

ESG, SRI, and impact investing: A primer for decision-making Vanguard Research August 2018

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- Investors throughout the world are increasingly interested in environmental, social, and governance (ESG) issues. However, they may be puzzled by the growing assortment of acronyms and terminology on the subject, leading to challenges in determining what—if any—action they should take.
- ESG investing is an investment-related activity that accounts for some type of ESG consideration. It is not a separate asset class, a single strategy, or even a single type of action, and importantly, the appropriate approach is not the same for all investors. We believe that specific forms of ESG investing can be prudent for investors with particular preferences, beliefs, resources, and circumstances. As with any other form of investing, investors must establish their goals and weigh the potential benefits of the various approaches against any relevant risks and costs to give themselves the best chance of achieving their desired outcome.
- In this paper, we clarify the terms and trends and provide investors with an objective, practical framework for making informed decisions. Our clear four-step process helps investors establish specific goals, evaluate potential options, and decide on an ESG investing approach based on personalized criteria and trade-off considerations.

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Contents

l.	Terminology	4
	rifying the confusion	
II.	Trends	5
	set growth reflects increasing appetite of investors	
	ta democratization	
	obal initiatives and regulatory developments	
III.	Decision-making framework	8
Defi	fine goals	8
Eval	aluate options	11
Dec	cide on action	16
Reas	assess periodically	17
IV.	Case studies	19
Port	rtfolio screening	19
Acti	tive ownership	20
Impa	pact investing	20
V.	Conclusion	22
VI.	. Appendix	25
Alte	ernative ways to address ESG issues	25
Port	rtfolio screening due diligence considerations	26

Environmental, social, and governance (ESG) integration. Socially responsible investing (SRI). Engagement. Green bonds. Impact investing. Interest in various forms of ESG investing has been growing, but the array of terms in this area has contributed to investor confusion. The right decision depends on a number of factors, including an investor's goals, beliefs, resources, and preferences. Though one agreed-upon process to evaluate ESG investing actions may never exist, any proposed process should be practical, helping investors make informed decisions with both their time and capital.

We appreciate that investors throughout the world have diverse ideologies, religious beliefs, environmental and social opinions, and preferences. They operate under different regulatory environments and have distinct resources, skill sets, and financial expectations. The goal of this paper is not to examine whether certain ESG approaches can meet investor goals. Rather, the aim is to serve as a primer to help investors better understand terms and trends, and to provide a practical framework for what—if anything—to do about an ESG-related issue based on available approaches and their unique circumstances.

How to read this primer

We understand that some investors have a strong understanding of certain ESG investing topics, but others are less familiar. As a result, we structured this paper so that it can be read cover to cover for a comprehensive

primer on this topic, while also allowing more knowledgeable readers to skip to sections of particular interest.

I. Terminology

Clarifying the confusion

Though certain ESG investment approaches have been utilized for centuries, much of the associated terminology is new and sometimes misinterpreted.¹ Many of these terms are defined and used differently by academics, practitioners, and the financial press. While global

consensus on definitions may never be achieved, it is important to ground any discussion on the topic by explaining some common terms. Figure 1 presents four key categories and the terms associated with each. These definitions have been adapted from those used by the Global Sustainable Investment Alliance (GSIA), an international collaboration of membership-based sustainable investment organizations. Additional information on some of these terms can be found in Evaluate options in Section III.

Figure 1. Putting a definitional stake in the ground

Umbrella terms

ESG investing:

An investment-related activity that accounts for some type of environmental, social, or governance consideration. Related terms include: responsible investing, socially responsible investing (SRI), thematic investing, and sustainable investing.

ESG investing strategies

1. ESG integration

· Systematic inclusion of financially material ESG information (risks and opportunities) to complement standard investment analysis.



· Does not necessarily preclude investment in an organization or country because of undesirable activity.

Example: An active manager, who does not have a specific values mandate, considers all traditional and ESG-related risks, including litigation, reputational, and regulatory risk, for a publicly traded tobacco company. The manager then decides to overweight the stock, after analysis shows it is trading at an attractive price.

2. Active ownership

· Use of internal or external resources to positively influence corporate behavior on ESG-related issues.



Key related term

Engagement:

Direct contact with companies to discourage undesirable corporate behavior or recognize or encourage best practice behavior.

Example: After voting against the compensation report of an Australian mining company, an investor meets with the company several times to discuss specific issues. In response to shareholder concerns, the company's new long-term incentive plan adds a relative performance measure, making maximum compensation targets more difficult to achieve. The company also commits to disclosing more details of the compensation policy.

II. Trends

Asset growth reflects increasing appetite of investors across the globe

The lack of industry consensus on how to properly define ESG investing terms has complicated tracking trends in asset growth. Differing local terminology, investor preferences, and disclosure requirements have contributed to the absence of a global reporting standard for assets managed using some form of ESG investment approach.

Asset estimates can look quite different depending on what is included, which may not always be clear without close examination. Therefore, it is important to establish a baseline scope of industry assets to facilitate investor understanding of the size and trends for ESG investing approaches. Many industry studies cite statistics produced biannually by the GSIA. As of December 31, 2015, the GSIA reported \$22.9 trillion of ESG managed assets globally.² Given that the report contains an array of investment categories, structures (for example, private and public investment vehicles), and action types (such as ESG integration), the GSIA data can be interpreted as a broad estimate of ESG assets under management.³

Figure 1 (Continued). Putting a definitional stake in the ground

3. Portfolio screening

- An active or index strategy
 that selects from a universe
 of investments that meet
 specific screening criteria
 determined by the investor, a hired asset manager,
 or a separate third party.
- Uses two methods: exclusionary (negative) screening, which excludes or underweights securities of certain countries, or companies based on specific ESG-related criteria; and inclusionary (positive) screening, which overweights or only purchases securities of companies with higher ESG ratings than industry peers ("best in class") or other investment opportunities.

Key related term

Norms-based screening:

A form of exclusionary screen that sets minimum standards for business practice based on companies' adherence to international norms, such as human rights and corruption.

Example: A religious organization's investment committee seeks an index vehicle that prohibits the purchase of securities of companies with core businesses involving alcohol, adult entertainment, and biotechnology that contribute to perceived immoral behavior.

4. Impact investing

Targeted investments, often made in private equity or debt markets, with the dual objective of generating measurable, positive societal and/or environmental impact and a level of financial return.

Key related terms

Sustainability-themed investing:

Investing in organizations that stand to substantially benefit from positive sustainability trends. These trends are often environmentally focused, such as the development of renewable energy sources.

Social impact bonds (or "pay for success" contracts): A form of investing that links private capital and governments to improve targeted social outcomes and, ideally, produce government savings (Rangan, Appleby, and Moon, 2012).

Green bonds:

Debt financing issued by private or government entities for an environmentally friendly project or initiative.

Example: A private fund invests in real estate companies focused on building or renovating apartments and retail property in urban areas to help low-income communities. The fund's general partners are passionate about this issue and hope to attract investors who feel the same way.

² The most current data published by the GSIA are included in the 2016 Global Sustainable Investment Report. Assets presented in the report are as of December 31, 2015, with the exception of Japan, which is as of March 31, 2016.

³ The GSIA data include some double counting of assets. For example, investment managers that engage in ESG integration and advocacy include total firm assets in both categories. GSIA accounts for this by subtracting double-counted assets from the total one time, leaving a total headline estimate of \$22.9 trillion.

Figure 2 displays a breakdown of ESG investing assets by strategy type and geographic location.

It is important to note that reconciling these types of estimates can be challenging, as headline numbers are often formulated using different sets of criteria. Investors should carefully assess any reported ESG asset totals by examining what specifically is included in such estimates. For instance, estimates of assets in portfolio screening strategies can vary widely. GSIA, which includes both public and private commingled vehicles and separate accounts, reports assets in screening strategies of \$22.3 trillion as of December 31, 2015. But when accounting

Figure 2. ESG investing assets are growing and reflect diversity by region and strategy



Notes: The breakdown of assets by strategy includes double counting (see Footnote 3). For assets to count in the active ownership category, a professional asset manager must have sponsored or co-sponsored at least one shareholder resolution for an ESG-related issue. The portfolio screening category includes GSIA assets from positive screening, negative screening, and norms-based screening. The impact investing category includes GSIA assets from impact investing and sustainability-themed investing. Assets in the Asia region include totals from the Asia ex-Japan and Japan categories from relevant GSIA reports. In some GSIA reports, assets for Japan are reported under a slightly delayed time frame.

 $\textbf{Sources:} \ \textbf{Vanguard calculations, using data from GSIA.}$

for only publicly available mutual funds and ETFs (and using a different data provider), the global asset total is smaller—\$2.0 trillion.⁴

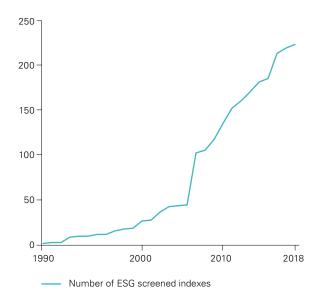
Ultimately, the growth in different approaches largely reflects rising capital markets and increasing appetite from investors over the last few years. The growing global interest is a complex phenomenon, with a diverse set of drivers at both the global and local levels. However, two drivers that have become increasingly clear are the better availability of ESG-related data, and global initiatives and regulatory developments.

Data democratization: Broader availability of data for investors

ESG-related data appear to be moving from the margins to the mainstream, as more than 11,700 public companies worldwide now disclose ESG indicators (Bloomberg, 2016). Heightened investor interest in ESG-related data has been noticed by financial data companies. More than 125 organizations produce research and ratings (Bender, Sun, and Wang, 2017), including a number of major financial analytics firms, such as Bloomberg and Thomson Reuters.

This proliferation of data, coupled with growing investor interest and technological advancements, has aided the ability of active managers to integrate material ESG issues into their due diligence process. It also has helped index providers construct a wider set of screened indexes for asset managers to consider tracking to meet potential demand from investors with different moral preferences (Figure 3).6

Figure 3. Growth in ESG screened indexes has accelerated



Note: The count includes screened equity and fixed income indexes that cover global regions using different ESG-related criteria based on a customized Morningstar search as of June 2018.

Sources: Vanguard calculations, using data from Morningstar, Inc.

Global initiatives and regulatory developments

The growth in assets can also be attributed to the establishment of responsible investing initiatives and regulatory changes. For instance, in 2006 the United Nations formed the Principles for Responsible Investment (PRI), an independent global alliance of asset owners, investment managers, and investment service providers who commit to providing transparency reports publicizing their activities that relate to the PRI principles. These principles include ESG integration, portfolio company engagement, and advocating for relevant ESG-related

⁴ This figure represents the sum of equity and fixed income mutual fund and ETF assets from Morningstar, Inc., for products it defines as "socially conscious."

⁵ According to a breakdown of assets by GSIA, the majority of ESG investing dollars is attributed to institutional investors, such as pension plans and insurers. The GSIA notes, however, a 13% increase in the relative proportion of assets attributed to retail investors between 2014 and the start of 2016 (to 26% of total assets) in Canada, Europe, and the United States.

⁶ The significant growth of data availability is not without challenges. Investors must assess the relative importance of the information if using it for active ESG integration, impact measurement, or company ESG ratings for screening. This is compounded by the short history of some company information availability and lack of industry-wide ESG disclosure standards, which affect investors' ability to compare companies. For more information on this challenge, see *Portfolio screening* in Section III

⁷ For examples of ESG-related policy changes in different countries, see Heath, Paty, and Martindale, 2016.

information disclosure from public companies.⁸ Membership in PRI has grown to more than 1,900 signatories owning or managing \$81.7 trillion in assets as of April 2018.⁹ A regulatory example is a law in Belgium that prohibits investors from financially supporting select companies involved in the manufacture, use, repair, marketing, sale, import/export, and transportation of antipersonnel mines and cluster munitions (Eurosif, 2014).¹⁰

III. Decision-making framework

In this section, we provide a decision-making framework to help investors determine what—if anything—they should do about ESG issues. The framework asks investors to establish the goals for potential action; shares what options may be available to help them meet their goals; and articulates how to decide which actions to take, if any, based on the investor's preferences, beliefs, expertise, resources, and circumstances. Figure 4 illustrates the key steps in this decision-making process.

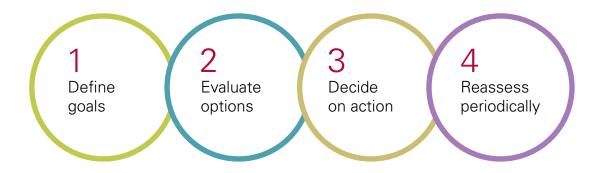


Identify the issues

In order for investors to determine what approaches may be an appropriate option, they must first decide what ESG issue or set of issues they want to address. This decision is not always easy, especially if multiple parties are involved, such as in cases with investment committees. A large and growing list of ESG-related issues may be important to different investors, as shown in **Figure 5**.

Determining issue focus areas: Clarifying the areas of focus is important for all types of ESG investing strategies. For some approaches, translating an issue or set of issues into a clear set of companies or countries that exhibit desired or undesired ESG behavior can be difficult. For instance, investors who are concerned about the environmental impact of fossil fuels may want to examine which firms are conducting undesired behavior. Some may prefer focusing on the highest carbon dioxide-emitting companies, so they must determine how many companies to include on that list. Others may worry about the supply chain of fossil fuels.

Figure 4. Key steps to making a prudent ESG investment decision



Source: Vanguard.

 $[\]boldsymbol{8}\;$ Portfolio screening is not included in the list of principles.

⁹ For instance, a traditional active equity fund manager may not have considered ESG-related information when conducting an independent assessment of a company's relative attractiveness as an investment opportunity. However, in light of ESG-related scandals at public companies that have made headlines recently, the manager decides to systematically consider such information in the due diligence process and formally document it in an annual PRI Transparency Report.

¹⁰ Exemptions to this law include index funds and financing of specific projects of companies engaged in prohibited activities, as long as such projects are not affiliated with these activities (Boring, 2016).

Figure 5. The list of potential ESG issues is extensive and growing

Environmental Fossil fuels Air emissions and air Occupational health and safety quality Biodiversity protection Hazardous materials use Renewable energy sources Community health, Land contamination Waste generation safety, and security Natural resource Water use and Energy conservation conservation preservation Social Adequate housing Consumer privacy Opioids Abortion providers Employment of minorities Religious values and women Adult entertainment Human rights standards Tobacco Alcohol Income inequality Union relationships Animal testing Manufacturers of birth Weapons control products Workforce exploitation Casinos and gambling Obesity equipment Governance Antitrust violations Consumer fraud Political contributions Disclosure of material Auditor independence Reporting transparency Board independence Short-term focus Executive compensation and elections Board diversity Oversight of strategy Voting rights

Note: This represents a sample, not an exhaustive list, of ESG issues.

Source: Vanguard.

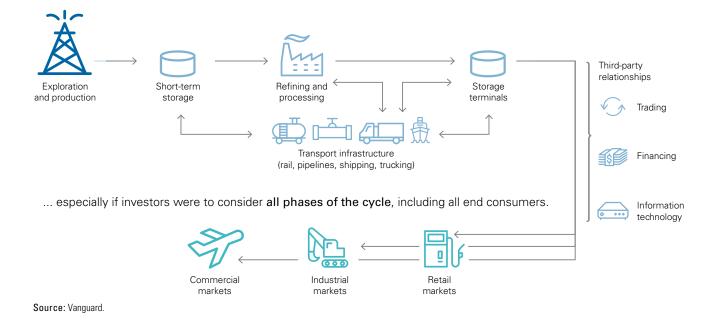
In turn, the question that often arises is, "Which companies in each part of the supply chain count?" Some investors prefer zero tolerance, meaning that any company participating in an undesired business activity is considered. Others prefer setting a threshold as a percentage of company revenue from the business activity, in cases where the activity may not be a core business practice. However, there are examples where the business activity is a small percentage of the firm's revenue but the activity represents a sizable percentage of market share of that undesired activity's sales (for example, gun retailers and manufacturers of nuclear weapons).

Some investors also question how to address companies that they feel are engaged in certain undesired business activities but are also innovating in areas with positive environmental or social impact. For instance, some fossil fuel firms spend a significant amount of financial and human capital on clean energy alternative research, development, or sales. Lastly, investors also may wonder how to consider companies that are making significant progress at reducing their undesired business practices.

In Figure 6, we illustrate the basic life cycle of fossil fuels from initial exploration through end consumer. Some investors struggle to decide which phases of the cycle reflect their concerns.¹¹ This example shows how narrowing down the list of companies or countries is not necessarily a straightforward task. Therefore, investors should be clear about their exact preferences to avoid any potential confusion.

Figure 6. Determining the boundaries of an ESG issue can be a complex decision

The oil supply chain encompasses many different kinds of companies, directly or indirectly involved with the production and delivery of petroleum products ...



Some investors worry that it may appear disingenuous to signal a disassociation from fossil fuels if they rely on them for some aspect of their own business (for example, energy to power a factory or flying to meet with customers) or personal use (driving a car, home energy), particularly in countries with limited energy source options.

¹¹ A statement by Yale Corporation Committee (Yale University, 2014) provides an example of the challenge in determining what fossil fuel-related activities to target for a potential exclusionary screening strategy. In addition to considering the phases of the life cycle, some investors may also want to look at companies that provide financial support (such as banking services), create marketing content, make political contributions, pay lobbying organizations, provide technological hardware and/or software, or maintain third-party affiliations (such as involvement with certain trade organizations) that they believe in some way support a particular company exhibiting undesirable behavior.

Determine objectives

The most appropriate potential courses of action will vary, based on the investor's preferences, beliefs, goals, expertise, resources, and circumstances. Therefore, it is critical that the investor defines the objective before moving to the evaluation step. Based on our experience, investors tend to have one or more of the following objectives for ESG-related issues:

- Satisfy values preference. This is based solely on ethical, moral, religious, humanitarian, political, and/or environmental preferences. For example, even if a company is conducting a commercially legal business activity, an investor may prefer not to co-profit from or finance the firm because the investor considers this activity at odds with his or her values. This moral desire is sometimes significant enough that the investor is willing to take action even if it could lead to a sacrifice in financial return. If that is the case, the utility that he or she derives from the values alignment more than offsets the financial cost of the action (Minor, 2007).
- Generate financial benefit. Some investors are
 interested in an action that they believe will improve
 their financial results, such as enhancing risk-adjusted
 return. For instance, an investor may choose to invest
 in a group of solar energy companies with a belief that
 the market is underestimating their ability to take
 market share from traditional fossil fuel firms in the
 next few years.
- Effect meaningful change. Some investors desire
 an approach that will lead to positive ESG-related
 change on an issue that concerns them. For example,
 they may aspire to influence a change in working
 conditions for employees of a company in an
 emerging-market country.
- Meet legal requirement. This objective is typically for institutional investors or financial advisors acting as agents on behalf of beneficiaries or clients. For example, a regulatory change may require a pension fund to exclude investment in companies that conduct certain activities.



The next step is to study ways to address the ESG-related goal or set of goals. Importantly, these actions are not necessarily mutually exclusive, meaning that investors can pursue multiple approaches.

Form a special advisory subcommittee to lead the evaluation effort

For institutional investors, an increasingly common practice is to establish a temporary task force or standing committee charged with reviewing stakeholders' ESG-related proposals, assessing how potential actions address the goals, determining potential implications of different decisions, and providing a recommendation to the board. Some special committees establish formal and transparent processes for proposal submission and decision-making.¹²

ESG integration

Traditional or quantitative active investors who systematically and explicitly consider any financially



material ESG issues in their analysis and investment selection process are employing an integration approach. This practice is not meant to replace standard analysis but rather to complement their quest to achieve a better risk-adjusted return outcome. Some active investors have been implicitly considering ESG-related information in their research process for years or even decades, before the activity became labeled as ESG integration.

With the substantial growth in the availability of ESG-related information and the number of active investors who are formally or informally integrating it into their analytical process, academics and practitioners debate to what extent ESG-related information is priced into financial assets. Regardless, for a more comprehensive analysis, active investors should examine any financially material ESG opportunities and risks for securities of each company or country they own or are considering for the portfolio.¹³

Active ownership— "voice and vote"

Shareholders and debt holders

of companies have ways they can express their beliefs in order to compliment positive company behavior or encourage change. 14 These actions are conducted either directly by the investor or through a hired agent. Typically, agents that own equity or debt securities on behalf of investors (such as advisors and fund managers) have a responsibility to advocate for change if it can help maximize long-term value.

Is a passive investor a passive owner? This fiduciary responsibility applies to equity index managers as much as—if not more than—any other type of investor, because they typically own securities of companies for extended periods, if not permanently in some cases. As a result, the voice and the vote are critical tools for protecting or enhancing value over the long term (Mercer, 2009). A Morningstar study (Bioy et al., 2017) confirmed that the

12 largest providers of index mutual funds and exchangetraded funds across three regions (the United States, Europe, and Asia) have been very active with engaging and voting to protect shareholder value.

Engage with portfolio companies

Constructive dialogue with members of a portfolio company's board of directors or top executives is a common tool that larger shareholders or debt holders use. This can improve company policies, practices, and disclosures through the sharing of ideas and concerns. ¹⁵ Engagement should be thought of as a process (a series of interactions), not a singular event (Dimson, Karakaş, and Li, 2015), in part because changes often require evaluation and approvals by the companies. Asset managers, institutional investors, and advisors can publicize their engagement priorities and corporate stewardship beliefs by posting them on their organization's website in hopes that some portfolio companies or peers review and adopt some of their recommendations.

Making the business case: Engagement discussions should be structured in a way that, using a business rationale, conveys to company decision-makers that changes could lead to long-term value maximization (Tonello and Singer, 2015). The incremental value of engagement activities for the investor, whether it be to effect meaningful ESG-related change or to generate financial benefit, is difficult to estimate, particularly because many shareholder discussions with company executives or board members are held privately (Mercer, 2009).¹⁶

¹³ A 2015 CFA Institute survey of members who are portfolio managers or research analysts found that the most popular reason for ESG integration is to help manage investment risks (e.g., reputational, regulatory) (Hayat and Orsagh, 2015). For detailed examples of ESG integration, see Sloggett and Gerritsen (2016).

¹⁴ Porter et al. (2016) note that a growing number of companies are, on their own, developing profitable business strategies that deliver tangible social benefits (often referred to as shared values)

¹⁵ Some investors prefer to remain owners, rather than divest, because they do not want to give up their seat at the table to influence change (Piani, Douma, and Georgieva, 2018). However, engagement can be time-consuming and complex, and it may not be practical for some investors (Mercer, 2009). More institutional investors, asset managers, and advisory firms that manage securities are establishing or expanding investment stewardship teams to pursue these types of efforts. Given the complexity, time commitment, and cost, direct owners of securities with limited resources sometimes hire engagement service firms to handle the interactions on their behalf.

Some engagement activities involve specific company strategy recommendations using deep company and industry-specific knowledge and experience. This is common with private equity and activist hedge funds where general partners are often expected to materially change company behavior. In other cases, engagement is often focused on understanding company oversight and strategy and encouraging effective management practices of short- and long-term ESG-related risks and opportunities.

¹⁶ Direct engagement is often handled privately to build trust and ensure openness (Piani, Douma, and Georgieva, 2018). More public forms of engagement are often referred to as activism, which can be confrontational at times (Hayat and Orsagh, 2015). Whether activism is beneficial over the long term tends to be case-dependent (Ernst and Young LLP, 2015). Mercer (2009) discusses a few factors that may improve the odds of success with shareholder engagement.

In addition to constructive dialogue, other possible engagement actions with portfolio companies include:

- Joining a coalition or advocacy group. Owners of company equity or debt can join collaborative engagement efforts with others that have similar views. This can reduce costs by eliminating duplicate engagement efforts while creating a louder, more centralized voice. Coalitions can also produce "sign-on letters," which a group of investors send to a corporation or policy maker, seeking some form of action. Groups that promote changes of certain ESG-related corporate behavior include PRI, 30% Club, and the CDP (formerly the Carbon Disclosure Project).
- Drafting letters to companies. Some shareholders
 or debt holders draft open letters to public companies
 to disseminate their views and recommendations
 for corporate behavior on certain ESG-related topics.
 These letters are sometimes posted on websites so
 others can learn about the investor's view. Investors
 also can draft private letters to a single company with
 customized language encouraging change that could
 enhance or protect long-term value.

Sponsor, co-sponsor, or support (vote for) a shareholder resolution requesting company change In some countries, certain shareholders are permitted to sponsor or co-sponsor recommendations (in the form of shareholder resolutions) made to a public company's board of directors at an annual shareholder meeting. These recommendations are voted on by shareholders, typically by proxy, and are often nonbinding. There is evidence that shareholder resolutions can be successful at driving portfolio company change (Ertimur, Ferri, and Stubben, 2010). Global, independent, proxy advisory service firms help connect investors and companies and share information on how proxies may relate to ESG issues. They also provide voting recommendations for investors.

Portfolio screening

The next category of potential approaches to ESG-related issues is to screen in or out securities of companies



or countries based on certain business practices.

Inclusionary (positive) screening

These strategies involve purchasing or overweighting securities of companies or countries that have strong ESG ratings relative to their industry peers (often termed "best in class") or other investment opportunities and exceed a minimum ESG rating threshold. The rating may be determined internally or by a third party and often considers a range of ESG criteria instead of just one or a handful of issues.

Ratings subjectivity: The voluntary disclosure of certain ESG information by public companies and the subjective nature of determining the overall rating based on an assessment of a broad set of ESG issues can lead to material differences in ratings across agencies. ¹⁷ These inconsistencies can produce very different security holdings and weightings in inclusionary screening strategies. Because of these inconsistencies, the investor should conduct due diligence on the rating provider's methodology.

¹⁷ For example, according to Bender, Sun, and Wang (2017), the average cross-sectional correlation of ESG scores from Sustainalytics, MSCI, RobecoSAM, and Bloomberg ranges from 0.47 to 0.76 as of June 30, 2017, for securities in the MSCI World Index. This is in contrast to the high level of correlations among credit rating agencies that determine default probabilities of fixed income instruments (Hawley, 2017).

Exclusionary (negative) screening

Screening out or limiting exposure to securities of companies or countries that engage in or support what an investor believes are undesirable activities—regardless of the securities' current market price—is probably the most well-known type of ESG investing approach. The goal is often to avoid co-profiting from or financing an activity that is at odds with an investor's values.

Perfect or pragmatic? Once screening criteria are determined, the investor must consider whether and how they can be implemented. When it comes to commingled products, the methodology often does not match the investor's ideal screening preference. In some circumstances, there may be strategies that can

be customized to match investors' precise desires.¹⁸ If a compelling index or active strategy with the exact screening criteria is not available, investors must assess whether an attractive strategy that is close enough to their screening preferences exists.

What parts of the portfolio? Screening is not unique to any particular category of investments, in public or private markets. However, the quality and breadth of options will vary by country, asset category, and investor type and size; this may influence the extent to which investors use screening strategies. The decision on whether and where to implement screening in a portfolio will be driven, in part, by these considerations and others, such as cost, expertise, and resources.

Will screening help or harm investment performance?

One of the most frequently asked questions is whether an investor can "do good and do well" when screening portfolios. In other words, is there a financial benefit or sacrifice when removing companies from an opportunity set because of certain corporate practices? This is an especially important question given Vanguard's muted outlook for returns over the next decade and for fiduciaries who may be legally precluded from compromising financial outcomes.¹⁹

A simple yes-or-no answer is not reasonable because there are a variety of potential inclusionary and exclusionary screening preferences, numerous countries and asset categories (both traditional and alternative) where screening could be applied, dissimilar strategy options available for investors of different locations, sizes, and types with distinct resource capabilities and legal provisions, and implementation costs that can vary significantly. In addition, the decision of whether the change will help or harm the portfolio must take into account the relative attractiveness of what will be replaced.

There is currently no industry consensus on this answer, and a commonly cited meta study has shown mixed results (Friede, Busch, and Bassen, 2015). Academic and practitioner studies on this question assess different ESG issues (e.g., controversial weapons, tobacco, gender diversity) and often use different construction and calculation methodologies, screening criteria, time periods, or data sets; this presents a challenge when searching for supporting or opposing evidence on specific ESG issues. In general, investors should understand that performance may be materially different from conventional investment options (indexed or active) over various time periods and that cost and diversification are key considerations.²⁰ Therefore, investors considering screening strategies must be able to stomach periods of investment underperformance.

Given all of the variables that can influence the answer to the help-or-harm question, we instead describe a framework in **Figure A-1** in the Appendix to help investors conduct the due diligence.

¹⁸ The evolution of financial technology is leading to the availability of bespoke options for a broader range of investors. Minimum investment requirements or implementation costs that may be associated with separate accounts could impede implementation.

¹⁹ For details on our long-term global capital markets outlook, see Davis et al. (2017).

²⁰ For example, Statman (2006) evaluates performance differences for a sample of screened indexes.

Impact investing

Impact investing involves allocating capital to companies, organizations, and funds with the intent to generate financial return and some form of material, positive social and/or environmental impact that aligns with the investor's personal values. This type of investing can be made in different countries and asset categories.

Concessionary versus nonconcessionary

Some impact investments are considered concessionary. Often referred to as "impact first," they are expected to generate a return on investment but not necessarily one that is competitive with that of traditional investments.²¹ Some investors are content with this because the expected financial give-up is offset by significant positive environmental or social impact that the recipient organization produces with the investor's capital. Nonconcessionary impact investments, often called "finance first" or "double-bottom line," are expected to make an environmental or social impact without any expected financial give-up. Although the impact investing market is still fairly immature, there is evidence that some private funds have provided financial results that were competitive with those of conventional funds across private categories (Mudaliar and Bass, 2017).

Due diligence considerations

While due diligence is important with many types of ESG investing options, it is critical for impact investments, as they are typically complex and are often made through private vehicles.

ESG impact measurement. Much industry debate
exists on the proper way to assess impact. Some
investors are comfortable with high-level qualitative
summaries; others prefer focusing on quantitative
ESG-related metrics. Before an impact investment
is chosen, investors should determine their personal
view of impact success and make sure that
information can be obtained. Organizations such
as the Global Impact Investing Network (GIIN) are
trying to improve the measurement process in private
markets, particularly because it can be difficult to
compare across companies and managers, given
the lack of required reporting standards.

- Investment performance benchmarking. Given the dual objective of generating both a financial return and measurable social and/or environmental impact, periodic assessments of performance are important. For nonconcessionary strategies, benchmarking options could include the investment or set of investments sold to fund the impact strategy or a conventional benchmark index that reflects the universe of securities the investor could otherwise track if not for the impact objective. For concessionary strategies, benchmarks would depend on how much return reduction would be acceptable. Lastly, a peer benchmark could be used for either strategy, reflecting the returns of relevant peer impact investment choices, in public and/or private markets.
- Manager selection. Unless an investor is comfortable investing directly in one or a group of impact investments, nearly all commingled vehicles necessitate the hiring of an active manager. Even with impact indexes, judgments must be made by the index provider when designing the methodology on what criteria are necessary to qualify securities as impact investments and what weighting scheme will be employed. Therefore, investors or advisors they hire to perform the search must have the resources and technical expertise necessary to conduct the appropriate level of due diligence to assess investment strategies that may be able to meet their requirements.
- Concentration. Given that the private and public market of enterprises with a core focus on certain materially positive environmental or social change tends to be small, the number of holdings in an impact investment vehicle may be limited; this could reduce portfolio diversification.
- Implementation costs. The all-in cost of many impact investment funds, particularly on the private side, is sizable. For example, according to a report by the GIIN using data on private impact funds from ImpactBase as of August 2014, the average management fees were 1.3% for private fixed income, 2.4% for equity, and 1.7% for real assets, with average carried interest (performance-based) fees of 3%–18% (Mudaliar and Barra, 2015). In addition, transition-related costs such as taxes or transaction fees may result if assets are made available to purchase impact investments. Investors should consider the full set of costs before committing capital to a public or private impact investment fund.

- Liquidity. Although there are some public options, impact investments are more often found in private markets (for instance, green tech venture capital).²² For private equity, real estate, and infrastructure funds with an impact objective, investors must have the ability to evaluate, access, and manage private holdings in a portfolio. Investors considering a private vehicle option must be comfortable with the liquidity profile, which may, in certain cases, require committing capital for ten or more years to a single fund.
- Law/regulatory risk. Public policy changes can turn out to be positive or unfavorable. If all or a large percentage of the holdings have a core business tied to a similar theme, unexpected rule changes may materially impact financial results, either positively or negatively.

As a result of these considerations and others, private impact investments should be evaluated only to the extent that investors, or an agent they hire, have the expertise to conduct the necessary due diligence and can locate and access available options that meet their specific values and investment criteria.²³



Once the goal, or set of goals, has been determined and the range of potential options identified and reviewed, the next step is to decide what to do based on the investor's customized decision-making criteria. This should include an assessment of direct or indirect implications of each option they are considering. ²⁴ The potential trade-offs of ESG-related actions will differ by investor and sometimes will require significant judgment, particularly if the investor has values preferences, such as humanitarian, political, or religious.

Investors must adopt what criteria are important to them and ensure that their expectations are clear once a decision on whether and what action to take is made. Committees and advisors can use a decision matrix to help structure a formal recommendation to a decision-making body or client on which actions to take, if any. Figure 7 presents an example of a decision matrix for a hypothetical large foundation. In practice, a rigorous assessment of the potential impact and expected outcomes using the criteria would be logged in a formal document.

Some committees prefer to use surveys or forums to get feedback from certain stakeholder groups before making final decisions. For advisors, practice management considerations may be important to include in the decision-making process; for example, in how to respond to client or prospective client inquiries if a decision is made to not offer screened ESG investment options for individuals with strong moral preferences. Individual investors can use a well-structured set of criteria to help ensure they are considering the potential direct and indirect consequences of any actions.

Fiduciaries should document decisions

Regardless of whether action is taken, those serving as fiduciaries for other investors should document the ESG issue in question, along with considerations related to the final decision. These include: pros and cons of any action, how the decision was reached, and any next steps, including plans for future review.²⁵ This procedural due diligence helps in the event that important stakeholders (such as the client, legal counsel, or a regulator) request information about the decision. It also ensures that goals and expectations of any action are clear.

²² A few public options, such as green or social impact bonds, are growing but still have limited issuance (Hayat and Orsagh, 2015).

²³ This conditional inclusion and sizing in a portfolio is considered a bottom-up approach. For additional details, see Wallick et al. (2015).

²⁴ For institutions, the board is typically responsible for setting the criteria because it usually is in charge of deciding whether and how to act. Because issues of concern can lead to emotional impulses, objective decisions by fiduciaries can be made only by limiting any potential behavioral biases (such as confirmation bias). For indirect implications, some agents express concern with regulatory clarity when considering whether certain approaches are in the best interest of clients or beneficiaries (Organization for Economic Cooperation and Development, 2017). Potential positive or negative reputational consequences of actions or inaction may be important to some investors (Mercer, 2009). As an example, Dartmouth College in the United States considered the potential impact of fossil fuel company divestment on recruitment and retention of students, faculty, and administrative staff, along with alumni access and donations (Zhang and Trerayapiwat, 2016). A study in Europe suggests that individuals may derive a social benefit by taking certain actions (Riedl and Smeets, 2017).

Figure 7. Decision matrix for a hypothetical large foundation

ISSUE: Concern that portfolio holdings could be negatively impacted by risks associated with climate change

Objective: Improve risk-adjusted return

Impact on...

Potential actions to address	Portfolio	Staff	Legal status	Donors	Beneficiaries
Option 1 ESG integration Require that the internal active fixed income research team systematically include any material climate-change risks in their assessments of bond valuations	The investment office leadership team believes the approach would provide a more accurate assessment of the material risks of each bond holding, which would improve the odds of achieving a strong risk-adjusted return.	The leadership team does not believe that this additional, ongoing analysis would require increased headcount for the research team.	Legal counsel believes that this approach would be in line with current rules and regulations, because the investment objective would remain the same.	An improvement in risk-adjusted return would be well-received; this could lead to increased donations.	A potential increase in return would boost portfolio assets and, therefore, increase the level of financial support that the foundation can provide to its designated beneficiaries through mission-related grants.
Repeat matrix for other actions being considered	-	_	_	-	-

Note: The issue, objective, potential actions, and criteria are hypothetical and illustrative in nature.

Source: Vanguard.



Reassess periodically

As with any other investment decision, the last step in the process is to periodically monitor and review previous decisions and determine whether the action or inaction still makes sense. Institutional investors and advisors may include this step in some form of legal document, with varying levels of detail, to ensure that proper assessments and stakeholder reporting become a standard practice. If action was taken, the evaluation should be linked to the goals and the criteria used, along with any metrics to be tracked or tasks to be done to measure success.

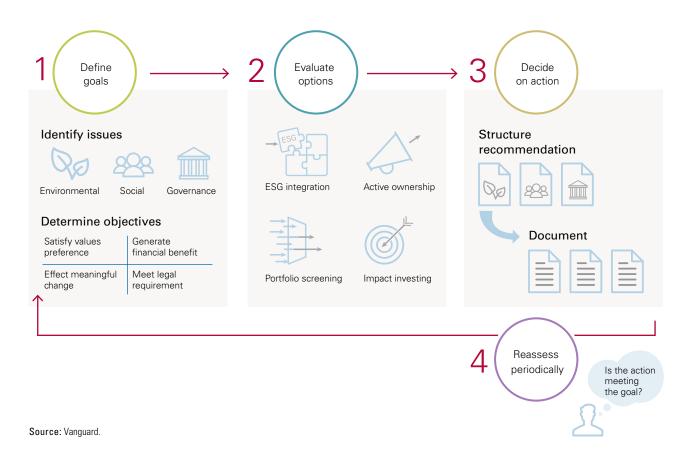
In cases when screening is chosen, a monitoring step would include checking whether the appropriate companies were included or excluded from the portfolio over the evaluation period. If engagement was chosen, investors should prioritize which companies to communicate with and set milestone expectations for monitoring progress (Piani, Douma, and Georgieva, 2018). Whether action was taken or not, the investor should periodically consider whether their goals and preferences, the options available, legal requirements, or decision-making criteria have changed.

Putting it all together

Figure 8 presents a more detailed summary of the four primary steps to making an informed decision about ESG investing. By the end of the process, investors will have

identified their goals, assessed an array of potential courses of action, and made a choice supported by thoughtful evaluation of important considerations and trade-offs tied to their preferences, beliefs, expertise, resources, and circumstances.

Figure 8. Making informed decisions on ESG investing actions



IV. Case studies

In this section, we share three hypothetical case studies to showcase how investors can apply our framework to make ESG investing decisions.²⁶ Although these studies mention investors in specific countries, the decision-making could be applied across the globe.

Portfolio screening

Superannuation fund in Australia

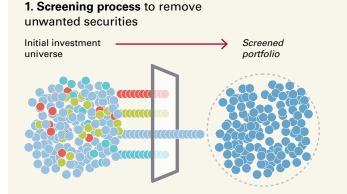
After conducting substantial due diligence on the investment tradeoffs of portfolio screening, an Australian superannuation fund (hereafter, Fund) is interested in removing tobacco and weapons stocks from the portfolio's broad international equity index exposure based on growing demand from participants with a moral preference objective. The Fund's investment team recognizes that removing a slice of securities from a broad-based allocation may change the underlying risk profile of the international equity allocation, which will increase the expected tracking error relative to the current international equity index holding.

The team is contemplating two options: investing in a vehicle that tracks a screened index that is capitalization-weighted and not perfectly aligned with its preferred screening criteria, or asking an investment manager to create a separately managed account in which the exact securities could be screened from the portfolio. With the latter approach, instead of maintaining an international equity allocation with risk exposures that differ from those of the unscreened universe, the investment manager could attempt to allocate the

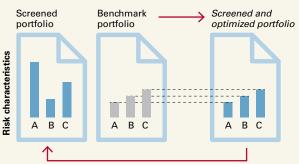
screened portfolio so that it closely matches the risk characteristics of the unscreened benchmark over time. Figure 9 provides an overview of this process. The Fund determines that this approach would be slightly more costly because of the trading, investment oversight, and administration required.

After carefully evaluating both options, the Fund decides to pursue the second option and instructs an investment manager to apply the requisite screen and minimize risk mismatches between the portfolio and the unscreened benchmark. The Fund determines that the incremental cost difference is reasonable, given that the screen is aligned with its preferences and that the unintended risk exposures will otherwise be larger than its tracking error risk budget permits. The Fund makes the portfolio changes and documents the new strategy in its Investment Policy Statement. It also records its decisionmaking process and notes who will determine the securities that qualify for the screen and who will monitor the portfolio for compliance. Lastly, it decides to annually review the landscape of screened options to determine whether its choice is still in participants' best interest.

Figure 9. Portfolio management techniques can help reduce tracking error versus traditional benchmarks



Portfolio optimization to match benchmark risk characteristics



Periodically reassess portfolio risk characteristics

Notes: The figure above is conceptual and illustrative in nature. Investors considering this type of approach should carefully assess all-in costs. **Source:** Vanguard.

Active ownership

Pension scheme in the United Kingdom

A pension scheme (hereafter, Plan) in the United Kingdom is interested in effecting change across a few large publicly traded companies on what it considers an important governance principle—board of director composition. The Plan's investment committee believes that efforts to improve board composition will enhance strategic decision-making and overall risk management processes, and that this will improve the Plan's funded status through a boost in assets from the shareholder value enhancement of these portfolio companies. The committee begins by forming a special advisory subcommittee to evaluate the issue. Before taking action, the subcommittee discusses its goals in detail and concludes that it is most concerned with the board's diversity, including gender and background. The subcommittee decides to focus its initial efforts on one company with a particularly unbalanced board, hoping to set a precedent after effecting change.

After clearly defining its goals, the subcommittee reviews its range of options. It rules out impact investing because there isn't an option that directly addresses its specific area of interest. The subcommittee also rejects portfolio screening options because it cannot find enough convincing evidence that doing so would address its goal of effecting change. Instead, it determines that engagement efforts will best help achieve the goal. The

subcommittee lands on two potential courses of action: direct engagement with the current board and company senior leadership, or sponsoring a vote for a shareholder resolution requesting company change. After reviewing the options using predefined decision-making criteria, the subcommittee decides to start with direct private engagement. The subcommittee hopes that, because the Plan is a major shareholder, this approach will drive change more quickly and allow it to maintain a more constructive relationship with the portfolio company. The subcommittee formally recommends this option to the investment committee and, subsequently, the Plan's board of directors, which gives final approval.

Through engagement with the portfolio company's board, the Plan's investment stewardship team learned of plans to institute a mandatory retirement age, which will lead to the turnover of several directors who have served on the board for over ten years. The board also was highly receptive to feedback on diversity and discussed opening a vote at the next annual shareholder meeting to create nonbinding guidelines for future board appointments; this, over time, would shift the board to a more balanced mix. Satisfied with this outcome, the subcommittee agrees to annually review the engagement approach, including the status of the company's board. The subcommittee and investment stewardship team then shift to targeting the boards of two other key portfolio companies, using a similar approach.

Impact investing

Advisor/retail investor in the United States

An advisor in the United States is working with a wealthy client whose family is interested in pursuing a "socially responsible investment." More specifically, this client has informed the advisor that she is interested in making an investment that will generate visible social impact but also deliver some degree of financial return. After a discussion with the client about her goals, investment objectives, and risk tolerance, the advisor determines

that she would be suited for an impact investment focusing on improving health outcomes for poor communities worldwide.

The advisor knows that because these types of investments are typically made through actively managed vehicles, outperformance of traditional investments will be possible, but meaningful due diligence is required. To reduce concentration risk, the advisor would prefer to place the client in a fund (either public or private) with a mandate to make a

variety of investments, rather than invest in a few companies. After conducting an initial manager search, the advisor lands on two promising choices for the client to consider: a global public fund and a private fund.

The advisor mentions that each option has a fairly limited list of holdings, given that there are few companies with the desired impact focus and that the options will require the client to take on active manager risk and pay higher expenses than what she pays on her current equity investments. The advisor explains that while the goal of each option is to outperform a conventional global market index benchmark and profit from companies that are making a measurable impact on an important social issue, there is no guarantee that either of the funds will beat their benchmark over the long term, and the road to success will likely be bumpy. The client says she is comfortable with the information presented, and the advisor proceeds to conduct more thorough due diligence.

Evaluating impact investment options

In order to complete a thorough evaluation process, the advisor reviews a checklist of key due diligence considerations. The sample list in **Figure 10** includes a few broad categories. The advisor carefully assesses the trade-offs of making such an investment, focusing in particular on the opportunity cost of time and capital related to effecting change and generating a financial return.

After conducting thorough due diligence and discussing the pros and cons of each investment option with the client, the advisor chooses the public investment option. Although the skill of each manager appears to be similar, the advisor selects the public fund primarily because it has a more robust measurement and reporting process, fewer restrictions on liquidity, and greater diversification profile because there is less portfolio concentration. The advisor updates the client's Investment Policy Statement to ensure that they both understand expectations for financial and social impact and that they will periodically revisit the decision to determine whether it has been successful in meeting the client's goals and whether it still reflects the client's preferred ESG investing approach.

Figure 10. Evaluating impact investing options requires robust due diligence

	Metrics used to report impact on targeted cause ²⁷			
Impact measurement	Stability/consistency of impact metrics reported by the manager through time			
	Frequency of disclosures on impact assessment			
	Attribution			
Performance	Third-party valuation policies and timing			
	Track record			
Liquidity	Cash flow control			
Liquidity	Commitment requirement			
	Portfolio allocation			
Investment profile	Diversification profile			
	Expected return			
	Depth of team			
	Experience			
Firm/	Incentive structure			
philosophy/ process	Talent retention strategy			
	Differentiated investment philosophy			
	Risk management/compliance processes			
	Management fee			
	Incentive fee			
Fees	Hurdle rate			
	Legal costs			
	Audit costs			
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Notes: All investments discussed in this case study are purely hypothetical. The criteria are meant to be illustrative, not all-inclusive. Bold text indicates that a particular criterion is more relevant for evaluation of the private fund option. Greenwich Roundtable (2010) provides a thorough discussion on due diligence for private alternative investments.

Source: Vanguard.

V. Conclusion

Promoting strong corporate governance, protecting the environment, and encouraging high social standards are on the minds of many investors throughout the world. But many are grappling with whether they should do anything about it within their portfolios. We believe it is critically important for investors—especially those who serve as agents on behalf of clients or beneficiaries—to carefully weigh the decision of whether and how to address ESG-related issues. Many ESG investing approaches are available, and deciding which tool, or set of tools, to use—if any—depends on a variety of factors. Our objective and practical framework can help investors make well-informed decisions through a prudent process that considers their beliefs, preferences, goals, expertise, resources, and circumstances.

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VI. Appendix

Appendix A: Alternative ways to address ESG issues

There are a number of actions investors can take related to ESG issues that do not involve their portfolio or direct interaction with companies.

Engage with policy makers

Investors can engage with politicians and regulators by methods such as calling their offices and writing letters. As with engaging with companies, constructive engagement is often conducted through private communication. The recommendations could include:

- Drafting policies that encourage positive technological development or positive behavior, such as tax incentives for commercial or retail purchases of certain products.
- Requiring certain industry-specific ESG-related informational disclosures (statutory reporting standards) that help investors conduct more-informed company assessments.²⁸ For example, the Sustainable Accounting Standards Board (SASB) is developing financially material and industry-specific ESG disclosures that could be included in existing regulatory filings for U.S. public companies to improve quality, consistency, and comparability.²⁹
- Drafting policies that disincentivize, restrict, or prohibit what the investor believes is undesirable behavior (for example, special taxes on tobacco products).

Participate in a fundraiser for or donate to a charity, research institution, or lobbying firm for targeted research, education/awareness, innovation, or lobbying

Research and education can help improve our collective understanding of the impact of different issues or potential approaches to dealing with those issues. For example, donor-restricted gifts to universities earmarked for certain types of ESG-related education can increase the number and quality of entrepreneurial and ESG-related classes, which can help produce the next generation of leaders to help drive issue change or innovative solutions (either through public policy and/or with new products and service development).³⁰ Nonprofits can also encourage this activity by offering rewards for those that generate ideas to drive the company or industry changes. Lastly, lobbying organizations can advocate for change on specific ESG-related issues in government on an investor's behalf.

Author op-eds

Given advancements in technology for news distribution and the wide use of social media, it is easier than ever for investors to mobilize their opinion and attract media attention. That can be done through an open letter (as stated previously), and op-eds can be written to a different audience in an attempt to inspire others to take action.

²⁸ Relevant industry-specific ESG-related metrics are often referred to as key performance indicators.

²⁹ Part of the quality improvement would result from independent audits of ESG-reported data for public companies.

³⁰ Stone et al. (2009) study the significant increase in U.S. business school courses with social benefit content. Based on the authors' conversations with experts at the surveyed schools, the drivers include student demand, faculty interest, employer demand, and competition among MBA programs.

Appendix B: Due diligence considerations for the financial impact of ESG portfolio screening

1. Enduring, logical rationale. Is there an enduring rationale for why the screening strategy may be expected to perform a certain way relative to what is considered being replaced in the portfolio?³¹

Figure A-1: Sample rationales on both sides of the debate

Screening may help performance

- Corporate social responsibility (CSR) can lead to lower financing costs (Attig et al., 2013).
- ESG data can serve as a proxy for measuring management quality (Greenwald, 2010).
- The market prices corporate environmental efficiency information slowly (Guenster et al., 2011).
- Building better relationships with primary stakeholders can lead to sources of competitive advantage (Hillman and Keim, 2001).

Screening may harm performance

- If some investors overweight the stocks of "socially responsible" firms because of tastes, they push up prices and reduce expected returns (Fama and French, 2007).
- "Sin" companies face greater litigation risk, leading to a higher expected return (Hong and Kacperczyk, 2009).
- "Sin" stocks have exhibited positive exposures to rewarded equity factors (Blitz and Fabozzi, 2017).
- Theory tells us if we start limiting our security selection choices, there should be a diversification cost (Minor, 2007).

- 2. Empirical evidence. What is the evidence of the specific active or index strategy's efficacy? In a rules-based approach, the results used to prove the case of helping or harming could depend on how the analysis was conducted.³² Questions could include: What type of strategy was tested? What screening method was used and why? How successful was it over different time periods? If back testing was used, how were potential statistical biases handled (for example, multiple testing, look-ahead)? Were all costs considered?³³
- 3. Portfolio impact. All else equal, the more screened issues, the greater potential performance difference from the broad market that an investor should expect. What are the differences in country and sector weights, factor exposures, company-level concentration, etc.? Are these differences expected to be fairly consistent, highly time-varying, or somewhere in between?³⁴ If the investor would like to apply a screen to every part of their portfolio but is unable to find compelling strategies that fit their needs in every asset category, what would be the impact on overall portfolio diversification?
- 4. Level of skill (for screened active strategies). How strong is the firm, people, process, and philosophy for the strategy, and how does it compare to what would be replaced?

³¹ For rules-based strategies, this topic sometimes leads to a question about whether overweighting securities with favorable ESG-related characteristics represents a compensated factor exposure, as with potential factor premia such as value or momentum. Given the ongoing debate on rationale and inconsistency in what investors and academics believe constitutes strong ESG characteristics, as highlighted in this paper, any factor evaluation must be done on a case-by-case basis. For a general discussion on compensated factors, see, for instance, Pappas and Dickson (2015).

³² For more on this topic, see Trinks and Scholtens (2017) and the citations within it.

³³ An all-in cost assessment is frequently excluded from screening studies, including some that evaluate the performance of different ESG screened indexes. The only way to make an apples-to-apples comparison is to consider real-world implementation costs. See Dickson, Kwon, and Rowley (2015) for a discussion of the various frictions that influence results for mutual and exchange-traded funds. For investors considering selling a current, traditional investment in order to fund a certain screening investment strategy, costs should include not just those needed to implement a strategy but also those that result from executing the transition of assets.

³⁴ With screened indexing, investors can choose to either accept or attempt to control for unintended risks that result from the screening process. For a discussion on quantitative methods that can be applied to try to control for such risks, see, for example, Jennings (2007) and Milevsky et al. (2006).



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