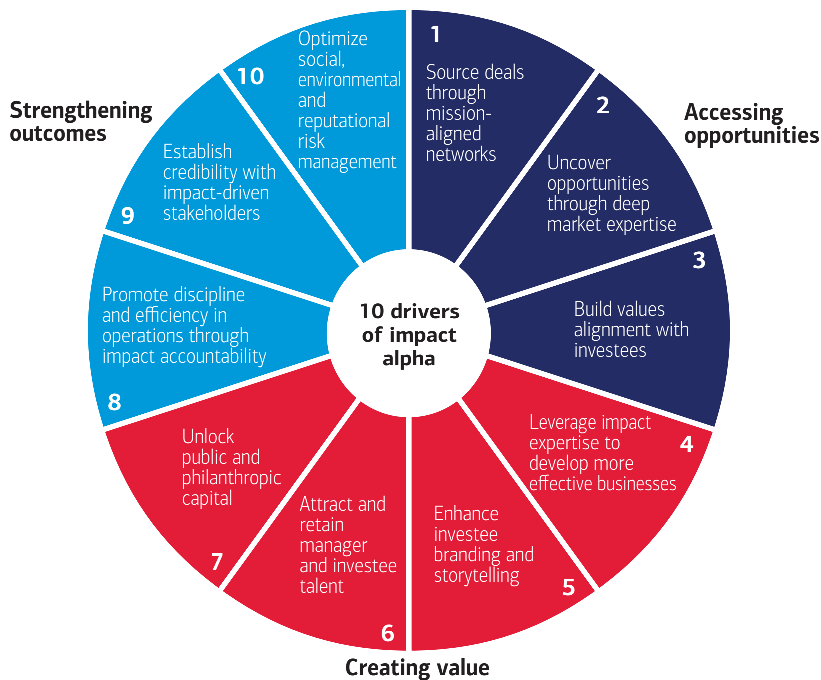


Source: Bloomberg, “Green Bonds Are Finally Sprouting Up All Over the Globe,” June 18, 2019.

It creates a market opportunity with the potential for outperformance versus a portfolio that is more diversified across sectors, for example. Impact-focused investment managers would argue that their expertise and operating approaches may be additive to the performance of the firms they invest in across the private market. A recent report authored by Tideline and Impact Capital Managers identified ten ways, beyond traditional methods, to add value in private equity.[61] Impact investors use additional value-creation-tools, creating the potential for additional return drivers, or “impact alpha.”[59]

[60] “How corporations are approaching sustainability and the Global Goals” George Ingram, Mai Nguyen and Milan Bala, Jan 8, 2019.
[61] Tideline and Impact Capital Managers, *The Alpha in Impact,* December 2018.
[62] See index definitions at the end of this document.
[63] Institutional Investor “Where ESG Fails,” By Michael E. Porter, George Serafeim, and Mark Kramer; October 16, 2019.

Exhibit 12: Ten drivers of impact alpha

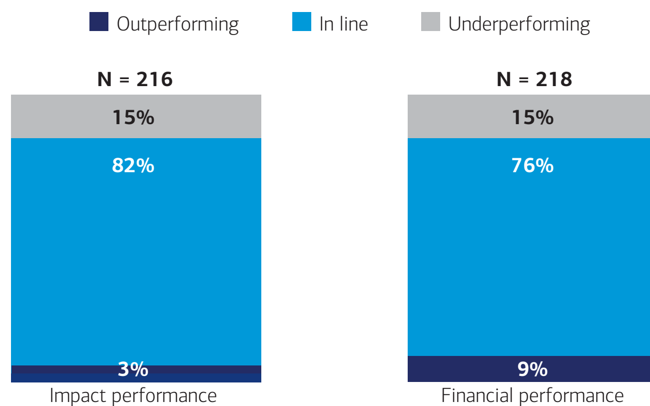


Source: Tideline and Impact Capital Managers, *The Alpha in Impact*, December 2018.

Also, research by Bain has shown that the benefit of these value-added drivers can deliver outperformance relative to traditional drivers of private equity value, or otherwise said, these value drivers are complementary to those traditionally used by impact managers to drive value in private equity investing.[64] Analysis of 450 private equity deals in the Asia-Pacific region from 2013 to 2018 shows deals that involved impact funds or on sectors considered "high sustainability*" returned an average multiple on invested capital of 3.4x versus only 2.5x for other deals.[62] In an increasingly diverse marketplace, managers and investors are showing a strong commitment to both investing for impact and measuring their economic and impact performance. A recent Global Impact Investing Network survey of investors showed that investors feel that they are getting both the financial and impact performance that they expect.[65]

Exhibit 13: Performance relative to expectations

N = number of respondents shown above each bar; some respondents chose 'not sure' and are not included.



Source: Global Impact Investor Network (GIIN) *Annual Impact Investor Survey 2019*, June 2019.

* Deals were classified as having social and environmental impact if the investor is an impact investor or if the sector is closely related to ESG focus (water, waste, education, clean tech, ecology, renewables, etc.).

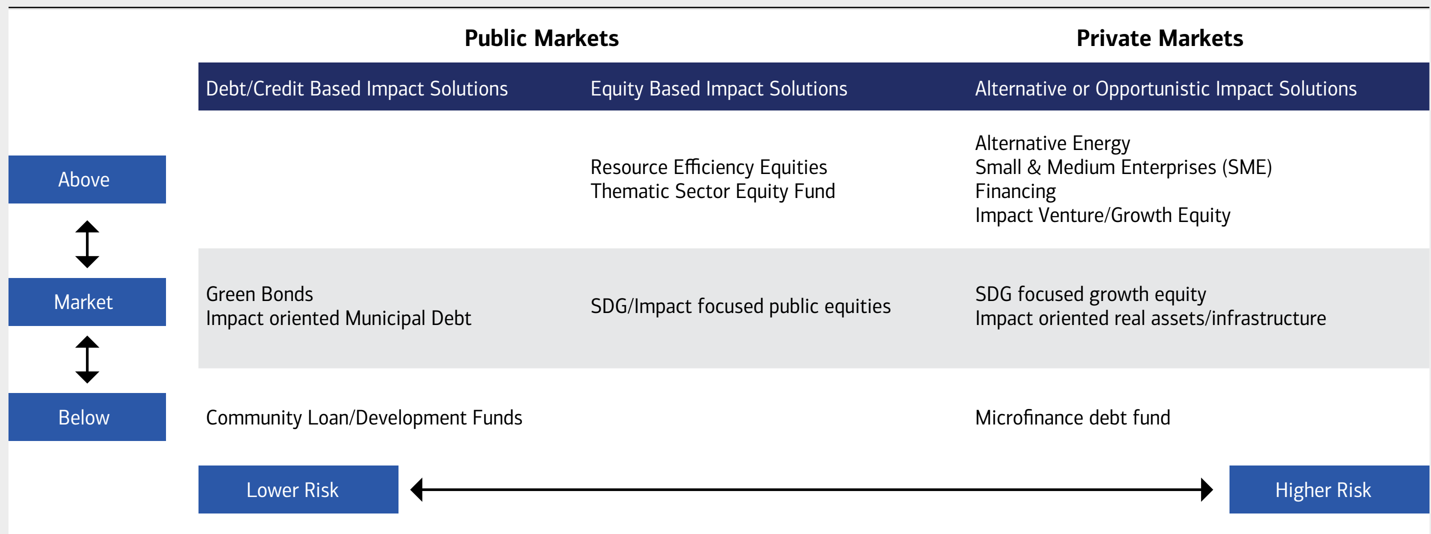
[64] Bain & Company *Private Equity Investors Embrace Impact Investing*, Kiki Yang, Usman Akhtar, Johanne Dessard and Axel Seemann, April 2019.

[65] Global Impact Investor Network (GIIN) Annual Impact Investor Survey 2019, June 2019.

Range of risk and return profiles for sustainable investments

Investors who begin the journey to integrate investments that "contribute" or advance measurable positive impact will find there is not just one risk and return profile to consider:

Exhibit 14: Range of risk and return profiles for sustainable investments under the "contribute" approach



Source: Bank of America Chief Investment Office, January 2019.

This illustration details the sustainable investing universe across public and private investments related to the "contribute" approach and have a range of potential investment risks and returns. The risks of many impact investments are not necessarily greater than their traditional counterparts but are often different, and understanding what those risks are is critical.

For example, investors in an alternative energy strategy may be using capital to create a positive impact on the environment. In addition to having the potential for lowering carbon emissions, investors are expecting a higher return because alternative energy companies are working in a high-growth-oriented space. However, the scale of the alternative energy sector, while maturing, is still small and might not be able to absorb significant capital inflows or outflows. These issues of scale and capacity are common in the impact investing landscape, particularly in smaller private markets where many of the social venture strategies that have potential for commercial and impact success are still early in their development.

Conversely, investments in strategies such as microfinance and community development offer a significant potential for social impact, but often yield lower returns than traditional strategies with, for instance, non-rated credit risk. This is due to the fact that there needs to be a cap on the return that can be extracted from loans designed to benefit low-income communities and investments that offer low-cost products or services to populations living below the poverty line. However, many of these strategies, while often compared to high yield because of their lack of credit rating, actually have significantly lower risk as measured by historic default rates. The Convergences Microfinance Barometer noted that while loss provisions in microfinance averaged 2% per year, in the period between 2006 and 2016, loan write-offs actually averaged only 0.5% per year.[66] This compares to default rates in the high yield bond space that although dropped to 2.1% in 2018, have averaged 3.3% per year over the last ten years.[67]

There is also a wide range of return associated with new business models designed to move away from traditional philanthropy or government support to private, return-based social solutions. In these types of investments, or for investments in early stage social impact entrepreneur funding, investors can think about the risk they are taking as akin to venture capital risk, whereas the potential return could be anywhere from 0% to a significant upside.

However, as opposed to traditional philanthropy, the difference is that impact investing is designed with the objective of returning capital to investors with a return dependent on the program meeting certain metrics and realization of the targeted improvements. We believe one of the goals of impact investing is to create a mechanism for the markets to reinvest that capital, thus creating the potential to scale and magnify the social and environmental impact.

[66] Convergences Microfinance Barometer 2018.
[67] S&P Global Ratings, *2018 Annual Global Corporate Default and Rating Transition Study*, April 2019.

Sustainable and impact investments at Bank of America

At Bank of America, the Chief Investment Office Due Diligence team (CIO Due Diligence) is responsible for assessing strategies in order for them to qualify internally as sustainable or impact strategies. All strategies must meet both of our sustainability and investment standards to qualify. The key components of this process are to evaluate:

1. The quality and competitiveness of the investment strategy
2. The intentionality and depth of ESG integration

To meet the first standard, the strategy must meet our investment and business due diligence processes that look for investment strategies that have a high probability of meeting or exceeding their investment objectives. This means that all recommended sustainability strategies have the potential to meet or exceed the risk and return profiles of the full investment category including all sustainable and non-sustainable strategies.

For all strategies that we define as sustainable or impact, the manager must first meet the investment conviction standard, defined by CIO Due Diligence as ability of the manager to meet its stated investment objective, for a certain level of risk and on a forward looking basis. In order for the risk and return characteristics for sustainable and impact strategies we referenced in this paper to be potentially realized, the strategies have to meet our definition of investment conviction first.

Second, and only after an investment has passed our investment and business due diligence standards, we evaluate how deeply a manager integrates sustainability into their daily investment process. This evaluation considers the different approaches outlined in this paper, from strategies looking to avoid material investment risks, to those that are looking to invest in the most sustainable companies and issuers, to those that use thematic and social or environmental goal-driven data to inform their investment thesis. We perform analyses using various qualitative inquiries, such as going through the manager's portfolio to understand the sustainability thesis and the depth of the analyses the manager uses to inform its selection; how the decision making process works across sustainability specialists, research analysts and portfolio management teams; and how the manager uses ESG in the portfolio construction and ongoing risk management practices. We also use third party quantitative sustainability-focused data sets to perform independent checks on portfolio holdings to help determine the manager's depth of knowledge on certain environmental, social and governance issues, as well as to help us connect the sustainability characteristics of the strategy to its financial risk and return profile.

Finally, arguably the most important component of our strategy assessment, is the sustainability, outcome or impact goal of the strategy. Each manager we work with needs to be able to clearly articulate the goal of their strategy, and the setting and monitoring of these goals against our expectations is as important to us as setting and monitoring performance and risk expectations.

- For "Avoid" strategies, this might be as simple as an intention to decrease exposure to fossil fuels or avoid companies that may be prone to reputational risk.
- For "Benefit" strategies, a manager could have as an objective to have a better overall ESG profile than its benchmark, or to demonstrate how resource efficient companies perform better than their peers.
- For "Contribute" strategies, managers must demonstrate specific, measurable outcomes or impact for each individual investment, but also at the portfolio level. We believe that being able to track the sustainability and impact goals of an investment is as important as tracking the risk and return of these investments through a robust monitoring process.

"Our goal is to provide clients with a strong investment process that helps to increase the probability that both their financial and sustainability objectives can be pursued simultaneously."

IN CONCLUSION

The world is facing rapid change—environmental factors, societal shifts and increasing regulatory pressures are transforming the economy and society across so many aspects of daily life—the way we communicate, consume food and products, travel, places we live and ways we work. These shifts are impacting the markets in many ways, sometimes in ways that were not expected.

Luckily for investors, data and analytical processes that take into account these changing environmental and social factors are evolving at a fast pace. Firms are being more transparent about their business practices and long-term strategies, and governments and financial organizations are demanding more reporting to help investors make informed decisions. Many firms are also taking a new look at their role in the capital markets and realizing that sustainable businesses may equate to more knowledge of risks as well as growth.

We believe these trends are only going to accelerate and we see more and more investors using the concepts of sustainability that we've discussed as a key input into their investment strategy. We also believe that investors who embrace sustainable investing practices will be better able to position their portfolios for potential long-term success.

Index Definitions & Annualized Returns

MSCI ACWI ESG Leaders Index is a capitalization weighted index that provides exposure to companies with high Environmental, Social and Governance (ESG) performance relative to their sector peers. MSCI ACWI ESG Leaders Index consists of large and mid-cap companies across 23 Developed Markets (DM) and 24 Emerging Markets (EM) countries*. The Index is designed for investors seeking a broad, diversified sustainability benchmark with relatively low tracking error to the underlying equity market. The index is a member of the MSCI ESG Leaders Index series. Constituent selection is based on data from MSCI ESG Research.

MSCI Emerging Markets (EM) ESG Leaders Index is a capitalization weighted index that provides exposure to companies with high Environmental, Social and Governance (ESG) performance relative to their sector peers. MSCI EM ESG Leaders Index consists of large and mid cap companies across 24 Emerging Markets (EM) countries*. The Index is designed for investors seeking a broad, diversified sustainability benchmark with relatively low tracking error to the underlying equity market. The index is a member of the MSCI ESG Leaders Index series. Constituent selection is based on data from MSCI ESG Research.

MSCI USA ESG Leaders Index is a capitalization weighted index that provides exposure to companies with high Environmental, Social and Governance (ESG) performance relative to their sector peers. MSCI USA ESG Leaders Index consists of large and mid cap companies in the US market. The Index is designed for investors seeking a broad, diversified sustainability benchmark with relatively low tracking error to the underlying equity market. The index is a member of the MSCI ESG Leaders Index series. Constituent selection is based on data from MSCI ESG Research.

MSCI Emerging Markets Index captures large and mid cap representation across 24 Emerging Markets (EM) countries. With 1,124 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI ACWI captures large and mid cap representation across 23 Developed Markets (DM) and 26 Emerging Markets (EM) countries. With 3,060 constituents, the index covers approximately 85% of the global investable equity opportunity set.

MSCI USA Index is designed to measure the performance of the large and mid cap segments of the US market. With 620 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the US.

MSCI ACWI ex Fossil Fuels Index is based on the MSCI ACWI Index, its parent index, and includes large and mid-cap stocks across 23 Developed Markets (DM) and 26 Emerging Markets (EM) countries. The index represents the performance of the broad market while excluding companies that own oil, gas and coal reserves. It is a benchmark for investors who aim to eliminate fossil fuel reserves exposure from their investments due to concerns about the contribution of these reserves to climate change. The Index is a member of the MSCI Global Fossil Fuels Exclusion Indexes.

Russell Global Large Cap Index is a subcomponent of the Russell Global Index, designed to capture 98% of the global equity market capitalization available to institutional investors.

Exhibit 6 data:	3 years		5 years		10 years	
	1/1/2017 12/31/2019		1/1/2015 12/31/2019		1/1/2010 12/31/2019	
Index	Return (Annualized %)	Standard Deviation (Annualized %)	Return (Annualized %)	Standard Deviation (Annualized %)	Return (Annualized %)	Standard Deviation (Annualized %)
MSCI ACWI ESG Leaders GR USD	13.30	11.07	9.17	11.45	9.72	12.81
MSCI ACWI GR USD	13.05	11.37	9.00	11.77	9.37	13.18
MSCI EM ESG Leaders GR USD	13.06	14.46	7.68	15.26	7.53	16.31
MSCI EM GR USD	11.99	14.38	6.01	15.79	4.04	17.15
MSCI USA ESG Leaders GR USD	15.43	11.58	11.14	11.65	12.86	12.26
MSCI USA GR USD	15.29	12.15	11.62	12.04	13.55	12.53

Source: MSCI ESG Research, MSCI data as of 12/31/2019

Indices are unmanaged and results shown are not reduced by taxes or transaction costs such as fees. It is not possible to invest directly in an Index. Past performance is no guarantee of future results. Standard deviation is a measure of risk, defined as deviation from an investment's benchmark. A smaller standard deviation indicates lower volatility (and lower risk) than higher standard deviation.

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Investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.

All recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors. Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets.

Investments have varying degrees of risk. Some of the risks involved with equity securities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Bonds are subject to interest rate, inflation and credit risks. Investments in foreign securities involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration. Investing directly in Master Limited Partnerships, foreign equities, commodities or other investment strategies discussed in this document, may not be available to, or appropriate for, clients who receive this document. However, these investments may exist as part of an underlying investment strategy within exchange-traded funds and mutual funds.

Impact investing and/or Environmental, Social and Governance (ESG) managers may take into consideration factors beyond traditional financial information to select securities, which could result in relative investment performance deviating from other strategies or broad market benchmarks, depending on whether such sectors or investments are in or out of favor in the market. Further, ESG strategies may rely on certain values based criteria to eliminate exposures found in similar strategies or broad market benchmarks, which could also result in relative investment performance deviating.

Interests in any private equity fund are not insured or otherwise protected by the Federal Deposit Insurance Corporation or any other government authority. Interests are not deposits or other obligations of, and are not guaranteed by, Bank of America Corporation or any of its affiliates or by any bank. Interests are subject to investment risks, including the possible loss of the full amount invested.

Alternative investments such as derivatives, hedge funds, private equity funds and funds of funds can result in higher return potential but also higher loss potential. Changes in economic conditions or other circumstances may adversely affect your investments. Before you invest in alternative investments, you should consider your overall financial situation, how much money you have to invest, your need for liquidity, and your tolerance for risk.

Please keep the following general risks in mind when investing in illiquid private equity funds:

- **An investment in a private equity fund involves significant risks and will be illiquid on a long-term basis. Investors may lose their entire investment.**
- **Private equity managers typically take several years to invest a fund's capital. Investors will not realize the full benefits of their investment in the near-term and there will likely be little or no near-term cash flow distributed by the Underlying Fund during the commitment period. Interests may not be transferred, assigned or otherwise disposed of without the prior written consent of the manager.**
- **Private equity funds are subject to significant fees and expenses, including management fees and, typically, a 20% carried interest in the net profits generated by the Underlying Fund paid to the manager (or similarly situated party). Private equity fund investments are affected by complex tax considerations.**
- **Private equity funds may make a limited number of investments, and such investments generally will involve a high degree of risk and may utilize significant leverage. In addition, funds may make minority investments where the Underlying Fund may not be able to protect its investment or control or influence effectively the business or affairs of the underlying investment. The performance of a fund may be substantially adversely affected by a single investment. Private equity funds may be less transparent than public investments and private equity fund investors are afforded less regulatory protections than investors in registered public securities.**
- **Private equity fund investors are subject to periodic capital calls. Failure to make required capital contributions when due may cause severe consequences to the investor, including possible forfeiture of all investments in the Underlying Fund made to date.**

Social impact bonds are a relatively new and evolving investment opportunity, which is highly speculative and involves a high degree of risk. An investor could lose all or a substantial amount of their investment.

An investment in **Green Bonds** involves risks similar to an investment in debt securities of the issuer, including issuer credit risk and risks related to the issuer's business. You should review the relevant offering document carefully before investing.

Mutual Fund Risk Considerations: Mutual funds are subject to investment risks, including possible loss of the principal amount invested. Investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. **For a discussion of the risks specific to a particular mutual fund, please refer to the fund's prospectus.**

ETF Risk Considerations: ETFs are subject to certain risks that may affect the price, yield, total return and ability to meet its investment objectives, including: general market risks; a particular asset class risk; the fact the funds in the ETF are typically passively managed; concentrations in a particular industry or region and; market trading risks (e.g., lack of market liquidity and trading at prices at or above their NAV). ETF shares may trade at a premium or discount to NAV and may be subject to management fees, transaction costs or expenses. **For a discussion of the risks specific to a particular ETF, please refer to the ETF's prospectus.**

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