Incorporating ESG Factors into Our Investment Framework

Our primary goal when considering environmental, social, and governance (ESG) factors is to identify risks and opportunities that can potentially result in downside or upside surprises to current market sentiment. While we have always inherently considered these factors in the past, formally identifying key ESG factors that can have material financial impacts adds to the robustness of our investment framework especially as disclosure of ESG related metrics improves and ESG issues become increasingly topical. ESG integration on a sector and industry basis allows our analysts to systematically analyze the most financially relevant ESG factors and assign probabilities to their proforma impact. In combination with other traditional investment considerations, our analysts use their probabilistic determination of ESG impact to ultimately assess whether we are being compensated with an appropriate level of risk premia for an investment.

A central tenant in fixed income investing is risk minimization; therefore, an analysis of ESG issues is paramount to fully embracing the practice of prudence. However, unlike equity investors that, in theory, bear the brunt of every unit of lost profit or cash flow, debt investors can insulate themselves from losses through more favorable positioning in the capital or term structure. As a result, the ESG factors that are most pertinent must have enough material financial impact to affect the prospective creditworthiness of an investment. The importance of governance, in our opinion, is ubiquitous in assessing the potential quality of future financial policy and strategic decision-making. On the other hand, specific environmental and social factors, and the degree of their materialness to financial performance, will vary on a sector and industry basis. The acuteness of the effects from ESG issues on risk premia will also vary depending on the duration of the investment. For example, climate change issues that will evolve cost structures over time should have less bearing on an issuer's near-term risk premia compared to longer duration bonds. Conversely, the ability to capture current market opportunities related to anticipatory climate change spending should positively affect near-term risk premia, all else equal.

ESG factors can affect financial performance across five categories: 1) revenue; 2) expenses; 3) assets; 4) liabilities; and 5) cash flow. Increased risks or opportunities within these categories should generally result in more or less required risk premia compensation. These financial categories can be further segmented as follows.

Revenue	Expenses	Assets	Liabilities	Cash flow
- Market Share - Scale - Pricing Power	- Cost of Goods Sold - Operating Expenses - Research and Development - Financing Costs - Extraordinary Expenses (restructuring, legal, impairment)	- Tangible Assets - Intangible Assets	- Contingent Liabilities	- Working Capital - Capital Expenditures - Debt Issuance

Since effects of ESG issues can be nuanced not only across sectors and industries, but also across investment horizon, we believe simply overweighting investments from issuers that score highly in terms of ESG factors in it of itself does not always lead to significant alpha generation. Many times an issuer's high score on ESG factors is already reflected in valuations (perhaps due to the overall

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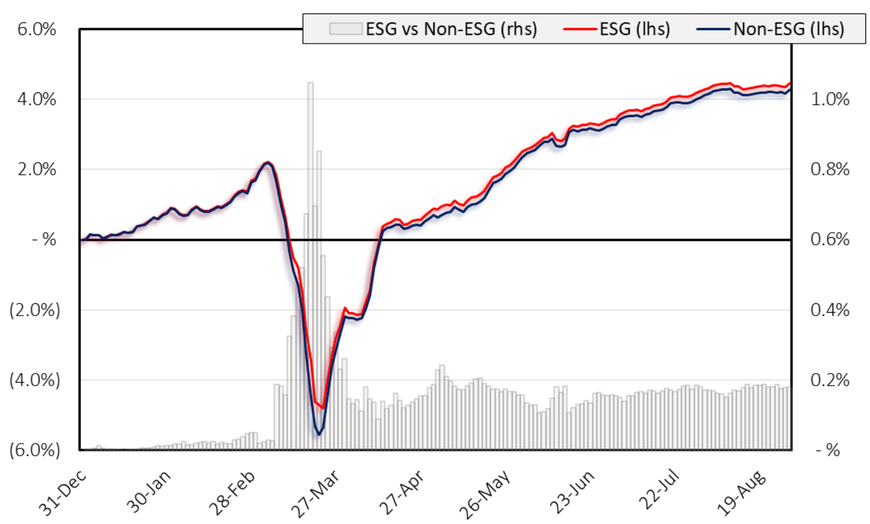
high-quality nature of the issuer) so overweighting positions in those investments does little to add incremental value to a portfolio. Furthermore, there can be significant variation among ESG scores from various third-party providers due to differences in scoring methodologies. Some providers focus on the disclosure of ESG metrics that may be biased due to lack of standardization in reporting requirements. Other providers weigh their scores more heavily on the occurrence of past events which from a fixed income perspective may have little bearing on prospective creditworthiness. Utilizing ESG scores from third-parties in a best-in-class or exclusionary screening strategy can be useful for benchmarking purposes to ensure portfolios are aligned with stated investment policies and objectives, but we believe they should not be considered a primary source for outperformance. Lastly, other factors aside from ESG including prevailing market conditions can affect an investment's performance. As strategies touting superior ESG scoring gain popularity, supply and demand dynamics will serve to further compress the risk premia for investments comprising these portfolios leaving little room for error.

The potential pitfalls from overly relying on third-party ESG scores when constructing portfolios can be illustrated when comparing performance of an ESG 1-5 year corporate index to the comparable non-ESG index. Through the month of March, year-to-date total return outperformed by 26 bps; however, near the market's nadir the relative outperformance was a remarkable 105 bps. When analyzing attribution using traditional portfolio risk factors, a lower average industry allocation to energy, aircraft finance, and REITs contributed significantly to the ESG index's outperformance in March. From a ratings perspective, more exposure to BBB and less exposure to BBB- contributed positively to returns, but more exposure to fallen angels contributed negatively.

Bloomberg Barclays U.S. Corporate 1-5 Year Indices
Year-to-Date Total Return



March Weighting	ESG	Non-ESG	+/-
BBB	16.7%	15.4%	+1.3%
BBB-	11.4%	13.1%	-1.7%
BB	2.4%	2.1%	+0.3%
Energy	5.6%	7.2%	-1.6%
Finance	0.2%	1.3%	-1.1%
REITS	1.0%	2.7%	-1.7%

Source: Bloomberg, Clearwater Advisors

High-level questions cloud the utility of ESG scores during the market sell-off: Why did the ESG index end up with more fallen angels? Was the relative outperformance more attributable to aversion of high beta issuers with low credit ratings? Could careful industry and security selection irrespective of ESG scores performed just as well? Without an ESG specific narrative to explain variations in performance, it is difficult to provide clear messaging to stakeholders on the contributions from ESG.