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Considerations on ESG Investment Implementation

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Summary:

Although interest in investing according to environmental, social, and corporate governance (ESG) standards is widespread, investment managers face a number of basic considerations with their portfolio choices. In this article, I give a high-level overview of these considerations within the context of the investor motivation: ESG values, ESG value, or both. These considerations include whether investors should exclude certain firms or use a positive tilt; how they could integrate ESG into an investment approach; the role of third-party ESG ratings; how they should measure and report their portfolios' ESG qualities; and what evidence shows about whether integrating ESG principles or engaging firm management on ESG issues affects portfolio financial performance.

Key findings:

1. ESG investing approaches can differ greatly based on whether the motivation is based on ESG values, ESG value, or both.
2. Using an ESG exclusionary approach can result in very different portfolio characteristics from using an ESG integration approach.
3. Portfolio manager disclosures regarding portfolio ESG qualities depend on whether their clientele want information concerning the portfolio's ESG values or ESG value.
4. Given more than 3,000 studies on the relation between ESG/SRI and portfolio returns, there is still no consensus answer, probably due to the aggregation of different types of firms and portfolios (that is, ESG values versus ESG value). However, a majority of the studies on individual firms find a positive relation.

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Introduction

Although environmental, social, and governance (ESG) investing has become increasingly popular over the last decade, with exponential growth in flows into ESG mutual funds and exchange-traded funds (ETF) as well as in the number of signatories to the Principles for Responsible Investment (PRI), questions still exist around many aspects of the investment approach. The first, and most important, issue is the lack of agreement on what ESG investing means and what an ESG investing approach entails, which means people use the concept in many different ways. For some, ESG investing refers to socially responsible or ethical investing and is a way they can invest according to their values. For others, ESG investing means examining the risk exposures and return opportunities that develop from corporations' environmental, social, and governance activities. Still others view ESG investing as a combination of the two. These are not interchangeable motivations, and they do not result in the same portfolios.

The different approaches to ESG investing develop from these variations in investor motivations and can be divided into two main categories: investing based on *ESG values* and investing based on *ESG value*. The first category reflects the origins of ESG investing—socially or sustainably responsible investing (SRI) and corporate social responsibility (CSR)—which date back many years (Renneboog, Ter Horst, and Zhang 2008; Starks 2021). The ESG values approach focuses on preferences, usually nonpecuniary preferences like world peace, human rights, religious values, and climate change. The most common strategy for those who employ this approach is exclusion—that is, these investors employ negative screening and divestment. Portfolio managers or clients taking this approach commonly exclude those companies whose products or behavior would be counter to their values. They may want to avoid complicity in supplying capital to a corporation with what they view are problematic products or behavior—or, alternatively, to supply capital to certain types of businesses, such as renewable energy.

The ESG values category also includes an approach in which the portfolio manager or client tries to make an impact by supplying capital. This is known as *impact,* or *community,* investing, which some people use to achieve impact goals. This category can also include engagement of firm management to change their products or behavior.

The other major category for ESG investment, *ESG value*, describes an approach in which analysis of ESG issues leads to return opportunities or better risk management. The most common investment approach for this category is to employ an integration approach in which a firm's ESG qualities are considered to better understand the ESG risk exposures and return opportunities. Similarly, the portfolio manager may believe that using an ESG lens provides a better way to find unique return opportunities, mitigate risks, or engage in a smart beta strategy. The portfolio manager may also employ two common related approaches:

positive screening for high-ESG-quality securities or tilting the portfolio to weight it toward higher ESG quality assets.

Alternative ESG value approaches include constructing an ESG momentum portfolio to capture expected gains from assets with increasing ESG quality or constructing an ESG thematic portfolio. The portfolio manager might accomplish this by, for example, investing in firms that provide energy solutions (for example, renewable energy firms) or, alternatively, health, biodiversity, or water solutions. Or the portfolio manager may invest in firms with solutions to social issues such as firms with better diversity and inclusion cultures or better human capital management. Finally, some investors use an ESG value investment approach of engaging with firm management to increase the firm's ESG quality.

The division between ESG values and ESG value is not a clear boundary, as many ESG investors have both motivations. For example, a FTSE Russell 2021 global survey of asset owners about their views on sustainable investment found mixed motivations: 56 percent stated that it is about being a universal investor, that a marketplace with advanced climate/sustainability standards will have improved or more stable long-term returns; 50 percent said it is about better portfolio returns—corporates/issuers with stronger sustainability or climate practices have preferable investment characteristics; and 46 percent said that it is about the preferences or concerns of beneficiaries or stakeholders. Strikingly, only 9 percent said they were willing to trade off financial return for social or environmental impact.1 Similarly, the 2021 Callan ESG survey of foundations, endowments, and public and private pension funds found that 55 percent of the respondents incorporated ESG factors because doing so aligned with their values; 46 percent did it for an improved risk profile; 34 percent did it for better long-term returns; and 18 percent used ESG factors to make an impact.[2]

Decisions on ESG Investment Approaches

Exclusion (Divestment) Compared to Positive Tilt

The first decision in the ESG investment approach for both ESG values and ESG value is whether to employ negative screening such as through exclusion or divestment or whether to approach it differently by, for example, using a portfolio tilt approach. For the ESG values investor, part of this decision depends on the extent to which the investor wants to avoid complicity by providing capital or receiving returns from a certain type of business. However,

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[1] See https://www.ftserussell.com/index/spotlight/sustainable-investment-2021-global-survey-findings-asset-owners.

[2] The Callan survey also included two additional responses: 54 percent stated they incorporate ESG factors because doing so is their fiduciary duty and 46 percent said they did this because of stakeholder concerns. See https://www.callan.com/blog-archive/2021-esg-survey/.

negative screening is not quite as simple as it might appear. For example, take an investor who does not want to invest in any business related to alcohol consumption. Does this investor avoid all companies with even minimal alcohol revenue, including grocery stores? The exclusion or divestment approach suggests that the investor eschew those companies with minimal revenue from problematic products, but the positive portfolio tilt approach would instead simply put less weight on problematic, low-ESG firms (although it could still be zero in some circumstances). Depending on the extent of the preferences, the exclusion approach can result in larger tracking errors—that is, more tradeoffs of potential returns for preferences. In the case of exclusions, these tradeoffs could be costly for the investor as they could result in a portfolio with less diversification and less liquidity. In contrast, the portfolio tilting approach allows for better diversification across sectors.

The exclusion approach also restricts the investor's ability to directly push for changes in the firm as the investor cannot vote on a firm's proxies or engage with firm management to change their products or behavior. In contrast, the positive portfolio tilt approach does give the investor these opportunities. In a recent working paper, Edmans, Levit, and Schneemeier (2022) point out that, although using the exclusion approach minimizes the externalities faced by a portfolio that screens out problematic firms, such an approach also provides no incentives for the problematic firm's management to pursue corrective changes because the firm will be excluded regardless. On the other hand, employing a portfolio tilting strategy provides the firm's management with incentives to pursue those changes so they can achieve capital to expand their business.

The exclusion approach also entails complexities that are often not considered. Does the investor exclude an entire business type or industry, or just the worst firms? Statman (2000) has pointed out that divestment to withhold capital does not necessarily result in the desired change unless there are insufficient numbers of other investors willing to provide the capital. That is, he points out, it only works if the capital supply function is less than perfectly elastic, which is probably not the case. He further argues that the effects of the divestment actions are more likely to result in change if they serve as banners for subsequent political actions. Consistent with the lack of financial effect on the firm, Teoh, Welch, and Wazzan (1999) conducted an empirical analysis of the South African divestment movement and concluded that there were no direct effects on firms' share prices or cost of capital. Further, Davies and Van Wesep (2018) show theoretically that even a large divestment campaign would not affect the compensation of a firm's management sufficiently to provide incentives to respond to the campaign. They argue that social pressures would be more likely to result in the desired change in corporate behavior.

Beyond the exclusion approach, some investors advocate for short selling the problematic ESG firms.3 The advocates of this approach provide several rationales. First, shorting the problematic firms could increase returns, while just excluding the stocks would not. Second, shorting not only deprives the firm of the investor's direct capital, but it can also put more pressure on the firm to change its behavior. In particular, if the short selling is substantial (for example, from many investors), then it can increase the firm's cost of capital. And related to Statman's elasticity argument mentioned above, the short selling would be more likely to succeed with a sufficient number of investors.

Third, shorting low-ESG firms is a way to hedge against ESG risks. For example, Engle, Giglio, Kelly, Lee, and Stroebel (2020) provide evidence on the effectiveness of shorting stocks to hedge portfolios against negative climate change news.. The authors find that the shorting approach provided a better hedge than did investing in renewable energy portfolios. Finally, short selling can help a portfolio's ESG footprint. For example, in pursuit of a net zero strategy, the short position on a firm with high carbon emissions could help offset long positions and would be an alternative to purchasing carbon offsets in the pursuit of a net zero strategy (Palazzolo, Pomorski, and Zhao 2020; Asness 2021).

Arguments also have been made *against* the short-selling approach as an ESG strategy. Some question the relation between short selling and a firm's cost of capital (Mahmood et al. 2022). Moreover, short selling implies a removal of the ability to engage with the firm. For example, short selling can be similar to divestment in that it leaves out the role of the long-term investor who engages with firm management to change their policies. There is also the question of whether short selling helps in the net zero calculation. For example, the Sustainable Finance Disclosure Regulation (SFDR), which is supposed to provide guidance that will help prevent so-called greenwashing by investment managers selling in European markets, does not yet include guidance for how shorting a low-ESG firm should be treated in the required portfolio ESG-disclosure framework. In particular, no guidelines exist regarding whether short positions can offset long positions in the disclosure.

ESG Integration

Integrating ESG into the investment decision framework takes many different forms, but in general, investors consider quantitative analysis overlaid with qualitative analysis. An example of a quantitative analysis would be evaluating whether the ESG issue affects a firm's cash flows or discount rate—the investor may determine that a particular ESG issue could affect customers' perspectives on a firm and, consequently, the firm's revenue. This effect could be positive or negative. Another ESG issue could be one the investor thinks will increase a firm's risk and thus its discount rate.

[3] See, for example, AIMA/S&S (2020), Palazzolo, Pomorski, and Zhao (2020), and Asness (2021, 2022).

Investors have long incorporated governance factors into their investment decisions. Companies that adopt better governance factors are often considered to have lowered their risk exposures and thus also lowered their costs of capital. On the other hand, companies that have compromised their corporate governance due to corporate behavior are considered to have increased their risk exposures.

Some investors employ firms' ESG profiles in factor models such as ESG smart beta or strategic beta strategies. For example, some smart beta ETFs combine an ESG strategy with a minimum volatility strategy; some combine an ESG strategy with an equal-weight index strategy; and some employ ESG with a dividend-yield weighting strategy, an ESG momentum strategy, or a smart beta strategy based on climate exposure. These types of strategies have seen increased usage. In a 2020 survey of asset owners, FTSE Russell found that 81 percent of those located in Europe, the Middle East, or Africa and 42 percent of those located in North America anticipated applying ESG, climate, or exclusion considerations to a smart beta strategy. These percentages had significantly increased from 2018, when the responses were 52 percent and 25 percent, respectively.

The Role of ESG Ratings

Many proprietary sources for quantitative and qualitative ESG measures on firms and other issuers exist. These ESG rating services often have diverse assessments and consequently have been criticized for different ratings for the same firm. However, we should not expect ESG ratings services to be in high agreement, nor should ESG ratings be compared to credit ratings, which typically have very high correlations. As discussed, ESG has different definitions and, further, the ESG ratings services themselves differ in their goals, perspectives, and methodologies. A more appropriate comparison for ESG ratings would be sell-side analysts' ratings and recommendations, which are highly variable.

In an examination of the issues surrounding ESG ratings differences, Berg, Koelbel, and Rigobon (2022) compare ratings across six different ratings providers and document that the correlations across the raters range from 0.38 to 0.71. They find further that these differences arise from differences in the raters' choices regarding measurement, scope, and weighting, with measurement divergence, at 56 percent, contributing the most to the overall divergence. Scope divergence contributes 38 percent, and weight divergence contributes 6 percent. The authors also find an individual rater effect that is important.

These differences in ratings measurement may arise in part because of differences in disclosure, but the relation is in a perhaps unexpected direction. Christensen, Serafeim, and Sikochi (2021) find that greater ESG disclosure by firms leads to greater ESG rating disagreement. They also find that greater ESG disagreement among the raters is associated with higher return volatility, larger absolute price movements, and a lower likelihood of issuing external financing. Similarly, as discussed further below, Gibson Brandon, Krueger, and

Schmidt (2021) find that greater ESG disagreement among the raters is associated with higher returns.

As Berg, Koelbel, and Rigobon (2022) point out, the ESG ratings divergence they document does not just indicate that the rating providers have different definitions, but also that there is disagreement about the underlying data. Thus, before using ESG ratings for investment or disclosure purposes, the user should understand what aspects of ESG the third-party rating services are trying to measure as well as how they are measuring those aspects.

The research on ESG scores has several implications for practical ESG implementation using ESG ratings. (Anecdotally, many ESG portfolio managers already follow these steps.) First, the portfolio manager should consider more than one rater's scores. Second, rather than relying on just the aggregate score for ESG, the portfolio manager should consider E, S, and G separately. Third, and most importantly, the portfolio manager should go to the raters' underlying indicators and potentially construct their own scores using their own scope and weight decisions. Fourth, when the rating disagreement among raters is higher, the portfolio manager should dig deeper to investigate the potential reasons for this higher disagreement.

Disclosure on ESG Quality of Portfolios (from an Investor's Needs Perspective)

Regulatory bodies and other organizations such as accounting standards boards across the world have been working on the appropriate disclosure policies for the ESG quality of firms and portfolios. These policies along with other regulations pertaining to sustainable finance policies have been increasing rapidly. As of the last update of the PRI database on these regulations (August 2021), the PRI had documented 750 policy tools and guidance across 86 countries. Of these policy instruments, 96 percent have been developed since 2000.4 Moreover, although the PRI had data for only part of 2021, they had already identified 159 new or revised policy instruments for the year, which was more than the total for the entire preceding year.

More of these policy instruments exist in the European Union than in other regions of the world. For example, Europe developed the previously mentioned SFDR, which requires principles-based disclosures on the portfolio's ESG qualities, both across sectors and within sectors. According to the SFDR, financial market participants and financial advisers must disclose specific information on their approaches to the integration of a "sustainability risk"

[4] See https://www.unpri.org/policy/regulation-database.

into their investment decisions.[5] Some also have to disclose the extent to which their decision-making process and their investment products take into account the consideration of principal adverse impact indicators. These indicators can include greenhouse gas emissions, carbon footprints, biodiversity impacts, and board gender diversity.

If EU regulations predict US regulations, then this implies that the United States will soon also have more regulation. Just recently, the US Securities and Exchange Commission put forth a proposal regarding mandated disclosure on climate-related issues. More mandated disclosures related to other ESG topics may also be forthcoming, particularly as other US regulators are considering ESG practices. The Municipal Securities Rulemaking Board issued in December 2021 a request for information, or RFI, to solicit public input on ESG practices in the municipal securities market. In addition, in August 2021, Gary Gensler, SEC chair, tweeted that he had asked staff for recommendations on human capital disclosure, which "could include a number of metrics, such as workforce turnover, skills and development training, compensation, benefits, workforce demographics including diversity, and health and safety." Although a human capital disclosure requirement had gone into effect the previous November, the SEC had not defined the term "human capital" but had left that to the discretion of firms' boards and management. With new rules on disclosures that are important to ESG investors forthcoming, whether in the municipal securities markets or for firms, portfolio managers will likely need to consider not only how to use this new data in their investment decisions, but also how to disclose the data to their investors.

Portfolio ESG disclosures do not depend just on actions by the regulators. Mergers and convergences of the previously different sustainability accounting groups are also providing guidelines for what companies and institutional investors can do to make their ESG profiles clearer to their investors. Other parties, such as the CFA Institute, have weighed in as well with guidelines for portfolio ESG disclosures.6

The challenge with ESG disclosure for an investment manager is how to determine the appropriate disclosures. Given the large amount of information that could be disclosed, it becomes imperative to have a filter, and the filter depends on the purpose of disclosing the information. Does the recipient want the information because of ESG values or ESG value or both? For ESG values, the most important filter is relevance. Is the ESG aspect relevant to the structure of the portfolio, to the investor? For ESG value, the most important filter is materiality. Is the ESG aspect material to the risk and return of the portfolio? That is, how do

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[5] The SFDR defines a "sustainability risk" as an "environmental, social or governance event or condition that, if it occurs, could cause an actual or potential material negative impact on the value of the investment." https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%.

[6] https://www.cfainstitute.org/en/ethics-standards/codes/esg-standards

the ESG activities relate to financial materiality? Thus, the investment manager should provide full disclosure of ESG issues with particular attention to those issues that are financially material. The SASB reporting standards vary across industries according to the financial materiality for each industry.

Under both viewpoints, which ESG aspects or metrics should be reported depend on not only relevance and materiality, but also the goals of the portfolio and the importance of different issues to the portfolio's investors. For instance, the importance of different E, S, and G issues have changed somewhat over time. Environmental, particularly climate-change, issues have been important for some time (see, for example, Ilhan, Krueger, Sautner and Starks (2022) for investor views on climate change disclosure). More recently, certain social issues have moved up in importance. Further, the interconnections among E, S, and G can make it difficult for the investment manager reporting on E, S, and G separately.

There is a strong need and desire for transparency. Investors want to understand how their money is being invested. The portfolio manager should be clear on the framework—such as Sustainable Development Goals, Task Force on Climate-Related Financial Disclosures, or SASB Standards—that firms are following for their disclosures, although with the collaborative actions to create standardization, this may become less important.

ESG portfolio disclosure is most helpful to investors if they can easily find it, so disclosing it in multiple places would appear to be in order. A firm's disclosure could be on the prospectus, the fact sheet, the annual report, and the website. The next question is then how to define the ESG to be disclosed. As in everything else, it depends on whether the ESG investing accords to ESG values or ESG value or both. If investments are based solely on ESG values by the exclusion of certain types of businesses, then disclosure on what businesses are being excluded may be sufficient. These are the relevant disclosures, and they could include the sectors or business types or firms excluded as well as the number excluded. An optional disclosure could be one that includes the expected tracking error from a primary index caused by the exclusions.

On the other hand, if the investments are based on ESG value or ESG value combined with ESG values, then more complications arise. The portfolio manager needs to consider the benchmark for comparison. Alternatives include a general benchmark such as the S&P 500, the Russell 1000, or an ESG Index. Investors may want to know not only the aggregate ESG qualities of the portfolio, but also the E, S, and G qualities separately.

The portfolio manager should consider the difference between backward-looking and forward-looking ESG measurements. Investors would ideally like to have both. The backward-looking measures provide investors with assurances regarding previous promises or assumptions while the forward-looking measures give the investors information for their

current investment considerations. Including both types also provides investors with information on the ESG outcome of the portfolio investments.

If the portfolio has exclusion of sectors, business types, or individual firms, those details could be provided and, depending on the circumstances, could include the number of firms eliminated compared to the benchmark. It could also provide the reasons for the exclusions such as product types or corporate behavior, including corporate controversies.

If the portfolio manager employs an ESG ranking system, it would benefit the investor to report on these rankings. For example, if the ranking system in use includes third-party ratings, then disclosing those ratings on a portfolio basis would be helpful. This would be particularly beneficial for mutual funds or ETFs whose portfolios' ESG qualities are being assessed already by outside parties such as Morningstar, MSCI, or ISS. The investors would also benefit from having the rating system explained and interpreted. This is particularly important if the portfolio manager is using a proprietary rating system.

If the portfolio manager uses an ESG integration process, then investors may benefit from having that process explained, along with examples. If the portfolio manager is employing engagement as an ESG strategy, then it could be beneficial if the portfolio manager were to explain the engagement process and give some insight into its success (not necessarily naming the firms). Providing general explanations becomes important when the portfolio is holding low-ranked ESG firms and engaging to improve their ESG quality. Doing so can help prevent misunderstandings regarding the portfolio's ESG quality.

For most portfolios today, disclosing the carbon footprint could be beneficial as many investors want that information. (For investment managers operating in Europe, the carbon footprint, calculated according to a specified formula, is part of the SFDR-required disclosures.) Given the concerns about greenwashing, providing data to investors is important. That is, investors want to know that the portfolio managers are being accountable for their claims. Again, this goes back to ESG value versus ESG values. If ESG is incorporated into the investment decisions, then explaining this incorporation becomes essential to the reporting task. On the other hand, if ESG is reflected through the values in the portfolio, then explaining those values decisions becomes the primary role of the reporting.

Regardless of the ESG strategy employed, the portfolio manager could explain the proxy votes on ESG proposals. For registered investment companies, this could go beyond the SEC-required voting policy and procedures document and the proxy voting record. Given the often-subtle differences across the wording of shareholder proposals on the same topic, providing an explanation for particular votes would go far in correcting misunderstandings.

ESG Investing and Return Performance

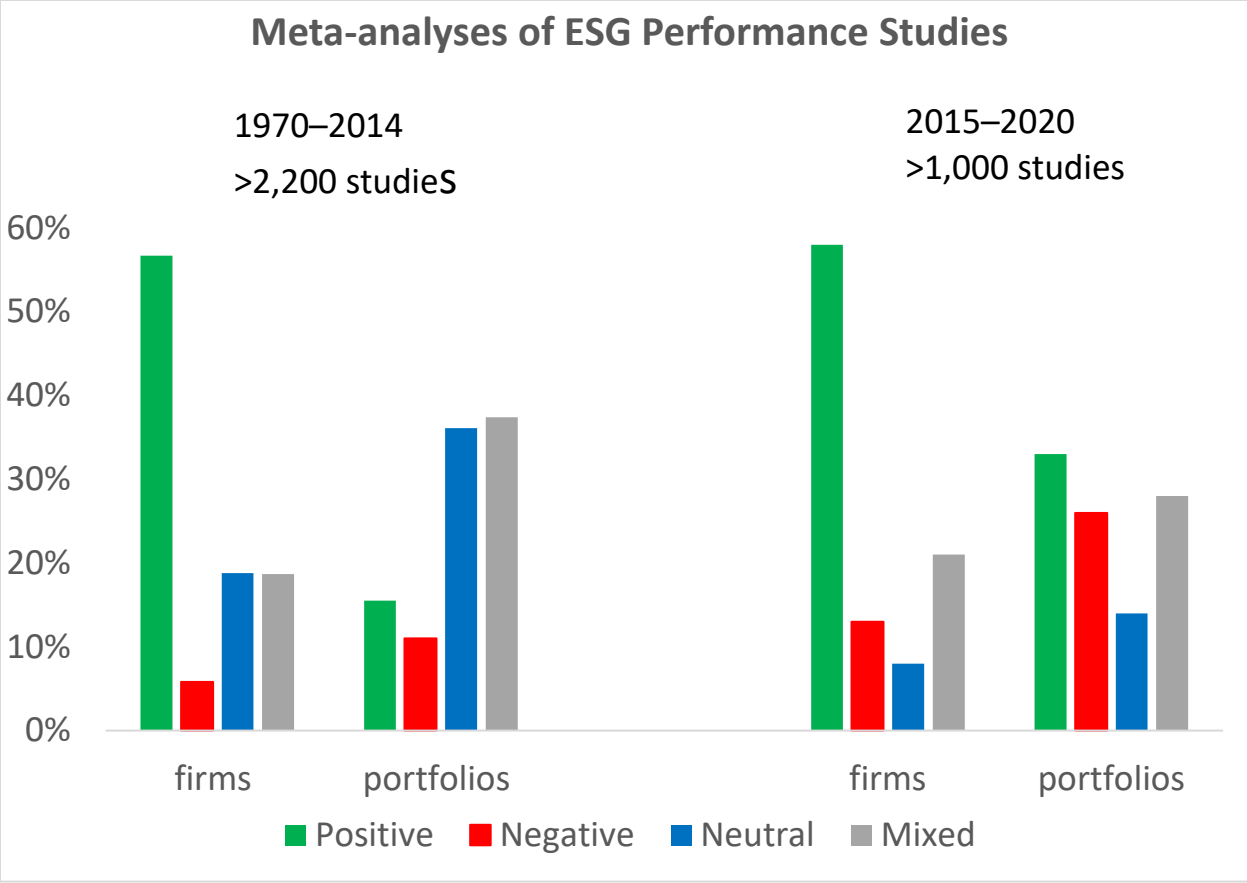
An ongoing debate exists among both practitioners and academics regarding whether ESG investing implies higher long-term returns or a tradeoff and thus *lower* long-term returns. The empirical evidence is somewhat muddled, resulting in very diverse opinions. Moreover, people have a tendency to interpret evidence according to their own prior beliefs.

Those who believe that ESG investing constitutes a tradeoff argue that ESG portfolios should underperform because they are a constrained optimization. That is, because they cannot invest in all companies, the ESG portfolios have a smaller investment opportunity set and consequently should expect to earn lower returns. This argument stems largely from the view of ESG investing as an approach that arises from investors' values and so includes negative screening to avoid complicity. Before ESG investing strategies became popular, there was an active debate on whether SRI funds should be expected to outperform or underperform conventional funds. Those who believe SRI funds should underperform have argued that because these funds generally employ a negative screening process—whereby they omit part of the investment universe—they can only be constrained optimizations (see Geczy, Stambaugh, and Levin 2021). That is, these portfolios do not get the full benefits of diversification (less risk for the same return) or they do not get the benefit of a higher-performing asset that is one of the shunned firms. This same argument cannot necessarily be applied to all ESG investment strategies because many of these strategies are based on risk assessments rather than exclusion strategies based on products or corporate conduct.

On the other hand, many ESG investors today do not believe that investing this way means they have to give up financial returns. They believe that investing according to ESG principles is beneficial because of the risks inherent in firms' ESG exposures. For these investors, the assumption is that the risk-adjusted ESG portfolios should perform the same as the market and that this approach does not make them worse off and may even make them better off. As another example, many impact investors today want to achieve market risk-adjusted returns rather than conciliatory returns, as was often the case in the past.

Finally, there are those who believe high-ESG-quality portfolios should outperform on a risk-adjusted basis. For example, this outcome could result if companies with high ESG quality have better management or better risk management.

There exist a large number of empirical studies on the performance of SRI or ESG firms or portfolios as compared to conventional firms or portfolios. Two meta-analyses (see the chart) have calculated that there exist more studies with ESG (or SRI or CSR) positive-performance conclusions than with conclusions of neutral relationships or mixed findings and there are much fewer studies with a negative relationship.



Sources: 1970–2014 data from Friede, Busch, and Bassen 2015; 2015–2020 data from Whelan et al. 2021

A meta-study of more than 2,200 published empirical academic studies (management science, finance, economics) conducted between 1970 and 2014 concluded, "Roughly 90 percent of studies find a nonnegative ESG–CFP [Corporate financial performance] relation…More importantly, the large majority of studies reports positive findings" (Friede, Busch, and Bassen 2015). In this analysis, the authors determined that when measuring ESG performance using a firm-level analysis, 57 percent found a positive relation between ESG and firm performance, 19 percent a neutral relation, and 6 percent a negative relation. The remainder had mixed findings. When using a portfolio-level analysis, the authors found a 16 percent positive relation between ESG and portfolio performance, a 36 percent neutral relation, and an 11 percent negative relation. Although a large difference exists between the two major types of analyses—firm-level and portfolio-level analyses—the negative findings in either type of study were small.

Whelan, Atz, Van Holt, and Clark (2021) had somewhat similar results in their meta-analysis of more than 1,000 empirical studies from 2015 through 2020. Using a firm-level analysis, 58 percent of the studies found a positive relation between ESG and firm performance, 8 percent a neutral relation, and 13 percent a negative relation, and the

remainder were mixed. When using a portfolio-level analysis, the authors found a greater number of both positive and negative results than did the earlier meta-analysis, with 33 percent positive, 14 percent neutral, and 26 percent negative.

However, these meta-analyses and even many of the articles on which they are based do not consider the differences across ESG portfolios, particularly those that are based on ESG values rather than ESG value. Thus, aggregating across portfolios based on animal rights or world peace would not necessarily result in similar time series of returns. Some researchers have tried to address this issue. For example, Statman and Glushkov (2016) develop a six-factor model that includes two additional factors, one for social responsibility criteria and the other for negative screening of shunned-company investments, such as in tobacco, alcohol, or gambling. In addition, Brière, Peillex, and Ureche-Rangau (2017) incorporate screening choices into their analysis and find for the comparison between ESG portfolios and their conventional counterparts in aggregate that relatively modest effects arose from the screening choices. When they examine the portfolios cross-sectionally, they find that the screening choices do have large effects in some instances.

Beyond the screening choices, the question arises as to whether E, S, and G fit together as one aggregate quality. Should performance instead be considered with each of these issues separately? This fits with both the ESG value and ESG values motivations, as some investors may be better prepared to incorporate E, S, or G into their investment decisions and some investors may have stronger preferences on the E or S quality of their portfolio. In fact, with regard to the environmental aspect, Pastor, Stambaugh, and Taylor (2021) provide evidence that the greater return performance for the stocks with the higher environmental scores is apparently driven by climate-news shocks, and they question whether we should expect future abnormal returns for ESG firms.

Berg, Koelbel, Pavlova, and Rigobon (2021) have considered the problems arising from noisy ESG ratings. Using a noise-correction procedure, they show that the previous regression estimates of the impact of firms' ESG ratings on stock returns are biased downward by about 60 percent and that the effect of ESG performance on stock returns is stronger than previously estimated. In a complimentary study, Gibson Brandon, Krueger, and Schmidt (2021) use ESG ratings from seven different data providers and examine the relation between the ratings disagreements and stock returns. They find that stock returns are positively related to the ESG ratings disagreement and that this relation is primarily driven by disagreement about the firm's environmental rating. (Avramov et al. (2021) report a similar result.)

As with any performance studies, we need to consider that we have limited observations across time, and sector influences can weigh on ESG performance due to the inherent ESG quality nature of the different sectors. For example, with the exception of the last quarter, the tech sector has seen generally strong performance while the oil and gas sector has

performed poorly. Thus, we need to consider whether these performances have had undue influence on the interpretations of the performance of high-ESG firms.

There is also a potential identification problem with many of the performance analyses: the problem of reverse causality. That is, even in the case where performance is concluded to be better or at least no worse off, is it the case that firms that do good also do well or that firms that do well can afford to do good?

ESG Engagement and Performance

Another issue with an analysis of ESG scores and firm or portfolio performance is that a common ESG strategy is to hold lower-ESG-quality firms and employ engagement to improve the ESG aspects and increase the value of the firm. Because ESG engagement strategies are typically conducted behind the scenes (McCahery, Sautner, and Starks 2016; Krueger, Saunter, and Starks 2020), it is difficult to establish whether they are successful without proprietary data from the investor who implements this strategy. A number of studies have examined the relation between stock returns and engagements on governance issues (Smith 1996; Carleton, Nelson, and Weisbach 1998; Gillan and Starks 2000; Becht et al. 2009; Becht, Franks, and Wagner 2021). Fewer studies have also examined the relation between stock returns and engagement on social or environmental issues (Dimson, Karakaş, and Li 2015, 2021; Barko, Cremers, and Renneboog 2021; Grewal, Serafeim, and Yoon 2016). These researchers generally have found that institutional investors' ESG engagements have appeared to be successful in improving a firm's E, S, or G qualities, resulting in higher returns.

Further, while these studies have focused on the first-moment mean stock returns, one study has examined whether engagement has been successful in changing E, S, or G qualities and significantly reduced downside risk (Hoepner, Oikonomou, Sautner, Starks, and Zhou 2021). In particular, these authors find that the measured risk-reduction effects depend on whether the engagement is viewed as successful and the effects vary across engagement types with the most effective engagements (in terms of lowering downside risk) arising from those that address environmental topics (primarily climate change).

Conclusion

While ESG investing is still rapidly growing in popularity, what it means depends on the context. The *ESG values* perspective implies that nonfinancial factors are important, while the *ESG value* perspective implies that the E, S, and G activities can be financially material, particularly for long-term investors. Such financial materiality can come from better risk management and identifying return opportunities, including through engagement.

Considerations on what investment approach to take, how to measure the ESG quality of a portfolio, how to report on the ESG quality of a portfolio, and the relation between ESG qualities and performance depend on which context is important to the investors.

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