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Executive summary

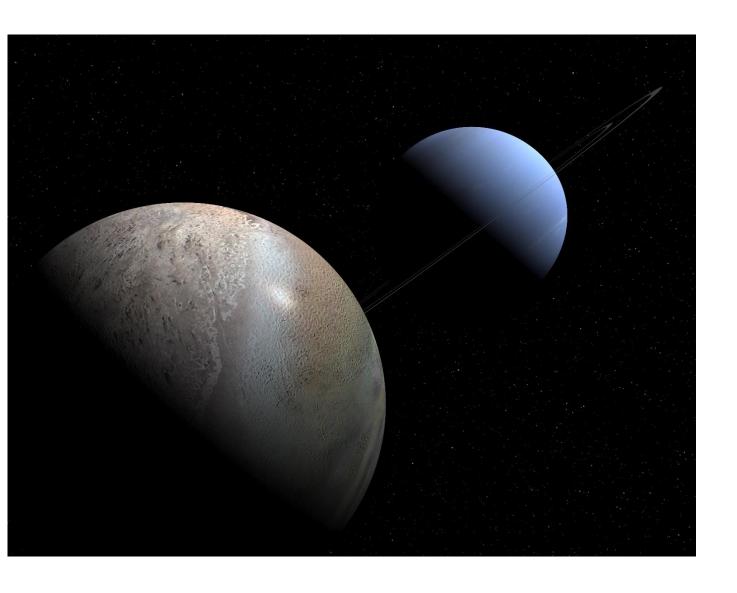
Robeco Global Equity has structurally integrated ESG information into its research and investment process for three years.

Over 200 investment cases have been written that incorporate ESG into the fundamental analysis and the valuation work.

In this white paper, we explain how and why we use this extra lens in our research.

What do we find?

- In about 50% of the investment cases there is an impact on the valuation due to the ESG analysis. On average 7% of company valuations are attributed to ESG factors.
- ESG as a measure of quality: there is a relationship between ESG valuation and Return on Invested Capital. The ESG analysis seems to confirm the analyst's view in many cases.
- In general, we see a positive impact on the valuations, so a focus on opportunities. The reasons for this are that the research universe is already pre-screened for opportunities and quality companies and the ESG analysis is mostly done relative to peers. CO2-heavy industries are an exception: here carbon risks are clearly leading to negative valuation adjustments.
- The portfolio with companies that have a clearly positive impact on valuation performed 10% better than the portfolio with companies with negative valuation impacts over the 2014 to 2016 period. As this is a very crude analysis (no adjustments for biases and factors and no statistical analysis) we cannot be too bold in our conclusions, but the result is encouraging and calls for further analysis.
- Two worlds colliding: one only loves what one knows; to us, the recipe for success in ESG integration is excellent research, true integration and active ownership.



Our We believe in creating a approach portfolio of best stock ideas combining a high Free Cash Flow yield with an above-average Return on Invested Capital.

> By including financially material ESG factors, it can then deliver superior shareholder returns over the long term. In this section we explain how we do it.

Sustainability Investing | Sustainability means many things to many people¹. At Robeco, Sustainability Investing is defined as an investment discipline that considers environmental, social and corporate governance criteria to generate long-term competitive financial returns and positive societal impact.

Sustainability Investing is of strategic importance for Robeco and a holistic approach is adopted. Robeco sees sustainability as a long-term driver of change in markets, countries and companies, something which impacts future performance. It is therefore considered to be one of the value drivers in our investment process, similar to other drivers such as company financials or market momentum. This is witnessed by the fact that the UNsupported Principles for Responsible Investment have awarded Robeco with the highest A+ ratings for the way in which Environmental, Social and Governance (ESG) factors are integrated into all investment processes and for the engagement with the companies in the portfolios.

For equity investments specifically, this means controversial weapons are excluded and an active ownership approach is in place. Engagement is done based on sustainability themes that are determined by means of consulting clients, sustainability researchers and the investment department. Financial relevance is important. That is also why integration of Environmental, Social and Governance issues into the investment process is an important cornerstone of Sustainability Investing for the fundamental global equity department.

Core belief: we make better informed decisions by incorporating material ESG issues | In accounting terms, an asset is defined as a resource that is controlled by the company and that is expected to provide future economic benefits. The market value of a company is derived from its assets and the future profits the company is able to generate through those assets. A company's market structure and market positioning determine the competitive advantage period; the period over which a company is able to generate returns above its cost of capital. Together with the risk profile of the returns generated, these factors are the main determinants of a company's value.

We see that intangible assets form an increasingly important part of a company's value in this day and age. The average is estimated to have increased from 17% in the 1970s to over 80% of market capitalization in 2015 (figure 1). These intangible assets are generally comprised of rights (leases, distribution arrangements, financing arrangements, etc.), relationships ((trained workforce, customer and distribution relationships) and intellectual property (patents, copyrights etc.).

¹ For more information on terminology please see: 'Sustainability Investing Glossary: a book of definitions', Robeco 2017

Internally generated intangibles are not disclosed on the balance sheet, because Accounting Standards do not recognize intangible assets unless there has been a transaction to support intangible asset values in the balance sheet (creating goodwill). They are, however, often significant in value, and should be understood and managed appropriately.²



Figure 1 | Components of S&P500 market value

Source: Ocean Tomo, LLC

Because of the increasing importance of intangible assets in company's valuations and the fluctuations in the value the market ties to this, it is important for investors to make a thorough assessment of these assets, the future profits a company can generate with these assets and the amount of capital that must be spent to keep up the value of the assets.

Keeping this in mind, it is very conceivable that (part of) the fundamental analysis of a company consists of looking at 'traditional' ESG factors, like human capital and innovation management (important for creating intellectual assets), stakeholder relations (customer relations, licenses to operate), supply chain management (important for brand value), etc.

It therefore makes perfect sense to include ESG topics in the fundamental analysis of a company to come to a good estimate of its (long-term) value and make an even better founded investment decision. Moreover, not looking at these factors you would probably run the risk of missing out on some important insights.

ESG impact on equity valuation via the Value Driver Adjusment Framework | In an ideal world, ESG is completely integrated in the research process and in the thinking of analysts.

² Global Intangible Financial Tracker 2016, Brand Finance, CIMA and IPA, May 2016

Why should you look differently at analyzing ESG risks and opportunities for a company than at other strategic or business risks and opportunities? As mentioned earlier, isn't it simply part of fundamental stock analysis? However, as the concept is fairly new (compared with some of the conventional investment and finance theories) it seemed necessary to make it an explicit step in the investment- and research process and build a clear framework for the analysts to apply.

This lead to the development of the Value Driver Adjustment Framework in 2014³, giving the analysts the tools to make the ESG factors tangible in their valuation. As the analysts value a company based on its ability to generate positive economic value over its competitive advantage period, which typically lasts 10 years but can go up to 20 years for companies with an extremely wide moat, the horizon is long. Just like Porter's five forces to analyze a company's competitive positioning or using a SWOT analysis, the Value Driver Adjustment methodology simply provides a framework to incorporate ESG factors.

The framework consists of three specific steps that are described in figure 2.

Figure 2 | Value Driver Adjustment Framework



Source: Robeco

Step 1: financial materiality as a starting point | As Robeco clearly takes the stance that ESG integration leads to making better informed investment decisions, materiality is defined as those ESG factors that have significant impact on the financial performance of a company, such as revenue growth, margins, required capital and risk. The notion that we make better investment decisions by focusing on financially material issues is supported by scientific evidence. Kahn et al. find that firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues⁴.

So in the first step of the Value Driver Framework materiality per industry is defined. As financial impact drives the integration approach, the assessment of materiality is done along two axes:

³ Please also see: 'Valuing ESG at Robeco Global Equity', 'Measuring ESG impact Part 1: valuation', 'Measuring ESG impact Part 2: decisions and portfolio', Robeco 2015

⁴ Khan, Serafeim and Yoon, 2015, Corporate Sustainability: First evidence on materiality, working paper Harvard Business School

- 1. Likelihood of the risk or opportunity arising
- Degree of the impact on the value drivers (sales growth, margins, cost of risk)
 In defining materiality the financial analysts draw upon the expertise of the in-house
 Sustainability Investing research that RobecoSAM⁵ has available.

Case example: materiality analysis in the chemicals industry | The landscape consists of companies that develop, manufacture and distribute specialty and commodity chemicals, plastics, industrial gases, agrochemicals, coatings and additives for the healthcare and wellness industries. Key issues to remain competitive are having an innovative process and product, environmental impact, green chemistry practices, including the implementation of strict emission controls, the use of (bio)catalysis, more efficient waste management, and the replacement of traditional solvents and hazardous reagents with renewable materials. We look for comprehensive product stewardship management systems that include product databases and client training.

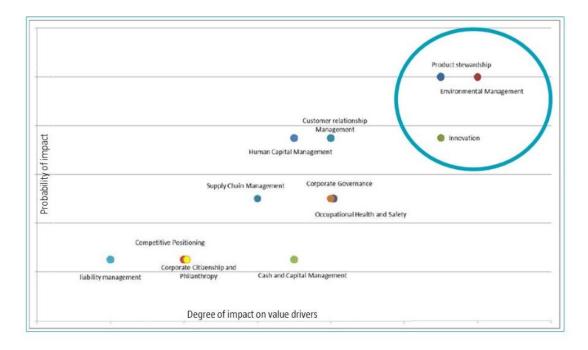


Figure 3 | Materiality matrix chemicals industry

Source: Robeco and RobecoSAM

⁵ Founded in Zurich in 1995 as Sustainable Asset Management, RobecoSAM is an investment specialist focused exclusively on sustainability investing. It offers asset management, indices, impact analysis and investing, engagement, voting, sustainability assessments, and benchmarking services. RobecoSAM is a sister company of Robeco.

The main material issues according to our analyst and the RobecoSAM specialists in this industry are Product Stewardship, Environmental management and Innovation management.

Product Stewardship is at the center of several societal, industry and regulatory drivers: stringent regulations (Safe Chemical Act in USA, REACH in Europe and potentially in Asia), reduction in the toxicity of product portfolios to minimize future increased costs and reduced sales caused by product phase-outs and substitutions. Companies are monitoring their portfolios' product life cycles and applying LCA (life cycle assessment) to product design. Introducing non-fossil fuel based raw materials to substitute oil-based raw materials, they will benefit from demand growth and from a higher degree of control on their input costs.

Environmental Management is necessary because there is a painful list of environmental accidents involving chemical operations. Environmental emissions have also acquired financial materiality. It is relatively straightforward to imagine that companies with a higher environmental footprint will in the future be faced with higher risk of liabilities either in the form of higher input costs (water, waste, remediation, energy) and/or taxation (carbon). This will impact profitability and margins, and will have repercussions on a company's reputation and social license to operate.

Innovation Management: the chemical industry is innovation driven. Chemical innovation plays a key role in addressing societal megatrends such as resource scarcity, climate change and electrified mobility. Novel products usually come with better pricing power. Their sales volumes grow faster than the rest of the portfolio. Companies providing efficient solutions to societal issues will be recognized as industry leaders and are more easily awarded a social license to operate.

Materiality from the perspective of other stakeholdes | The above described methodology of defining materiality and thereby coming up with the ESG issues that Robeco takes into account in its investment process, leads to a subset of ESG issues that can be identified. The approach is clearly financially driven. Even though there are 43 different ESG issues defined in this process, we understand that some stakeholders would consider other ESG issues to be more relevant from their perspective. To address these issues, other actors (governments, NGOs, labor unions) active in the field of sustainability and other tools (active ownership, exclusions) are available to investors. Each plays its own part. For Robeco ESG integration is about allocating capital in a sustainable way as we protect and grow our client's principal.

Step 2: ESG business impact analysis as relevant information for fundamental analysis

After determining the material issues, the second step in the process is to analyze the companies according to their policies, practices and performance on these issues. The companies are being compared with their peers and the impact on the strategy and on the business model is identified. Again a straightforward and uniform framework was developed as a tool. An example of this framework is depicted in figure 4. It is a summary of the analysis of the most material ESG issues. This analysis is backed by the Corporate Sustainability Assessment by RobecoSAM. The framework contains the ESG issue, a summary of the company analysis on the issue and the expected impact on the business model.

Figure 4 | Case example: business impact analysis of a coating company

ESG Issue	Business Model Impact (+, 0, -)	Explanation & Nature
Product Stewardship	+	Most companies have already moved towards water-based paints and reducing volatile organic compounds (VOCs). The company has integrated sustainability very well into its strategy and product development; and has implemented a social & environmental P&L to better understand and manage impacts. The company is investigating renewable raw materials and has a priority substances management program in place, focusing on hazardous materials, recyclability, weight, usage impact etc.
Environmental Management	+	Strong operational excellence with improving trends in water, waste, direct GCH and indirect GHG emissions. Strong performance and improvement on LTIFR as well.
Innovation	+	Regulations and customer demand drive innovation, including green building standards. The company has introduced the Planet Possible initiative (more value from fewer resources) and 20% of innovation focuses on sustainability, which aligns with long term targets of growing ecopremium products.

Source: Robeco

In this step, the analysts derive a lot of information from the Sustainability Analysts at RobecoSAM. Also the proxy voting statement, the remuneration analysis and the possible engagement topics and results are available to the analyst. There is interaction with our inhouse Governance and Active Ownership team on these specific topics and analysts are involved in the engagement cases of companies they cover. Together we are very well equipped to assess the performance of the company on the material issues and to analyze the impact on the strategy and business of the company.

Step 3: bringing it together makes the value of ESG visible | Valuing a company, as complex as it is, is at the heart of what fundamental investors do. Discounted cash flow (DCF) or Economic Value Added (EVA) valuation models are often used.

As is the case with most models garbage in means garbage out. So in first instance, the historical accounting data needs to be translated into economic reality. How much cash profits has the company actually made in the past and how much capital was invested to generate these profits? Has anything changed over time to make the company more or less profitable or capital intensive? This is a time-consuming but very important first step to making valuation work.

The second step is to form an opinion on the prospects for the factors that drive the value creation and thus the value of a company. For every investment, the responsible analyst makes an in-depth investment case of the company, which states his or her opinion on the industry, company strategy, the product portfolio, competitiveness of the franchise and a SWOT analysis. To quantify stock potential, four value drivers are identified: revenue growth, margin development, invested capital needed and risk (as defined by a discount factor). To assess the fair value of a stock, these four factors are combined in our proprietary valuation tool: a DCF model that explicitly takes invested capital into account.

In our approach, we first look at benchmark performance for the value drivers. Depending on the sector this can be peer performance, historical averages or product/market combinations. We then adjust these numbers based on the fundamental analysis of the competitive positioning of the company, its ability to grow, the efficiency of its operations, etc. Lastly we incorporate the ESG analysis by adjusting the value drivers further. The end result is a target price, which combines the benchmark view with the analyst's assessment and the ESG analysis.

In the example below (figure 5), our analyst expects the company to grow sales by an average of 4% over the next 10 years, while its operating margin will increase from 8% to 8.5%. Invested capital intensity remains stable and the resulting cash flows are discounted at an 8% weighted average cost of capital (WACC). The impact of material ESG factors on the business model and value drivers is explicitly considered in our valuation model. In this case the sales growth is upped to 5% and the profit margin increases by 0.5%, leading to an increase in the value of this company based on the ESG analysis.

Figure 5 | Case example: addressing the issue of valuation

Value Driver	Sales Growth	NOPAT margin	Invested Capital	WACC	Target Price
Benchmark	4.0%	8.0%	1.0x	8.0%	EUR XX
Company ex-ESG	4.0%	8.5%	1.0x	8.0%	EUR XX (+5.6%)
Incl. ESG Adjustment	5.0%	9.0%	1.0x	8.0%	EUR XX (+14%)

Source: Robeco

The An analysis of over 200 numbers: investment cases found statistics from that on average, ESG over 200 accounted for 7% of a investment company's valuation.

> The 10 most material topics ranged from innovation and health & safety to climate strategy.

We found that ESG opportunities outweigh risks in valuation terms. In this section we crunch the numbers.

ESG factors represent on average 7% of the analyzed companies' valuation | The framework that is described in the first chapter was used in over 200 investment cases our analysts made in the last three years . An analysis of these cases reveals that on average 7% of the valuation is being attributed to ESG factors⁶.

In almost all cases the first two steps of the process were taken and a business impact analysis was made. In about half (47%) of the cases, a financial impact was attributed to one or more of the ESG factors analyzed.

-60%

Figure 6 | ESG impact on individual target prices

Source: Robeco

The dispersion of the valuation impact is quite high, as can be seen in figure 6. Companies where target prices are severely lower or higher when integrating ESG are found in different sectors. The companies with an extreme impact on valuation (positive or negative) are companies that provide products that are either a solution to a sustainability problem (specialty chemicals), or actually contribute to a problem (pesticides, coal etc.) Companies that provide a solution are often also companies that score well on other material issues and vice versa, reinforcing the valuation effect.

Case example: opportunities abound, a solution provider | We find the strongest impact of ESG factors for companies who we would term the 'solution providers'. These are companies that develop products that help solve some of the sustainability related problems the world faces or help other companies in reducing their footprint. We foresee strong

 $^{^{6}\,}$ If a stock has a fundamental valuation of 100 and an extra uplift of 7% it means the fundamental valuation excluding ESG was 93. If there is a penalty of 7% it means the original target price was 107. The average is calculated over the absolute numbers.

demand for the products of this type of companies and - depending on R&D capabilities and barriers to entry – also strong margins.

We cannot stress enough that a strong sustainability profile is a necessary but far from a sufficient condition for us to invest. Think of solar and wind energy as an example; while both industries offer solutions to the greater energy transition theme, the underlying industry dynamics are very different. Solar is highly fragmented and carries a much lower profitability than the much more consolidated wind industry. The example of the company below shows that even when a we see a highly attractive sustainability AND fundamental profile, we still take valuation and business momentum into account. General investment principles still all apply! Note that early stage innovation also carries a highly different risk profile – this needs to be taken into account. We therefore remained on the sidelines in the example below. On the other hand, there are other examples where our conviction on sustainability factors allowed us to look beyond weak short-term trading conditions.

Figure 7 | ESG valuation impact high for solution providers

Value Driver	Sales Growth	Margins	WACC	Target Price
Benchmark	Industry average 4%	Industry average of 23% EBITDA margins.	8%	\$\$
Innovation Mgmt	Clear innovation leader. Product portfolio is broad and possible application areas vast. E.g. BioAg could prove to combine the route to sustainable agriculture and a very attractive business opportunity. On the other hand, competitors are catching up and the trick is to bring innovation from 'academic' theory to commercially scalable practice. +3%	High value add but generally shared with and decreasing over the lifetime of the product. Constant reinvestment into R&D capabilities is required. +6%		+ 45%
Environmental Mgmt		Very ambitious reduction targets for its own footprint. Small benefit to cost structure.		+ 5%
Corporate Governance			Dual share class structure a negative, but large shareholder with long term vision a positive. Effects offset each other, no adjustment.	+0%
Total	7%	29%	8%	50% of our final target price relates to ESG factors.

Source: Robeco

A broad range of material topics | In analyzing companies, the top 10 most material topics in our portfolios range from innovation and governance (financial topics) to health & safety and climate strategy (figure 8). The ESG factors that are most material across the board are innovation management, corporate governance, supply chain management and human capital management. Combining environmental management and climate strategy would also put this factor firmly in the top 5.

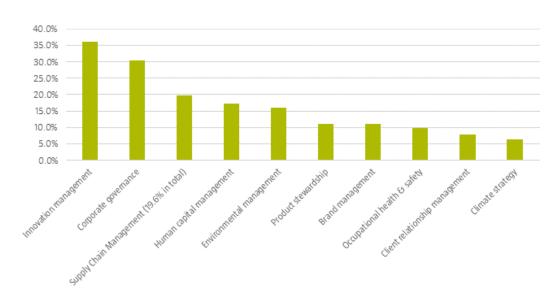


Figure 8 | Top 10 material ESG issues (in % of investment cases mentioned)

Source: Robeco

ESG opportunities are outweighing risks in valuation terms | As mentioned on an absolute basis on average 7% of the valuation of the companies analyzed can be attributed to ESG factors. When we simply take the average over the whole sample, we find that there is a skew to the upside as 4% extra upside is tied to ESG factors overall. This means that ESG factors are seen by our analysts as having a positive impact on companies value drivers (on average). So the opportunities seem to outweigh the risks, at least in value terms.

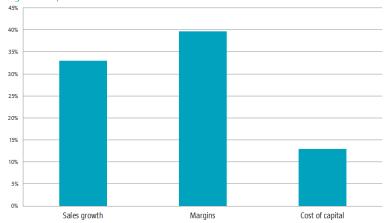
This is also clear when looking at which value drivers are being adjusted. Taking a risk perspective you would expect the cost of capital to be the main adjusting factor. However, this is not the case. In over 45% of the cases the analyst sees an effect on the profitability of a company and margins are adjusted accordingly. Mechanisms through which the analysts see improvement in profitability are for example:

- Good human capital management, leading to lower employee turnover
- Excellent operational management and energy efficiency
- Good supply chain management

All keep costs down and profitability up.

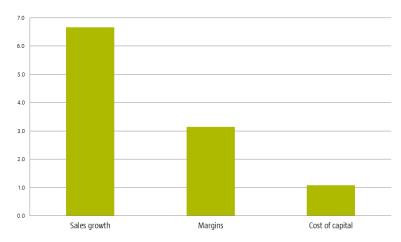
Sales growth is also often adjusted based on the ESG analysis. Good innovation management and having the right products and services in place to cater to changing customer preferences or changing regulation is adding to the conviction on a company outgrowing its market and peers.

Figure 9 | % of value drivers affected



Source: Robeco

Figure 10 | Ratio of upward/downward impact



Source: Robeco

Looking at the ratio of upward versus downward revisions to the value drivers, it turns out sales growth is mostly adjusted upwards, with a factor of almost 5.5 to 1. This ties in with the fact that innovation management is the most mentioned ESG factor in our research. Good innovation management is seen as improving sales growth, compared with competitors. Margins are also adjusted upwards more often than downwards. And the cost of capital is the only factor that shows equal amounts of upward and downward revisions. This is due to the fact that the cost of capital is often adjusted in cases where there are risks that are difficult to quantify, such as corporate governance issues or social issues such as data privacy.

ESG factors are seen by our analysts as having a positive impact on companies' value drivers (on average). They see more opportunities than risks. We will try to explain this phenomenon later on in this paper.

ESG as a The average operating measure of Return on Invested Capital quality for companies with high ESG valuation upside is more than four times the ROIC for companies with ESG downside.

> So, do investors underestimate the potential of using ESG information? In this chapter we try to answer that question.

Are we underestimating ESG risks as we find positive value in ESG? | There seems to be a common understanding that Environmental and Social issues tend to pose risks for a company, as does bad Governance. This notion manifests itself by the fact that many external costs (CO2 emissions, social licenses to operate) could be internalized in the future, leading to negative financial impacts. In the investment cases analyzed there is however a focus on opportunities. Are we missing the ESG risks? Possibly. But there are a few explanations as to why we find more opportunities than risks.

We search for opportunities | The first one is that equity analysts often look for companies that have good opportunities (as opposed to credit analysts that need to have a very good view on risks). In our investment process we look for companies with good cash flow generation and high Returns on Invested Capital (ROIC). We furthermore focus on large cap stocks. Research shows that there is a clear correlation between good ESG performance and size. Furthermore, many studies also show a positive relationship with traditional quality measures (stable profit, Return on Equity, operational profitability). With the focus that we have on large cap quality names, it is therefore understandable that we often find more opportunities than risks.

It is a relative game, we compare companies | In addition to this, stock selection is often a relative game: comparing one company with another. Again, as we focus on higher quality names, chances are these companies are better prepared for ESG risks and opportunities and they are adapting faster to changing consumer behavior and regulations than their peers do, giving them a competitive edge.

Case example: relativity in the food manufacturing sector | Overall, we have a negative stance towards the food manufacturing sector. Packaged foods are frequently unhealthy, driven by excessive use of cheap ingredients to prop up gross margins. Consumers are becoming increasingly aware of this and are moving away from highly manufactured products. This will impact sales growth negatively. This in turn will affect margins through negative operating leverage. Replacing cheap sugar, salt & fat to make products consumer-relevant again will further require margin investments by food manufacturers. We are underweight the sector yet invest in those names with a healthier product portfolio; those on the forefront of reformulation; those with significant R&D capabilities. As such, for the company in the example below, we assume higher growth rates and margins than we would otherwise have due to its better performance on innovation/health and supply chain management.

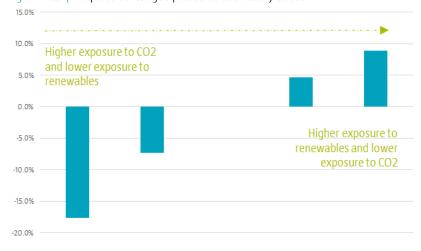
Figure 11 | Case example relativity in the food manufacturing sector

Value Driver	Sales Growth	Margins	WACC	Target Price
Benchmark	Food industry average 3.5%	Industry average of 16% EBIT margins.	7%	\$
Health හ Food Safety Mgmt	Exposure to better growth and healthier categories. Frontrunner in reformulation. +0.5%			+3%
Supply Chain Mgmt		Strong control over supply chain through longer term contracts leads to lower margin volatility through better commodity sourcing. Less accident prone vs peers. +0.5%		+5%
Innovation Mgmt	Significant investment into health related R&D, although capabilities are significantly underutilized. Some nice initiative such as fortified drinks to fight undernourishment. +1%	Products with a higher value add generally carry higher margins. +0.5%		+9%
Total	5%	17% with further ongoing continuous improvements	7%	17% of our final target price relate to ESG factors

Source: Robeco

CO2 heavy industries are the exception to the rule | Setting aside the average positive impact, for CO2 heavy industries the impact is clearly negative. In the energy sector, for example, the impact on the target prices in the investment cases are all negative, ranging from -20% to -2%. In the utility sector, the impact is more evenly divided over the names. As regulation management, climate strategy and energy efficiency are financially most material for this sector, it is obvious that utilities with high exposure to renewables warrant a positive adjustment and utilities with a high exposure to CO2 emissions clearly warrant a negative valuation adjustment.

Figure 12 | Impact on target prices in the utility sector



Source: Robeco

ESG as a confirmation of the sustainability of financial returns | Looking into the data more closely, we find that the average operating Return on Invested Capital for the companies with high ESG valuation upside (>10% tied to ESG) is more than four times the ROIC for companies with ESG valuation downside. We cannot say what comes first, the chicken or the egg. In other words, we cannot prove causality here; do companies that have high ROICs invest more in financially material sustainable solutions and projects, or can they invest more as they generate high returns in the first place? Either way, we know that good performance on financially material ESG issues marks a high quality company and most likely also good management. The ESG information thereby reinforces our view and helps us build conviction on the sustainability of the financial returns.

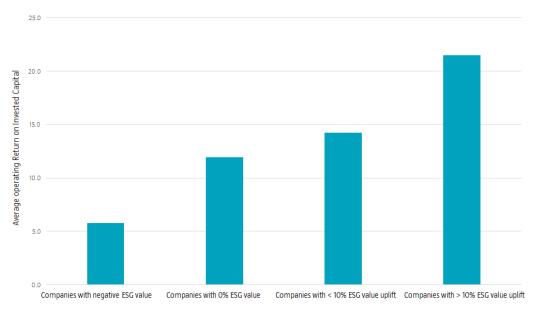


Figure 13 | Average operating ROIC per ESG valuation uplift bucket

Source: Robeco, Bloomberg

From this analysis we cannot conclude whether or not analysts currently underestimate ESG risks. However, there are many reasons why we find more opportunities than risks. What we can safely say is that it seems that CO2 exposure is a clear risk that is impacting equity valuations. Furthermore, incorporating ESG research into fundamental research gives insights into the sustainability of financials returns.

Performance ESG can make a positive and portfolio impact - but quantifying it can be hard. How do you split the sugar from the tea?

> And can you quantify the contribution it makes to stock performance when there are so many other variables.

In this section we look at the effect that FSG has on portfolio performance.

A plethora of research shows positive impact from ESG | Currently there is an overwhelming and still increasing amount of studies linking ESG scores, specific ESG factors, SRI strategies and many other sustainability related factors to financial performance. Most research shows that using some kind of SRI approach does not significantly detract from the investment return, and many show that there is some added value on a risk/return basis⁷. Some studies show that focusing on material ESG issues actually leads to improved financial returns for companies and stock returns for investors⁸. There is a clear distinction between SRI and ESG integration, stemming from the differences in investment goals (values or value based) and this shows in financial returns⁹. This research is the basis of our investment belief that taking into account financially material ESG issues makes for better informed investment decisions. Impact on performance is another issue.

How do you split the sugar from the tea? | Often we are asked by our clients to show the contribution to the performance from our ESG integration. In this paper we show what the ESG impact is on the valuation of companies that we research in our investment process. So we can give an idea of the magnitude the analysis has on our valuation work. However not all companies that are analyzed make it to the portfolio. And for those that do, many factors influence the decision making and the performance of the stock in the portfolio. What determines the share price movements of oil companies, for example; is it the debate about stranded assets, or the oil price? ESG integration is like a cup of tea. If you add sugar to the tea, it will taste sweeter and better. After stirring, it is however very difficult to attribute the resulting taste to the tea or the sugar. It is impossible to make a clear performance attribution to the ESG factors.

Case example: true integration at a consumer company | Fundamental and sustainability factors are often extremely intertwined and reinforce each other. In the home ${\mathfrak S}$ personal care sector, product quality & safety, brand and innovation management as well as supply chain management are factors of significant importance – be it from an economic or sustainability perspective. This strengthens our belief that the analysis should therefore also be an integral one. In the example of the company below, every single innovation launched needs to have a sustainability advantage but is equally required to bring an uplift to margins. Because sustainability is so integrated into product design and life cycle, the company is not able to specifically show the economic value add of their sustainability leadership. Also note that the company is able to provide a value add to consumers with its more environmentally friendly portfolio but consumers show only a limited willingness to pay for it. The margin and

 $^{^7}$ G. Friede, T. Busch & A. Bassen (2015) ESG and financial performance: aggregated evidence from more than 2000 empirical studies, Journal of Sustainable Finance & Investment, 5:4, 210-233

⁸ Khan, Serafeim and Yoon, 2015, Corporate Sustainability: First evidence on materiality, working paper Harvard Business School.

 $^{^{9}}$ Derwall, Koedijk, Ter Horst (2011) A tale of values-driven and profit-seeking social investors, Journal of Banking & Finance

sales uplift we assume is therefore limited. Also, we assume continued reinvestment in R&D, which we consider to be highly crucial in a world of ever more demanding consumers.

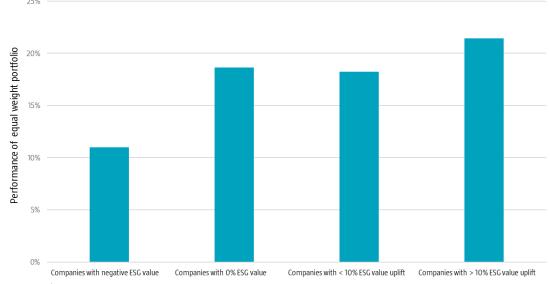
Figure 14 | True ESG integration & need for continuous reinvestment

Value Driver	Sales Growth	Margins	WACC	Target Price
Benchmark	Category growth of 4.5%	Industry average of around 16% EBIT margin in 2016.	7%	EUR
Fundamental Adjustment	Historical growth of $^{\sim}3\%$, guidance of 3-5% combined with Henkel's slightly weaker positioning, brings us to a base case of 3% .	Slightly lower margins due to lack of scale and #1 or #2 positions. A negative 200bps adjustment results in a 14% EBIT margin in the base case.		-27%
Brand and Innovation Mgmt	Strong R&D. New products need to have sustainability benefit. +0.5%	Higher value add and performance generally commands higher margins as well. +0.5%		8%
Supply Chain Mgmt		Simplification, standardization and smooth, agile processes lead to scalable platforms and thereby improve margin delivery. Strong supplier monitoring/lifecycle analysis. +2%.		13%
Cash and Capital Mgmt			Low dividend payout. Family ownership is a positive in the sense that it supports a long term focus. Generally value creation through M&A. No adjustment.	0/0
Total	3.5%	16.5%	7%	20% of value comes from ESG related factors.

Source: Robeco

Performance of ESG valuation | As mentioned earlier, many factors influence the decision on whether or not a stock is added or sold from the portfolio. A clear performance attribution is impossible to make. What we can show is that if we build four equally weighted portfolios based on the ESG valuation impact (negative, no impact, <10% impact and >10% impact), we find that over the 2014 to 2016 period the portfolio with the large positive ESG impact outperformed the one with the negative ESG value by about 10%. In the middle of the pack, there is no clear performance differential. We need to note that we did not adjust for size, sector, regional or factor biases in this relatively small sample and we already noted that there is a link to Return on Capital. So even though we have to be careful in drawing conclusions, this analysis does give us some comfort that integrating ESG into our valuation work adds value for our clients and calls for further analysis.

Figure 15 | Performance 2014 to 2016 per ESG valuation uplift bucket



Source: Robeco

Two worlds It is said that 'one only colliding loves what one knows' and that means embracing ESG research. However, it tends to be isolated from other ways of looking at companies.

> In this final section we look at how sustainability analysis needs to become part of normal work routine to become mainstream.

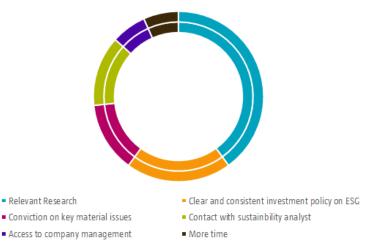
ESG research is still isolated from 'normal' fundamental analysis | The number of people that have a sustainability focus has grown tremendously over the years. Many asset managers have built teams to conduct voting and engagement and feed ESG information into the investment teams. Brokerage houses have also started producing vast amounts of ESG research. What seems to remain the same is that this information - while widely distributed – is still mostly read by ESG specialists and some analysts and portfolio managers. Topics are wide-ranging and plentiful. We read a lot about investment opportunities arising from the 2-degree scenario for climate change, corporate governance in Asia, and the topfive sustainability trends for 2017. Yet this mainly remains isolated from 'normal' fundamental analysis.

Analysts can only spend their time once | The fact that this top-down ESG research is still hardly being read by 'mainstream' financial analysts, is quite understandable considering that their raison d'être is to make a good return for their clients. If they do not, they lose clients and eventually their jobs. Furthermore, as most analysts focus on a specific sector or industry, ESG overview papers are too general for them. In addition, financial analysts can only spend their (research) time once, and their priority often goes to what is immediately financially relevant. ESG information gets lost in the vast excess of information that is being thrown at them.

To make it work-relevant research is the single most important factor | A brief round of inquiry at the Global Equity team shows (in figure 16) that in order for the team to be able to properly integrate ESG, the single most important factor is having access to relevant research. And relevance means there needs to be a link to financial performance; it needs to be tailored to the investment process, and the markets need to be not pricing in this information already. Such company-specific research is highly differentiated, and so it often brings unique information to the surface that gives us further conviction in our investment decision. Being close to the sustainability research analysts makes it possible for Robeco's financial analysts to receive research that is tailor-made to their investment needs.

Figure 16 | Ingredients to make it work

Relevant Research



Source: Robeco

A clear and consistent framework for ESG integration helps | Besides a clear investment philosophy - we integrate ESG because we believe it improves our investment decisions – a clear framework that is embedded in the investment process is key. Each investment process is different. The integration framework should be tailored to the way of working of the analysts and portfolio managers. Setting up the right framework can be done by the investment team itself with the help of a specialist.

One loves what one knows: getting conviction on materiality | As sustainability topics are to a large extent not addressed in the traditional financial analysis analysts pick up at university or in financial post doctorates, it takes some time to get acquainted with the ESG issues at hand. In our experience, however, investing time in these subjects pays off. Asked as to why our analysts integrate ESG into their analysis, there were two reasons only one analyst mentioned, namely that it is important for our clients and that it is part of our investment process. By far the main reason was that the information adds value to the fundamental analysis, more specifically it:

- shows risks and opportunities for long-term returns on invested capital and cash flow generation
- is an indication of the sustainability of the business model
- gives better insight into a company's risk profile, the type of risks we normally would not analyze (supply chain for example)
- gives an indication of the company's culture
- gives information on the extent to which certain management information is available within companies
- can (partially) explain why a company has a better return profile than its competitors

- shows in a peer comparison which companies have their processes in order, which in turn creates more value
- gives better insight into whether management incentives are in line with long-term company strategy and goals

Engagement helps to gain more insight | Even though the analysts have access to leading ESG research from RobecoSAM, transparency can still be an issue. Engaging with companies can be a good way of getting more insight into the sustainability profile, policies, performance and strategy. For the global equity strategy an integrated active ownership approach is in place, to further enhance the ESG information in the investment case and the research process, and to encourage companies to improve their ESG performance, improving portfolio performance in the long run.

Figure 17 | Three key pillars to integrating sustainability



Source: Robeco

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