Glenmede Investment Management

Moving into the Mainstream – The Value of ESG Momentum

The increasing accessibility of environmental, social, and governance (ESG) performance data is allowing asset managers to analyze the risk and return ramifications of incorporating ESG information within an overall investment process. A company's absolute ESG rating score as typically defined by MSCI, Thompson Reuters, Sustainalytics, and Bloomberg, among others, has traditionally served as a starting point for impact investor assessment. Now, ESG Momentum, an investment factor that identifies stocks with an improving ESG footprint over the prior 12 months, is emerging as a strong and differentiated input for a broader set of investment models.

The potential strength of ESG Momentum as an investment factor makes it relevant for general stock selection—a use that goes well beyond thematic impact investing models. We believe the factor shows an ability to produce annualized excess returns comparable to traditional characteristics, such as valuation metrics, fundamental ratios, and earnings signals for U.S. equity investors. In addition, our research suggests ESG Momentum results are uncorrelated to other factors, which could improve a portfolio's risk-return profile.

Incorporating ESG Momentum

To get a quantitative picture of the impact that ESG Momentum might have when added to multifactor stock selection models, we utilized MSCI's data*, given the strong quality of the firm's library and the depth of historical information, mapped to financially material ESG issues as defined by the Sustainability Accounting Standards Board (SASB) Materiality Map™. In calculating ESG Momentum, we took the change in ESG scores on a monthly basis from ratings 12 months prior for all constituents in the Russell 1000 Index. This created a factor comparable to Price Momentum, which has become a commonly accepted standard in the investment community. The equal-weighted top quintile of ESG Momentum was tested on its own and versus an equal-weighted combination of Price/Earnings, ROE, EPS Estimate Revisions, and 12-Month Price Momentum.

Our analysis indicates that ESG Momentum has the potential to merit use across mainstream investment models, not just in those specifically designed for impact investing. The top quintile of ESG Momentum delivered an annualized excess return of 1.6 percent above the equal-weighted index over the past nine years (12/31/2009-12/31/2018), as shown in Figure 1.[1]

Figure 1: ESG Momentum vs. Equal-Weighted Russell 1000

	Top Quintile ESG Momentum	Russell 1000 Equal Weight	Difference
Annualized Return	**14.6**	**13.1**	**1.6**
Standard Deviation	**14.9**	**13.8**	**1.1**
Return/Risk	**0.98**	**0.94**	**0.04**

Source: FactSet Data from 12/31/2009 - 12/31/2018

Past performance is not indicative of future results. This performance above is hypothetical, derived from historical performance. Please see important disclosures at the end of this case study.

The seemingly low correlation of ESG Momentum with other factors also underscores its additive potential to general investment models. ESG Momentum had a near-zero correlation with the average stock selection factor in our Russell 1000 constituent library, which includes valuation metrics, fundamental ratios, earnings revision signals, and technical indicators. As detailed in Figure 2, even using sector-neutral factor rankings, ESG Momentum had a very low correlation average—close to 0.01—relative to other factors. Of note, MSCI has produced a study with similar results.[2]

Figure 2: ESG Momentum – Average Correlation with Other Investment Factors

	ESG Momentum	Sector-Neutral ESG Momentum
Value	**-0.004**	**-0.002**
Fundamental	**0.003**	**0.006**
Earnings	**0.001**	**0.009**
Technical	**-0.002**	**0.006**
ESG Score	**0.016**	**0.016**
Overall	**0.000**	**0.005**

Source: FactSet Data from 12/31/2009 - 12/31/2018

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Our internal research shows ESG Momentum could have performed better than a set of representative factors since 2010 as detailed in the chart in Figure 3. The right side of the chart shows that the ESG Momentum factor we calculated had a return of 14.6 percent versus the actual Russell 1000 return of 13.3 percent. At the same time, portfolio risk, measured by standard deviation, was lower for the ESG Momentum factor compared to Momentum, EPS estimates, and P/E.

In the main body of the chart, the performance of various factors in our general stock selection model are ranked for contribution to excess return each year. In five of the nine years charted below, ESG Momentum delivered returns in excess of the Russell 1000 benchmark.

In practice, we do not create any single-factor portfolios, but use different criteria for each sector, drawn from a library of more than 80 factors. We find that ESG Momentum is particularly additive when applied to specific sector/industry models. The performance of the factor seems to have value when assessing either buying or short-selling opportunities.

Figure 3: ESG Momentum Might Enhance Performance of Multifactor Models

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Highest	EPS Est 29.3%	ESG Mom 3.3%	ESG Mom 21.5%	P/E 50.6%	Russell 1000 13.2%	Russell 1000 0.9%	P/E 20.2%	ROE 25.0%	Russell 1000 -4.8%
	Momentum 27.6%	Russell 1000 1.5%	P/E 21.5%	ESG Mom 44.5%	ESG Mom 12.1%	Momentum 0.7%	Avg Stock 16.1%	Russell 1000 21.7%	Momentum -5.8%
	ESG Mom 25.5%	ROE -0.1%	Momentum 19.4%	Momentum 43.3%	ROE 11.5%	EPS Est -1.4%	ESG Mom 15.2%	Momentum 21.1%	ROE -7.2%
	Avg Stock 24.9%	EPS Est -1.2%	ROE 19.1%	ROE 40.7%	Avg Stock 11.1%	ESG Mom -2.3%	ROE 12.1%	EPS Est 20.8%	Avg Stock -8.7%
	P/E 21.3%	Avg Stock -1.9%	EPS Est 18.9%	EPS Est 38.6%	EPS Est 11.0%	ROE -2.8%	Russell 1000 12.1%	Avg Stock 19.0%	EPS Est -11.2%
	ROE 21.0%	Momentum -3.5%	Avg Stock 18.2%	Avg Stock 36.9%	P/E 10.6%	Avg Stock -3.7%	EPS Est 10.0%	ESG Mom 17.5%	ESG Mom -11.7%
Lowest	Russell 1000 16.1%	P/E -6.5%	Russell 1000 16.4%	Russell 1000 33.1%	Momentum 6.8%	P/E -6.0%	Momentum 6.2%	P/E 17.1%	P/E -18.2%

Top Quintile Performers 2010-2018

Return	Risk	Return/Risk
ESG Mom 14.6%	ESG Mom 14.9%	ESG Mom 0.98
ROE 14.0%	ROE 14.0%	ROE 1.00
Momentum 13.5%	Momentum 15.7%	Momentum 0.86
EPS Est 13.3%	EPS Est 15.7%	EPS Est 0.85
Russell 1000 13.3%	Russell 1000 12.6%	Russell 1000 1.06
Avg Stock 13.1%	Avg Stock 13.8%	Avg Stock 0.94
P/E 12.0%	P/E 17.2%	P/E 0.70

Sources: Glenmede Investment Research, FactSet and MATLAB (Russell 1000 Universe, monthly rebalancing with no transaction costs) top-quintile returns are based on equally weighted total returns of most attractively ranked stocks (top 20%) for each factor every year.Multifactor model is the equal-weighted, four-factor combination of traditional factors, while Multi/ESG is the five-factor, equal-weighted model. This is for illustration only. There can be no assurance that higher performance would result from adding ESG Momentum.

Looking Ahead

In the near term, the maturation of ESG information use will be driven by investment managers continuing to look critically at the details of the ESG data sets available to ensure they understand and select the inputs that are right for their models. For example, two widely used ratings systems—MSCI's IVA and Morningstar's Sustainalytics—are noticeably different, with a correlation ratio of approximately 0.25. Newer providers that produce ESG ratings based on news, rather than on fundamental characteristics, are equally differentiated.

Perhaps part of the solution moving forward will be drawing inputs from multiple sources—particularly those focused on the subset of ESG issues most likely to have financially material impacts. For this analysis, we focused on the 12-month change in MSCI's ESG ratings filtered for material issues utilizing SASB's Materiality Map™. In order for an issue to be included in our signal, it must be deemed material by both SASB and MSCI. This additional filter significantly improves the momentum signal, a result that has been confirmed in academic literature.[3]

The implementation of ESG factors within investment strategies is still in its early stages. ESG Momentum is showing promise as an input into models and undoubtedly will continue to evolve, especially as data availability, quality, and consistency improve through broad market uptake of ESG reporting standards like those developed by SASB.

From our analysis we believe ESG Momentum is a compelling signal relevant well beyond the scope of ESG-oriented investment strategies and has the potential to be a powerful factor for improving risk-adjusted returns for quantitative multifactor models.

DISCLOSURE:

[1] *The performance information related to ESG Momentum included in this table is hypothetical, included merely for illustration of theory and model structure, and does not represent the investment performance of any actual product. Choices of what to include in this article have been selected with the full benefit of hindsight, after performance over the period was known. Results achieved in simulations do not guarantee future investment results. It*

is possible that the assumptions here are wrong, and that the actual results will be better or worse than what is discussed here. Although the information contained herein has been obtained from sources believed to be reliable, accuracy and completeness cannot be guaranteed. Simulated results do not include actual trading, so there is no guarantee that any actual account could have achieved comparable results if managed during the relevant timeframe.

[2] *Zoltán Nagy, Altaf Kassam, Linda-Eling Lee. "Can ESG Add Alpha? An Analysis of ESG Tilt and Momentum Strategies." MSCI Research, June 2015.*

[3] *Khan, Mozaffar and Serafeim, George and Yoon, Aaron, Corporate Sustainability: First Evidence on Materiality (November 9, 2016). The Accounting Review, Vol. 91, No. 6, pp. 1697-1724. Available at SSRN: https://ssrn.com/abstract=2575912 or http://dx.doi.org/10.2139/ssrn.2575912.*

* *MSCI Data is updated on a monthly basis. Past performance is not indicative of future results.*

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