



# FACTOR INVESTING AND SDG PERFORMANCE; HOW IS THEIR COMPATIBILITY?

By Leon Nauta

**Factor investing is often referred to as ‘the best of both worlds’, combining elements from active and passive investing. But does it also offer the best of both worlds from an economic and sustainability perspective?**

In 2015, the UN Sustainable Development Goals (SDGs) were launched to serve as a framework for sustainable economic development. This created an opportunity for investment managers to develop strategies specifically geared towards sustainable economic development. Many actively managed SDG themed strategies were launched, but what about factor investing and the SDGs? How is their compatibility?

Factor investing strategies select firms based on certain stock characteristics that have empirically shown to generate alpha over the long-term. The five most well-

known factors are momentum, size, value, low-volatility, and quality. ESG is sometimes defined as a factor as well, but the consensus is that ESG is not a factor but a risk-management measure. Researchers studied to what extent firms with strong ESG performance also have strong factor characteristics, and they found that firms with strong ESG performance tend to have strong quality and low-volatility factor characteristics. Some found that this relationship also applies (albeit weakly) to the value factor.

The SDGs are a specific set of ESG criteria and for SDG integration to go mainstream the focus needs to be on financial materiality. Research found that SDG performance positively impacts corporate image, which results in lower costs of attracting and retaining customers and skilled employees. Strong SDG performance also leads to better positioning for (regulatory) changes, resulting in lower disruption costs. In total, 30 material ESG topics are identified as being part of the SDG framework. This presents an interesting opportunity to research if firms with strong SDG performance also tend to have strong quality, low-volatility, and value factor characteristics. MSCI datasets are used to research this relationship.

The data indicate that, overall, firms with strong SDG performance also tend to have strong quality factor characteristics. This is especially the case for developed market

firms with strong SDG performance in the MSCI SDG data category empowerment, reflecting the performance regarding SDG 4, 5, 8, 9, and 10. The most material SDG in this category is SDG 8 (decent work and economic growth). Most likely, this is the strongest driver for this positive relationship, as asset growth is a key characteristic of the quality factor. SDG 5 (gender equality) is also likely to be a driver, as the consensus is that corporate diversity results in above-average financial performance. Also, SDG 9 (industry, innovation, and infrastructure) and SDG 10 (reduced inequalities) have a relatively high financial materiality and strong performance related to these SDGs contributes to growth.

For emerging markets, the underlying relationship between SDG performance and the quality factor is different. Emerging market firms that have strong SDG performance in the category empowerment tend to have weak quality factor characteristics. Research indicates that, also in emerging markets, a strong contribution to economic growth (part of SDG 8) and industry, innovation, and infrastructure (SDG9) are drivers for strong financial return. So the negative relationship between the category empowerment and the quality factor must be attributed to strong performance in contributing to decent work, gender equality, and reduced inequalities. This would explain why sweatshop-practices



Leon Nauta

and inequality remain persistent at relatively high levels in emerging markets, even after experiencing relatively strong economic growth. The data also support conclusions made by other studies, which found that firms in emerging markets that have strong gender equality, actually have weaker financial performance. This is due to the low acceptance of women in the labor force in non-Western countries.

For emerging market firms, the positive relationship between SDG performance and the factor quality is driven by the MSCI SDG category basic needs. This category reflects the performance regarding SDG 1, 2, 3, 6, and 11. This positive relationship is intuitive, because these SDGs much more often relate to growth markets in emerging markets than in developed markets. In accordance, developed market firms with strong SDG performance in this category have a neutral relationship with the quality factor. The environmental SDGs in the MSCI SDG categories climate change (SDG 12, 14, and 15) and natural capital (SDG 7, and 13) show to have no relationship with the factor quality, in both markets. This is because environmental issues, although they are the most important for human existence, are identified to have lower financial materiality.

Firms with strong SDG performance also tend to have strong low-volatility factor characteristics. This is intuitive as ESG performance is, in the end, defined as a risk-management measure. Also, for the low-volatility factor, the performance in the non-environmental categories empowerment and basic needs drive this positive relationship because of their higher financial materiality. Larger availability of financial material variables allows one to make a more thorough earnings forecast. This improves accuracy, and asset growth predictability is a key characteristic of the low-volatility factor. For emerging market firms, the relationship between SDG performance and the low-volatility factor is negative. This is in line with other research that found, in general, emerging market firms having weak low-volatility factor characteristics. This is because, on

Figure 1: The UN Sustainable Development Goals



Bron: UN.org

average, emerging market firms tend to have less developed business models, are more recently established, and have higher leverage than their developed markets counterparts. These aspects make it more difficult to predict growth, regardless of their SDG performance.

Firms with strong SDG performance tend to have weak value factor characteristics in both markets. This could be attributed to the fact that, for different reasons, undervaluation is an important characteristic of the value factor. One of these reasons is that firms with strong value factor characteristics tend to be more prone to economic changes, while firms with strong SDG performance tend to be better positioned for changes. Also, firms with strong SDG performance are currently receiving more attention, and this causes upward pressure on the stock price.

Note: For constructing the factor-models, the MSCI Barra Global Equity Model for Long-Term Investors dataset is used, and MSCI's recommended factor characteristic weights were applied. For the determination of the firm's SDG performance the MSCI ESG Sustainable Impact Metrics 2016-17 dataset is used. The research is conducted under supervision of industry specialists in the field of Factor Investing. No warranty is given that the identified relationships will continue to exist in the future. <

- Factor investing data indicate that the underlying relationships between SDG performance and the quality and low-volatility factors differ between developed and emerging markets;
- Firms with strong SDG performance tend to have strong quality and low-volatility factor characteristics;
- Size and momentum factor investing strategies tend to more often select firms with weak ESG performance;
- Value factor investing strategies marginally tend to more often select firms with strong ESG performance, but they more often tend to select firms with weak SDG performance.

This article is written by Leon Nauta, Post-Master Investment Management Student at the VU University Amsterdam.