

How do individuals perceive the EU taxonomy?

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Abstract

The EU taxonomy for sustainable activities is a cornerstone in the European Union's efforts to redirect private capital towards sustainable investments. We examine people's awareness and opinions of the EU taxonomy. We analyze data from two studies conducted in 2021: i) survey data from a sample of the adult population in Germany, and ii) data from a discrete choice experiment conducted among individual investors in France and Germany. Based on study I, we find that awareness of the EU taxonomy is very low. However, the majority of people agree with its definition of environmental sustainability and believe that it increases the credibility and attractiveness of sustainable investments. In particular, financially literate people, sustainable investors, and people with already high levels of trust perceive the EU taxonomy as adding value. Based on study II, we find that individual investors in Germany and France, on average, prefer funds that are more compliant with the EU taxonomy. These results have important implications for policy makers and practitioners.

JEL classification: G11, G41, G53

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1. Introduction

The EU taxonomy is a fundamental component of the European Union's (EU) sustainable finance strategy, which aims to promote sustainable economic growth by redirecting private capital towards sustainable investments (European Commission, 2018). A key goal of the EU taxonomy is to provide investors with standardized and credible information about the environmental sustainability of investment products and to reduce information asymmetries between providers and investors. However, so far, we know very little about people's awareness and opinions of the EU taxonomy and whether individual investors would consider the EU taxonomy in their investment decisions.

Previous studies show that a considerable share of retail investors is interested in sustainable investments, but they do often not invest sustainably for various reasons (e.g., Bauer and Smeets, 2015; Wins and Zwergel, 2016; Gutsche and Zwergel, 2020). Barriers typically arise from a lack of knowledge about sustainable investments or a lack of trust in the accuracy of the information provided by product providers. The introduction of the EU taxonomy could reduce such barriers and channel capital towards the EU Commission's objectives. However, ex ante, it is not clear whether individual investors perceive the EU taxonomy as relevant information and whether they would take it into account when they invest. Therefore, in this paper we ask: Are people aware of the EU taxonomy and what do they think about it? Would individual investors consider the EU taxonomy in their investment decisions?

To answer these questions, we analyze survey data from two studies both conducted in 2021. In study I, we conduct a large-scale online survey among a representative sample of 3,000 individuals from the adult population in Germany. Based on this data, we are able to assess the overall knowledge and perception of the EU taxonomy among a heterogeneous population of individuals. In study II, we conduct an online investment choice experiment among 411 individual investors from Germany and 402 individual investors from France. With the help of the online investment choice experiment, we investigate the extent to which investors consider the EU taxonomy in comparison to other typically relevant attributes. In particular, we see whether investors from two large EU countries have similar or different preferences for the EU taxonomy.

We find that only a small share of the adult population in Germany was aware of the EU taxonomy in 2021. However, after receiving information on the EU taxonomy, more than 50% agree with the EU taxonomy's definition of environmental sustainability and believe that the

EU taxonomy increases the credibility and attractiveness of sustainable investments. In particular, people with a high level of financial literacy, people who have already invested sustainably, and people who already have a high level of trust agree with the definition of environmental sustainability and perceive the EU taxonomy as adding value. We also find that investors from both countries, Germany and France, prefer funds with a higher degree of with the EU taxonomy. By analyzing investment behavior, we find that preferences for the EU taxonomy are influenced by similar factors as those for other sustainable investments, including warm glow, environmental attitudes, and political identification.

By considering aspects of financial literacy and trust, our paper contributes to empirical studies that analyze the relevance of these factors for individual investment decisions in general (e.g., Guiso et al., 2008; Lusardi and Mitchell, 2008, 2011; van Rooij et al., 2011, 2012). We show that these factors are related to how people perceive information about the sustainability of investment products.

Moreover, our paper especially contributes to several strands of the literature on sustainable investment behavior. Previous studies find that investors consider sustainability ratings (e.g., Bassen et al., 2019; Gutsche and Ziegler, 2019; Hartzmark and Sussman, 2019) and that sustainability labels may help those investors who face investment barriers to invest sustainably (Gutsche and Zwergel, 2020). Instead of considering generic sustainability classifications by state and non-state actors (cf. Gutsche and Ziegler, 2019) or a sustainability rating from a private rating agency (cf. Hartzmark and Sussman, 2019), we show that investors consider the EU taxonomy as a concrete framework officially established by a state actor. We find that individual investors perceive it as adding value. Furthermore, we show that individual investors in two large European countries prefer funds with a higher degree of compliance with the EU taxonomy.

However, we find no evidence that the EU taxonomy can overcome typical investment barriers to sustainable investments, such as low knowledge or financial literacy (e.g., Borgers and Pownall, 2014; Riedl and Smeets, 2017; Gutsche and Zwergel, 2020; Anderson and Robinson, 2022; Engler et al., 2023; Gutsche et al., 2023) and trust deficits (e.g., Nilsson, 2008; Wins and Zwergel, 2016; Gutsche and Zwergel, 2020). Instead, we find that investors who are financially literate, who have high levels of trust, or who are already investing in a sustainable manner perceive the EU taxonomy as adding value.

2. Study I: Are people aware of the EU taxonomy and what do they think about it?

To answer the first research question, we analyze data from an online survey conducted in January and February 2021 among 3,000 adults in Germany. Respondents were recruited from an online panel administered by the professional market research institute YouGov. To obtain a sample that is as representative as possible of the adult population in Germany, the sample was stratified by age, gender, and main place of residence at the federal state level.

In addition, a number of measures have been implemented to ensure data quality. First, panel members receive internal bonus points as an incentive for participating in surveys and answering questions honestly. Second, a quality assurance system was used to screen out participants with qualitatively poor response behavior (e.g., unrealistically fast response times). Third, we also manually checked the data for inconsistent responses, incorrect information, or systematic response patterns. As a result, 235 respondents were excluded from the analysis, so that the following analysis is based on 2,765 observations.

The survey consisted of five parts: Part 1 contained questions that allowed us to screen out people who did not fit the profile of the target group. In this part, we also asked respondents about their current savings and investment products. Part 2 consisted of questions to measure respondents' sustainable investment behavior. Part 3 comprised questions measuring respondents' financial literacy, interpersonal trust, and further individual characteristics. Part 4 measured respondents' awareness and perceptions of the EU taxonomy. Finally, Part 5 comprised questions on the socio-demographic and socio-economic background of our respondents.

2.1 Variables and sample characteristics (study I)

We use four questions to capture respondents' awareness and perceptions of the EU taxonomy (see Table 1). The first question asks whether respondents were aware of the EU taxonomy prior to the survey. Following this question, we provided all respondents with an explanation of the EU taxonomy and its objectives to obtain an assessment of the EU taxonomy also from respondents without prior knowledge. We explained that the European legislator has developed a classification system/criteria catalogue (the EU taxonomy) that makes it possible to measure the extent to which financial investments make a significant contribution to the following six environmental objectives: (1) mitigation of climate change, (2) adaptation to climate change, (3) sustainable use and protection of water and marine resources, (4) transition to a circular economy, (5) prevention and reduction of pollution, and (6) protection and restoration of biodiversity and ecosystems.

Afterwards, we asked the three remaining questions. The purpose of these questions was to understand the extent to which respondents agree with the definition of environmental sustainability in the EU taxonomy and whether the EU taxonomy increases the credibility and attractiveness of sustainable investments.

< insert Table 1 here >

To understand what kind of individuals are aware of and support the EU taxonomy, we additionally consider a variety of individual characteristics (see Table 2). In particular, we want to understand whether more experienced investors or those with higher levels of financial literacy see added value in the EU taxonomy, or whether the opposite is true. More experienced investors may be more familiar with the debate on sustainable investments (e.g., greenwashing or the lack of a common definition of sustainable investments), especially if they already own sustainable investments. These individuals may appreciate the introduction of an official categorization of sustainable investments and the provision of information on the level of environmental sustainability of investments. They may therefore better understand the added value of the EU taxonomy.

On the other hand, people with low financial literacy may not be able to obtain or evaluate information on sustainable investments from providers or ratings agencies on their own. These individuals may need official guidance and summarized information to make appropriate (sustainable) investment decisions. For this reason, people with low financial literacy may appreciate the introduction of the EU taxonomy. We measure differences in individual financial experience and literacy through current general and sustainable investment behavior, but also through the “Big Three” developed by Lusardi and Mitchell (2008).

< insert Table 2 here >

In addition, trust and distrust play an important role in individual (sustainable) investment behavior (e.g., Guiso et al., 2008; Nilsson, 2008; Gutsche and Zwergel, 2020). Distrust in the information disclosed by the provider is a barrier that prevents investors from investing sustainably (Gutsche and Zwergel, 2020). We therefore want to understand whether people with low trust perceive the EU taxonomy as increasing the credibility of sustainable investments. To this end, we analyze how individual perceptions of whether financial service providers have good or bad intentions and the general tendency to distrust are related to individual beliefs about the value of the EU taxonomy. Finally, we also consider standard socio-demographic and socio-economic characteristics such as age, gender, education level, and income.

Table 3 shows the summary statistics for the individual characteristics of the respondents. 51% of the respondents are female, and the average age is 49.47 years. These figures are consistent with official population statistics (German Federal Statistical Office, 2023a). The same applies to the regional distribution of respondents' main place of residence at the federal state level (see Table A.1 in the Online Appendix A). Therefore, our sample is representative of the German adult population in terms of the stratification criteria used. Comparing further individual characteristics to official information on to the general population, our sample also has a similar median income, a slightly higher proportion of individuals with a university degree, and a somewhat higher financial literacy (German Central Bank, 2023; German Federal Statistical Office, 2023b; European Commission, 2023).

< insert Table 3 here >

2.2 Empirical analysis

Are people aware of the EU taxonomy and what do they think about it?

Figure 1 provides an overview of the respondents' awareness and perceptions of the EU taxonomy. Only about 8% of respondents had heard of the EU taxonomy before the survey. At the time of the survey in 2021, the awareness of the EU taxonomy among the German adult population was therefore very low.

< insert Figure 1 here >

However, once the objectives of the EU taxonomy were explained, the majority of respondents (55%) agreed with the EU taxonomy's definition for environmental sustainability. Similarly, just over half of the respondents (51%) indicated that the EU taxonomy strengthens the credibility of sustainable investment products. We also find that the EU taxonomy could be a relevant factor in individual financial decision-making. A significant proportion (58%) agreed that the attractiveness of investment products increases if these products contribute to the environmental objectives formulated in the taxonomy.

Result 1: *A small minority of the adult population in Germany was aware of the EU taxonomy in 2021. After receiving information on the EU taxonomy, more than 50% agree with the EU taxonomy's definition of environmental sustainability and believe that the EU taxonomy increases the credibility and attractiveness of sustainable investments.*

Do awareness and perceptions of the EU taxonomy vary across different groups of people?

We use binary logit models to examine econometrically how the awareness and perceptions of the EU taxonomy vary across different groups of people. Table 4 (model 1) shows that sustainable investors are significantly more likely to be aware of the EU taxonomy than non-investors, but also than non-sustainable investors. We find no evidence that financial literacy significantly increases awareness of the EU taxonomy. Awareness of the EU taxonomy is therefore largely a result of people's experience with sustainable investment products, rather than their general investment experience or their ability to understand fundamental financial concepts.

We also find a higher awareness of the EU taxonomy among both investors with low and high trust in financial service providers. We interpret this as an indication that investors who have already formed an opinion about trust in providers are more likely to pay attention to measures that reduce information asymmetries. In addition, we find that the awareness of the EU taxonomy is significantly lower among older people and women, but significantly higher among university graduates.

< insert Table 4 here >

University graduates also tend to agree with the definition of environmental sustainability according to the EU taxonomy (see Table 4, model 2). We also find a significantly higher agreement with the definition among women. Thus, prior to the survey, women were significantly less aware of the EU taxonomy, but once they were given an explanation of the goals of the EU taxonomy, they were significantly more likely to agree with its definition of environmental sustainability.

While we find no significant difference in agreement between sustainable, non-sustainable investors, and non-investors, the definition is significantly more accepted among financially literate people. In terms of trust, we find significantly higher agreement with the definition among people with higher trust scores than among people with medium or low trust scores. The definition therefore appeals more to people who are not affected by trust barriers.

We also find little to no evidence that the EU taxonomy can increase the perceived credibility or attractiveness of sustainable investments among people with low trust scores (see Table 4, models 3 and 4). Instead, people with high levels of trust are significantly more likely to perceive the EU taxonomy as increasing the credibility or attractiveness of sustainable investments. However, we find that people with low interpersonal trust are significantly more likely

to believe that the EU taxonomy increases the credibility of sustainable investments than people with medium trust. This results could be interpreted as a weak indication that the EU taxonomy could address trust barriers.

However, the perceived value of the EU taxonomy goes hand in hand with increasing financial literacy. People with higher levels of financial literacy are significantly more likely to believe that the EU taxonomy increases the credibility and attractiveness of sustainable investments. These results also apply to university graduates. Sustainable investors seem to particularly value the promotion of the credibility of sustainable investments. Our results suggest that highly educated people and those familiar with financial concepts in general and sustainable investing in particular value the EU taxonomy. Therefore, improving (financial) education may help to increase the credibility of sustainable investments that comply with the EU taxonomy.

We also note that age is an important factor in enhancing the credibility of sustainable investment through the EU taxonomy. Older people are significantly less likely to agree that the EU taxonomy can strengthen the credibility of sustainable investments. We do not find significant effects for any of the other characteristics.

Result 2: *In particular, people with a high level of financial literacy, people who have already invested sustainably, and people who already have a high level of trust agree with the definition of environmental sustainability and perceive the EU taxonomy as adding value.*

3. Study II: Would individual investors consider the EU taxonomy in their investment decisions?

Based on our first study, we can make statements about how adults in the general population in Germany perceive the EU taxonomy and its impact on sustainable investing. To investigate whether investors would use the EU taxonomy when making investment decisions, we consider data from a discrete choice experiment conducted among individual investors from Germany and France. Such experiments are increasingly used to investigate investors' preferences for sustainable investments (e.g., Gutsche and Ziegler, 2019; Lagerkvist et al., 2020).

The experiment was embedded in an online survey, which we conducted in collaboration with the professional market research institute Psyma between May and July 2021, and thus three months after the data collection for study I. Following previous studies (e.g., Gutsche and Ziegler, 2019), our target group consists of household financial decision-makers aged 18 or older who had experience with or sufficient knowledge of financial products with variable

returns, such as bonds, stocks, investment funds, or more complex investment products. These criteria aim to ensure that respondents were familiar with decision-making situations similar to those presented in the experiment.

The market research institute implemented several measures to ensure high data quality. To verify the authenticity of respondents, an initial verification process takes place during panel registration. This process includes a plausibility check of the address, postal code, and other details provided. It also includes a check for duplicate entries. Participants were directly incentivized within the panel, with the incentive amount determined by the survey's length and the number of participants with similar characteristics. The market research institute also performed quality checks based on the answers given in the survey (e.g., addressing systematic response patterns). As a result, 165 participants who did not read or answer our questions carefully, answered systematically, or had excessively short survey completion times, were excluded from the sample.

The survey comprised eight parts (A-H): Part A included questions to exclude respondents not meeting the criteria of our target group. Part B consisted of general questions on investment and consumption behavior. Part C included questions about individual econometric preferences such as trust and personal attitudes. Part D contained the investment choice experiment, which we describe in detail in the next section. Part E considered further background information on respondents' sustainable investment behavior. Part F focused on questions related to low-carbon infrastructure. Part G included questions on financial literacy and cognitive reflection. Finally, Part H comprised additional questions about respondents' socio-demographic and socio-economic background.

3.1 Experimental design

On the first screen of the experiment, we described the basic setting to the respondents. In six subsequent decision situations, respondents would see four different real bond funds available on the financial market. In each of these six decision situations, respondents were then asked to indicate which of the four funds they found so attractive that they would be most likely to purchase it for an investment amount of €500. We provided a brief explanation of the financial products in which these funds could invest in (i.e., corporate bonds, public bonds, cash, and other derivatives). We also explained that all the funds were actively managed, accumulated income, were traded in euro, had similar risk-return profiles, and invested primarily in corporate bonds.

To reduce potential hypothetical bias (e.g., List, 2001), we asked respondents to make each choice as if they would actually choose one of the four funds in reality. They were also asked to consider their personal financial situation for each decision and to assume that the investments would be realized after the end of the survey in April 2021 and would run for exactly one year. Accordingly, we asked respondents to imagine that the funds would be returned in May 2022 and that respondents would be paid the current value of their funds. We also provided two sample calculations (see the experimental instructions in Online Appendix B).

On the second screen, we provided a brief explanation of the five attributes describing each fund. For each fund, we reported the level of fees, the degree of compliance with the EU taxonomy, the strength of sustainability, the annual return over the past two years, and the share of emittents of bonds from the EU (see Table 5).

< insert Table 5 here >

The attribute ‘degree of compliance with the EU taxonomy’ is the key attribute in our experiment. This attribute can range from 0% to 100%. The percentage indicates the proportion of the fund’s economic activities that comply with the EU taxonomy. Since there is no real-world information on the extent to which funds comply with the EU taxonomy, we created a hypothetical value for each fund based on random sampling. We did this by linking a fund’s potential level of compliance with the EU taxonomy to its level of sustainability, measured by the established Morningstar Sustainability Rating.

The Morningstar Sustainability Rating ranges from one to five globes, with a higher number of globes indicating better sustainability performance. Hartzmark and Sussman (2019) show that investors take this rating into account when making investment decisions. They find significant inflows for funds having received a high Morningstar Sustainability Rating of four or five globes, significant outflows for funds with a low Morningstar Sustainability Rating of one or two globes, but no significant investor reactions to medium ratings of three globes. We use of these findings and include only funds with one, two, four, or five globes in our experiment. Thus, we do not include funds with three globes.

For funds with one globe, we derived the degree of EU taxonomy compliance by randomly drawing a value from the numbers of 0%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, and 80%. This approach establishes a link between our self-constructed EU taxonomy attribute and a fund’s level of sustainability as measured by a real and established indicator. Our approach also prevents the two measures from reflecting exactly the same information. We also prevent a fund with a low sustainability rating from fulfilling the EU taxonomy 100%. For funds with

two or four globes, we increased the range of possible values for the degree of compliance with the EU taxonomy by adding the values of 90% and 100% to the available values. Finally, for funds with five globes, we also included the values of 90% and 100%, but removed the values of 0% and 10% from the available choices.

In addition to the attribute of interest, other attributes that may be relevant to a large proportion of participants are commonly included in discrete choice experiments to describe the alternatives (e.g., Hoyos, 2010). Thus, we also included the strength of a fund's sustainability as measured by the Morningstar Sustainability Rating. To avoid any positive or negative reactions to the rating agency or the display of the globe rating, we did not mention the name of the rating agency or the sustainability rating itself. Instead, we labeled a fund's sustainability level as "very low" if the fund had one globe, "rather low" for two globes, "rather high" for four globes, and "very high" for five globes. We simply explained to respondents that a fund's sustainability level was measured by a company on the basis of a five-point scale ranging from "very low" to "very high."

Since individual investors tend to chase past returns (e.g., Sirri and Tufano, 1998), we also reported the annual return over the past two years for each fund. Moreover, individual investors prefer to invest in their domestic economy or country (e.g., Lewis, 1999). To run the experiment without differences in attributes and levels in France and Germany, we included the attribute 'share of bond issuers from the EU,' thus considering the EU as the domestic economy instead of the countries of France and Germany themselves. Finally, because investors view fund fees differently (e.g., Barber et al., 2005; Choi et al., 2010), the funds in our experiment differed in the amount of fees incurred during the one-year investment period. They were calculated as the sum of each fund's front-end load and management fee over the one-year holding period.

Each choice situation was constructed by randomly drawing four out of 16 bond funds that had been carefully selected in advance (see Table B.1 in the Online Appendix). To prevent participants from obtaining additional information about these funds, for example, from websites of financial information providers, we did not show the real names of the funds. Thus, participants could only consider the information provided in the experiment. This approach also prevents familiarity with certain funds or fund providers from influencing our results. In each choice situation, participants could reread the explanations of the attributes. Figure 2 shows an example choice set.

< insert Figure 2 here >

3.2 Variables and sample characteristics (study II)

To econometrically analyze respondents' investment decisions in the experiment, we construct one variable for each attribute (see Table 5). The *Degree of compliance with the EU taxonomy* is the core attribute-related variable in our econometric analysis and measures a fund's share of economic activities (in %) that complies with the criteria of the EU taxonomy.

To analyze whether preferences for the EU taxonomy vary across different investor groups, we consider the same individual-specific characteristics as in study I (see Table 2), with two exceptions. First, to measure trust in providers, we construct the dummy variable *Low trust in providers* that takes the value of one if the respondent rather or fully disagreed with the statement: "I am convinced that the investment information's stated sustainability criteria are adhered to." In addition, the dummy variable *Medium trust in providers* takes the value of one if the respondent was undecided about the statement. The dummy variables *High trust in providers* takes the value of one if the respondent rather or fully agreed with the statement.

Second, the median income class in both the German and French samples is between €3,000 and €3,500 (instead of between €2,500 and €3,000 in the sample considered in Study I). Accordingly, the dummy variable *Low income* takes the value of one if a respondent reported a monthly net household income below €3,000. The dummy variable *Medium income* takes the value of one if a respondent reported a monthly net household income from €3,000 to €3,500. The dummy variable *High income* takes the value of one if a respondent reported a monthly net household income above €3,500. Finally, the dummy variable *Do not report income* takes the value one if a respondent did not report the monthly net household income.

Table 6 shows the summary statistics for the two samples considered study II. In both samples, the proportion of current investors is about twice as high or more than twice as high as in the sample of the general adult population in Germany from study I. In addition, the proportion of women in both countries is well below 50%, which is consistent with previous samples of individual investors (e.g., Riedl and Smeets, 2017; Gutsche and Zwergel, 2020; Engler et al., 2023). Compared to the sample in study I, we also observe higher trust in financial service providers in both samples, but lower interpersonal trust. With regard to the other characteristics, the differences to the sample in study I are rather small.

The differences between the two samples from study II are also rather small. We observe a larger share of non-sustainable investors in Germany (48% versus 39%), while the share of sustainable investors is almost identical at 14% in Germany and 11% in France. In line with other studies, financial literacy is higher among respondents from Germany (e.g., Klapper et

al., 2015), while we observe a higher proportion of respondents with low interpersonal trust in France (e.g., Falk et al., 2018).

< insert Table 6 here >

3.3 Empirical analysis

We use conditional and mixed logit models in willingness to pay space (e.g., Train and Weeks, 2005) to econometrically examine the data from our choice experiment (see Table 7). In the basic model specifications (models 1, 3, 5, and 7), we include only attribute-related variables to estimate individuals' mean willingness to pay for the five different attributes. In the remaining model specifications, we additionally include interaction terms between our main attribute (the degree of compliance with the EU taxonomy) and all individual characteristics. These model specifications allow us to analyze how preferences for the EU taxonomy vary across different individual characteristics.

< insert Table 7 here >

The basic model specifications reveal very similar positive preferences for funds with a higher degree of compliance with the EU taxonomy in Germany and France. In Germany, individual investors are willing to pay on average between 0.022 and 0.025 percentage points (2.2 to 2.5 basis points) higher fees for a one percentage point increase in the degree of compliance with the EU taxonomy. The estimated mean willingness to pay in France is 0.020 percentage points or two basis points. Consistent with previous studies, we also find that individual investors in both countries have a stronger preference for funds with lower fees, a high sustainability rating, higher annual returns over the past two years, and a higher share of domestic bonds issuers.

In contrast to these robust results, the results regarding the relevance of individual characteristics for preferences for the EU taxonomy are more inconclusive, as they vary across the different estimation approaches and the two countries. The results in model 2 suggest that financially literate investors in Germany have stronger preferences for the EU taxonomy. This result would be consistent with our finding in study I. However, this result is not robust when we use a mixed logit model instead (see model 4). In model 4, we instead find a significant negative lower mean willingness to pay for a higher degree of compliance with the EU taxonomy among non-sustainable investors, people with low interpersonal trust, and people with a low income.

The results reported in model 6 suggest that current non-sustainable investors have significantly lower preferences for a higher degree of compliance with the EU taxonomy than people who currently have no investments. In contrast, sustainable investors prefer a higher degree of compliance with the EU taxonomy. Individuals with low trust in financial providers have significantly lower preferences for the EU taxonomy. However, none of these results hold when we use a mixed logit model instead (model 8). In this case, we even find no significant interaction term and thus no evidence that preferences vary across different individual characteristics.

In non-reported regression results (which are available upon request), we also account for typical determinants of sustainable investment behavior such as economic preferences, political orientation, environmental attitudes, or feelings of warm glow (e.g., Riedl and Smeets, 2017; Gutsche and Ziegler, 2019; Heeb et al., 2023; Gutsche et al., 2023). Our main estimation results are robust to the inclusion of these variables. We also find that the determinants of sustainable investment behavior differ across Germany and France: In Germany, feelings of warm glow, an ecological political orientation, and positive environmental attitudes are significantly positively related to preferences for the EU taxonomy, while the reverse is true for a liberal political orientation. In contrast, only altruistic motives and an ecological political orientation are positively related to preferences for the EU taxonomy in France.

Result 3: *Individual investors in Germany and France, on average, prefer funds that are more compliant with the EU taxonomy. Although not uniformly consistent across both countries, individual preferences for the EU taxonomy are related to non-financial factors that are known to be relevant for sustainable investment behavior.*

4. Conclusion

We investigate people's awareness and opinions of the EU taxonomy. In particular, we consider people's agreement with the EU taxonomy's definition of environmental sustainability and perceptions of the EU taxonomy's effect on the credibility and attractiveness of sustainable investments. We also examine whether individual investors prefer investment funds with a higher degree of compliance with the EU taxonomy. We empirically examine these questions based on data from two studies from 2021. In the first study, we analyze survey data from a sample of the adult population in Germany. In study II, we consider data from a discrete choice experiment conducted among individual investors from France and Germany.

Based on study I, we find that only a small minority of the adult population in Germany was aware of the EU taxonomy in 2021. After receiving information on the EU taxonomy, more than 50% agree with the EU taxonomy's definition of environmental sustainability and believe that the EU taxonomy increases the credibility and attractiveness of sustainable investments. In particular, financially literate people, people who have already invested sustainably, and people who already have a high level of trust agree with the definition of environmental sustainability and perceive the EU taxonomy as adding value.

Based on study II, we find that individual investors in Germany and France, on average, prefer funds that are more compliant with the EU taxonomy. We also find some evidence suggesting that preferences for the EU taxonomy are related to non-financial factors such as feelings of warm glow, a green political orientation, and positive environmental attitudes that are known to be relevant for sustainable investment behavior.

Our study provides valuable first insights into how people understand, accept, and use the EU taxonomy. The EU taxonomy aims to redirect private capital towards more sustainable investments by providing standardized information to help investors make better-informed (sustainable) investment decisions. Our results suggest that this policy strategy could be successful. We show that individuals from two large EU countries on average value the introduction of the EU taxonomy and prefer funds with a higher compliance with the EU taxonomy. The core objective to redirect capital towards more sustainable investments might thus be achievable. These findings might also motivate providers of sustainable investment products to not only disclose the share of environmentally sustainable activities but also to modify their investment strategies to enhance this share.

However, we also find that only a small minority was aware of the EU taxonomy in 2021. We also find that investors who already have sustainable investments see the value of the EU taxonomy. For fully realizing the impact of the taxonomy and to redirect capital from a larger share of individual investors (and especially those investors who do not yet have sustainable investments), policymakers need to increase awareness and understanding of the EU taxonomy. This could be achieved through educational campaigns, seminars, or integrating it into financial literacy programs. Since there have been recently started an initiative to foster financial education by the German federal ministry of finance (German Federal Ministry of Finance, 2023), these and similar programs should also address sustainable financial literacy and knowledge about relevant measures such as the EU taxonomy.

There are also several limitations to our study that suggest avenues for further research to extend our findings. Our study based on cross-sectional data provides a snapshot of investor attitudes and behavior at a specific point in time. Longitudinal studies could track how these attitudes and behaviors change over time, particularly in response to policy changes or significant environmental events. Future studies could also include more EU countries than France and Germany to provide a more comprehensive understanding of attitudes towards the EU Taxonomy. While our study experimentally examined willingness to pay, future research could investigate whether these attitudes translate into actual investment behavior.

References

- Anderson, Anders, and David T. Robinson, 2022, Financial literacy in the age of green investment, *Review of Finance* 26 (6), 1551-1584.
- Barber, Brad M., Terrance Odean, and Lu Zheng, 2005, Out of sight, out of mind: The effects of expenses on mutual fund flows, *The Journal of Business* 78 (6), 2095-2120.
- Bauer, Rob and Paul Smeets, 2015, Social identification and investment decisions, *Journal of Economic Behavior & Organization* 117, 121-134.
- Bassen, Alexander, Katrin Gödker, Florian Lüdecke-Freund, and Josua Oll, 2019, Climate information in retail investors' decision-making: Evidence from a choice experiment, *Organization & Environment* 32 (1), 62-82.
- Borgers, Arian, Jeroen Derwall, Kees Koedijk, and Jenke Ter Horst, 2015, Do social factors influence investment behavior and performance? Evidence from mutual fund holdings, *Journal of Banking & Finance* 60, 112-126.
- Choi, James J., David Laibson, and Brigitte C. Madrian, 2010, Why does the law of one price fail? An experiment on index mutual funds, *The Review of Financial Studies* 23 (4), 1405-1432.
- Engler, Daniel, Gunnar Gutsche, and Paul Smeets, 2023, Why Do Investors Pay Higher Fees for Sustainable Investments? An Experiment in Five European Countries, SSRN Working Paper 4379189.
- European Commission, 2018, Sustainable finance: Commission's Action Plan for a greener and cleaner economy, https://ec.europa.eu/commission/presscorner/detail/en/IP_18_1404 (last accessed January 25th, 2024).
- European Commission, 2023, Monitoring the level of financial literacy in the EU, <https://europa.eu/eurobarometer/surveys/detail/2953> (last accessed January 25th, 2024).
- Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David Huffman, and Uwe Sunde, 2018, Global evidence on economic preferences, *The Quarterly Journal of Economics* 133 (4), 1645-1692.
- German Central Bank, 2023, Vermögen und Finanzen privater Haushalte in Deutschland: Ergebnisse der Vermögensbefragung 2021, <https://www.bundesbank.de/resource/blob/908138/5fa52fcaa9ad19972391d3c8c1bb82ce/mL/2023-04-vermoegensbefragung-data.pdf> (last accessed January 25th, 2024).

German Federal Ministry of Finance, 2023, Eckpunkte für finanzielle Bildung, https://www.bundesfinanzministerium.de/Content/DE/Downloads/Internationales-Finanzmarkt/eckpunkte-fuer-finanzielle-bildung.pdf?__blob=publicationFile&v=9 (last accessed January 25th, 2024).

German Federal Statistical Office, 2023a, Educational level, https://www.destatis.de/EN/Themes/Society-Environment/Education-Research-Culture/Educational-Level/_node.html (last accessed January 25th, 2024).

German Federal Statistical Office, 2023b, Current population of Germany, https://www.destatis.de/EN/Themes/Society-Environment/Population/Current-Population/_node.html (last accessed January 25th, 2024).

Guiso, Luigi, Paola Sapienza, and Luigi Zingales, 2008, Trusting the stock market, *The Journal of Finance* 63 (6), 2557-2600.

Gutsche, Gunnar and Andreas Ziegler, 2019, Which private investors are willing to pay for sustainable investments? Empirical evidence from stated choice experiments, *Journal of Banking and Finance* 102, 193-214.

Gutsche, Gunnar and Bernhard Zwergel, 2020, Investment barriers and labeling schemes for socially responsible investments, *Schmalenbach Business Review* 72, 111-157.

Gutsche, Gunnar, Heike Wetzel, and Andreas Ziegler, 2023, Determinants of individual sustainable investment behavior - A framed field experiment, *Journal of Economic Behavior & Organization* 209, 491-508.

Hartzmark, Samuel M. and Abigail B. Sussmann, 2019, Do investors value sustainability? A natural experiment examining ranking and fund flows, *The Journal of Finance* 74 (6), 2789-2837.

Heeb, Florian, Julian F. Kölbl, Falko Paetzold, and Stefan Zeisberger, 2023, Do investors care about impact?, *The Review of Financial Studies* 36 (5), 1737-1787.

Hess, Stephane and David Palma, 2019, Apollo: A flexible, powerful and customizable free-ware pack-age for choice model estimation and application, *Journal of Choice Modelling* 32, 100170.

Hoyos, David, 2010, The state of the art of environmental valuation with discrete choice experiment, *Ecological Economics* 69 (8), 1595-1603.

Klapper, Leora, Annamaria Lusardi, and Peter Van Oudheusden, 2015, Financial literacy around the world, Washington DC: World Bank 2, 218-237.

Lagerkvist, Carl Johan, Anna Kristina Edenbrandt, I. Tibbelin, and Y. Wahlstedt, 2020, Preferences for sustainable responsible equity funds – A choice experiment with Swedish private investors, *Journal of Behavioral and Experimental Finance* 28, 100406.

Lewis, Karen K., 1999, Trying to explain home bias in equities and consumption, *Journal of Economic Literature* 37 (2), 571-608.

List, John A., 2001, Do explicit warnings eliminate the hypothetical bias in elicitation procedures? Evidence from field auctions for sportscards, *American Economic Review* 91 (5), 1498-1507.

Lusardi, Annamaria and Olivia S. Mitchell, 2008, Planning and financial literacy: How do women fare?, *American Economic Review: Papers & Proceedings* 98 (2), 413-417.

Lusardi, Annamaria and Olivia S. Mitchell, 2011, Financial literacy around the world: An overview, *Journal of Pension Economics & Finance* 10 (4), 497-508.

Nilsson, Jonas, 2008, Investment with a conscience: Examining the impact of pro-social attitudes and perceived financial performance on socially responsible investment behavior, *Journal of Business Ethics* 83, 307-325.

Riedl, Arno and Paul Smeets, 2017, Why do investors hold socially responsible mutual funds?, *The Journal of Finance* 72 (6), 2505-2550.

Sirri, Erik R. and Peter Tufano, 1998, Costly search and mutual fund flows, *The Journal of Finance* 53 (5), 1589-1622.

Train, Kenneth and Melvyn Weeks, 2005, Discrete choice models in preference space and willingness-to-pay space, In: *Applications of simulation methods in environmental and resource economics* (Ed.: R. Scarpa and A. Alberini), Dordrecht: Springer, 1-16.

Van Rooij, Maarten, Annamaria Lusardi, and Rob Alessie, 2011, Financial literacy and stock market participation, *Journal of Financial Economics* 101, 449-472.

Van Rooij, Maarten, Annamaria Lusardi, and Rob Alessie, 2012, Financial literacy, retirement planning and household wealth, *The Economic Journal* 122 (560), 449-478.

Wins, Anett and Bernhard Zwergel, 2016, Comparing those who do, might and will not invest in sustainable funds: a survey among German retail fund investors, *Business Research* 9, 51-99.

Tables

Table 1: Measures for individual awareness and perceptions of the EU taxonomy

Variable	Definition
Awareness of EU taxonomy	Dummy variable that takes the value of one if the respondent answered the following question with yes: “Have you ever heard about the European Union’s taxonomy for classifying environmentally friendly economic activities?” Answer options: a) yes, b) no, c) do not know
Agreement with definition of EU taxonomy	Dummy variable that takes the value of one if the respondent rather or fully agreed with the following statement: “An investment is considered environmentally sustainable if it makes a substantial contribution to achieving at least one of the six environmental objectives. In addition, the sustainable investment must not lead to a significant harm of one of the other five environmental objectives.” Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree, f) no answer
Increased credibility of sustainable investments	Dummy variable that takes the value of one if the respondent rather or fully agreed with the following statement: “In my view, if the investment contributes to achieving at least one of the six environmental objectives, this strengthens the credibility that it is indeed a sustainable investment.” Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree, f) no answer
Increased attractiveness of sustainable investments	Dummy variable that takes the value of one if the respondent rather or fully agreed with the following statement: “From my personal point of view, the attractiveness of a sustainable investment increases if it contributes to the achievement of one of the six environmental objectives and at the same time does not significantly harm any of the other environmental objectives.” Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree, f) no answer

This table defines the variables used as dependent variables in the econometric analysis in study I.

Table 2: Measures for individual characteristics

Variable	Definition
Non-sustainable investor	Dummy variable that takes the value of one if the respondent reported to hold bonds, stocks, investment funds, or more complex investment products, but no sustainable investments
Sustainable investor	Dummy variable that takes the value of one if the respondent reported to hold bonds, stocks, investment funds, or more complex investment products, and sustainable investments
No investor	Dummy variable that takes the value of one if the respondent reported to hold neither bonds, stocks, investment funds, or more complex investment products
Financial literacy	Number of correct answers to the following three questions: 1) "Imagine that someone puts €100 into a savings account with a guaranteed interest rate of 2% per year. They don't make any further payments into this account and they don't withdraw any money. How much would be in the account at the end of five years?" Answer options: a) more than €102, b) exactly €102, c) less than €102, d) do not know, e) refuse to answer; 2) "Imagine that the interest rate on your savings account is 1% per year and inflation is 2% per year. Please give your estimate of how much you could buy with the money in the savings account after one year." Answer options: a) more than today, b) exactly the same, c) less than today, d) do not know, e) refuse to answer; 3) "Please give your assessment of whether the following statement is true or false: "Buying a single stock usually has a safer return than a stock mutual fund." Answer options: a) true, b) false, c) do not know, d) refuse to answer; Lusardi and Mitchell (2008)
Low trust in providers	Dummy variable that takes the value of one if the respondent rather or fully disagreed with the following statement: "I am convinced that most financial service providers (e.g., banks, insurance companies) have good intentions." Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree
Medium trust in providers	Dummy variable that takes the value of one if the respondent was undecided about the following statement: "I am convinced that most financial service providers (e.g., banks, insurance companies) have good intentions." Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree
High trust in providers	Dummy variable that takes the value of one if the respondent rather or fully agreed with the following statement: "I am convinced that most financial service providers (e.g., banks, insurance companies) have good intentions." Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree
Low trust in people	Dummy variable that takes the value of one if the respondent rather or fully disagreed with the following statement: "People only have the best intentions." Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree; Falk et al. (2018)
Medium trust in people	Dummy variable that takes the value of one if the respondent was undecided about the following statement: "People only have the best intentions." Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree; Falk et al. (2018)
High trust in people	Dummy variable that takes the value of one if the respondent rather or fully agreed with the following statement: "People only have the best intentions." Answer options: a) completely disagree, b) rather disagree, c) undecided, d) rather agree, e) completely agree; Falk et al. (2018)
Age	Age of the respondent in years
Female	Dummy variable that takes the value of one if the respondent reported to be female
University degree	Dummy variable that takes the value of one if a respondent had a degree from a university or university of applied sciences
Low income	Dummy variable that takes the value of one if a respondent reported a monthly net household income below €2,500, and thus below the median class of €2,500 to €3,000
Medium income	Dummy variable that takes the value of one if a respondent reported a monthly net household income of €2,500 to €3,000 (the median class)
High income	Dummy variable that takes the value of one if a respondent reported a monthly net household income above €3,000, and thus above the median class of €2,500 to €3,000
Do not report income	Dummy variable that takes the value one if a respondent did not report the monthly net household income

This table reports the variables used as explanatory variables in the econometric analysis.

Table 3: Overview of individual characteristics (study I)

	Number of observations	Mean	Standard deviation	Minimum	Maximum
Non-sustainable investor	2,765	0.20	0.40	0	1
Sustainable investor	2,765	0.14	0.35	0	1
No investor	2,765	0.66	0.96	0	1
Financial Literacy	2,765	2.19	0.50	0	3
Low trust in providers	2,765	0.55	0.45	0	1
Medium trust in providers	2,765	0.28	0.38	0	1
High trust in providers	2,765	0.17	0.46	0	1
Low trust in people	2,765	0.31	0.45	0	1
Medium trust in people	2,765	0.29	0.49	0	1
High trust in people	2,765	0.40	15.03	0	1
Age	2,765	49.47	0.50	19	77
Female	2,765	0.51	0.46	0	1
University degree	2,765	0.29	0.50	0	1
Low income	2,765	0.44	0.96	0	1
Medium income	2,765	0.11	0.31	0	1
High income	2,765	0.39	0.49	0	1
Do not report income	2,765	0.06	0.24	0	1

This table reports the summary statistics of the individual characteristics considered in study I. All variables are defined in Table 2.

Table 4: Individual awareness and perception of the EU taxonomy

Dependent variable:	Awareness of EU taxon- omy	Agreement with defini- tion of EU taxonomy	Increased credibility of sustainable investments	Increased at- tractivity of sustainable investments
	(1)	(2)	(3)	(4)
Non-sustainable investor ^{a)}	0.032 (0.103)	0.087 (0.068)	-0.103 (0.068)	0.037 (0.068)
Sustainable investor ^{a)}	0.473*** (0.113)	0.064 (0.089)	0.249*** (0.088)	0.148 (0.091)
Financial literacy	-0.027 (0.044)	0.292*** (0.029)	0.235*** (0.028)	0.321*** (0.029)
Low trust in providers ^{b)}	0.231** (0.101)	0.052 (0.060)	0.003 (0.060)	0.009 (0.061)
High trust in providers ^{b)}	0.756*** (0.111)	0.214*** (0.079)	0.399*** (0.078)	0.296*** (0.080)
Low trust in people ^{c)}	0.070 (0.104)	0.043 (0.065)	0.112* (0.065)	0.093 (0.066)
High trust in people ^{c)}	0.062 (0.094)	0.331*** (0.062)	0.301*** (0.061)	0.340*** (0.062)
Age	-0.011*** (0.003)	0.002 (0.002)	-0.007*** (0.002)	-0.002 (0.002)
Female	-0.335*** (0.078)	0.146*** (0.051)	0.037 (0.051)	0.092* (0.052)
University degree	0.236*** (0.082)	0.198*** (0.059)	0.233*** (0.059)	0.264*** (0.059)
Low income ^{d)}	-0.155 (0.125)	-0.134 (0.085)	-0.050 (0.084)	-0.132 (0.087)
High income ^{d)}	-0.074 (0.123)	-0.069 (0.087)	0.019 (0.086)	-0.076 (0.089)
Do not report income ^{d)}	-0.002 (0.180)	-0.216* (0.123)	-0.104 (0.125)	-0.139 (0.126)
Constant	-1.049*** (0.281)	-0.854*** (0.190)	-0.231 (0.190)	-0.579*** (0.196)
Regional controls	Yes	Yes	Yes	Yes
Number of observations	2,731	2,765	2,765	2,765

This table reports, based on four binary logit models, the estimates of average marginal and discrete probability effects of continuous and discrete explanatory variables, respectively. The dependent variables *Awareness of EU taxonomy* (model 1), *Agreement with definition of EU taxonomy* (model 2), *Increased credibility of sustainable investments* (model 3), and *Increased attractivity of sustainable investments* (model 4) are defined in Table 1. All explanatory variables are defined in Table 2. a) The base category is *No investor*. b) The base category is *Medium trust in providers*. c) The base category is *Medium trust in people*. d) The base category is *Medium income*. e) The number of observations is lower than in the other model specifications, as all individuals from the federal state of “Saarland” had not yet heard of the EU taxonomy. These individuals were excluded due to perfect collinearity. *** (**, *) indicates that the corresponding estimated average marginal or discrete probability effect is significantly different from zero at the 1% (5%, 10%) significance level (robust standard errors in parentheses).

Table 5: Attributes in the choice experiment (study II)

Attribute		Variable	
Label	Levels / range	Label	Definition
Fees	0.00% - 6.67%	Fees	Fees charged on a bond fund in %
Degree of compliance with the EU taxonomy	0% - 80% (in ten percentage points steps) if a fund's strength of sustainability is very low 0 - 100% (in ten percentage points steps) if a fund's strength of sustainability is rather low or rather high 20 - 100% (in ten percentage points steps) if a fund's strength of sustainability is very high	Degree of compliance with the EU taxonomy	Share of economic activities in the fund that comply with the criteria of the EU taxonomy in %
Strength of sustainability	Very low, rather low, rather high, very high	High sustainability rating	Dummy variable that takes the value of one if the bond fund's strength of sustainability is rather or very high
Annual returns in the past two years	-0.02% - 12.75%	Annual returns in the past two years	A bond fund's annual returns in the past two years in %
Share of issuers of bonds from the EU	0.00% - 83.23%	Share of issuers of bonds from the EU	A bond fund's share of issuers of bonds funds from the EU in %

This table reports the attributes and their levels used in the discrete choice experiment. The table also defines the variables used in the econometric analysis.

Table 6: Overview of individual characteristics (study II)

Country:	Germany				France			
	Mean	Standard deviation	Minimum	Maximum	Mean	Standard deviation	Minimum	Maximum
Non-sustainable investor	0.49	0.50	0	1	0.38	0.49	0	1
Sustainable investor	0.14	0.35	0	1	0.11	0.32	0	1
No investor	0.37	0.48	0	1	0.51	0.50	0	1
Financial Literacy	2.25	0.90	0	3	2.03	0.96	0	3
Low trust in providers	0.10	0.30	0	1	0.08	0.27	0	1
Medium trust in providers	0.69	0.46	0	1	0.74	0.44	0	1
High trust in providers	0.21	0.41	0	1	0.20	0.40	0	1
Low trust in people	0.47	0.50	0	1	0.54	0.50	0	1
Medium trust in people	0.33	0.47	0	1	0.22	0.42	0	1
High trust in people	0.20	0.40	0	1	0.18	0.39	0	1
Age	48.36	18.26	18	84	47.36	16.86	18	78
Female	0.43	0.50	0	1	0.46	0.50	0	1
University degree	0.31	0.46	0	1	0.33	0.47	0	1
Low income	0.46	0.50	0	1	0.48	0.50	0	1
Medium income	0.13	0.33	0	1	0.11	0.31	0	1
High income	0.31	0.46	0	1	0.32	0.47	0	1
Do not report income	0.11	0.31	0	1	0.08	0.28	0	1

This table reports the summary statistics of individual characteristics for 411 individual investors from Germany and 402 individual investors from France, considered in study II. All variables are defined in Table 2. The variables related to trust in providers and income are measured in slightly different ways, with the differences outlined in Section 3.2.

Table 7: Individual preferences for the degree of compliance with the EU taxonomy

Dependent variable:	Willingness to pay for attribute							
	Germany				France			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Means</i>								
Fees	-0.204*** (0.016)	-0.206*** (0.016)	-1.216*** (0.100)	-1.209*** (0.096)	-0.195*** (0.016)	-0.196*** (0.016)	-1.380*** (-1.380)	-1.388*** (0.095)
High sustainability rating	5.399*** (0.512)	5.426*** (0.514)	6.070*** (0.621)	6.211*** (0.742)	4.038*** (0.438)	4.001*** (0.433)	4.585*** (4.585)	4.608*** (0.477)
Annual returns in the past two years	0.609*** (0.062)	0.609*** (0.062)	0.646*** (0.047)	0.629*** (0.071)	0.561*** (0.067)	0.562*** (0.067)	0.616*** (0.616)	0.614*** (0.099)
Share of issuers of bonds from the EU	0.013* (0.007)	0.013* (0.007)	0.016*** (0.005)	0.018*** (0.005)	0.014* (0.007)	0.015** (0.007)	0.021*** (0.021)	0.022 (0.014)
Degree of compliance with the EU taxonomy	0.022*** (0.005)	0.001 (0.029)	0.025*** (0.003)	0.048 (0.031)	0.020*** (0.005)	0.013 (0.030)	0.020*** (0.020)	0.003 (0.047)
x Non-sustainable investor ^{a)}	--	-0.012 (0.010)	--	-0.020** (0.009)	--	-0.022* (0.012)	--	-0.019 (0.044)
x Sustainable investor ^{a)}	--	-0.009 (0.017)	--	-0.015 (0.016)	--	0.042** (0.018)	--	0.036 (0.042)
x Financial literacy	--	0.015*** (0.006)	--	0.008 (0.006)	--	0.008 (0.005)	--	0.005 (0.039)
x Low trust in providers ^{b)}	--	0.010 (0.017)	--	0.006 (0.016)	--	-0.037* (0.021)	--	-0.031 (0.074)
x High trust in providers ^{b)}	--	0.006 (0.013)	--	0.004 (0.019)	--	-0.008 (0.014)	--	0.001 (0.028)
x Low trust in people ^{c)}	--	-0.012 (0.011)	--	-0.013* (0.007)	--	0.018 (0.012)	--	0.011 (0.018)
x High trust in people ^{c)}	--	-0.003 (0.014)	--	-0.005 (0.014)	--	0.018 (0.016)	--	0.011 (0.082)
x Age	--	0.000 (0.000)	--	0.000 (0.000)	--	0.000 (0.000)	--	0.000 (0.002)
x Female	--	-0.009 (0.010)	--	-0.015 (0.010)	--	-0.016 (0.011)	--	-0.013 (0.023)
x University degree	--	-0.016 (0.011)	--	-0.011 (0.012)	--	0.028** (0.012)	--	0.025 (0.060)
x Low income ^{d)}	--	-0.022 (0.014)	--	-0.021** (0.010)	--	0.007 (0.016)	--	0.018 (0.036)
x High income ^{d)}	--	0.011 (0.015)	--	0.005 (0.011)	--	0.003 (0.017)	--	0.013 (0.019)
x Do not report income ^{d)}	--	-0.024 (0.018)	--	-0.030 (0.026)	--	-0.006 (0.029)	--	0.013 (0.026)
x Regional controls	--	Yes	--	Yes	--	Yes	--	Yes
<i>Standard deviations</i>								
Fees	--	--	-1.257*** (0.148)	-1.313*** (0.162)	--	--	-1.126*** (-1.126)	-1.094*** (0.208)
High sustainability	--	--	5.433*** (0.435)	5.609*** (0.382)	--	--	4.261*** (4.261)	4.117*** (0.607)
Annual returns in the past two years	--	--	0.453*** (0.057)	0.473*** (0.083)	--	--	0.601*** (0.601)	0.577*** (0.125)
Share of issuers of bonds from the EU	--	--	0.065*** (0.009)	0.064*** (0.008)	--	--	0.082*** (-0.082)	0.082*** (0.016)
Taxonomy share	--	--	0.039*** (0.006)	0.032*** (0.005)	--	--	0.051*** (-0.051)	0.043*** (0.013)
Number of respondents	411				402			
Number of decisions	2,466				2,412			

This table reports estimates of willingness to pay in terms of *Fees* for various continuous and discrete explanatory variables, based on four conditional logit models (models 1,2, 5, and 6) and four mixed logit models (models 3,4, 7, and 8) in the willingness-to-pay space. All explanatory variables derived from the attributes in the choice experiment are defined in Table 5. Explanatory variables used for interaction terms with those variables derived from the choice experiment attributes are outlined in Table 2 and Section 3.2. a) The base category is *No investor*.

b) The base category is *Medium trust in providers*. c) The base category is *Medium trust in people*. d) The base category is *Medium income*. The “Means” panel reports the estimated means of the willingness to pay for the corresponding explanatory variable. The “Standard deviations” panel reports the estimated standard deviations from the normal distribution of the willingness to pay associated with each explanatory variable in the mixed logit models, assuming that the random parameters follow a normal distribution. We consider random parameters for *Strength of sustainability*, *Annual returns in the past two years*, and *Share of bond issuers from the EU* in all mixed logit models. For the (simulated) maximum likelihood estimation of the conditional logit models and mixed logit models, we use the R package “Apollo” (Hess and Palma, 2019). The parameters in the mixed logit models are estimated using the simulated maximum likelihood method with 2,000 draws based on the Modified Latin Hypercube Sampling algorithm. *** (**, *) indicates that the corresponding estimated willingness to pay is significantly different from zero at the 1% (5%, 10%) significance level. To take into account that six decisions per individual are included, we cluster the standard errors at the individual level in all models (cluster-robust standard errors in parentheses).

Figures

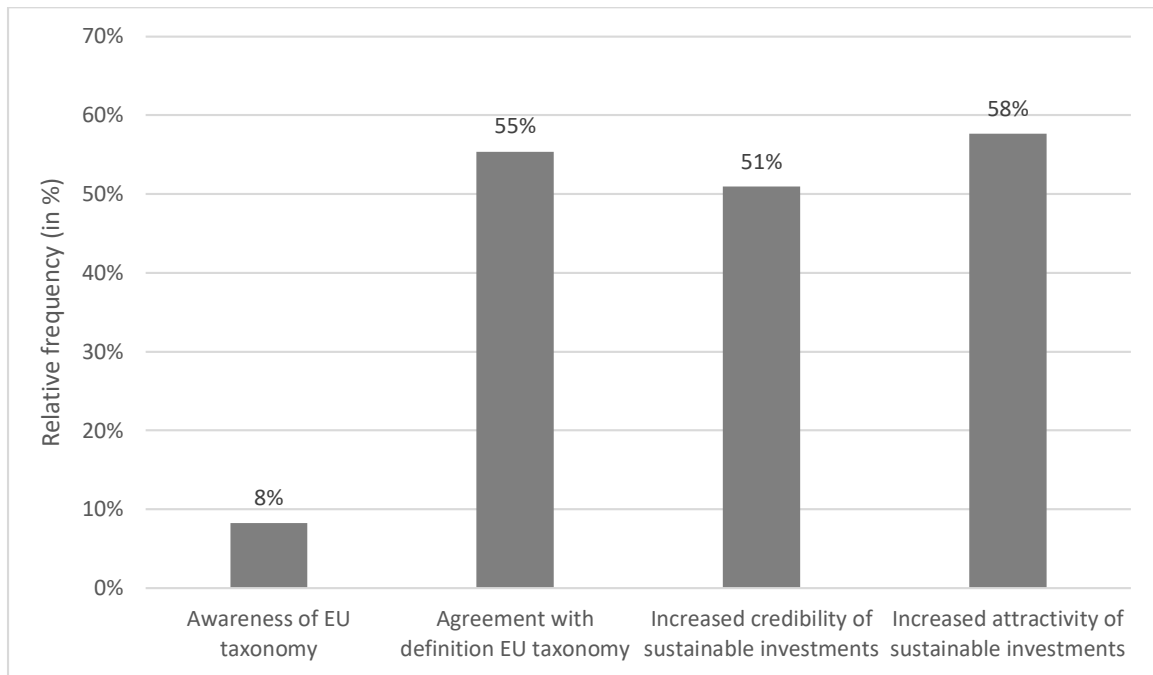


Figure 1: Awareness and perceptions of the EU taxonomy

In each of the six choice situations, please indicate which of the four bond funds offered you would like to purchase for an investment amount of €500. To do so, please select the fund you would like to purchase.

To view the explanation of a term again, please click on (?) next to the respective term or on the corresponding term itself.

	Bond fund 1	Bond fund 2	Bond fund 3	Bond fund 4
Fees (?)	0.55%	5.92%	4.02%	4.16%
Degree of compliance with the EU taxonomy (?)	90%	60%	100%	0%
Strength of sustainability (?)	Very high	Low	High	Very low
Annual returns in the past two years (?)	6.20%	4.90%	6.10%	5.96%
Share of issuers of bonds from the European Union (?)	65.31%	47.20%	59.32%	83.23%
Your choice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 2: Exemplary choice set

Online Appendix A

Table A.1: Regional distribution of respondents

	Population	Sample
Baden-Württemberg	0.13	0.11
Bayern	0.16	0.15
Berlin	0.04	0.03
Brandenburg	0.03	0.03
Bremen	0.01	0.01
Hamburg	0.02	0.03
Hessen	0.07	0.08
Mecklenburg-Vorpommern	0.02	0.02
Niedersachsen	0.10	0.09
Nordrhein-Westfalen	0.21	0.22
Rheinland-Pfalz	0.05	0.04
Saarland	0.01	0.01
Sachsen	0.05	0.05
Sachsen-Anhalt	0.03	0.03
Schleswig-Holstein	0.03	0.04
Thüringen	0.02	0.02

This table reports a comparison of the shares of respondents by different states between the general population in Germany and our sample. The shares for the general population are based on data from 2021 (German Federal Statistical Office, 2023a).

Online Appendix B

Experimental instructions

The following experimental instructions were shown to respondents in the non-incentivized experimental group without safe option:

Please carefully read the following text, after 20 seconds at the earliest you can go to 'next'.

We would now like to return to the topic of financial investments. On the following pages you will be shown six times each four different actively managed bond funds that are available on the financial market. Such funds are investments that invest a majority of their assets in a portfolio of corporate and public bonds and may also include other positions such as cash and other financial products (e.g., derivatives). All funds considered reinvest income in the fund, are traded in €, invest the majority of their portfolio in corporate bonds, and have very similar risk and return profiles. In each of these six decision situations, please indicate which of the four bond funds you find so attractive that you would be most likely to purchase it given an investment amount of €500.

Please decide in each selection situation as if you would actually select one of the four bond funds in each case in reality. In particular, please remember to consider your personal financial situation when making each decision.

When making your decisions, assume that each of the investments will be realized after the survey ends in July 2021 and will run for exactly one year. Imagine that after that, in August 2022, the bond funds will be sold and you will be paid the current values of your funds.

Examples:

If the value of your bond fund were to increase to €550 by August 2022, you would be paid €550 less applicable fees.

On the other hand, if the value of your bond fund were to decrease to €450 by August 2022, you would be paid €450 less applicable fees.

Table B.1: Bond fund universe

Number	ISIN	Name	Strength of sustainability	Annual returns in the past two years	Share of issuers of bonds from the European Union	Fees
1	LU1542252181	Allianz Green Bond - AT EUR ACC	Very high	5.45%	55.12%	6.15%
2	LU0665630736	Allianz GIF - Allianz China Strategic Bond - AT EUR ACC H	Rather high	2.45%	0.00%	3.71%
3	LU0503630740	Pictet - Global Sustainable Credit - HI EUR ACC H	Very high	6.60%	49.10%	6.67%
4	LU1781815300	Edmond de Rothschild Fund Crossover Credit - CR EUR ACC	Rather high	5.60%	30.11%	2.03%
5	LU1104108243	BNPP Flexible Global Credit - Classic EUR ACC	Rather high	0.25%	36.95%	3.80%
6	LU1472740767	Mirova Global Green Bond Fund - R/A EUR ACC	Rather high	6.10%	59.32%	4.02%
7	LU1586216068	NN (L) Green Bond - P EUR ACC	Very high	5.65%	72.93%	3.60%
8	LU1280196426	AXA World Funds - Global Green Bonds - I EUR ACC	Very high	6.20%	65.31%	0.55%
9	LU0133089424	T.Rowe Price Funds-Euro Corporate Bond Fund - A EUR ACCFonds	Rather low	4.90%	47.20%	5.92%
10	LU0155951089	Credit Suisse (Lux) Corporate Short Duration EUR Bond Fund - B ACC	Very low	1.20%	44.73%	5.80%
11	IE00B567SW70	GAM Star Credit Opportunities (EUR) - Ordinary ACC Fonds	Rather low	6.65%	53.05%	6.53%
12	LU0660296624	Credit Suisse(Lux)Emerging Market Corporate Bond Fund - IB USD ACC	Very low	12.75%	26.36%	3.81%
13	LU1727354448	JPMorgan Funds-Global Corporate Bond - I2 EUR ACC H	Rather low	8.75%	17.10%	0.44%
14	LU0029761706	UBAM Dynamic Euro Bond - AC EUR ACC	Rather low	-0.20%	43.32%	3.54%
15	LU1663942362	DWS Invest Short Duration Credit - TFC EUR ACC	Very low	1.60%	71.40%	0.51%
16	AT0000A1PKM0	ERSTE Bond Corporate Plus - EUR ACC	Very low	5.96%	83.23%	4.16%

This table reports the selection of actual bond funds that served as the basis for the investment experiment in study 2. We included bonds in the investment universe only if individual investors in Germany could purchase them either on a stock exchange or directly from the bond fund provider. For certain retail investment products available on the capital market, a minimum investment amount is required to purchase the respective investment product. Bond funds were eligible for inclusion in the investment universe only if their minimum investment threshold did not surpass €250, ensuring they were accessible investment options for individuals with limited

financial resources. Moreover, we selected 16 bond funds in a manner that ensured the values of different attributes were nearly independent across the available alternatives, i.e. bond funds. In terms of sustainability strength, we chose four bond funds rated with one globe, four with two globes, four with four globes, and four with five globes according to the Morningstar Sustainability Rating. Given that Hartzmark and Sussman (2019) observed no significant investor reactions to a three-globe rating, we excluded this category. Furthermore, we limited our consideration to actively managed bond funds primarily investing in a mix of corporate and public bonds, though they could also hold other assets like cash and financial products (e.g., derivatives). All selected bond funds reinvested their income, were traded in euros, and had closely comparable risk and return profiles (rated two or three according to the German key investor information document, on a scale ranging from one for the lowest risk and return profiles to seven for the highest).