ESG and the Stock-Picker’s Dilemma

Karina Funk
Karina Funk is co-portfolio manager of the Brown Advisory Large-Cap Sustainable Growth strategy, and Head of Sustainable Investing at Brown Advisory. Karina joined Brown Advisory in 2009 and has extensive sustainability-oriented investment experience spanning early-stage ventures to debt and public equities.

David Powell
David Powell is the co-portfolio manager of the Large-Cap Sustainable Growth strategy. He joined Brown Advisory in 1999 as an equity research analyst with responsibility for identifying and recommending investment opportunities in the industrials and energy sectors.

Contact

1 Brown Advisory
100 High St #2700
Boston, MA 02110

2 Brown Advisory
901 S. Bond St. #400
Baltimore, MD 21231

Email: si@brownadvisory.com
Abstract

One of the greatest challenges that public equities investors face to integrating environmental, social, and governance (ESG) data into their decision making is the lack of proof that real – not hypothetical – investment strategies can use ESG factors to enhance performance. This is an important challenge to overcome for “ESG” and “impact” investors, but also for mainstream investors who need clarity on the practical performance of companies and investment managers who claim to incorporate ESG goals into their strategies. We posit that ESG information can provide an investment edge, but current techniques that seek to provide proof of this assertion focus on systematic risk, or beta factors. In contrast, we look at this topic predominantly from the perspective of idiosyncratic risk: can one use ESG information to identify exceptional companies that produce investment returns above what can be explained by market risk factors? This article summarizes some of the challenges that researchers have confronted in their analyses of systematic ESG risk. It then presents a framework for how to use ESG information to support fundamental research. If more investors are willing to view ESG information in this light – as a key ingredient in investment decision making rather than the source of a persistent, quantifiable investment rule – we believe they will come to recognize its value.

Acknowledgements

The authors would like to thank Emily Dwyer, Ethan Berkwits, and Amanda Loverde as this paper benefitted from their research or review. All errors and omissions are the authors’ alone.
The Search for an ESG Investment Edge

For decades, investors and academics have contested the merits of considering environmental, social, and governance (ESG) factors in investment decision making. Hundreds of academic studies and thousands of media commentaries have taken different angles on this issue, with the conversation centered on one key question: Does the incorporation of ESG factors in portfolios help, hurt, or do nothing to returns?

We are surprised neither about the longevity of this debate nor the lack of a satisfying conclusion. To be sure, a variety of challenges to ESG data provision and utility afflict the field, some of them highlighted in this issue of the Journal. In this article we briefly summarize some of those issues. But the subject on-hand is more fundamental: the question itself.

In our view, the ESG investing debate has centered on *beta*, or *systematic*, risk. Many studies have asked whether ESG metrics are statistically significant as a factor in market or portfolio returns. Defining the question in this way is appealing: it demands a definitive yes-or-no answer. Moreover, it offers the potential to add value in the way that more traditional, factor-based investment approaches do; it appeals to strategies centered around the “classic” factors of value, growth, quality, size, style, and so on. In a world increasingly enamored of “strategic beta” and, more recently, “smart beta” solutions, investors believe they can manage portfolios vis-à-vis these types of market risk factors (Mainie, 2015). Can we also generate predictable utility from managing portfolios around an “ESG factor?” As evidenced by the ongoing debate, some believe we already can, and others believe we will never be able to.

Alongside the “ESG factor” debates, it is important to remember that established factors, like value or momentum, do not produce consistent value in and of themselves. Some traditional investment factors (size, value) have stood the test of time even as we learned to identify more than one factor – the market factor – that can drive returns. (This work builds on the Capital Asset Pricing Model developed in the 1960s.) Multi-factor models, of course, are not held to an expectation that “buy and hold” will lead to outperformance. To expect attractive returns with factor-based portfolios, a good deal of skill is required. Managers must build models that identify significant factor correlations, tilt portfolios toward “good” factors and avoid or hedge away “bad” ones, and maintain the desired factor exposures over time. Moreover, they must understand that the correlation of traditional factors with performance outcomes (such as portfolio returns and volatility) is highly sensitive to market conditions and the exact time-periods reviewed (Podkaminer, 2013).
In contrast, the absolute nature of the debate over ESG factors is hard to ignore. Many academic and industry studies are determined to identify ESG factors that correlate with portfolio risks and returns. The methods for doing this involve very large data sets that build broad, hypothetical portfolios and back-test them over long periods of time to determine correlations that may define systematic, or beta, risk factors. While these efforts are valuable – they may eventually lead to well-defined ESG factors that resonate with economic principles – it is easy to forget that they cannot prove whether “ESG investing” can be a source of market-independent returns, or alpha. The debated methods can only discern pervasive factors that affect a large proportion of securities, or beta.

Using ESG Information to Drive Alpha

The conviction that investors can use ESG information to drive alpha arises from our experience in managing idiosyncratic risk. We do not use ESG research to produce a systematic filter, or a set of rules, for our portfolios. Instead, we use it to identify exceptional companies that we believe will produce investment returns beyond what can be explained by market risk factors. We have found that this approach can, in fact, drive alpha over time. Unfortunately, this approach is not easily tested by statistical studies. As is typical for fundamental stock pickers, we apply information – ESG-related or otherwise – to an investment process that is as qualitative as it is quantitative; it is a process ultimately driven by human decisions. While we think our approach contributes to attractive risk-adjusted returns, we frankly acknowledge our inability to offer statistical proof of its validity.

To be clear, we do not suggest a “right” or “wrong” way to use ESG information in investing. We simply want to highlight an approach that does not use quantitative rules or lend itself to consistent statistical evaluation. It is up to investment managers and, ultimately, their clients whether they seek investment exposures that are systematic (beta exposure) or idiosyncratic (alpha exposure). Moreover, we welcome further academic discussion on the use of ESG information to produce idiosyncratic results. More focus from the academic community on this approach may reveal better ways to test and show its value.

Background

As most readers are likely aware, the academic and investment communities have long debated whether ESG factors positively, negatively, or neutrally influence portfolio performance. In studying the characteristics of socially responsible indices, some researchers have found high correlations with conventional indices (Statman, 2006).
Acknowledging this result, select studies take the middle road, claiming investors are no worse off employing ESG screens because they “do not forego a lot of opportunities, but they also do not financially benefit from their screening activities” (Dam and Scholtens, 2015).

Researchers have also investigated the contrast between “socially responsible” and its presumed opposite, “vice” investing.¹ One study concluded that investors “pay a financial cost in abstaining from [sin] stocks” (Hong, 2009). Another study found that by eliminating the worst ESG offenders the resulting hypothetical portfolios have greater downside protection (Hoepner, 2013). Yet another study found that firms with superior performance on sustainability issues outperform firms with inferior performance on material sustainability issues (Khan, et al., 2015). The United Nations Environment Program published a helpful review of key academic and broker reports on responsible investment and performance (UNEP, 2007). Of the 20 academic studies referenced, half reported a positive effect of ESG factors on portfolio performance, three reported negative effects, and the rest were neutral. Of the 10 investment-broker reports reviewed, three were positive and the rest were neutral. Finally, a growing number of meta-analyses conclude that incorporating ESG issues into investment decision making generates better returns than comparable non-ESG strategies (Clark, et al., 2015).

In short, anyone seeking answers in this debate faces a tangled web of information. Multiple studies over many years have offered high-quality analyses, but have led to varying conclusions that cloud the issue rather than providing clarity. There are many challenges to finding definitive causality between ESG data and financial performance. To name a few:

- Companies are not required to provide audited data relevant to many ESG metrics.
- Ratings frameworks created by firms like MSCI, Eikon, and Sustainalytics, among others, have made admirable progress in recent years. The same is true of research, education, and engagement programs from Ceres, the Global Reporting Initiative, the Sustainability Accounting Standards Board, and others. There is nonetheless little to no standardization in how companies report ESG data.
- Research firms lack standardization on the ESG issues they cover and the systems they use to quantify those issues into a score or rating for a company (Bose and Springsteel, 2017).

¹ “Socially responsible investing,” by some definitions, requires the avoidance of “sin” stocks – typically alcohol, tobacco, firearms, gaming, adult entertainment, and the like. Similarly, some ESG ratings criteria assign low ESG scores to companies engaged in these business activities, leading many “ESG” investors to avoid those low-scoring companies altogether. “Vice” investing, on the other hand, seeks out rather than avoids exposure to such sin stocks, or ESG risks.
● Definitions of “sustainability,” or what constitutes a valid ESG metric, remain ambiguous (Esty and Cort, 2017) – not to mention potentially controversial and politically charged.
● Inconsistencies in ESG data may be exacerbated among small- and medium-sized companies that do not have the resources required to complete ESG analyst surveys and publish sustainability reports (Douglas, 2017).
● In many cases, there are several degrees of separation between ESG factors and financial performance. Though a relationship may exist it can be difficult to show correlation through the noise.

Stock-pickers and the Challenge of ESG Quantification

As an exercise to supplement this paper, we sought to understand what sort of correlation we could find between ESG ratings data on our portfolio companies with the returns that those companies produced over the past five years. The results are not statistically significant for a variety of reasons, but we thought some of our observations were worth noting.

We took information from six leading ESG rating systems and attempted to level-set the various scores on a one-to-ten scale, with 10 being the highest ESG score and one being the lowest. We found a wide dispersion of results. The difference between the “best” and “worst” ESG score for the average company in our portfolio was 4.6. In other words, a typical company would receive a score of, say, 7.5 from one ESG rating firm (in the top quartile), while another firm would rate that same company with a 3 (in the bottom one-third). The different focuses of each ESG ratings provider primarily drove the dispersion: some prioritize climate risk, others focus exclusively on governance issues, and so forth. We did not find statistically significant correlations between trailing returns and any of the ESG ratings, either.

We want to reemphasize that this data would not hold up to academic scrutiny. Because we invest in a concentrated portfolio it is hard to find statistical significance in our relatively small sample. Thus, our own portfolio surely has little comparability to other actively managed funds that incorporate ESG considerations. Yet we agree with scores of fund managers who shared with the U.S. Forum for Sustainable and Responsible Investment that expectation of stronger financial performance is a top reason for incorporating ESG into the investment process (US SIF, 2016).
As active managers\(^2\) that are more focused on alpha than beta, even well-defined, statistically valid, and perfectly clairvoyant ESG metrics would not help much with our primary task: diving deep on individual companies and finding the select few that are poised to produce exceptional long-term business results.

This has little to do with ESG data specifically; no screening approach is very helpful for bottom-up investors. If we run screens for metrics that are arguably associated with high quality – return on equity, earnings variability, historical earnings per share growth – we will at best get a list of companies to *start* looking at more deeply. These metrics alone do not reveal if a company has high barriers to entry, enjoys persistent drivers of growth, or has a resilient business model supported by a forward-looking management team that understands the company’s long-term sustainability risks and opportunities and is investing in those opportunities. Such success factors are difficult to quantify and not very amenable to statistical analyses. Nevertheless, active managers of concentrated portfolios need an ESG framework that is unconstrained by the challenges identified by many analyses and summarized in the previous section of this article.

**Sustainable Business Advantages: A Company-level Research Model**

Personally, we rely on an approach that eschews general rules and instead focuses on how the ESG attributes and strategies of a specific company are likely to impact its business results over time.

In academic terms, we want to manage and master *idiosyncratic risk*, and seek results through return streams that are not correlated with the broad market. In more pragmatic terms, we are looking for exceptional companies that have the potential to thrive in many different market or economic scenarios.

Additionally, we look for information gaps to gain perspective on a company’s prospects that we believe we observe more clearly than does the rest of the market. As long-term investors, we look for companies that will thrive in the physical, social, and economic reality that exists today and is likely to develop over time. In our view, responsible companies understand and manage their long-term sustainability risks, while truly exceptional management teams see the *opportunity* in sustainability, not just the risk. These teams find ways to address sustainability challenges for their own company and their customers in a way that drives growth, profitability, and market share. Finding these companies before the market understands their potential has been a consistent source of alpha for us.

---

\(^2\) Managers who maintain concentrated portfolios with high active share compared to their benchmarks.
There are many ways to think about sustainability as part of a stock-picking exercise; we comment on our own approach. We use the term “sustainable business advantage,” or SBA, to describe the characteristics in a company's business strategy that can drive shareholder value through sustainability. Specifically, we look for companies that can produce at least one of three distinct financial outcomes with these advantages:

- First, they accelerate revenue growth by offering a “sustainability-critical” product or service. These help customers reduce the cost of doing business by saving energy, water, and other resources.

- Second, they lower their own costs materially, thereby improving margins, by becoming productivity leaders through innovative manufacturing, distribution, or other strategies.

- Third, they increase customer loyalty, enhance their brand, and attract and retain top talent because their sustainability strategies are a differentiator. This way they grow their market share.

Companies with great fundamentals and the potential to drive the above outcomes through sustainable business advantages are the companies that we want to own.

Table 1 illustrates how our approach is distinct from one focused on ESG metrics, scores, and rankings. We look at various sectors and the challenges that companies face in those sectors. But rather than focusing on how companies avoid risk we are interested in how companies embrace and capitalize on the opportunities produced by sustainability challenges. We also note that positive sustainability strategies are a requirement for finding great companies, but the sustainable business advantages (or any other ESG attributes) are a means, not an end. Our end-goal is to invest in fundamentally strong companies that will outperform over time. One of our methods for doing this is to find companies using sustainability strategies to add value for shareholders.
Table 1. Sample Framework for Capitalizing on Sustainable Business Advantages

One example we can readily situate in the chart from Table 1 is ARM Holdings. ARM Holdings is a UK-based leader in low-power microprocessors. (It is now a part of Softbank.) Their commitment to power efficiency and a streamlined chip design was established in the early days of the company’s founding in 1990. This enabled them to eventually build the low-power, low-cost chips that mobile lifestyles rely on. Nearly all smartphones today have at least one ARM-designed chip (Hern, 2015). Power efficiency and performance have become top concerns in the semiconductor design process given the goal of increasing computational performance per watt and per dollar. ARM’s commitment to power efficiency along with a sleek, simple, and effective chip design is their sustainable business advantage. This has been a powerful driver of revenue growth. Creating more resource-efficient data centers is a similar market challenge that appears ripe for sustainable business advantage. This would respond to the demand for digital services in emerging markets, the growth of the cloud in established markets, and the need to store and access huge quantities of data from the Internet of Things. Cavium, a U.S.-based provider of high-end integrated processors, has licensed ARM’s designs for greater efficiency and functionality in the server market. By improving on standard, inefficient methods, Cavium extends ARM’s original sustainable business advantages into functions beyond mobile devices.

Does an investment in a company with sustainable business advantages guarantee returns? Of course not. Will it automatically lose money? Of course not. We want to reiterate that our investment in these companies is based on a business case, not a sustainability case. It is admirable that ARM-based chips consume less energy; we invested because those attributes have helped ARM acquire new customers and dominate an industry. Will Cavium
succeed over a long period of time? It may, but it won’t be exclusively because of its energy-efficient value proposition. Cavium also needs make great capital allocation decisions and provide customers with speed and functionality in order to topple big incumbents.

Many ESG metrics, scores, and rankings focus on data pertaining to a company’s production efficiencies, carbon footprint, and water usage. Translating these metrics into shareholder value is not straightforward. Nor are the examples we offered ideal, as ARM and Cavium outsource their manufacturing. Yet far from debating the validity of ESG metrics, we have conviction that ESG information is valuable to our fundamental thesis. Yes, we used ESG data in both of these cases to inform our investment decision, but we do not build portfolios based on ESG factors alone. The way to make money on companies with great ESG characteristics is to first invest in fundamentally strong companies. ESG information helps with broader due diligence, providing insight into a company’s sustainability strategies alongside their fundamental strengths, the competitive environment, and, of course, stock valuation at the time of buy or sell decisions.

**Broader Application and Paths for Future Research**

We have not identified ESG attributes among our portfolio companies that consistently help us pre-select portfolio candidates for strong future performance. Each company and situation is unique.

To be sure, our industry’s ability to understand and deliver alpha – whether ESG-related or not – is incomplete. For example, one study revealed that beta is often confounded with alpha, and this can mistakenly attribute outperformance to the value-add of an active manager rather than market risk premia (Bender, 2014). But we need not wait for more studies offering statistical validity or categorical proof of how ESG can provide investment alpha or beta. Instead, we call on practitioners, in collaboration with industry and academic researchers, to continue to extend the applications and results of incorporating ESG information into investment decision making.

We believe that the academic community is far more qualified than we are to sort through the publicly traded universe and find common identifiable elements among companies with compelling sustainable business advantages. We very much hope to see more studies in the future with this sort of focus.

We offer an analogy to William Sharpe’s argument for why managers should understand and utilize factor models:
While the relative importance of various factors changes over time, as do the preferences of investors, we need not completely abandon a valuable framework within which we can approach investment decisions methodically. We have developed a useful set of tools and should certainly continue to develop them. Meanwhile, we can use the tools we have, as long as we use them intelligently, cautiously, and humbly [Sharpe, 1984, as quoted by The Research Foundation of the Institute of Chartered Financial Analysts in 1994].

The above statement could apply as much to the study of ESG factors that are pervasive (beta) as it could to the study of ESG factors that are particular to a company's business model (alpha). Indeed, creating and testing frameworks of customized ESG strategies may be a fruitful path to understanding how these strategies can ultimately affect shareholder value. Michael Porter has published an extension of his seminal work on competitive advantages by looking at social influences of company competitiveness (Porter, 2006). Company case studies and practitioner-oriented books provide an outlook on the business case for corporate environmental strategies (Esty, 2009). Other authors focus on the nuances of managing corporate sustainability investments in contexts that may not yield immediate returns but that are of strategic concern as companies navigate environmental risks and opportunities that reveal themselves over time (Henderson, 2015). And one of the authors on this paper has offered a combination of quantitative measures and qualitative evidence that can be combined and mined to create company-specific sustainability models for empirical testing (Funk, 2003).

As a final note, we acknowledge that investors look for different outcomes from sustainable investing. Some want to achieve impact; others want to align their portfolio with their values; others simply want to gather better information to drive better decisions. These are all worthy goals and, we believe, all achievable. Our comments in this article specifically refer to the use of sustainable investment principles to drive better returns. In our experience, there is no silver bullet proving companies with a certain quantifiable attribute persistently achieve positive investment results. However, we strongly encourage practitioners to accept the worth of ESG research as independent from a search for a quantifiable ESG screen applied categorically across an investable universe. Information about a company's sustainability strategies and practices can be used to improve fundamental investment decisions. ESG research does not by itself ensure investment gains or losses, but when combined with additional due diligence it can inform better investment decisions.
References


*Journal of Environmental Investing* 8, no 1 (2017)