DWS

Marketing Material

ESG Integration

Sustainability is multi-layered, complex and subjective. There are very different interpretations of what sustainability is and is not. Also, the variety of available data and its evaluation by different rating agencies differs greatly in many cases – depending on how ESG factors are weighted and standardised and the theoretical basis behind their combination. Dennis Haensel, Global Head of ESG Investment Solutions and ESG Advisory, talks in this interview with Bastian Werth, the DWS expert on big data, and Niklas Heidenreich, a Senior Product Specialist from the ESG Advisory Team, about the integration of ESG into investment strategies.

Q: Dennis: In the ESG Buzz 'Smart data & smart integration' we've already talked about the DWS ESG Engine and its data processing capabilities. But can you please explain again what the ESG Engine is?

BASTIAN With our DWS ESG Engine we pull together a variety of data that is offered in the market by different providers on different topics and then structure and process it so that it can be used in the investment process. A big part of our job as asset managers is to extract from the raw data the information and insights that add value, and that's what the ESG Engine does in the area of sustainability.

NIKLAS It is exactly the information that Bastian just mentioned that is available as non-financial information to all portfolio managers, analysts and other investment specialists when assessing risk and can thus be incorporated into the fundamental analysis of a company, , i.e. what is commonly referred to as ESG integration. In addition, of course, the data can be used for dedicated ESG strategies that set a clear sustainability focus with specific targets.

Q: Dennis: Who decides the objectives of the DWS ESG Engine? For example, which data points should be used, which data providers we source the data from, and which aspects are the most important?

NIKLAS The actual methodology is decided by a panel of experts, including specialists from the ESG Engine team and our Responsible CIO Office, as well as asset

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class specialists such as portfolio managers or analysts. With the help of the asset class experts in particular we try to ensure that the data-driven ESG signals are also in line with the assessment of our experts who know these markets or asset classes inside out. To give a concrete example, at the end of 2020 we published a so-called climate transition risk rating for sovereigns and we discussed and cross-validated the preliminary results of this climate transition risk rating with the asset class experts for emerging market bonds. Their assessments from the market then mirrored what we saw in the data.

BASTIAN Especially with new topics, it's not clear at the beginning what to do. To give an example: in 2015 the United Nations came up with 17 so-called sustainable development goals that specifically define which business activities or products are to be considered sustainable. These goals have quickly become popular. They have also been picked up by data providers who have then studied companies and asked what these companies contribute to the sustainability goals.

In some cases, it's very clear. For example, in the case of a manufacturer of wind power, you can credit 100% of the wind turbine to Goal 7 - Affordable and Clean Energy. In other cases, it's not so clear. For example, Goal 2, ‚No Hunger', generally has food manufacturers in its scope. But does this mean all foods – including those that are high in sugar or fat – or just certain foods? And this is where our panel of experts comes in. In the first step, we ask ourselves – 'is there any data at all on this?' In other words, do I have data on the nutritious or the sugary products of a company, or am I perhaps just making assumptions? And in the second step, we ask ourselves how we can make sense of this data and use it in an investment strategy.

Q: Dennis: What step does an investor have to take to incorporate these sustainability criteria into his portfolio?

NIKLAS Before they are incorporated into an investor's portfolio, you have to first understand and accept that there is no gold standard for incorporating ESG criteria into an investment strategy. Various initiatives are already working on this, but it is not an easy task because sometimes very different aspects of sustainability have to be included. What is and what is not sustainable remains a very subjective assessment.

What we do observe, however, is a certain consolidation in what is understood by „sustainability". This is driven not least by regulation. The implementation of sustainability is a process in which you have to regularly check whether the targets you are aiming for are still up to date and whether new data is available with which you can then map sustainability targets that you could not map before.

There is no gold standard for incorporating ESG criteria into an investment strategy. What is and what is not sustainable remains a very subjective assessment.

BASTIAN What surprises many investors again and again is that the data providers sometimes come to fundamentally different assessments. You find an assessment from one agency that a company is particularly sustainable and another agency reports that the same company is particularly bad in terms of sustainability. Why? The agencies sometimes have different assessment approaches. What is also important is how it is produced: the extent to which people conduct research, or if artificial intelligence is at work. Another distinction is whether the company has behaved well in the past and also how well it is positioned for the future. Different points of view can be taken on all of these questions, which then lead to some very different results.

These are the challenges implementing ESG and you have to deal with the diversity of opinion in a meaningful way.

NIKLAS If a company does not have a sustainability strategy – for example, because it has not yet developed its own sustainability guidelines, which can then ideally be transferred to the capital investment, or because it does not want to go to the trouble of creating extra guidelines from scratch – then it is best to take a market consensus on sustainability as a starting point. From there an investor can then check concretely whether individual approaches should be adopted, modified or completely discarded. In our experience, discussions become more constructive when the ideas are more concrete.

Q: Dennis: Is there already a market consensus?

NIKLAS Unfortunately, there is no market consensus yet from individual associations or index providers. You have to work very hard to find that. There are many associations, index providers and also asset managers who provide information about their implemented ESG framework. Especially for index providers such as MSCI, the index methodologies are publicly available so that they can be compared. However, this has not generated a consensus approach. This is due in particular to the fact that the index providers publish different gradations of ESG variants, which makes the process more difficult. You can also look at the various ESG certifications, such as the FNG label in Germany, or the Austrian Ecolabel. Or you look at Fund Ratings – for example there's a sustainability rating from Morningstar. And then when you have looked at all of that you can check the underlying criteria and also find overlaps on which criteria are applied, for example, or which implementation is applied.

BASTIAN The oldest and simplest way of incorporating ESG criteria in the investment process is to exclude certain companies. These can be companies that produce certain controversial products: for example, internationally outlawed weapons such as cluster munitions or anti-personnel mines, or tobacco or fossil fuels. Of course, this is also a subjective assessment. If you follow the discussion about nuclear power in the European Union you will see that there is no consensus. There are countries like Germany that are in the process of phasing out nuclear power, and there are countries that are rather proud of their nuclear sector, like France. We find similar subjectivity every day in discussions with our customers. What one customer finds controversial, another customer may find ok.

In addition to these controversial sectors, we traditionally also look at whether companies act in accordance with international conventions and standards, such as the UN Global Compact, the ILO standards or OECD guidelines. Unfortunately, there are always negative examples, such as badly maintained production facilities that have collapsed, pipelines that are laid through indigenous territories without proper dialogue beforehand, or cases of bribery or corruption. However, these past incidents don't show if a company has addressed these issues and is already transforming its business strategy.

NIKLAS There is, of course, also the possibility of looking forward. This forward view is typically mapped through a company's objectives, such as whether to increase diversity in management or link board compensation to sustainability goals. However, indicators are also considered that show what a company is already doing in concrete terms to make its business model climate-friendly. This allows a company to be compared to its competitors and, for example, to exclude those that are falling far behind. Important for this assessment for the investment context is whether there are gradations. Have the goals only been roughly formulated, or have they already been quantified? If they have been quantified, are they ambitious or rather average? And it's through that granular detail that you can make investment decisions.

Q: Dennis: Now you both described how to exclude companies that violate different criteria. Are there also examples of positive evaluation?

NIKLAS The original idea of ESG comes from exclusions. But with some assessments, it's just looking at a coin from two sides. For example, there are so-called best-in-class ratings. This is where companies are ranked within their reference group – that could be the industry or country or both, for example – and then a relative ranking is created. And once you have that ranking, how to apply it is up to the investor. With the negative view, the investor could say he excludes companies that are in the bottom 20% of that ranking or underweights them. Similarly, you can also turn the tables and say that you overweight companies that are in the top 30% or 40% of this rating or even set up a strategy that only invests in the top 30% or 40%.

BASTIAN A positive indication is always when a company takes sustainability seriously. For example, you can look at whether sustainability is represented on the board of directors, with a board member directly responsible for the topic. You can look at whether the company sets itself measurable sustainability goals: whether it has itself audited by an external provider, for example. And in this way you can also find companies that excel in terms of sustainability.

I mentioned the United Nations' sustainable development goals earlier, and you can also select companies that contribute to these goals and develop an investment strategy based on them. There are a variety of thematic strategies that deliberately invest in certain industries, for example; companies that provide technological solutions to climate change.

Q: Dennis: That means that an investor needs to be clear in the beginning about their guidelines and to what extent they want to avoid ESG risks in their portfolio. What is the next step an investor needs to take?

NIKLAS There are cases where the investor's background already suggests certain sustainability goals. Good examples are foundations or churches. When it comes to the actual implementation, one should then pay attention to the specifics of the asset class. For example, if an investor in government bonds wants to exclude countries that practise the death penalty. This will have relatively little effect if he invests in European government bonds because the death penalty has been abolished in Europe. However, if he invests in a global investment universe this changes, as the two largest markets suddenly disappear.
In the end we see that very often a mix of the previously described forms of implementation is chosen, a combination of exclusions and best-in-class approaches, with overweighting and underweighting. And this is also how DWS's ESG standard looks. A best-in-class rating provides the basic framework. Based on that we remove companies that violate certain standards from the portfolio.

What are these exclusions? We exclude companies that:
- violate internationally recognised norms such as on human rights or labour rights
- produce outlawed weapons, which include cluster bombs and anti-personnel mines
- generate sales in so-called controversial sectors, including tobacco or gambling, or which have very high climate risks.

BASTIAN The next point is then how broadly you want to define these criteria. Let's say I want to exclude tobacco and armaments. In the case of tobacco, the consideration is quite simple, because there is no doubt about what a tobacco product is and who produces it. With armaments it is not quite so simple. There are companies that mainly produce armaments, but there are also many globally active industrial companies that produce components or parts that are then built into more complex weapons systems by an armaments company at the next stage. This means that it can make a difference if I allow a share of sales of up to 5% to a weapons company or a share of sales of up to 10%.

If a company supplies a component to a defence company and the defence company uses it in a weapons system, you have to look at whether this component is essential for the weapons system or whether the component could simply be used in civil aviation.

And to stay with the example of armaments: if a major industrial company supplies a component to a defence company and the defence company uses it in a complex weapons system, you have to look at whether this component is essential for the weapons system or whether the component could simply be used in civil aviation. Does the company report how many of the components it sells to defence contractors and how many it sells to civilian contractors? This is not always directly obvious, so even in such supposedly objective areas you come to a point where you have to estimate the share of sales.

Q: Dennis: Who does this estimation?

BASTIAN The designated data providers look at the annual report, then combine the statements made there with newspaper reports or with other company publications and then make an estimate, using that figure as a baseline. They can then say with relative certainty that the company definitely has no more than a 5% share in armaments, but whether it is 2.2% or 2.5% cannot be determined precisely. But that would not be relevant if you apply a 5% threshold.

NIKLAS Once these criteria, including their thresholds, have been defined, investors often ask what impact this ESG strategy has on the basic profile of their investment universe. Do certain industries or companies from certain countries become less investable? Do sustainability criteria shift systematic risks at the portfolio level? We also often get questions, especially when strategies are managed against liabilities, about whether long-dated corporate bonds are then still investable, i.e. in the context of so-called asset-liability matching. These are all discussions that have to be clarified in the actual implementation.

Q: Dennis: Let me summarise briefly. At the beginning, the investor defines what his or her criteria are. You are then in a position to give the investor transparency about the corresponding risks and also to recommend how strongly to set this respective limit.

Let's move on to a very specific topic – the climate. This troubles many of our customers. How can an investor take climate risks and opportunities into account in their investment strategy?

BASTIAN With our DWS climate ratings. What's important here are both quantitative and qualitative metrics. Quantitative indicators are those that can be easily measured, such as the carbon intensity of a company, i.e. how much carbon a company emits compared to its sales. Qualitative indicators are those that show, for example, whether the company is aiming to increase its share of renewable electricity. The climate topic is very complex. Looking at just one parameter and thinking about how to optimise that is often not enough.

NIKLAS This complexity is actually also transferred one-to-one to the implementation of the investment strategy. There are many possibilities. Popular are, among others, rules that aim to improve the CO_2 intensity compared to the benchmark. If necessary, these can of course also be combined with exclusions of high carbon-intensity companies.

In the end, however, it is really about reducing the global CO_2 footprint in order to limit further global warming as much as possible. There are several paths and choices to achieve this goal. One is, for example, a gradual reduction of CO_2 intensity on a portfolio level or an immediate implementation with a reduction of 30, 40 or even 50%.

> It is important to understand that there are different types - so-called scopes - of carbon emissions related to the value chain of a company.

Q: Dennis: Can you explain how we calculate the carbon footprint of a company?

BASTIAN First of all it is important to understand that there are different types – so-called scopes – of carbon emissions related to the value chain of a company. Let me give you a simple example. Company X operates a factory somewhere on a greenfield site. Components or raw materials are delivered there and go through a production process and in the end finished products emerge.

The emissions that occur in the production process are the so-called Scope 1 emissions. They are those that Company X itself emits directly on its own premises.

Company X also consumes electricity to run its machines. This electricity generation produces emissions. These are counted as so-called Scope 2 emissions.

The components that Company X processes were also manufactured somewhere and emissions are also produced in this manufacturing process. These are counted as so-called Scope 3 upstream emissions.

Last but not least, the products the company manufactures will be used and may emit CO_2 while in use. For example, if Company X manufactures cars, the cars will later be driven and emit CO_2 in the process. These are the so-called Scope 3 downstream emissions.

And then there is another often neglected type of emission, the so-called avoided emissions. For example, if our Company X manufactures wind turbines and sells these wind turbines to an electricity producer, the electricity producer uses them to reduce the load on its coal-fired power plant. Then the emissions that the coal-fired power plant does not emit as a result are counted as avoided emissions.

The further away the emissions are from the company, such as Scope 3 or avoided emissions, the more difficult it is to obtain reasonable data or to make reasonable estimates. But for individual industries these are exactly the relevant emissions that you must definitely keep an eye on.

NIKLAS To then incorporate the emissions into an investment strategy, these emissions need to be analysed further. As a general rule, a company emits more emissions the bigger it gets, and in order not to penalise companies for their sheer size, one should „normalise" or ‚adjust' emissions.

Two basic approaches have gained acceptance in the market. One is so-called CO_2 intensity, where you look at a company's emissions in relation to its sales. Another approach – which we at DWS call the carbon footprint – is to allocate the emissions to the investor as an owner in the company, i.e. either via the share of

market capitalisation held with the investment (in shares, for example) or via the share held in the total enterprise value.

BASTIAN This choice of decision-making framework is something that can irritate or frustrate newcomers. But it also has a considerable influence on how the investment solution looks afterwards. If I bought a low-carbon strategy a few years ago, perhaps an actively managed product, then the chances are high that it will only be based on Scope 1 and 2. That is, only emissions that occur directly in the company or in the generation of electricity. But now it is the case that, for example, only a moderate amount of emissions are generated in the extraction and processing of oil. If I exclude only Scope 1 and 2, I might keep big oil companies in my portfolio and end up with a low-carbon strategy that includes big oil companies, which is perhaps not really what I wanted.

Q: Dennis: So what is our recommendation?

BASTIAN Our recommendation is to always keep an eye on the entire value chain and to consider especially Scope 3 and avoided emissions.

Q: Dennis: Do you have an example of this process, where you started to define climate targets and reduce climate risks with the customer?

BASTIAN A good example is the Deutsche Bank pension fund with which we worked intensively to implement guidelines and criteria. It is often the case that the guidelines formulate in very general terms what is to be avoided – for example, investments in companies that are involved in controversial environmental practices. But what we need at the end of the day is a concrete warning or signal to the portfolio manager on whether or not to buy a stock. And you discuss that with the client, determine what the target is, maybe do one or two test calculations, and then eventually come to an implementation of these guidelines.

NIKLAS The Deutsche Bank pension fund example is really a good illustration of what we talked about at the beginning: that sustainability approaches in an investment strategy are not static but evolve continuously over time. That's exactly how we did it with the DB Pension Fund.

In 2020, as the desire grew to take greater account of climate characteristics in the portfolio, we in the ESG Advisory Team sat down with the DB Pension Fund team in several workshops. We went step by step through the process described earlier. We defined the issues and decided how we wanted to normalise them, and went through investment level analysis to see if de-investing in high carbon-intensity companies could impact returns in the bond universe.

By doing so we were able to show clearly, for example, that there was hardly any difference in bond yields between high and low CO_2 intensity companies and thus no impact on the calculated return of the portfolio was to be expected. At the end of 2020, it was decided by all sides that the CO_2 intensity of liquid assets should be reduced by 30% and that has already been largely implemented today.

Q: Dennis: Can you tell us how you calculated the CO_2 intensity?

NIKLAS The DB Pension Fund followed our recommendation to consider the whole value chain of the company i.e. Scope 1, 2 and 3 and avoided emissions.

Q: Dennis: Climate is currently a dominant topic. What could become important in the near future?

BASTIAN There are signs of which topics will become the next major ESG trend. One example is fair taxes, i.e. the question of whether a company pays taxes where it earns money. Or that the Covid crisis exacerbated social inequality. And if you've been following the media in recent months an exciting question is whether the blocking of user accounts by large Internet corporations should be seen as an infringement of freedom of expression or whether this is part of their responsibility to protect users from adverse / misleading / dangerous content --- a very thin border. Often enough, topics are also „shaken up" by scandals, so if, for example, a data protection scandal suddenly occurs because a social network has lost data somewhere, then the topic is suddenly more present in people's minds – and then perhaps they also look through their portfolio to see how it is positioned in this area.

Q: Dennis: Very quick question about our collaboration with the rating agencies. Are you able to approach them proactively as well?

BASTIAN We are in a constant dialogue with the rating agencies. Sometimes a portfolio manager comes to us because he cannot understand the assessment of a rating agency. And then we enter into a dialogue to clarify how

they arrived at that rating or to clarify the rating methodology in general. Typically, these agencies conduct market consultations to see whether their rating model still includes all current trends or whether it has blind spots – in order to eliminate them. And we are involved in a constant exchange there as well.

NIKLAS I think it is also important for all parties involved, the ESG rating agencies, us as asset managers, and of course also our clients, to keep your eyes on the ball with this topic. This is also quite exciting because we see that ESG criteria are also often reflected in social discussions, or represented in the media. We have already talked in detail about climate risks and I especially think about the Fridays for Future movement that was very dominant in the news before the Covid crisis. It's good to see appearing in the capital investment sphere something that is also prevalent in social discourse.

Q: Dennis: A time when we can dream of combining investment with doing something socially good. Finally, do you have any advice you would like to give our readers?

BASTIAN You should definitely address the matter with a certain level of expertise. For example, we have just seen through the Covid crisis that data is extremely important, for example data on daily new infections. But in order to derive action from that data – to adopt or not adopt Covid measures – that data has to be considered in context. To compensate for delays in reporting, you look at roughly the 7-day average here. You have data, but you have to approach this data with open eyes and expertise and work with it in order to be able to use it to arrive at meaningful decisions.

NIKLAS This expertise that Bastian just mentioned is a good example and I would like to bring up a fitting quote from Paracelsus – a 16th century physician – who said that medicine is not only science but also a bit of art. And through expertise and a sense of proportion, which are used here, maybe you can apply that idea a little bit to ESG.

Dennis: Thank you very much, Bastian and Niklas. We have learned that there is no gold standard. Investors should talk to us to define what their goals are. We can then review the relevant data and show the impact on investments to implement a personalised investment strategy together with investors.

I bid you farewell and hope to have you back for the next episode of ESG Buzz.

In the German ESG Buzz podcast series, experts provide answers on the topic of sustainable investing. The moderator Dennis Haensel is Global Head of the ESG Investment Solutions & ESG Advisory Team.

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