Insight 09 | 2017

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RobecoSAM Smart ESG: heavy on ESG, light on Bias

- **Simple ESG measures can lead to bias in stock selection across multiple factors**
- **Focus on generalized ESG rankings can underestimate risk in the portfolio**
- **Research-based analysis needed to interpret and implement ESG data for investors**

The rise of factor investing has led many investors to focus on stocks that display low volatility, value, momentum, quality or size. In parallel, the rise of sustainability investing has enabled investors to simultaneously chase companies with strong environmental, social and governance (ESG) credentials raising the question of whether ESG should be a factor in its own right.

At a recent Responsible Investor conference in London, Ruben Feldman, Senior Quantitative Analyst at RobecoSAM explains the inate biases of ESG scores and highlights RobecoSAM's approach to isolating the "ESG factor" for better risk-adjusted returns.

Tangled data

ESG generally is mis-implemented throughout the investment industry," explains Feldman. "When you rank companies according to pure ESG criteria without de-tangling the correlations with other factors, you end up with huge biases."

Fifteen years ago, first generation ESG indices were launched that used ESG scores to rank companies on their sustainability performance. At the time, ESG data was too new and too limited to spot ESG biases. For example, we can see now that there are significant overweights towards companies headquartered in countries that score well. For example, countries like Switzerland do consistently well (the DJSI has historically been overweight in Switzerland). Here, most of the return isn't coming from ESG, but rather as a result of things like how well the Swiss economy is doing, the strength of the Swiss franc versus the US dollar, and other macroeconomic factors.

Similarly, many sustainability indices have huge biases towards Europe and large caps, simply because big companies and / or European companies have set aside resources to devote to ESG reporting. They're often able to report not only more information but have an overall better presentation. This doesn't necessarily mean that their sustainability efforts are any better, what it does mean is that they are better at data packaging which greatly facilitates the job of ESG researchers trying to gather and analyze lots of information.

All these biases mean you're no longer investing in ESG, but in some sort of random mix of extraneous factors which may be good or bad, producing positive or negative results.

Beware of bias

Meanwhile, the 'smart beta' factors also generate their own biases, he says. "If you invest in an ESG portfolio you will get a strong bias to the style factors that are positively geared towards ESG such as size and quality. If you have fewer problems at a company (or at least reported incidents), then it will have a higher quality score which will then translate to a higher sustainability score and weighting within an ESG index." So then, quality (as measured by no reported problematic media incidents) is blindly equated with sustainabilty.

"If you have so much *quality* or *size* in your portfolio, then you're not really exposed to ESG, but rather to quality and size factors instead. Our research has shown that ESG sometimes has significant risk exposure to the size factor, sometimes as much as 20%. If size does well, then ESG does well, and vice versa." This tends to be the approach for determining the ESG value of companies for sustainabiliity indices.

Feldman emphasizes, "ESG can be rules based, but it can't be pure data processing. It's not enough to simply have corporate governance policies. At some point you need to have someone actively evaluating whether a corporate governance scheme is good,bad, or somewhere in-between." Is it truly effective at preventing corruption? Is it ensuring ethical and customer-focused practices throughout the organization?

Though later on, answers must be quantified, qualitative analysis is critical to the process. Feldman went on to compare the difficultly of ESG valuations with stock picking explaining that, "it's not as simple as for the value factor, which is based on clearly defined financial metrics like price-to-book or price-to-earnings ratios.

Elimating bias through rigorous analysis

Feldman later added, "there are a lot of different underlying themes within sectors that make ESG data more complicated but at the same time more useful." Corporate governance, for example, is more important in certain sectors like banking and finance, whereas health & safety are important ESG indicators for materials companies. You have to make allowances for certain things and weight data/criteria accordingly. "So you need to have a well-defined framework within which to work but, as previously discussed, there is still an overwhelming need for sustainability research expertise to make sense of the data."

Sustainability indices tend to only take into account *general* ESG scores, which have huge biases. "I think integrating ESG can be very beneficial, even if it doesn't have the same academic grounding as other investment factors," he says. "It doesn't have the same grounding because it's not as easy to interpret; the ESG data isn't straightforward, and doesn't go as far back as other datasets (RobecoSAM's data goes back to 1999, which is the longest available history of which we are aware)."

The input of our sustainability research team combined with the analytical models of our quants team, enables RobecoSAM to create a Smart ESG score that more accurately characterizes the true ESG value associated with a company, thereby reducing the biases associated with traditional ESG scores. "You could say that compared to traditional indices, RobecoSAM's Smart ESG is heavy on ESG and light on bias."

What Smart ESG means for portfolios

RobecoSAM's Smart ESG scores isolate the ESG factor by removing the biases and the noise (i.e. irrelevant data points, such as outdated questions and criteria) that come with standard ESG scores. "Once you extract the true ESG signal by getting rid of the unintended biases, you get an independent source of risk with significant explanatory power and a positive Information Ratio that is totally autonomous to the other risk sources. Integrating this into a model would enable the investment manager to benefit from information that is otherwise ignored.

In addition, more of your portfolio risk is explained by an additional factor (the ESG factor), and since that factor actually has positive long-term returns, your portfolio's overall risk-adjusted returns will be better in the long term.

"So if it's calculated well and integrated well, then it can benefit your portfolio," Feldman says, adding "information is key, and using it properly is even more important."

"Sustainability is often mis-implemented in portfolios due to unintended factor biases. This emphasizes the need for 'smarter' ESG scores."

Ruben Feldman, MS, CFA
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RobecoSAM Sustainability Research Team

About RobecoSAM
Founded in 1995, RobecoSAM is an investment specialist focused exclusively on Sustainability Investing. It offers asset management, indices, impact analysis and investment, sustainability assessments, and benchmarking services. Together with S&P Dow Jones Indices, RobecoSAM publishes the globally recognized Dow Jones Sustainability Indices (DJSI) as well as the S&P ESG Factor Weighted Index Series, the first index family to treat ESG as a standalone performance factor using the RobecoSAM Smart ESG methodology. As of June 30, 2017, RobecoSAM had client assets under management, advice and/or license of approximately USD 19.3 billion.

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