



HOW TAXONOMY-ALIGNED ARE ESG-STRATEGY FUNDS?

A practical example

Executive summary

The main purpose of this study is to show that even state-of-the-art sustainable investment funds tend to show low alignment with the EU Taxonomy – and that this has little to do with their sustainable qualities but stems from the way Taxonomy is itself currently set up. This is particularly relevant since investors will be confronted with low alignment portfolio share starting from January 2022 onwards and may be confused by the seemingly contradictory information. In order to achieve this task, we show the process of constructing an ESG-Strategy global stock portfolio and report on its Taxonomy alignment.

Our main findings are:

- Low Taxonomy alignment even for an ESG-Strategy portfolio applying minimum exclusions criteria, which shows substantially better sustainability features than a non-ESG-Strategy portfolio. Therefore, the EU taxonomy alone cannot be interpreted as a measure of the sustainable qualities of an ESG-Strategy portfolio.
- The main reason for low Taxonomy alignment is the current narrow framework of the Taxonomy, which focuses only on climate considerations, without addressing other key environmental and social dimensions of sustainability. In addition, for the time being it only covers climate risk mitigation and adaptation, two out of six environmental objectives, and only about one-third of macroeconomic sectors.
- While the lack of granular corporate disclosure is challenging for practitioners, in this study we find evidence that this drawback can nonetheless be overcome by estimations and proxies that address the current stage of Taxonomy related disclosure regulations.
- The Do Not Significantly Harm (DNSH) and minimum safeguards (MS) criteria are not significant barriers for Taxonomy alignment because such breaches can be partially screened out of an ESG portfolio that applies minimum social and environmental criteria.
- The German target market concept sets a practical standard to define sustainable financial products that can be used for portfolio construction purposes. In addition, the minimum exclusions criteria given by the German target market concept do not constrain investment and diversification opportunities. However, a national target market concept can result in 'gold plating' and so prevent the efficient cross-border distribution of funds.

In the near term, we foresee an increasing focus of regulation on developing technical screening criteria for the remaining environmental objectives, with additional social objectives gradually entering the scope of the Taxonomy framework. These developments are already planned for the Taxonomy regulation and are expected to come into effect starting in 2023. In the meantime, investors may be interested to learn that low Taxonomy alignment of an Article 8 ESG-Strategy portfolio is a predictable result which, however, may not, of itself, be an indication of poor sustainability features.

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1. Introduction

For investors, sustainability is one of the most important long-term investment themes of the century. Massive amounts of capital are currently being invested in sustainable funds. European sustainable funds have grown almost ten-fold in the past decade, from EUR 112 billion at the end of 2010 to EUR 1,101 billion at the end of 2020¹. The European Commission estimates an investment gap of 175 to 290 billion Euro per year to achieve climate goals until 2050, of which a considerable amount will be channeled through private investments, providing opportunities to the asset management industry. In order to achieve its sustainability goals, the European Union published its Action Plan in 2018 which aims to reorient capital flows towards sustainable investments, manage financial risks stemming from environmental and social-related issues, and foster transparency long-termism in financial and economic activity

One of the main building blocks of the EU Action Plan is the Taxonomy, which is a classification framework designed to determine whether an economic activity is environmentally sustainable. The purpose of the Taxonomy is to reorient financial resources to sustainable projects. This is done by disclosing the share of Taxonomy-aligned investments in a fund marketed as sustainable – which should increase demand for ESG assets. While the current focus of the EU Taxonomy initiative is about climate change, other dimensions of sustainability will gain more traction over the medium and long term. In practice, this process is challenging for investors because many public companies have yet to make relevant information available to investors in their company statements, let alone in a standardized manner, with business classification frameworks and granular data that allow investors to assess all issues related to sustainable investing. The current framework of the EU Taxonomy bases on the Technical Expert Group (TEG) recommendations published in its final technical report on the Taxonomy on March 9, 2020. Further development of the Taxonomy will be done by the Platform on Sustainable Finance. Although the EU has taken the first steps of defining a Taxonomy of sustainable activities, investors still face many challenges and open questions. The Taxonomy is a great effort with a big impact potential to foster sustainable investing, but in order for the Taxonomy to be assessed adequately, the concepts underlying the Taxonomy should be well understood by all market participants.

In this study we deal with the question of how aligned ESG-Strategy portfolios to the EU Taxonomy are. To provide insights to this question we have structured this study as follows: in chapter 2, we create an Article 8 ESG-Strategy global equity portfolio based on the FTSE World index as our starting universe, applying a sustainability screen, a best-in-class approach and fundamental analysis. We show that it is possible to construct portfolios with sound sustainability and financial characteristics. In chapter 3 we assess the Taxonomy alignment of our portfolio and show that even for a sound sustainable portfolio like ours, the Taxonomy alignment is very low. We provide evidence for the reasons underlying these results and state that the main source for low Taxonomy alignment is the current narrow framework of the Taxonomy Regulation. The second potential source of low Taxonomy alignment – lack of granular corporate disclosure – is largely overcome by estimations and proxies. Chapter 4 summarizes the main conclusions of this study.

We conclude that the current requirements of the EU Taxonomy alone are not necessarily a measure of the sustainable qualities of an ESG portfolio and the focus of further development should be on defining the technical screening criteria for all environmental objectives which will expand the list of sustainable economic activities. This expansion is already planned for the Taxonomy regulation starting from 2023. In the meantime, investors may expect the low Taxonomy alignment of an Article 8 ESG-Strategy portfolio to be normal and should not be associated with poor sustainability features.

¹ See Morningstar 2021, “European sustainable funds landscape: 2020 in review”.

2. Creating an Article 8 ESG-Strategy portfolio in practice

The main contribution of this report is to provide facts on how aligned sustainable products are – and can be – with the EU Taxonomy. With this purpose, we show the process of constructing a long-only global stock portfolio in this chapter and show how the implementation of a sustainability strategy in combination with minimum exclusions criteria results in better sustainability features for a portfolio. The EU regulations on sustainable finance are guiding actions of investors and therefore the following paragraphs aim to recall the main features of the EU regulation that deal with sustainable financial products and of the German target market concept for sustainable financial products upon we build to construct our Article 8 ESG-Strategy portfolio according to the Sustainable Finance Disclosure Regulation (SFDR).

2.1. Regulatory background

In order to reorient capital flows towards sustainable investments, the European Commission has developed the Sustainable Finance Disclosure Regulation (SFDR). It aims at increasing financial intermediaries' transparency duties to end-investors concerning sustainability risks and sustainable investment targets which came into effect on 10 March 2021. The SFDR differentiates two categories of products with sustainability features: the so-called Article 8 and 9 financial products. Article 8 products actively promote environmental or social characteristics; Article 9 products have sustainable investment as their objective. In addition, minimum transparency standards with regard to sustainability risk apply to all financial products under Article 6². The European Supervisory Authorities (ESAs) recently published a consultation paper on adjustments of the SFDR disclosures related to the Taxonomy Regulation. The purpose of the consultation is to have input regarding technical standards for disclosures by financial products investing in economic activities that contribute to an environmental objective as defined by the Taxonomy Regulation with the purpose to avoid overlaps between both regulations. The proposed standards provide further differentiation of Article 8 products according to whether these products also invest partially in sustainable investments alongside the ESG strategy³. Reporting Taxonomy alignment is required only for those Article 8 products that commit to making sustainable investments. In this study, we refer to this type of products, which promote environmental and social characteristics and aim for a share of sustainable investments within the framework of the ESG strategy.

The EU Action Plan also foresees to clarify the obligation for investment firms to advise clients on social and environmental aspects of financial products. In practice, this is a challenge since SFDR is formulated in very general terms and it does not provide concrete definitions and standards regarding sustainable financial products. In order to face this challenge, the BVI, the German Banking Industry Committee together with the German Derivatives Association proposed the German target market concept for sustainable financial products, which sets concrete standards for financial products in order to brand them as sustainable. Although the definitions still have to be finalized, the proposal sets a useful reference that can be used for portfolio construction purposes⁴. The following paragraphs summarize the standards for ESG-Strategy funds (based on Article 8 products according to SFDR).

ESG-Strategy (Article 8 products according to SFDR): Products that are committed to follow a dedicated ESG strategy and apply minimum exclusions criteria. In addition, the product provider has to follow a recognized industry standard⁵.

The sustainable minimum exclusions criteria for corporate⁶ issuers are detailed in Table 1:

² A detailed definition of the two types of sustainable funds can be found under the [link](#).

³ Details on the sustainable financial products disclosures proposed by the ESAs can be found under the [link](#).

⁴ We strengthen that the concept is not final yet. More details to the German market concept for sustainable financial products can be found under the [link](#) Mitteilung 23/2020.

⁵ Recognition of the UN PRI.

⁶ The German target market for sustainable products sets criteria for sovereigns as well. Since we are focusing on a global stock portfolio in this study, we do not contemplate sovereign exclusion criteria.

Table 1. Minimum exclusion criteria according to the German target market concept

Criteria	Threshold
Turnover from production and/or distribution of weapons*	> 10%
Turnover from production and/or distribution of controversial weapons (include anti-personal mines, cluster munitions, biological and chemical weapons*)	> 0%
Turnover from production of tobacco	> 5%
Turnover from production and/or distribution of coal	> 30%
Serious violations of UN Global Compact (UNGC)	

Sources: BVI, German Banking Industry Committee and German Derivatives Association.

* There is some debate as to whether nuclear weapons should be treated as banned weapons and the decision of excluding nuclear weapons remains a matter of the exclusion policies of the asset management company. For the purposes of this study, we decided to exclude nuclear weapons from our model portfolio.

The thresholds for the exclusions of tobacco (5% of company revenue), weapons (10%), controversial weapons (0%) and thermal coal (30%) are aligned with common practices⁷.

2.2. Construction of an ESG-Strategy portfolio – A practical example

To build an ESG-Strategy portfolio, we take the following steps:

- Define the investment universe and apply of sustainable minimum exclusion criteria
- Apply a best-in-class approach
- Apply a ‘value’ investing strategy
- Rebalance the sector and stock weights of the final portfolio

For the application of the sustainable minimum exclusion criteria, we use data from Sustainalytics’ Product Involvement Research and Global Standards Screening. We apply a screen covering five key areas: controversial weapons, small arms, tobacco, coal and global norms and standards.

For the purpose of implementing an ESG strategy we use Sustainalytics’ ESG Risk Ratings. ESG risk ratings bring together the dimensions of exposure and management to arrive at a single measure of risk, referred to as unmanaged risk. Unmanaged risk has two components: unmanageable risk, which cannot be addressed by company initiatives, and the management gap, which represents risks that could be managed by a company through suitable initiatives are not yet being managed. In the ESG Risk Ratings methodology, this risk decomposition framework applies to individual material ESG issues and a company’s overall ratings. In both cases, the extent of ESG risk facing companies is quantified as an “Unmanaged Risk Score,” which is in the range of 0-100, with 0 indicating no unmanaged ESG risk and 100 indicating the highest level of risk management. A company’s unmanaged risk score is calculated as the difference between its exposure score and its managed risk score⁸.

2.2.1. Definition of the investment universe and application of minimum exclusion criteria

We use the FTSE World Total Return Index as our investment universe for building our ESG-Strategy global stock portfolio. It covers 90 to 95 percent of the investable global market capitalization. The index has 2,568 securities as of November 2020, of which 2,532 are common stocks issued by 2,494 companies. In this study we only consider common stock. As we stated before, we follow the sustainability exclusion criteria of the German target market concept for sustainable financial products as the first step in the construction of our Article 8 ESG-Strategy portfolio⁹. Applying the

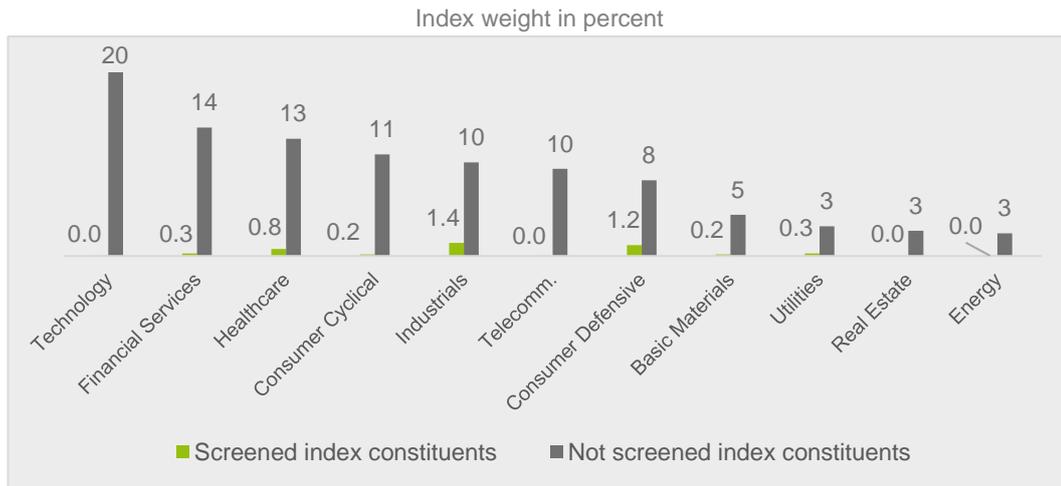
⁷ See Morningstar 2021, “European sustainable funds landscape: 2020 in review”, and Novethic 2020, “European green funds and the EU Taxonomy: the great challenge!”.

⁸ For more details see Sustainalytics 2018, “The ESG risk ratings: moving up the innovative curve”.

⁹ See Table 1 for the list of exclusion criteria applied for an ESG-Strategy fund according to the German target market concept for sustainable financial products.

sustainable minimum exclusion criteria results in the exclusion of 4.3% of the index weight (or 85 companies of 2,494). This is not much of an impact for the investment universe of the portfolio as can be seen by the small green bars in Figure 2.1. This aspect is important from the risk-return perspective, especially if we consider that integrating the sustainability dimension into the portfolio construction reduces investment and diversification opportunities further¹⁰.

Figure 2.1 Minimum exclusion criteria on the investment universe of the FTSE World Index – Sector allocation



Source: Morningstar, German target market concept, as of November 2020

The application of the exclusion criteria improves the sustainability characteristics of the investable universe. By excluding 85 companies, the weighted average ESG risk score is reduced from 22.3 to 22 – which is a marginal decrease of 2% and shows the effect of the German target market concept for improving the sustainable characteristics of an investable universe. This is because companies that are in sectors with high environmental footprints or exhibit some type of ESG controversy tend to have higher ESG risk scores.

The investment universe, after applying the sustainable minimum exclusion criteria, includes 2,447 securities from 2,409 different companies. In terms of number of issuers, it represents a reduction of only 5% with respect to the 2,494 companies in the starting investment universe.

Key findings:

- *The minimum exclusion criteria given by the German target market concept for sustainable financial products screens out 4.3% of index weight or 85 companies of the FTSE World Index, which has a minor impact on the investment universe.*
- *The application of the exclusion criteria according to the German target market concept improves the sustainability characteristics of the investable universe as evidenced by a reduction of 2% of the weighted average ESG risk scores of the investable universe.*

¹⁰ Underlying this rather simple statement is the fundamental law of active management, summarized in the expression:

$$IR = IC * \sqrt{Breadth}$$

It asserts that the value added of active asset management (IR) depends on only two key variables: the first, (IC) is the portfolio manager’s skills in selecting individual securities and the second (Breadth) is the number of independent investment opportunities. In other words, if one portfolio manager with the same skills of a second portfolio manager builds a portfolio with a higher number of securities, there is a high probability that the portfolio built by the first portfolio manager will outperform.

2.2.2. Application of a best-in-class approach

As noted above, there is no universal standard defining how sustainable portfolios should be constructed or what investing strategies are considered sustainable. However, most practitioners agree that ESG strategies (relevant for Article 8 products) refer to the explicit commitment to address ESG risks and opportunities as a central part of the investment process, including sector allocation and security selection. ESG strategies combine single approaches, such as best-in-class, while maintaining minimum exclusions criteria¹¹. Given that best-in-class is among the most common strategies for building a sustainable portfolio, we use this approach for the purpose of the portfolio construction in this study. The best-in-class approach guides the stock selection towards the best-performing companies of an industry with regard to their overall ESG risk ratings and has the advantage of keeping a broad investment universe.

In order to implement a best-in-class approach to our screened investment universe, we consider only the lowest quantile of the distribution of ESG risk scores by industry in our investable set of assets – i.e. companies with the lowest ESG risk scores in each industry¹². This approach allows us to focus only on companies with the best performance in the industry in terms of sustainability and make sure that there are enough investment and diversification opportunities in the investable universe. While this approach provides opportunities to invest in a wide range of economic activities, it also provides exposure to industries that have large ESG footprints. For example, Figure 2.2 shows that although the energy and utility sector exhibit higher ESG risk scores than the other sectors, there are still companies that can be included in the portfolio and contribute to diversification. Moreover, the sector average ESG risk scores of our investable universe after applying the best-in-class approach is lower than the sector average ESG risk score of the original index.

Figure 2.2 ESG risk scores of the investable universe and FTSE World Index by sector



Source: Morningstar, as of November 2020

This strategy reduces our investable universe to 1,011 securities from 993 companies, representing a reduction of 59% of number of issuers with respect to the previous step. Nonetheless, the investment universe is still large enough to construct a diversified portfolio. The weighted average ESG risk score of the investable universe is reduced considerably from 22 to 19.1, which means a reduction of 13% compared to the previous step.

¹¹ Besides the widespread best-in-class approach there are other strategies like ESG tilting which consists in assigning higher weights of securities with low ESG risk scores. A variation of this static tilting approach is to tilt the weight of securities for which ESG scores improve in time, which is known as ESG momentum.

¹² There are 138 industries represented in the 11 sectors in the FTSE World index.

Key findings:

- The best-in-class approach guides the stock selection towards the best-performing companies of an industry with regard to their overall ESG risk ratings and has the advantage of keeping a broad and diversified investment universe.
- Applying this approach, the weighted average ESG risk score of the investable universe reduces further by 13% from 22.03 to 19.10.

2.2.3. Application of a ‘value’ investing strategy

A wide range of approaches can be taken to develop an investment strategy, including fundamental, quantitative and other types of analysis that aim to achieve high market returns. Stock selection may be guided by a focus on value, growth, market capitalization or other points of interest. This study follows a fundamental approach for illustration and integrates financial datapoints at the company level, including price to fair value, profitability, and leverage. The Morningstar fair value is a proprietary discounted cash flow (DCF) model augmented with other forward-looking long-term analytical tools, including scenario analysis and in-depth competitive advantage analysis¹³.

Figure 2.3 Fundamentals of the investable universe

X vs. Y: Price/Fair Value vs. Leverage (left) and Price/Fair Value vs. ROE (right)



Source: Morningstar, as of November 2020

The aim of our investing strategy based on fundamental analysis is to identify sweet spots for investments in companies which are cheap, having relatively low market price while also being highly profitable and having low leverage. Drawing on data from Morningstar, we emphasize the current valuation of the stocks based on price to fair value data and use a financial leverage ratio and return on equity (ROE) to cover gaps in fair value data. We constrain the amount of investable assets again, this time on the basis of the fundamental data and we assign a maximum threshold of 1.5 for Price to Fair Value and 40 for leverage and a minimum of 0 for ROE. This can be seen in Figure 2.3. The choice of an investment strategy has unintended consequences on the weighted average ESG risk score of the investable universe. In the case of this illustrative value approach, the weighted average ESG risk score of the portfolio decreases slightly from 19.1 to 19 or 0.5% in relative to the previous step.

After applying this step, we end up with 475 stocks issued by 473 different companies from 103 industries and 26 countries. This basket of firms represents a reduction of 52% in the number of issuers concerning the previous step. Still, the portfolio includes enough securities and companies to offer investment and diversification opportunities.

¹³ For more details on the fair value model used in this report we refer to Morningstar 2015, “Equity Research Methodology,” under the [link](#).

Key findings:

- Different investing strategies like value, growth and others are compatible with ESG-Strategies and allow enough investment and diversification opportunities.
- The choice of an investing strategy has unintended consequences on the average ESG risk score of the investable universe. In this illustrative value approach, the weighted average ESG risk score of the investable universe decreases slightly by 0.5% compared to the previous step.

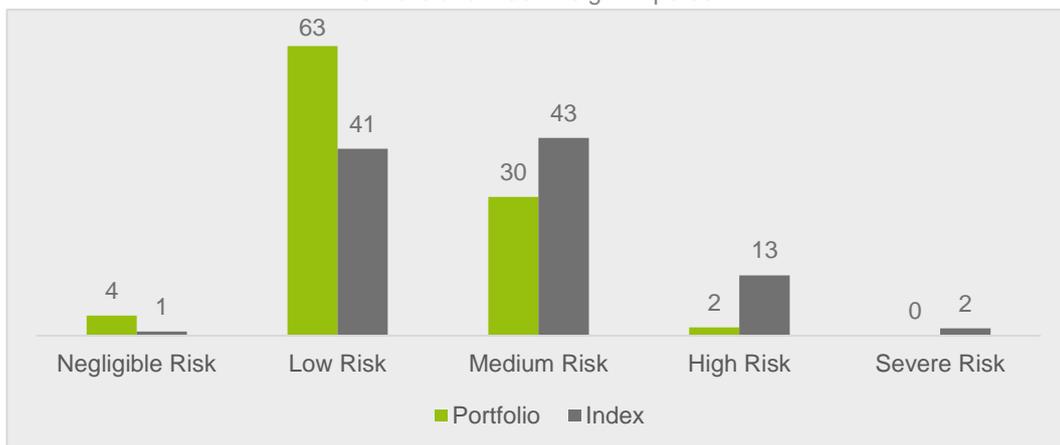
2.2.4. Rebalancing of the sector and stock weights of the final portfolio

The final portfolio is constructed based on a final investable universe of 473 companies identified in the previous steps. We base on these investable assets and construct our portfolio to minimize cluster risks at the sector and security level. For this, we take the reference of a sector weight of 9%, which is the equally weighted value and for the stock-picking we select stocks with sound financial fundamentals (cheap stocks, low leverage and highly profitable) and low ESG risk scores at the same time and set a maximum of 1% for the portfolio weight of every single security. So, we define our portfolio, by rebalancing the single name weights taking into account the three fundamental criteria mentioned in the previous step and the ESG risk scores. The final portfolio embraces 450 securities from 450 companies, which allows wide diversification and investment opportunities. We stress that this model portfolio is highly diversified as compared with actual global equity funds that have usually less than half securities in its portfolio than ours.

We previously stated that under SFDR, Article 8 products actively promote environmental or social characteristics. The critical question that arises at this point is how to put into evidence that a fund promotes such environmental and social characteristics. While the regulation does not provide any standards or guidance regarding this, one approach to consider is comparing the sustainability characteristics of a portfolio with a reference index. Our portfolio construction process – applying sustainable minimum exclusion criteria and the best-in-class approach – prepares us to make this comparison.

Figure 2.4 Final portfolio and FTSE World Index allocation by ESG Risk Categories¹⁴

Portfolio and Index weight in percent



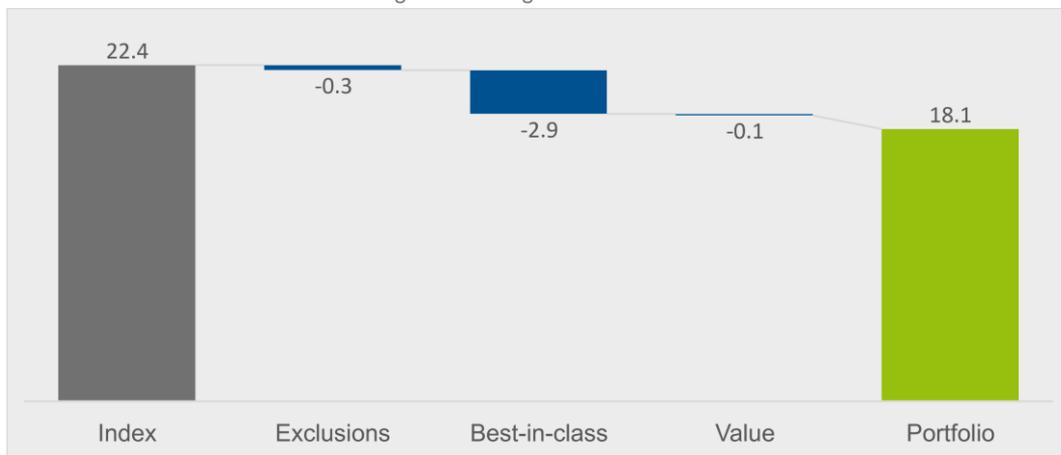
Source: Sustainalytics

In Figure 2.4 we observe that the portfolio has a lower ESG risk profile than the index since the index assigns more weight to companies with medium, high and severe ESG risk ratings, whereas the portfolio assigns higher weights to companies that have negligible and low ESG risk ratings. The portfolio excludes assets in the severe ESG risk category and limits exposure to the high-risk category to only 2%. In contrast, the index assigns 13% of its weight to these assets in the high-risk category and 2% to assets in the severe risk category. At this stage, the weighted average ESG risk score of the final portfolio is 18.1, a 19% reduction from the index’s weighted average ESG risk score of 22.3.

¹⁴ The thresholds for the definition of risk categories according to ESG risk scores is described in annex 5.2.

Figure 2.5 summarizes the steps so far and their effect on the sustainability profile of the investable universe. We see that the major improvement in terms of sustainability is given by implementing of the best-in-class approach which provides a marginal reduction of the weighted ESG risk score of the investable universe of 2.9 ESG risk score points or 13%. The minimum exclusion criteria are the second source of improvement in ESG risk as it provides a marginal reduction of 0.3 ESG risk score points or 2%. Based on these results, we can assert that our model Article 8 ESG-Strategy portfolio shows improved sustainability features compared to the original index.

Figure 2.5 ESG Risk scores in the process of constructing an ESG-Strategy portfolio
Weighted average ESG risk scores



Source: Sustainalytics

In this chapter, we have demonstrated that investors can apply minimum exclusions criteria together with a value focused investing strategy that incorporates ESG characteristics by following a best-in-class approach. With the new EU Taxonomy regulations taking hold, however, the alignment of our model portfolio with the sustainability criteria of the Taxonomy has yet to be assessed. We deal with these criteria in detail in the following chapter.

Key findings:

- *The implementation of an investing approach that takes into account risk aspects at the sector and security level by the portfolio construction reduces clusters risks. The implementation of minimum exclusion criteria together with an ESG-Strategy results in better sustainability features for a portfolio, i.e. a weighted average ESG risk score that is 19% lower than that of the market index. The application of both type of strategies result in an investment strategy that integrates key financial metrics and sustainable characteristics.*

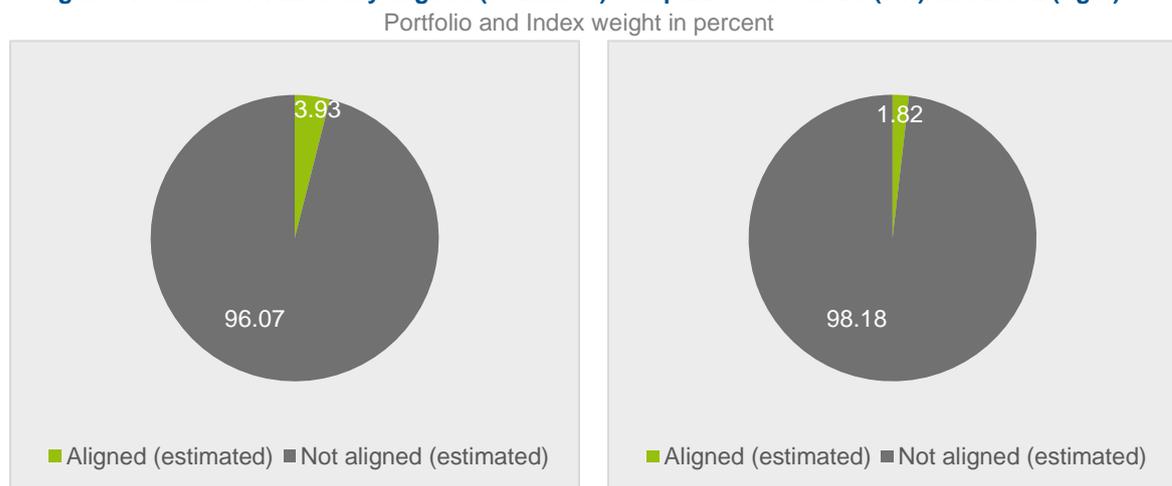
3. Explaining the EU Taxonomy alignment of an ESG-Strategy portfolio

At the time of writing this report the Taxonomy-related disclosures are still evolving. On March 15th 2021 the European Supervisory Authorities published a consultation in which investors are required to provide information regarding the share of a fund's portfolio that is aligned with the EU Taxonomy for environmentally sustainable activities starting in January 2022. On the 7th May 2021 the EU Commission published a new draft delegated act on Taxonomy disclosures, which requires the publication of Taxonomy-related KPIs for individual companies on the basis of Taxonomy 'eligible' activities instead of 'aligned' activities¹⁵. Although the final disclosure requirements at both levels are still open, this chapter shows that even for our model Article 8 portfolio, which exhibits relatively low levels of ESG risk, Taxonomy alignment is low. This result is due to the current Taxonomy's design, which is in an inchoate stage of development, making it impracticable to assess the sustainable quality of a portfolio. These results are not altered if we focus on the share of a fund's portfolio eligible revenues since the amount of green revenues as defined by the Taxonomy is also low.

3.1. Low EU Taxonomy alignment despite low levels of ESG risk

The left side of figure 3.1 depicts the results obtained from the Sustainalytics EU Taxonomy Solution regarding the Taxonomy alignment of our ESG-Strategy portfolio created in chapter 2. The results show that the level of alignment of our portfolio to the Taxonomy amounts to 3,93% of the portfolio weight, which is disappointingly low. The share of a fund's portfolio eligible revenues according to the Taxonomy is 8.4%, also low. At the same time, we observe that our portfolio exhibits higher Taxonomy alignment than the index (see right side). Higher portfolio Taxonomy alignment than for the index represents further evidence of sustainability soundness of an ESG-Strategy model portfolio. With the further extension of the catalogue of sustainable activities given by the further development of the Taxonomy and as more companies make better sustainability-related disclosures, we expect to see greater levels of alignment between Article 8 portfolios and the Taxonomy. Nevertheless, it is necessary to understand how a dedicated ESG-Strategy portfolio can end up with a Taxonomy alignment of a single-digit number.

Figure 3.1 Share of Taxonomy aligned (estimated) companies – Portfolio (left) and Index (right)



3.2. Taxonomy background – framework with limited scope at the current stage

The Taxonomy is a list of economic activities with performance criteria for their contribution to six environmental objectives. There are four conditions that an economic activity has to meet to be recognized as Taxonomy-aligned:

¹⁵ Eligible activities according the EU Taxonomy are the ones that contribute to an environmental objective and fulfill the technical requirements. Taxonomy aligned activities are Taxonomy eligible activities that additionally comply with the 'Do not significantly ham' principle and with the minimum social safeguards. Figure 3.2 illustrates these definitions.

- a. Substantially contributes to at least one of the six objectives
 1. Climate change mitigation
 2. Climate change adaptation
 3. Sustainable use and protection of water and marine resources
 4. Transition to circular economy, waste prevention and recycling
 5. Pollution prevention and control
 6. Protection of healthy ecosystems
- b. Comply with technical screening criteria established by the European Commission.
- c. Do no significant harm (DNSH) to any of the other five environmental objectives.
- d. Comply with minimum social safeguards (MS).

- **EU Taxonomy:** a classification framework designed to determine whether an economic activity is environmentally sustainable.
- **Substantial contribution:** criteria to assess whether an economic activity substantially contributes to a Taxonomy objective.
- **Do no significant harm (DNSH):** principle that states that an economic activity substantially contributing to an environmental objective should not significantly harm the other environmental objectives.
- **Minimum social safeguards (MS):** covering minimum requirements in terms of human and labor rights, etc., to be satisfied while performing a certain activity

The reporting disclosures in this study are based on the Taxonomy Regulation, the TEG recommendations in their final report, and take into account the proposals given by the European Supervisory Authorities (ESAs) in its recent consultation regarding Taxonomy-related financial disclosures. According to this consultation two of the key measures that will have to be published by funds marketed as sustainable are:

- The portfolio share of investments that are aligned with the Taxonomy as the main SFDR Taxonomy-related disclosure¹⁶.
- The share of alignment in 'own performance', 'enabling' or 'transition' or activities. Economic activities that make a substantial contribution based on their 'own performance' reforestation or the production of electricity from solar cells, for instance. 'Enabling' activities are economic activities that, by provision of their products or services, enable a substantial contribution to be made in other activities. Examples are the manufacture of low carbon technologies or the infrastructure for low carbon transport. The Taxonomy Regulation defines 'transition' activities as the ones that contribute to the goal of achieving a net-zero emissions economy in 2050 but are not currently close to a net-zero carbon emissions level. These activities must show evidence of an environmental risk management above average. In addition, the technical screening criteria for these activities are very stringent and will be subject to regular revision, approaching zero over time.

The current framework of the Taxonomy represents only a fraction of the envisioned scope, which likely explains a large part of our portfolio's low Taxonomy alignment:

- The current focus of the Taxonomy is on the environmental dimension of sustainable activities, letting aside any social aspect.
- Only two of the six environmental objectives are considered i.e. climate change mitigation and adaptation.
- The focus on the economic activities and sectors that have the largest environmental footprints, chosen in order to leverage the greatest emissions reductions, ensures that less than half of the EU macroeconomic value added and only about one third of the EU workforce are covered¹⁷.

A second potential explanation refers to data issues: for the Taxonomy assessment of our SFDR ESG-Strategy portfolio created in chapter 2 we use the aforementioned dataset from Sustainalytics' EU Taxonomy Portfolio Report, which aggregates company-level data from Sustainalytics EU Taxonomy Solution. Currently, it covers only the climate change mitigation objective and does not include transition activities. Substantial contribution is assessed using green revenue proxies for a substantial set of own contribution and enabling type economic activities¹⁸. Transition activities are not

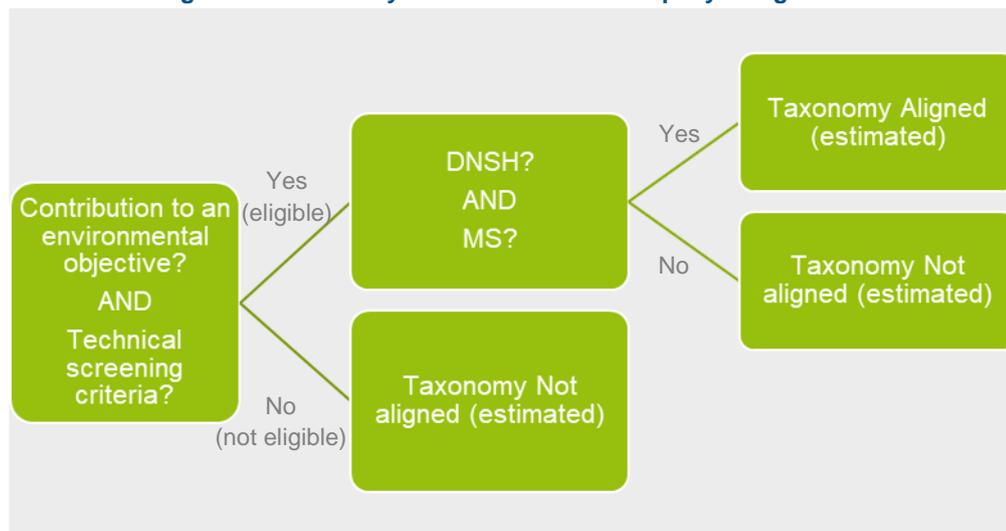
¹⁶ See Footnote 3 of this study.

¹⁷ See 2019 "TEG Taxonomy Technical Report", p 80.

¹⁸ The DNSH criteria are assessed leveraging Controversies Research in combination with Management Indicators. The relevant environmental indicators are mapped to the DNSH criteria and provide a clear assessment in case of significant events or low management performance in relation to environmental topics. Minimum safeguards are assessed using Sustainalytics Global Standards Screening which assesses compliance with international norms and standards

covered yet, either. Given the limited information provided by companies until Taxonomy reporting becomes mandatory in 2022 for a large group of companies, it is currently neither possible to provide a full picture of all activities of involvement, nor the associated revenues. In the absence of reported data, proxies are used¹⁹. Since the substantial contribution is assessed using green revenue proxies (in contrast to verification of actual data), for a significant set of economic activities it is only possible to refer to 'aligned' (estimated) and 'not aligned' (estimated) companies. Figure 3.2 illustrates the decision process and the company designations of the Taxonomy selection criteria used in this study.

Figure 3.2 Taxonomy decision tree and company designation



Source: Sustainalytics

3.3. The current EU Taxonomy set-up as the main reason for the observed low Taxonomy alignment of ESG-Strategy model portfolio

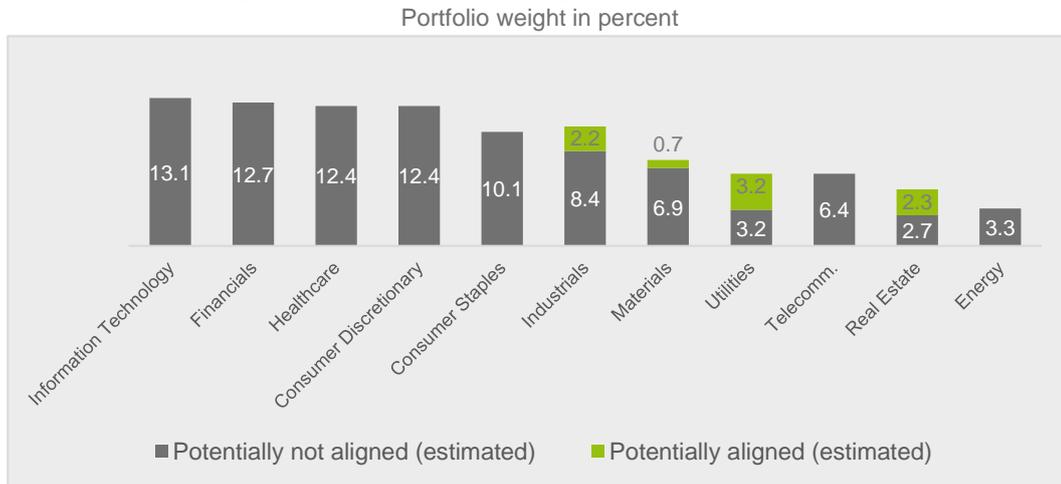
We now explain why the gap in the alignment of our model Article 8 portfolio with the Taxonomy is due largely to limits in the current definitions of the Taxonomy with respect to what counts sustainable economic activities. The scope of sustainable activities defined by the Taxonomy is so narrow that Taxonomy alignment of a sustainable portfolio can be expected to be very low.

Figure 3.3 shows that green revenues as defined by the Taxonomy (eligible revenues) for the climate change mitigation objective could only be determined in four of the eleven sectors in which investments are allocated: Industrials, Materials, utilities and Real Estate. For example, there is no manner in which companies in retail-related sectors including consumer discretionary and consumer staples can be Taxonomy aligned, because these sectors are out of the scope of the Taxonomy. This gap in sector coverage of the Taxonomy suggests that the limited scope of the Taxonomy activities is the most significant explanation for low Taxonomy alignment even for ESG-Strategy funds on the market.

such as OECD Guidelines for Multinationals, ILO standards, UN Global Compact. In addition, severe social or governance events not directly related to an international norm are also taken into account. For more details on Sustainalytics' EU Taxonomy Solution we refer to Sustainalytics 2021, "Methodology description: EU Taxonomy data", which is available for clients and on request.

¹⁹ See the annex 5.1 to this study which summarizes several studies on how practitioners assess Taxonomy alignment.

Figure 3.3 Taxonomy aligned (estimated) and not aligned (estimated) companies allocation by sector



Source: Sustainalytics

Key findings:

- *Low Taxonomy alignment of our model Article 8 ESG-Strategy portfolio likely due to the limited scope of the current Taxonomy framework.*

3.4. Major data gaps persist, but are not the main cause for low Taxonomy alignment

Another potential reason for low Taxonomy alignment is given by data issues, i.e. the lack of granular disclosure at the company level to make the Taxonomy assessment²⁰ creating limitations to the datasets that data providers can provide as well.

There are three core data issues at the current stage of the development of the taxonomy-related reporting:

- Lack of data on opex and capex
- Lack of data on ‘transition’ activities
- Missing data for small companies, non-listed companies and companies not based in the EU

Regarding opex and capex data, there is very limited reported data, particularly on opex. Therefore, estimations will be much more difficult to formulate for these two metrics than for revenues, which are currently widely used by practitioners. Since the climate change adaptation objective should be assessed using capex in many cases, current Taxonomy assessment tools are focused on the climate change mitigation objective.

Regarding the lack of data related to transition activities, the number of companies with aligned transition activities is extremely low, or even 0 for many sectors, because of the stringency of the technical screening criteria. This limitation is stated by the Joint Research Center (JRC) which calculated Taxonomy-aligned estimated coefficients in order to compute sector-level estimates where company-specific information is not available. For companies in transition sectors like for example, cement manufacturing, the coefficient is 0.03 (i.e. 3% of Taxonomy alignment for the whole cement manufacturing sector). For other transition activities, such as manufacturing of industrial gases, the coefficient is 0, i.e. 0% Taxonomy alignment²¹.

²⁰ Indeed, a study based on the FTSE Russell’s Green Revenues Classification System (GRCS), a database with green revenues, found a data gap because of lack of granular company disclosure to quantify Taxonomy alignment of 70% of a universe of more than 16,000 companies worldwide. See Adelphi and ISS ESG 2020, “Sizing the green economy: Green revenues and the EU Taxonomy”.

²¹ See the [link](#) to the JRC-estimated coefficients, page 170.

Other data issues also pose a challenge for practitioners like missing data especially for non-listed companies, small companies and non-EU companies. Many global investment funds have a big share of investments in Non-EU companies, like our portfolio (see Figure 3.4) and therefore this is a major issue for practitioners which is currently being addressed through estimations and proxies given by data providers. However, assessment methods of the established ESG rating providers differ significantly and data issues like comparability and reliability remain. This also represents additional costs for asset manager companies. In response to this problem, the EU Commission has recently issued a draft reform of the Non Financial Reporting Directive (NFRD) which is intended to create a uniform EU standard for corporate sustainability reporting. The directive will be renamed to Corporate Sustainability Reporting Directive (CSRD) and among other objectives, it will expand the group of companies subject to reporting requirements not only to companies based in the EU but also to companies from non-EU countries that are listed on an EU stock exchange. This draft marks a step in the right direction, however as mentioned before, major data issues like comparability, reliability and accessibility remain, not to mention that disclosures based on actual data would be available only starting 2023. The BVI has been advocating for compulsory and standardized electronic sustainability reports that can be accessed via a uniform EU data access point for a long time. Good, standardized and accessible data is a prerequisite for being able to comply with Taxonomy-related disclosures.

Figure 3.4 Model ESG-Strategy portfolio allocation by region

Portfolio weight in percent



Source: Sustainalytics

In summary, we find low Taxonomy alignment even for our model Article 8 portfolio. Therefore, the EU Taxonomy alone cannot be interpreted as a measure of the sustainable qualities of an ESG-Strategy portfolio. The main reason for low Taxonomy alignment of our model portfolio is the limited scope of the current Taxonomy framework. We do not expect too much contribution from improvements in Taxonomy-related disclosures if the Taxonomy framework is not extended. First, because revenues are more comprehensive metrics than opex and capex and allow the mapping from economic activities in the list of the Taxonomy's green activities to a company reported financial data. Second, improvements won't come from reporting on transition activities either since, as stated before, the number of companies with aligned transition activities is extremely low, or even 0 for many sectors, because of the stringency of the technical screening criteria. Third, the contribution of disclosures of small and non-listed companies is low compared to those of big companies, especially those based outside the EU, and this last issue is already reflected in our results accounted through estimates and proxies. Therefore, we see estimations as necessary at the current stage, if any portfolio alignment should be reported.

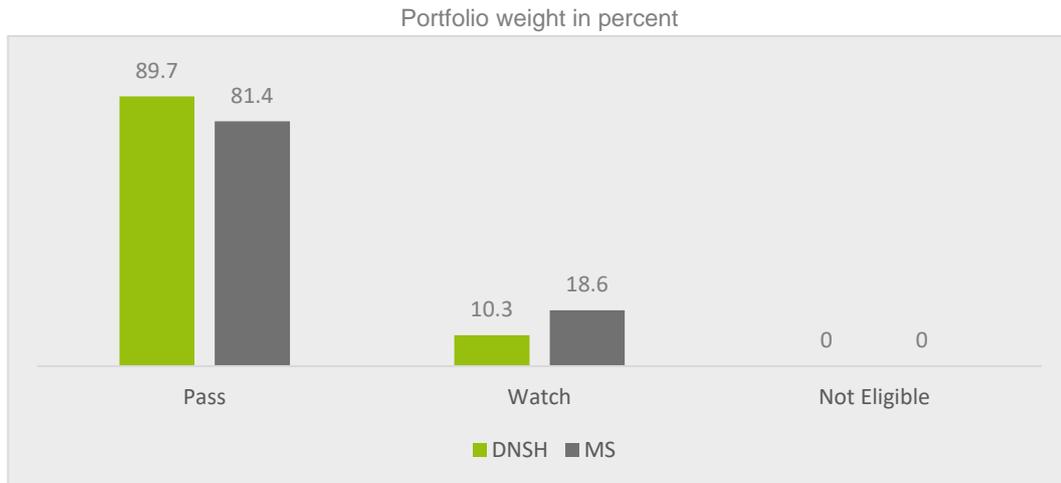
Key findings:

- *The lack of company disclosures is still very challenging for practitioners. However, estimations and proxies for green revenues are available and suggest that lack of data is not the main reason for low taxonomy alignment.*

3.5. The “Do not significantly harm” principle (DNSH) and minimum social safeguards (MS) alone do not account for low EU Taxonomy alignment

Now we turn to the results of the Taxonomy alignment assessment of our ESG-Strategy portfolio with regard to the DNSH principle and minimum social safeguards, which could also reduce the number of taxonomy-aligned companies (see decision tree in Figure 3.2). Figure 3.5 depicts the conclusions regarding the DNSH principle for the companies in our ESG-Strategy portfolio²².

Figure 3.5 DNSH and MS conclusions for a model ESG-Strategy portfolio



Source: Sustainalytics

The main observation in this Figure is that all assets in the portfolio, regardless of whether they are Taxonomy-eligible, pass the DNSH criterion (89.7% of portfolio weight or 400 companies). Companies in the ‘watch’ category are Taxonomy-aligned companies which are flagged for monitoring because they are subject of some controversy (10.3% of portfolio weight or 50 companies). However, they do not represent a breach to the DNSH principle. The reason behind this result is that, as we described in chapter 2, the sustainable minimum exclusion criteria had already screened out companies with severe sustainability-related controversies.

Similar to the DNSH conclusions, we see the majority of companies in our portfolio pass the MS criteria (81.4% of portfolio weight or 355 companies) and a small share of companies being flagged in the watch list, which does not represent a breach (18.6% of portfolio weight or 95 companies). Therefore, we can conclude that the DNSH as well as the MS criteria are not major sources for low Taxonomy alignment of our ESG-Strategy portfolio.

Key findings:

- *MS as well as DNSH criteria are not major reasons explaining low Taxonomy alignment.*
- *No not eligible companies explained by the application of the sustainability screen in the portfolio construction phase.*

²² In the context of DNSH and MS, a ‘pass’ conclusion is assigned to an activity that satisfies the relevant screening criteria without raising concerns. A ‘watch’ conclusion is assigned where no evidence of a breach is found, but there are signals that suggest additional caution. For more details regarding these definitions we refer to Sustainalytics 2021, “Methodology description: EU Taxonomy data”.

4. Conclusions

On the EU taxonomy

- With regard to the EU Taxonomy on sustainable economic activities, we find a low percentage of Taxonomy alignment of our model Article 8 portfolio even though it exhibits relatively low levels of ESG risk. This finding is in line with other studies (see annex 5.1). Therefore, the current version of the EU Taxonomy cannot be interpreted as the only measure of the sustainable qualities of an ESG-Strategy portfolio.
- We show that the still narrow scope of the current Taxonomy framework is the main source for low Taxonomy alignment: focus on environmental dimension of sustainable activities which excludes social aspects, definitions given only for two of the six environmental objectives i.e. mitigation and adaptation, for which the list of sustainable activities covers only 6 and 7 of 21 macroeconomic sectors for mitigation and adaptation, respectively, as well as the focus only on sectors with large environmental footprints.
- A second, albeit less important aspect is a significant gap of reported data, regards Taxonomy-related disclosures (estimated at 70% of the universe of global listed companies). This issue poses a challenge for practitioners while assessing the Taxonomy alignment of their portfolios, however proxies are available for the purpose of the study to overcome this drawback. Therefore, we see the use of estimations as necessary to assess Taxonomy alignment until actual data is available.
- We finally observe that the minimum social safeguards and the DNSH criteria are no major source of low Taxonomy alignment for our model portfolio. Portfolios constructed within the framework of the German target market concept, which sets the standard of application of minimum exclusion criteria, are expected to show few or no breaches to both minimum social safeguards and the DNSH in the reporting phase.

On the construction of sustainable portfolios and the German target market concept for sustainable financial products

- We show that sustainable portfolios can be constructed in practice. In addition, the application of minimum exclusions criteria from the German target market concept together with an ESG-Strategy ('best-in-class') results in a portfolio with advanced sustainability characteristics.
- In addition, the minimum exclusions criteria given by the German target market concept are defined appropriately to allow for wide investment and diversification opportunities.
- The application of minimum exclusion criteria together with an ESG-Strategy can be combined with other investing approaches either financial or sustainable as for example, value, growth, momentum or ESG engagement in order to enhance the risk-return and sustainable characteristics of the portfolio without worsening investment and diversification opportunities.

In a nutshell, we see the main focus of the regulation on developing technical screening criteria for the remaining environmental objectives so that the scope of the current Taxonomy framework can be expanded. In the meantime, investors and policymakers should not interpret the reported data on fund's Taxonomy alignment alone as a complete measure of sustainable qualities. Most importantly, with the market standards that currently develop in accordance with the Sustainable Finance Disclosure Regulation (SFDR) and the German target market concept, a meaningful framework for ensuring sustainable qualities is already available.

5. Annex

5.1. Literature Review

In this section we review the most prominent studies that deal with the implementation of the Taxonomy in practice and focus on the relevant results for the purpose of this study.

- **MSCI (2019): less than 20% of MSCI's green bond index and only 9% of the constituents of the MSCI All Countries World is taxonomy compliant**

According to MSCI the eligibility criteria set by the EU Taxonomy is so stringent that it might significantly reduce the investment universe of funds. Currently, about 85% of bonds labelled green, by market value, meet eligibility criteria for inclusion in the Bloomberg Barclays MSCI Green Bond Index, but only 17% of the market value of bonds contained in green bond index would meet the proposed EU Taxonomy criteria, and thus be eligible to be verified in line with the EU Green Bond Standard (EU GBS), according to MSCI. In the equity space, MSCI claims that only about 9% of constituents of the MSCI All Countries World Investable Market Index are likely to be involved in taxonomy-eligible activities and meet the do-no-significant-harm criteria.

Download: [Environmental Finance on MSCI Research](#)

- **DG FISMA (2020): 3 out of 101 funds are eligible for EU Ecolabel**

The purpose of the study was to test the draft of the EU Ecolabel criteria for financial products. The test was applied to 101 green equity funds domiciled in the EU27 and consisted in assess the share of EU Taxonomy aligned revenues of the funds' constituents. The test focused on the EU environmental objective "climate change mitigation". The results of the study showed that only three funds in the sample of 101 qualified under the draft of the EU Ecolabel criteria. Regarding the turnover share of Taxonomy alignment, the study found that more than 50% of the turnover does not fall under the taxonomy i.e. half of the activities has no chance of being "green". These results show evidence that the sustainability criteria is too stringent and therefore, the authors propose as solution to set the thresholds in a different way, either adjust the thresholds over time or differ the thresholds for different capitalizations, since SMEs have the potential of true green investments. Another proposal is to adopt a more forward-looking approach, in which not only revenues are considered but also capital expenditures (capex).

Download: [Testing draft EU Ecolabel criteria on UCITS equity funds](#)

- **Morgan Stanley (2020): less than 100 companies out of 1,300 have activities complying with the taxonomy that contribute to the climate change mitigation objective and only six companies that contribute to climate change adaption**

Morgan Stanley estimated the Taxonomy alignment of firms in its Sustainable Solutions database. The database embraces 1,300 companies, which address sustainable challenges according to their own assessment. The alignment assessment included the fulfillment of the four Taxonomy criteria: turnover eligibility, technical criteria, do not significantly harm criteria (DNSH) and minimum social safeguards. Under the climate change mitigation objective, Morgan Stanley found that 94 companies are Taxonomy compliant in a degree that ranges from 1% to 100% of the company's revenues. Regarding the climate change adaptation objective, Morgan Stanley identified just six insurance firms as taxonomy compliant. These companies focused on natural catastrophe insurance products and their revenues alignment range from 11% to a maximum of 53%.

Download: [Environmental Finance on Morgan Stanley study](#)

- **PRI (2020): comprehensive group of case studies that list the biggest challenges of applying the EU Taxonomy**

The PRI Taxonomy Practitioners Group brings together 40 investors, asset owners and service providers from EU-based not EU-based firms who shared the experiences and tools to help understand and support the implementation of the Taxonomy in all asset classes. The group members produced case studies to illustrate the methods, challenges and solutions to implement the Taxonomy in their investment processes. The Group focused on the technical expert group on sustainable finance (TEG) recommendations. Despite the practical challenges, many case studies demonstrated that the Taxonomy is operational, and that Taxonomy alignment is useful and necessary to construct a more

sustainable financial system. The group identified key categories of challenges that investors faced while implementing the Taxonomy: sourcing and matching data, adapting the Taxonomy approach and starting a Taxonomy process.

Download: [Testing the Taxonomy](#)

- **Novethic (2020): share of European green equity funds is less than 30%**

This study analyzed 104 equity fund portfolios to determine their compatibility with the Taxonomy. To achieve this task Novethic analyzed the public information provided by the companies in the portfolios to assess turnover exposure to sustainable activities as defined by the Taxonomy. Results of this analysis show that the average share of portfolio from sustainable activities listed by the Taxonomy does not exceed 30%. The level of detail of the public data provided by the companies is insufficient to verify all the thresholds and metrics recommended by the TEG. Therefore, Novethic adopted a rather broad approach to assess the share of company turnover that is potentially aligned with the Taxonomy and estimated the taxo-compatibility at the fund level. It is important to notice that these results overestimate the level of Taxonomy alignment since Novethic conducted just the first step of Taxonomy compliance verification, which means that thresholds and metrics determining environmental performance, DNSH criteria and minimum social safeguards were not verified. The main challenges in implementing the Taxonomy identified by this study are first, the massive lack of company data and second, the obligation timelines of the sustainable finance regulation which are not aligned: under the NFRD companies that offer products or services in the European Union will have to report the share of turnover, capital expenditures (capex) or operating expenditures (opex) that is aligned with the EU Taxonomy starting from 2022 and with full applicability in 2023, whereas investors have to report the portfolio share of Taxonomy alignment already from the fiscal year 2021. At the time of writing this study, the Taxonomy delegated acts have not been published yet.

Download: [European green funds and the EU Taxonomy: the great challenge!](#)

- **FTSE Russell (2020): 30% of companies provide disclosures that are granular enough to quantify their green revenues**

The FTSE Russell's Green Revenues Classification System (GRCS) is a classification system for green revenues of global companies. The proposed EU Taxonomy and GRCS are broadly similar in structure and highly aligned on core activities. The GRCS is much broader than the Taxonomy and encompasses all the main sustainable activities covered by the Taxonomy and it includes other activities related to water and waste pollution control that are currently not relevant for the Taxonomy, because as for now it only focuses on climate change mitigation and adaptation. The database embraces 16,000 companies, of which roughly 3,000 companies are identified as providing green products and services as defined by the Taxonomy. The main insight of this study is that only 30% of the companies provide disclosures that are granular enough to quantify green revenues, for the remaining 70% of the companies, data has been estimated. This study focuses only on the first step of meeting Taxonomy criteria, which means that it only considered Taxonomy revenues eligibility and it did not conduct the check of companies meeting the technical screening, the DNSH criteria and the minimum social safeguards.

Download: [Sizing the green economy: Green Revenues and the EU taxonomy](#)

- **Adelphi and ISS ESG (2020): a maximum of 2% of Taxonomy alignment of major European indices**

In a joint study Adelphi and ISS ESG assessed the Taxonomy alignment of the EURO STOXX, CAC 40 and DAX. They found less than a third of Taxonomy-aligned green revenues from the companies in the indices and a 2% Taxonomy alignment for the EURO STOXX 50 and CAC 40 and only 1% for the DAX. The authors attribute these results in first place to highly stringent criteria, especially for transition activities, second, to the lack of company data to verify Taxonomy criteria and third, to the currently proposed green activities as set in the TEG report. The study identifies the main challenges in the technical criteria set to define significant contribution or Taxonomy relevant activities.

Download: [European Sustainable Finance Survey](#)

5.2. Risk categories according to ESG risk scores

Risk Category	Range Overall
Negligible Risk	0-9.99
Low Risk	10-19.99
Medium Risk	20-29.99
High Risk	30-39.99
Severe Risk	40-100

Source: Sustainalytics

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