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Integrating ESG into active systematic strategies

Seth Weingram, Matt Picone and Andy Moniz

ESG is one of the most important trends in contemporary investing, with ESG issues reported to affect investment risk and return, and asset owners demanding ESG strategies in diverse market and portfolio contexts.

Yet ESG is a challenge to engage with, owing to its sprawling scope, lack of consistent definitions, and subjective elements. As a result, asset owners face more difficulty than ever in identifying which ESG strategies can best achieve their combined financial and ESG-related objectives.

The systematic investment process offers a ready solution.

Systematic investing and ESG

ESG investing has two principal goals:

- extraction of alpha from ESG concepts, and
- alignment of investments with the asset owner's values and societal norms.

The systematic investment process is especially well suited to meeting these joint objectives. In fact, ESG can be seen as a natural extension of systematic investing. To see why, consider three core components of the systematic investment process as set out in Figure 1.

Data inputs: The focus of contemporary signal development has

shifted away from fundamental and market pricing data towards the expansive world of alternative data.

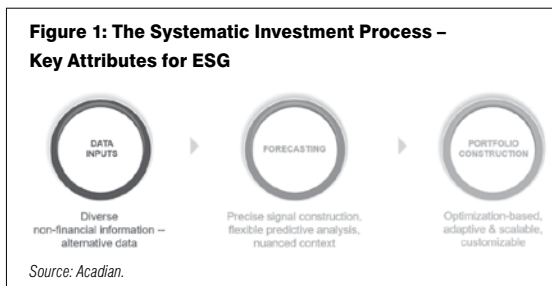
In the investing context, alternative data refers to information originally intended for non-financial purposes. Such data may lack structure or governance by an authoritative body and is often difficult to readily map to tradable instruments. Examples of unstructured data include free-form text and images as opposed to data tables and other well-organised and labelled forms of information.

These attributes also happen to characterise much ESG-related information. Typical examples include media reports about ESG-related incidents or scraping online information to assess the well-being of companies' employees. As a result, exploiting ESG-related information for investing purposes is naturally viewed as a subset of contemporary systematic investing's focus on alternative data.

Returns forecasting: Extracting value from ESG-related information requires pushing the frontiers of forecasting in several respects. Firstly, ESG-based signals should be precisely targeted and should isolate specific information that the market is not already correctly pricing, perhaps because it is difficult to process or its relevance to fundamentals is misperceived.

Second, ESG signal construction should incorporate contextual nuance such as industry-specific health and safety signals or capturing variation in political and regulatory environments that may affect pricing.

Figure 1: The Systematic Investment Process – Key Attributes for ESG



Thirdly, ESG signal development demands sophisticated and flexible predictive methods, including machine learning. As an illustrative example, consider using the size of a company’s management team as a governance indicator. Larger teams may predict higher returns, as collective expertise and industry connections grow, but perhaps only up to a point. Beyond some threshold, factional behaviour and other inefficiencies may outweigh benefits. Research that involves such complexities calls for advanced analytical approaches and a specialised, highly disciplined research environment.

While targeted signals, precise construction, and flexible predictive modelling are crucial to extracting value from ESG information, those requirements are hardly unique to the ESG context. They have more broadly become the hallmarks of modern signal development.

Portfolio construction: ESG also aligns naturally with systematic portfolio construction. Optimisation-based portfolio construction provides a disciplined and precise mechanism to govern trade-offs involved in implementing ESG considerations beyond those reflected in stock return forecasts. For example, it allows for selective divestment aimed at minimising the impact on myriad financial risk exposures.

In addition, systematic portfolio construction machinery adapts to ESG’s added complexity. It is straightforward to add constraints on exposures to climate-related risks or to ensure an active allocation to climate-friendly companies.

Finally, systematic portfolio construction is highly customisable, which is an especially important trait in aligning portfolios with investor-specific values.

The alternatives to a systematic approach to ESG fall into two categories.

1. Simple, rules-based strategies that several years ago would have been labelled smart beta but, as that term has fallen out of favour, are now likely to be mislabelled as passive. Such strategies tend to rely on modest exclusions and, as a result, are often relatively low active risk.
2. Discretionary investing approaches, including concentrated “impact” strategies.

Alternatives from both classes tend to forgo advantages of a rich systematic process. Omission of a comprehensive and sophisticated stock forecasting model that includes both ESG and non-ESG signals risks losing out on alpha generation opportunities.

Moreover, reductive portfolio construction leaves both rules-based and discretionary strategies vulnerable to in-

advertent risks. While that problem is not unique to ESG, ESG may exacerbate it. For instance, ESG ratings tend to be associated with known economic risk factors, most intuitively, industry risk, but also country exposures and market capitalisation. ESG ratings coverage also tends to vary across market segments, with particularly limited use in emerging markets reducing the flexibility of portfolio formation.

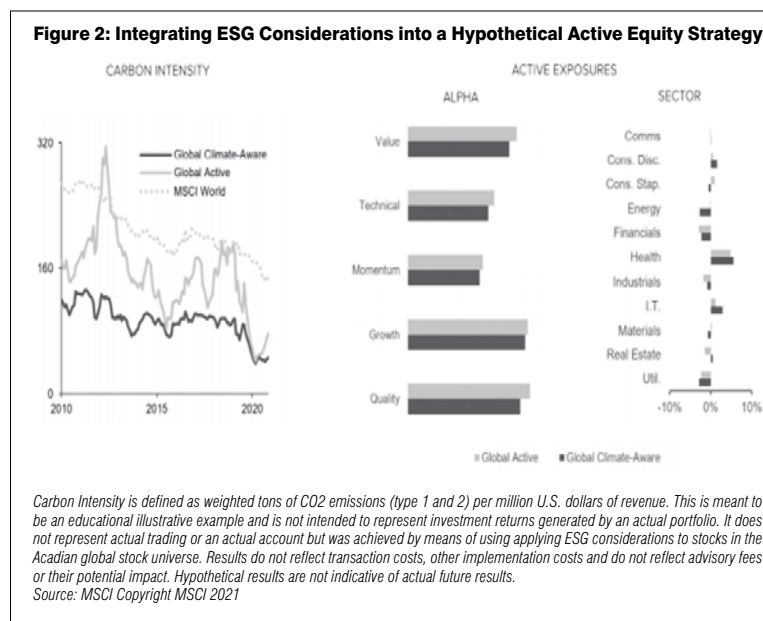
Integrating ESG objectives into active systematic strategies

While a conventional rules-based climate-aware portfolio, which targets low active risk, may not be relevant to investors in global active portfolios, the advantages of the systematic approach may also translate into more typical active investing contexts.

To demonstrate, a baseline hypothetical global active portfolio is established that incorporates our proprietary alpha model and risk controls and calibrated to produce roughly 3% active risk. A comparably active global climate-aware portfolio is also created by layering in primary and secondary carbon reduction objectives along with other ESG criteria.

The key results are illustrated in Figure 2 with the left panel showing that the global climate-aware portfolio meets the 50% carbon intensity reduction target. The baseline global active portfolio also generates a material reduction, which reflects the presence of ESG signals that are integrated into the investment process. The explicit carbon intensity objective, however, provides for a larger and more consistent reduction. The right two panels highlight that meeting the carbon intensity goal comes at little cost in terms of exposures to signals in the forecasting model and active sector risk. This reinforces the benefits of flexible portfolio construction.

Figure 2: Integrating ESG Considerations into a Hypothetical Active Equity Strategy



Carbon Intensity is defined as weighted tons of CO2 emissions (type 1 and 2) per million U.S. dollars of revenue. This is meant to be an educational illustrative example and is not intended to represent investment returns generated by an actual portfolio. It does not represent actual trading or an actual account but was achieved by means of using applying ESG considerations to stocks in the Acadian global stock universe. Results do not reflect transaction costs, other implementation costs and do not reflect advisory fees or their potential impact. Hypothetical results are not indicative of actual future results.
Source: MSCI Copyright MSCI 2021



The quote

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**The quote**

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Conclusion

We believe that ESG offers significant value for investing and given the breadth and intuitive relevance of ESG-related information, it would be surprising if it did not.

Although capturing that value is not easy, systematic investing is naturally well suited to address the complexities involved with respect to data, forecasting, and portfolio construction.

Moreover, the systematic process's flexibility allows for precise and disciplined trade-offs between ESG and financial considerations as well as the customisation of outcomes to investors' specific values.

In essence, the systematic process has been evolved over many years so that it naturally reflects the qualities of a well-conceived approach to ESG investing.

However, the benefits of a systematic approach to ESG extend further. Its need for comprehensive and high-quality ESG-related data to predict returns and manage risk incentivises an important form of active ownership, one aimed at promoting corporate transparency and disclosure with respect to ESG-related issues. Such activities have real relevance to societal stakeholders, not just to investors. Without meaningful data and metrics to assess ESG-related concerns and progress, we have little hope for improvement. **FS**