Quantitative Equity Investing & Responsible investing

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If your institution is struggling to decide what stance to take on responsible investing, you are not alone. As a institutional investment manager, we meet with a good sample of institutional investors and consultants, and responsible investing has repeatedly stood out as a key topic of discussion. We see this growing interest as a symptom of a broader societal shift in attitude toward corporate and institutional responsibilities.

Many of us grew up in a world where conventional wisdom held that social responsibility had no place in the corporate world. This view was epitomized by Milton Freedman, leading economist of his time, who argued that a corporation should have no social responsibility to the public or society, as its only concern was profit maximization[1]. Today, more and more investors are recognizing that a company's reach and responsibility extend far beyond the maximization of short-term shareholder wealth. Firms are pressed to take stances on social and environmental issues, and politicians are under pressure to tackle these issues as well. As a result, companies face both reputational and regulatory pressures toward greater social responsibility.

So how should you invest your institution's money in this new context? Let's walk through the key considerations that you will face as you seek to integrate responsible investing principles into your investment strategies.

The Many Faces of Responsible Investing

The first step to understanding where you fit within the responsible investing space is understanding your own motivations. Are you looking to better align your investments to your stakeholders' values, or are you also hoping that responsible investing will protect you against tail risks or improve your investment performance?

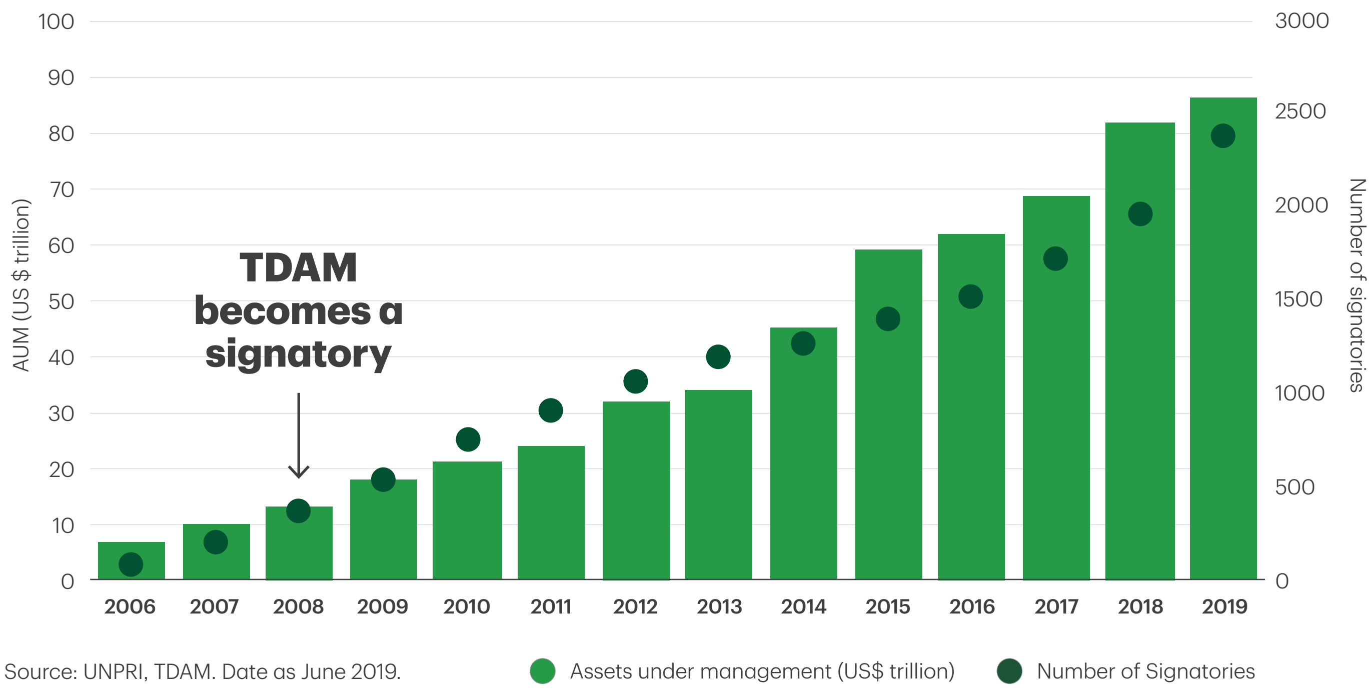
Socially Responsible Investing (SRI) tackles the values-based scenario. SRI has historically been associated with screening out firms and industries that go against one's set of values or moral principles[2]. This form of investing restrictions is a natural fit for quantitative investing processes, which can easily be adapted to appropriate sub-universes often without meaningfully affecting investment outcomes.

ESG (Environmental, Social and Governance) investing, on the other hand, is a much more holistic approach, actively seeking out companies that are good corporate actors in order to generate sustainable, long-term risk-adjusted returns. ESG issues span a wide array of legal, social, environmental and reputational risks that can, and regularly do, have bearing on a company's bottom line. At a high level, these issues manifest themselves as physical and transition risks related to climate change (E), human rights and/or labor health and safety (S) or executive remuneration and board diversity (G). Because this approach can lead to significant tilts in the portfolio, it is important to understand the benefits and biases it can introduce into portfolio holdings.

Growing interest in Responsible Investing

It may not surprise you to know that responsible investing has grown significantly over the past decade (**Chart 1**). The United Nations Principles of Responsible Investing (UNPRI), the world's leading proponent for responsible investing, now groups together nearly 2,500 signatories, totaling more than $86 trillion (USD) of assets under management.

Chart 1: Number of Signatories to the UNPRI and the Cumulative AUM of all Signatories, over time.

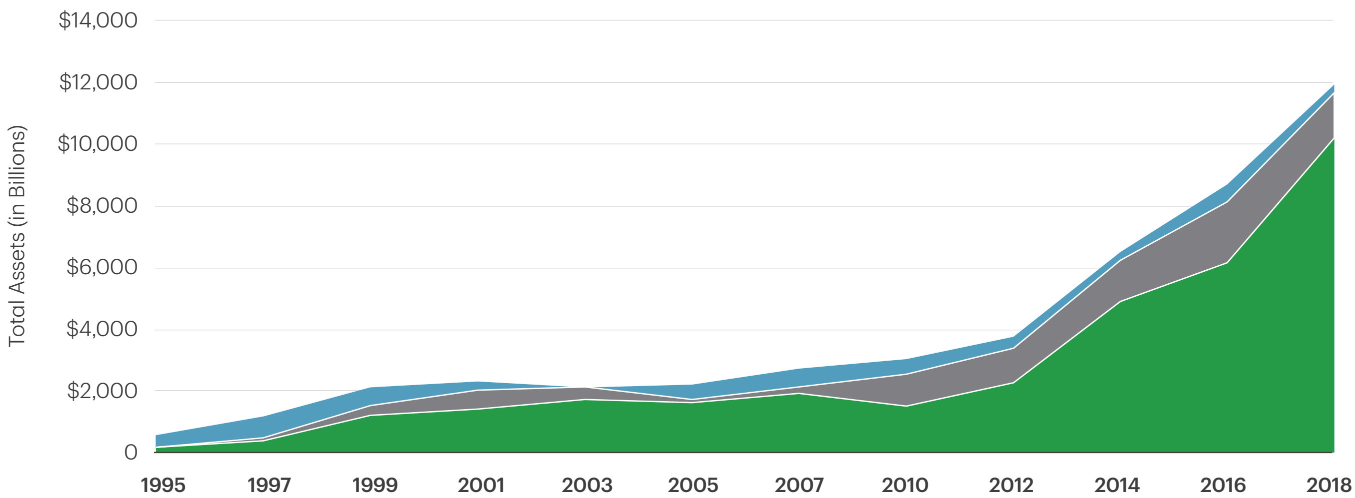


Source: UNPRI, TDAM. Date as June 2019.

[1] Friedman, M. (1962). Capitalism and Freedom. University of Chicago press.
[2] Popular "sin" industries include Tobacco, Gambling, Alcohol and Weapons Manufacturers.

The rising adoption of responsible investing exhibited in **Chart 1** is no different in Canada (**Chart 2**), with more than half of all Canadian AUM now falling under the responsible investing umbrella.

Chart 2: Sustainable and Responsible Investing in the United States 1995–2018



Source: US SIF Foundation.

Encouraging Signs

The excitement around responsible investing is supported by an ever-growing body of research showing that it is possible to do good while doing well. Many studies have indeed correlated corporate financial performance with corporate governance, employee satisfaction, board diversity and environmental management; as well as corporate social responsibility with lower cost of debt and equity capital.[3–17]

Looking carefully at the ESG data from Sustainalytics, a leading independent ESG and corporate governance research and ratings firm, we find that companies with good ESG ratings also display healthier financial characteristics; such as stronger corporate management, higher profitability, better earnings quality and lower volatility. **Charts 3-8** showcase factor exposures of the MSCI All Country World (ACWI) Index by ESG quintile. Stocks in the lowest quintile (Q1) have the lowest ESG ratings, while stocks in the highest quintile (Q5) have the highest ratings.

[3] Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment, 5(4), 210-233.
[12] Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. The quarterly journal of economics, 118(1), 107-156.
[13] Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. Journal of Financial economics, 101(3), 621-640.
[14] Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. Financial review, 38(1), 33-53.
[15] Albertini, E. (2013). Does environmental management improve financial performance? A meta-analytical review. Organization & Environment, 26(4), 431-457.
[16] Chava, S. (2014). Environmental externalities and cost of capital. Management Science, 60(9), 2223-2247.
[17] El Ghoul, S., Guedhami, O., Kwok, C. C., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital? Journal of Banking & Finance, 35(9), 2388-2406.

Charts 3–8: Factor exposures of the MSCI AC World Index by ESG quintile

Note: The green dots display the average exposures from Dec-2011 to Dec-2018, while the gray bars show the range of exposures between the 5th and 95th percentile.

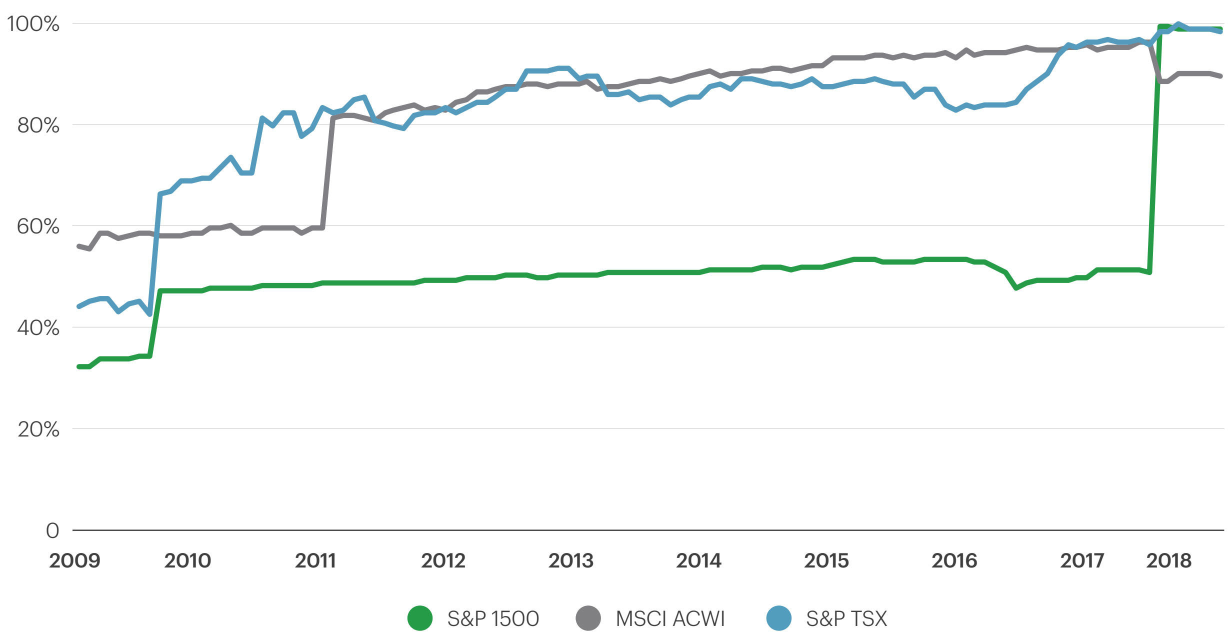
Source: Sustainalytics, Compustat, TDAM. Date as June 2019.

But despite these appealing features, investment managers need to be aware of the potential pitfalls of blindly integrating ESG data into their investment processes.

Hidden Dangers

Though ESG data has improved over the years, it still has some limitations that can have meaningful investment consequences. The integration of ESG scores into investment processes requires a thorough analysis of the underlying data. Unfortunately, ESG ratings are still fairly young. Sustainalytics' data, for instance, only goes back as far as mid-2009. The historical coverage for small capitalization and emerging market stocks is often even shorter and patchier. For example, until 2018, almost none of the smaller capitalization companies within the S&P 1500[4] had any ratings at all. **Chart 9** shows the percentage of stocks with ESG ratings for three large, well-known capitalization-weighted indices.[5]

Chart 9: Percentage of stocks with ESG ratings from August 2009 to December 2018



Source: Sustainalytics, TDAM. Date as June 2019.

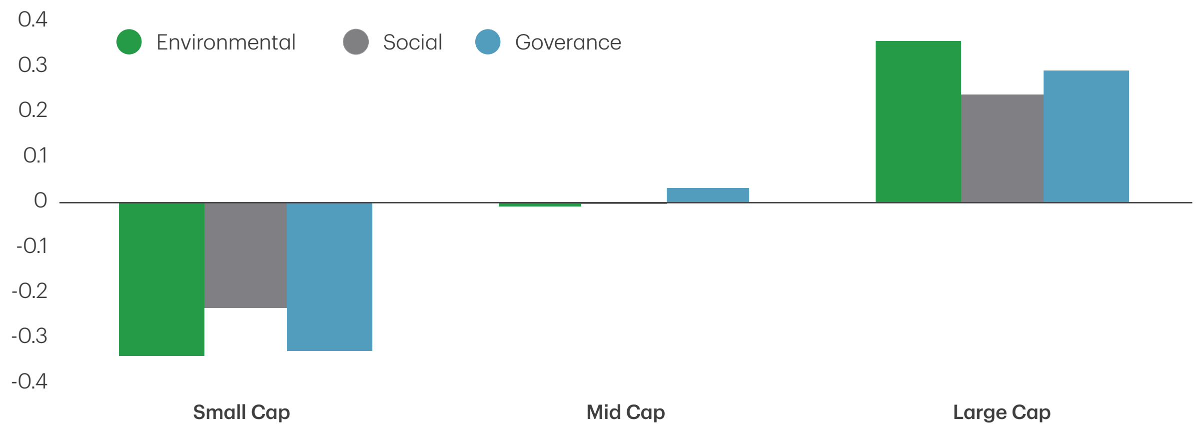
Such a short history means that the dataset can hide unintentional biases. For example, it can be hard to tell whether a stock in a given sector or country is scored poorly due to inherent ESG issues or simply due to methodology. This lack of clarity is made worse by the fact that ESG ratings largely rely on historical public company disclosures that are often voluntary, unstandardized, unaudited and reported irregularly[6]. Among others, the Global Reporting Initiative (GRI) and the Sustainability Accounting Standard Board (SASB) have been making headway toward standardizing ESG discloses. However, there are still no clear standards for ESG reporting and as a result, disclosures often lack the completeness, objectivity and comparability[7] we have come to expect from traditional financial information.

The absence of standardization can have a significant impact on your capitalization preferences, among other things. As observed from the chart below (**Chart 10**), large companies, on average, have better ESG ratings than smaller companies. This information bias should not come as a surprise, as ESG ratings tend

[4] The S&P 1500, or S&P Composite 1500 Index, is a stock market index of US stocks made by Standard & Poor's. It includes all stocks in the S&P 500, S&P 400, and S&P 600. This index covers 90% of the market capitalization of U.S. stocks.
[5] For the rest of this article, we use the MSCI AC World Index as our investment universe, with monthly ESG data ranging from December 2011 to December 2018. We start our analysis from 2011 to include emerging market stocks as well as to get around the methodological changes prior to this period.
[6] Welsh, H., & Kwon, S. (2018). State of Sustainability and Integrated Reporting 2018. Investor Responsibility Research Center Institute (IRRCi).
[7] Adams, C. A. (2004). The ethical, social and environmental reporting-performance portrayal gap. Accounting, Auditing & Accountability Journal, 17(5), 731-757

to reward companies with more disclosures and policies, which naturally favours the larger and more resourceful companies. Likewise, larger and more mature industries tend to be rated higher, as well as those facing more public scrutiny and analyst coverage.

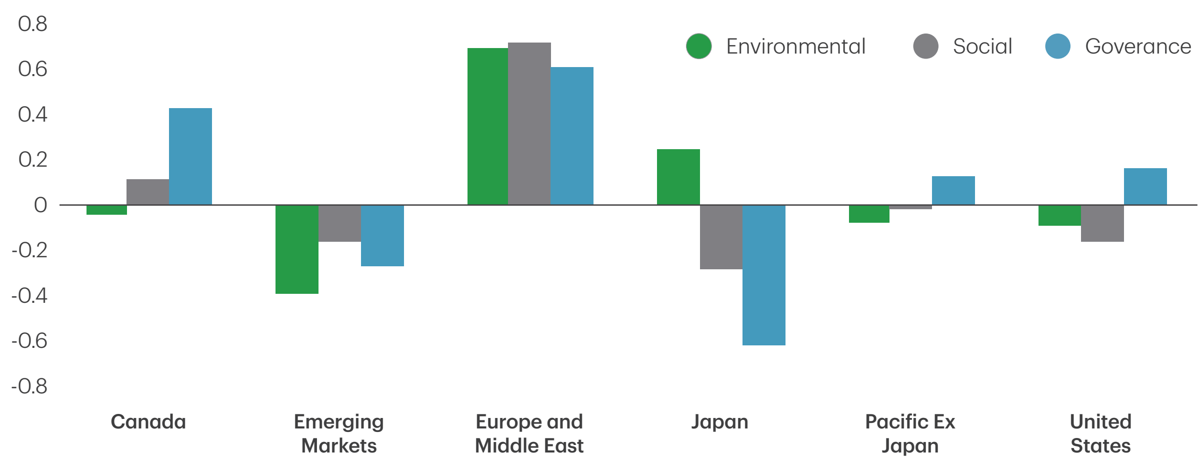
Chart 10: Average standardized E, S and G ratings by market capitalization



Source: Sustainalytics, TDAM. Date as June 2019.

Not all biases in the data are necessarily bad. We can positively make a case for why firms in some geographies tend to have better ESG ratings. As observed in **Chart 11**, European companies comfortably sit atop ESG ratings. The regulatory disclosure requirements in Europe result in companies providing better and higher quality ESG reporting[8]. For instance, under the European Union Non-Financial Reporting Directive (NFRD), public-interest companies are required by law to disclose information on environmental and social matters. Moreover, European companies tend to have the most demanding ESG-conscious investor base, as well as a strong, long-lasting culture of disclosure and reporting on ESG-related matters.

Chart 11: Average standardized E, S and G ratings by region



Source: Sustainalytics, TDAM. Date as June 2019.

[8] Perrault Crawford, E., & Clark Williams, C. (2010). Should corporate social reporting be voluntary or mandatory? Evidence from the banking sector in France and the United States. Corporate Governance: The international journal of business in society, 10(4), 512-526.

Accordingly, a large European company could very well be rated better than its global industry peers despite having more ESG risk.

It is important that we all keep these biases in mind to ensure that capital is allocated not only to the best rated companies, but more importantly, to those with the best ESG practices and activities.

Conclusion

The proliferation of ESG data and research has led to a clearer and deeper understanding of the ESG issues impacting industries and society. Though information gaps remain, ESG data is bound to grow over time in both quality and quantity; with standard-setting and regulatory bodies pushing for more granularity, transparency and standardization in reporting.

Understandably, proper ESG integration is hard. Naively factoring ESG issues into portfolio construction may very well bring about undue or unwanted exposures. After all, ESG risks do not discriminate by market capitalization or country of origin. More and better data is required to properly assess the breadth and nuances of the ESG and sustainability risks at play. While the short history of ESG data poses a real challenge for back-testing and longer-term studies, preliminary analysis of the data does show promise.

We strongly believe that ESG analysis should be done in conjunction with investment stewardship, as it would be foolish to dismiss the role of active ownership, including shareholder engagement and proxy voting, in fostering change within companies and driving sustainable long-term value. ■