Responsible Investing
Perspectives

Performance with principles: How can ESG investing support financial returns?

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Summary

- We believe that considering environmental, social and governance (ESG) issues in investments makes sound financial sense, as well as being the right thing to do; this view is increasingly backed up by research and evidence.
- Numerous studies find a link between company-level ESG performance and their financial and operational performance; in particular, there is evidence that taking ESG into account can help protect against volatility and downside risk.
- Companies with strong ESG credentials can also present opportunities. We find that strong ESG performance can be a signal for quality, which can support stock selection.
- Looking at the track record of socially responsible investing (SRI) funds in practice, although some market conditions may see them deviate from mainstream benchmarks, the evidence shows that SRI portfolios have performed in line with mainstream peers over the long term, and may have superior risk characteristics.
- ESG momentum matters; and creating positive ESG momentum can be supportive of financial performance.

Background

When ethical funds were in their infancy, a common assumption was that funds that incorporate ESG characteristics, and in particular those with a strict ethical screen applied, must necessarily involve a trade-off with performance.

But over time, the debate about performance has turned on its head. Increasingly, investors recognize the potential financial materiality of issues such as corporate governance, labor management and environmental performance — and history is littered with examples of companies that have neglected these issues and paid the financial price. Furthermore, sustainability megatrends such as the low-carbon energy transition, demographic change and more informed consumerism offer opportunities for companies that can tap into these trends and provide solutions.

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As this understanding has grown, the question more commonly now being asked is whether investors can generate 'ESG alpha'; in other words, can looking at ESG factors as part of an integrated analysis of companies produce better-quality investment decisions that enhance long-term fund performance?

In this paper, we provide a summary of what we view as some of the leading academic and industry research on these questions, and comment on how their findings fit with BMO Global Asset Management's three decades of experience in running ESG funds.

Research consensus points to a positive ESG / performance link at the company level — with reduced risk and volatility as a key driver

The relationship between company-level ESG and financial performance has been extensively researched, with several hundred studies on the subject. While earlier research suffers particularly from the data issues outlined below, more recent studies have the benefit of a longer run of data covering a wider universe of companies.

Given the volume of evidence, meta-studies or literature reviews are a good starting point to identify where the current consensus lies. These point to a significant weight of evidence in favor of a positive relationship between ESG and company performance.

- The most comprehensive meta-analysis we have identified is **Friede, Busch & Bassen** (2015),[1] which uses other meta-analysis papers to identify over 2,200 underlying empirical studies on the link between ESG and corporate financial performance. It finds that 90% show a non-negative relationship, with a large majority showing a positive relationship.
- **Deutsche Bank** (2012)[2] looked at over 100 academic studies on the links between ESG characteristics and financial performance. It found that 89% show that companies with high ratings for ESG factors exhibit market-based outperformance; while 85% show accounting-based outperformance; and 100% show a lower cost of capital in terms of debt (loans and bonds) and equity.

Data and methodological questions

The biggest challenge in this area of research is the availability of consistent, high-quality, long-term data on company ESG performance. ESG data providers such as MSCI, Sustainalytics, FTSE Russell and Vigeo Eiris have revised their methodologies over time, and have had to find ways to deal with patchy corporate disclosure, filling the gaps with various estimation techniques. There is little consistency between these providers, with low correlation between their ESG ratings of specific companies.[3] Coverage is also a problem area, particularly when it comes to small-cap, emerging markets and bond-only issuers.

At the portfolio level, there are different definitions of SRI or ESG indices and funds, meaning that different approaches are not directly comparable.

The other variable is the definition of performance. Some studies focus on business performance metrics such as cash flow or revenues; others look at market performance indicators including share price performance, volatility and credit risk.

Once data issues are understood, the question turns to the quality of the research methodology. Issues to be wary of include:

- **Mistaking correlation for causation:** Establishing that there is a relationship between ESG and performance does not necessarily prove that one causes the other. Company-level ESG performance may be linked to some other third factor that actually accounts for the performance differential. For instance, ESG data tends to favor large companies due to their better public disclosure; studies that fail to correct for this bias may produce misleading results. Another possibility is that companies with good financial performance may be able to afford better CSR teams and reporting, which would mean the causation is reversed.
- **Data-mining:** Researchers keen to prove — or disprove — a particular hypothesis on ESG and performance may keep testing the data in different ways until something apparently significant is found.
- **Publication bias:** Researchers who are allied with one particular point of view may simply decide not to publish results that fail to back up this view. This bias is, by definition, particularly hard to avoid.

In this review, we highlight research we believe to have a robust underlying methodology, taking into account these potential pitfalls.

[1] Gunnar Friede, Timo Busch & Alexander Bassen (2015), 'ESG and financial performance: aggregated evidence from more than 2000 empirical studies,' Journal of Sustainable Finance and Investment (2015)

[2] 'Sustainable Investing: Establishing long-term performance and value,' Deutsche Bank Group (2012)

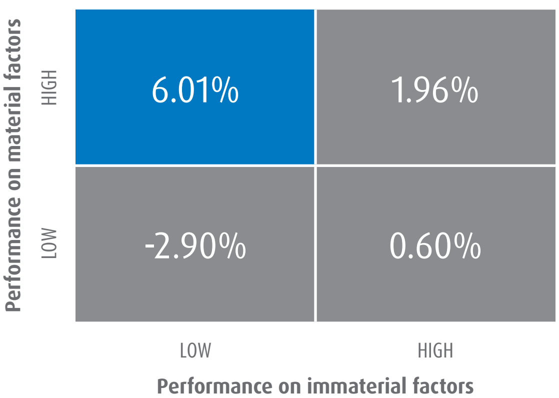
[3] See, for instance, 'Causeway's observations on environmental, social, governance investing and ratings' Causeway (2017).

- A study by **University of Oxford and Arabesque** (2015)[4] finds a similar pattern. Looking at over 190 studies, it found that 88% of reviewed sources show companies with strong sustainability practices demonstrate better operational performance, which ultimately translates into cash flows; and 80% show that strong sustainability practices have a positive influence on investment performance.
- The **University of Cambridge Institute for Sustainability Leadership** (2014)[5] is particularly worth noting as it points out many of the methodological pitfalls in this area of research outlined above. With that in mind, they select a small number of the most robust studies, citing four in particular that find that poor performance on ESG factors can be associated with higher volatility and/or higher cost of capital. They conclude that environmental and social factors have a stronger performance link than corporate governance indicators.

Turning from these meta-analyses to individual studies, **Khan, Serafeim & Yoon** (2015)[6] is notable for taking a systematic and robust approach to scoring company-level ESG performance. Rather than taking the ESG data provider ratings as given, they use methodology from the Sustainable Accounting Standards Board to identify only the most material ESG issues, defined on an industry-by-industry basis. They also control for a range of other variables such as size, profitability and ownership in order to make the ESG signal as pure as possible. They find that companies scoring well on these material risk factors generate up to a 6% annualized alpha performance. But they warn that focusing on immaterial factors — the "noise" of sustainability reporting — appears to detract from performance.

Individual study: Stock returns versus performance on material / immaterial factors

Stock returns (in annualized alpha) by type of sustainability performance



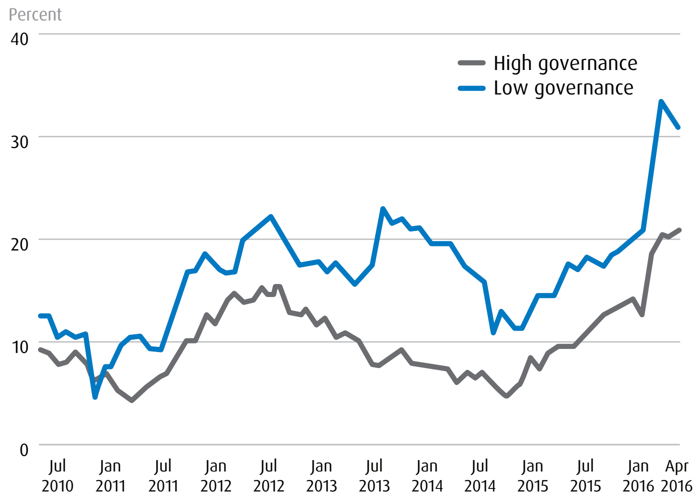
Source: Khan, Serafeim & Yoon (2015)

Hoepner et al. (2011)[7] draws out the relationship between ESG and risk, with a focus on environmental management. The paper splits companies into hypothetical portfolios according to the quality of their environmental management and, looking at worst-case losses across these portfolios, finds that the portfolio of highly rated companies protects the investor best against downside losses in value.

Bank of America Merrill Lynch (2017)[8] identifies a similar relationship. It ranks companies into five groups on the basis of their ESG score in the years 2005-2010, and finds that those in the top fifth experienced the lowest volatility in earnings per share of 32%[9] in the subsequent five years (2010-2015), while those in the lowest fifth experienced the highest volatility at 92%.

While many papers focus on equities, the link between ESG and downside risk is of great relevance to fixed income. **Barclays** (2016)[10] gives evidence on the links between credit and fixed income, with a particularly interesting finding being that issuers with strong governance performance have experienced less credit downgrades.

12-month rolling downgrade notch rates for bonds with high and low governance scores



Source: Barclays Research, MSCI ESG Research

[4] 'From the stockholder to the stakeholder,' University of Oxford and Arabesque Partners (2015)
[5] The Value of Responsible Investment, Cambridge Institute for Sustainability Leadership (2014)
[6] Khan, Mozaffar N., George Serafeim and Aaron Yoon. "Corporate Sustainability: First Evidence on Materiality." Harvard
[7] Does Pension Funds' Fiduciary Duty Prohibit the Integration of Environmental Responsibility Criteria in Investment Processes?: A Realistic Prudent Investment Test, Hopener, Rezec & Siegl (2011)
[8] 'ESG Part II: A Deeper Dive,' Bank of America Merrill Lynch (2017)
[9] Median change in EPS (earnings per share) volatility in 2010-2015
[10] 'Sustainable Investing and Bond Returns,' Barclays (2016)

Emphasizing the positive — ESG as a source of alpha

The case for using ESG factors to support risk management looks strong. But can it also generate investment opportunities? We believe the answer is yes — and that there are two ways this can play out.

First, our own experience in analyzing stocks for our Responsible Funds range is that, consistent with some of the evidence cited above, strong company-level ESG performance often acts as a signal of a good-quality company. In other words, companies that manage their environmental risks, look after their staff and have solid corporate governance tend to deliver on traditional 'quality' indicators such as low earnings variability and high return on invested capital.

MSCI (2016)[11] analysis of the relationship between ESG data and investment quality and finds a statistically significant positive correlation. Where the underlying investment process involves the identification of quality companies, the process of ESG research should support this aim. Care has to be taken not to 'double-count' the ESG signal given the close correlations with other factors (multicollinearity), particularly where it is feeding into quantitative processes.

The second way in which ESG factors can support alpha generation is through identifying companies whose future revenue streams will benefit from providing solutions to sustainability challenges. We see the Sustainable Development Goals (SDGs), developed by the United Nations and supported by 193 governments, as a framework for describing these opportunities.

According to the **Business and Sustainable Development Commission** (2017),[12] achieving the SDGs could open up an estimated $12 trillion in market opportunities across food and agriculture, cities, energy and materials, and health and well-being. Funds with a positive thematic or impact focus are well-placed to identify companies that are positioned to move into these growth markets.

In understanding how these positive factors may link to performance, evidence from unlisted asset classes is useful as there is a longer history of impact-orientated funds to draw on. The **Global Impact Investing Network** (2017)[13] has published a review on the financial performance of impact investments. Within private equity, for instance, it cites the GIIN / Cambridge Associates benchmark, which tracks 71 funds; since inception these have delivered an aggregate net IRR of 5.8%. As is typical in this asset class there is a wide range, with those at the higher end comfortably competing with conventional private equity.

SRI funds hold their own on performance, even where there are exclusions

The performance of SRI or exclusion-based funds has also been the subject of significant research. These types of funds tend to exclude 'sin stocks' (tobacco, alcohol, etc.) as well as poor ESG performers, reducing the overall investment universe. According to conventional asset management theory [**Markowitz** (1952)[14]], diversification reduces risk — meaning that anything which restricts the investable universe is, in theory, negative from a portfolio construction point of view.

However, more recent studies such as **Garz et al**. (2002)[15] have pointed out that in practice, all fundamental fund managers apply some form of screening — on factors such as size or liquidity — in order to get to a manageable shortlist of stocks to research. Additionally, the ESG screening process itself may add investment-relevant information, which ultimately improves the stock selection decision, for all the reasons detailed above [see, for instance, **Renneboog et al**. (2008)[16]].

Several papers look at how these potentially competing factors have played out in practice.

- **Morgan Stanley** (2015)[17] took over 10,000 U.S. mutual funds and divided these into sustainable and mainstream funds. They found that sustainable equity mutual funds had equal or higher median returns, and equal or lower median volatility for 64% of the periods examined over the last seven years, compared with their mainstream peers.
- Similarly, **Carleton** (2015)[18] looks at Canadian mutual funds and splits them into SRI and mainstream. It finds no systematic performance difference, but superior risk performance for the SRI funds (measured by Sharpe and Sortino ratios).
- **Gil-Bazo et al**. (2008)[19] consider a different angle — the characteristics of the fund management firms running SRI funds. It finds outperformance versus conventional funds for strategies run by firms with an SRI specialization, but underperformance for non-specialists. Although the sample size is relatively small, this could indicate that a high degree of expertise is required to successfully manage the constraints involved in running screened strategies.

The studies above look at performance over an extended time period. In our experience, there are some important features of ESG investing to be aware of that can influence shorter-term performance.

[11] 'Factor investing and ESG integration,' MSCI (2016)
[12] 'Better Business, Better World,' Business & Sustainable Development Commission (2017)
[13] 'GIIN Perspectives: Evidence on the financial performance of impact investments,' GIIN (2017)
[14] 'Portfolio Selection,' Harry Markowitz, Journal of Finance (1952)
[15] 'More Gain than Pain – SRI Sustainability pays off,' Garz, Volk & Gilles (2002)
[16] 'The price of ethics and stakeholder governance: The performance of socially responsible mutual funds,' Renneboog, Horst & Zhang (2008), cited in 'The performance of socially responsible investment funds: A meta-analysis,' University of Salzburg (2012)
[17] 'Sustainable Reality,' Morgan Stanley Institute for Sustainable Investing (2015)
[18] 'Canadian Responsible Investment Mutual Funds,' Carleton Centre for Community Innovation (2015)
[19] 'The performance of socially responsible mutual funds: The role of fees and management companies," Gil-Bazo, Ruiz-Verdú & Santos (2008)

One critical factor is the correlation with quality mentioned above. Most SRI funds have a quality bias, therefore, they will face challenges when other styles of investing predominate. The post-Trump market was an example: there was a shift to value stocks, following which quality-orientated investment strategies (including many ESG funds) underperformed. However as this has unwound over the course of 2017, so performance has also corrected.

A second factor is that under-represented sectors, such as defense or tobacco, are favored by the market in particular time periods.

Hvidkjær (2017)[20] identifies several studies on the performance of "sin stocks." Sectors such as tobacco can have attractive characteristics from an investment point of view, including their defensive characteristics in more difficult market conditions. In addition, as **Merton** (1987)[21] points out, stocks that are disliked by large sections of the market may become attractively valued versus fundamentals.

However, we would also argue that industries involved in controversial and high-risk activities can face threats to their long-term viability as government regulations tighten—with the bankruptcies in the coal sector being a case in point.

Engagement can be a powerful tool to drive ESG momentum

A final question is whether applying an engagement approach to a fund can help support financial returns. The hypothesis here is that by being an active owner—through voting proxies, and communicating with the company on shortcomings in sustainability and governance—asset managers can improve the ESG profile of their portfolio, therefore improving the quality of companies they own.

There is evidence that creating positive ESG momentum can be supportive of financial performance. **MSCI** (2013)[22] constructs synthetic portfolios to illustrate how company ESG performance can relate to investment returns. They integrate data in three different ways—excluding companies with the worst ESG scores, overweighting strong ESG performers and overweighting stocks whose ESG scores are showing positive momentum. All achieve positive active returns—but the third had the largest outperformance.

The key paper on the impact of engagement is **Dimson et al**. (2012),[23] which is based on BMO Global Asset Management data. Based on analysis of engagement with U.S. companies over the 1999-2009 period, they find that successful engagement is followed by positive abnormal investment returns averaging 4.4%, whereas unsuccessful engagement has no impact on returns.

More recently, the UN Principles for Responsible Investment (UN PRI) commissioned two research teams to analyze the effectiveness of investor engagement.

- **Dimson et al**. (2017)[24] reviewed 1,806 collaborative engagements coordinated by the UN PRI. They found evidence of an increased return on assets following successful investor engagement.
- **Gond** (2017)[25] takes a more qualitative approach to address the question of why investor engagement can have a positive effect. Alongside the perhaps obvious benefits of sharing information and building knowledge, he highlights the role of engagement in shifting the internal political dynamics within corporates, including elevating issues to the Board level.

We see this as a nascent, but promising area of research. If, as we believe, consideration of ESG factors can be supportive of long-term risk-adjusted returns, then it is in all of our interests for investors and companies to work together to raise the bar for better ESG management. Making progress together can help to support performance, as well as make a positive contribution to the world's sustainability goals.

[20] 'ESG investing: a literature review,' Søren Hvidkjær, Report prepared for Dansif (unpublished, 2017)
[21] 'A simple model of capital market equilibrium with incomplete information,' Merton, The Journal of Finance (1987)
[22] 'Optimising environmental, social and governance factors into portfolio construction,' MSCI (2013)
[23] 'Active Ownership,' Dimson, Karakaş & Li (2012)
[24] 'Local leads, backed by global scale: The drivers of successful engagement,' Dimson, Karakaş & Li,, PRI Academic Network RI Quarterly Volume 12 (2017)
[25] 'How ESG Engagement Creates Value,' Gond, PRI Academic Network RI Quarterly Volume 12 (2017)

How can BMO Global Asset Management help?

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