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Why Do Investors Pay Higher Fees for Sustainable Investments?

An Experiment in Five European Countries

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Abstract

We study why investors are willing to pay higher fees for sustainable investments using large-scale online experiments with individual investors across five European countries. We focus on two potential explanations - investors' social preferences and limited financial literacy. We find that, across all countries, social preferences significantly contribute to the share of sustainable investments in investment portfolios. However, social preferences do not significantly influence investors' sensitivity to fees. Instead, financially illiterate investors pay higher fees, because they pay less attention to fees and (wrongly) believe funds with higher expenses outperform after fees. These results have important implications for financial regulation.

Keywords: Sustainable investments; Experimental finance; Financial literacy; Cross-country analysis

JEL codes: G11, G41, G53

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1. Introduction

Individuals increasingly demand that their investments not only yield financial returns, but also social and environmental returns (Hartzmark and Sussman, 2019; Krueger, Sautner, and Starks, 2020; Barber, Morse, and Yasuda, 2021; Bauer, Ruof and Smeets, 2021).[1] Many investors are even willing to pay higher fees to invest in a sustainable manner (Riedl and Smeets, 2017; Baker, Egan, and Sarkar, 2022; Heeb, Kölbel, Paetzold, and Zeisberger, 2023). So far, however, we do not have a good understanding of what drives investors to pay higher fees on sustainable investments.

We distinguish between two main channels for investors' sensitivities towards sustainable investment fees. First, investors could be willing to pay higher fees because of their social preferences. They are willing to pay to do good. Just like some consumers are willing to pay more for fair trade products, some investors could be willing to pay more for sustainable investments. If fees charged on sustainable investments increase, investors with strong social preferences may react less sensitively compared to investors with weak social preferences. We call this the social preferences explanation for paying higher fees. Second, individual investors often ignore the importance of fees (Sirri and Tufano, 1998; Hortacsu and Syverson, 2004; Barber, Odean, and Zheng, 2005; Choi, Laibson, and Madrian, 2010; Barahona, 2020). Thus, investors with low financial literacy might pay higher fees on sustainable investments, because they do not understand the effect of these fees on their net returns. We call this the financial literacy explanation.

To empirically analyze the relevance of these two channels, we conduct a large-scale online experiment with broad samples of individual investors from France, Germany, the Netherlands, Poland, and Spain. We chose those countries because of their differences in economic background, stock market participation, and prosocial behavior. Existing studies differ in their methods, time period, and context, which makes comparisons of sustainable investment behavior across countries difficult. We consider the same target population, methodological approach, outcome variables,

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[1] See also recent (working) papers: Humphrey, Kogan, Sagi, and Starks (2021), Bonnefon et al. (2022), Brodback, Guenster, Pouget, and Wang (2022), and Giglio et al. (2023).

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explanatory variables, and timing across countries. This allows us to compare cross-country results more directly than previous studies.

Individual investors are defined as financial decision makers in their household who either currently or previously owned investment products or are sufficiently informed about them. To ensure that our samples are as representative as possible of the populations of household financial decision makers in the five countries, we applied a two-step recruitment strategy. The final sample has a size of 5,162 individuals, with at least 1,000 respondents in each country.

The pre-registered incentivized experiment is carried out simultaneously in all five countries. In the experiment, individual investors allocate their endowment between sustainable and conventional MSCI World exchange traded funds (ETFs). Two different sustainable ETFs are considered, where one tracks an index that follows a screening strategy based on environmental, social, and governance (ESG) criteria, and the other follows a climate-related strategy. The investment decisions in the experiment are incentivized to ensure that choices are consequential and that the experimental results generalize to real-life behavior (e.g. Riedl and Smeets, 2017). In addition, we measure a wide variety of preferences and beliefs, such as social preferences, risk preferences, time preferences, return expectations, and risk perceptions. We measure financial literacy using the Big Three financial literacy test (Lusardi and Mitchell, 2008, 2011) and directly test whether individuals understand the impact of fees on their net returns.

We find that social preferences significantly influence individual decisions regarding sustainable investments across all five examined countries. Specifically, we observe that social preferences are significantly positively associated with the share of sustainable investments in an individual's portfolio in each country.

However, these social preferences do not affect the sensitivity to increased fees on sustainable investments. Rather, when fees for sustainable investments rise, investors with stronger social preferences reduce their sustainable investment portfolio shares similarly to those with weaker social preferences. This indicates that while social preferences enhance the overall allocation to sustainable investments (a level effect), they do not alter the reaction to higher fees (a slope effect).

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Instead, we find evidence for the financial literacy explanation for paying higher investment fees. Investors with low financial literacy react not only insensitively to higher fees on sustainable investments, but even tend to increase their shares of sustainable investments if fees increase. In contrast, investors with high literacy reduce their sustainable investments if they become relatively more expensive than conventional investments.

This shows that individuals *do not* make a conscious choice to pay higher fees because of having strong social preferences to pay more for doing good. Rather, investors *do* pay higher fees for sustainable investments because they do not understand the consequences for their net returns. Further analyses based on two follow-up experiments show that investors with low financial literacy pay less attention to fees and (wrongly) expect funds with higher fees to outperform net of fees. We also find that investors with little financial knowledge generally tend to pay higher fees, i. e. even if they only have to choose between conventional funds. However, investors with lower financial literacy pay even higher fees when they are confronted with an additional layer of complexity due to the introduction of sustainable investments into the choice set.

Fee sensitivity on sustainable investments varies across countries, consistent with financial literacy levels in those countries. Fee sensitivity is highest in the Netherlands and Germany, the countries with the highest financial literacy, and lower in Spain, France, and Poland. Oaxaca-Blinder decompositions show that the observed country differences can be largely attributed to differences in financial literacy across countries.

Our paper contributes to literature on sustainable finance, asset pricing, and financial literacy. First, we contribute to the sustainable finance literature analyzing investors' willingness to pay for sustainable investments (e.g. Riedl and Smeets, 2017; Gutsche and Ziegler, 2019; Heeb et al., 2023). We find that social preferences positively predict the share of sustainable investments, and thus are associated with a higher willingness to pay for sustainable investments (a level effect). However, social preferences do not explain investors' *sensitivities* towards sustainable investment fees (a slope effect). Instead, we identify low financial literacy as main factor to explain insensitive reactions to higher fees on sustainable investments.

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Second, empirical evidence on the sustainable investment behavior of retail investors has focused on single-country studies (e.g. Riedl and Smeets, 2017; Gutsche and Ziegler, 2019; Hartzmark and Sussman, 2019; Bauer et al., 2021; Anderson and Robinson, 2022; Giglio et al., 2023) and it has not been clear to what extent these results generalize to other countries. Based on a large-scale survey, with exactly the same target groups, experimental approaches, definitions of sustainable investments, and time period, we show that individual investors differ in their sensitivities to rising fees for sustainable investments across countries and that these differences can be explained by country differences in financial literacy.

Third, we find some variation across countries in how financial motives and individual preferences (e.g. risk preferences, time preferences, or signaling) explain the share of sustainable investments in an individual's portfolio. However, social preferences universally predict the share of sustainable investments in all countries studied, contributing to cross-country studies analyzing social preferences (e.g. Falk et al., 2018) and sustainable investments (e.g. Dyck et al., 2019; Gibson et al., 2022). This finding stands in stark contrast to models in traditional finance postulating that investors' decisions are grounded solely on risk-return considerations. Here, the result that social preferences universally matter gives support to the assumptions of more recent models in finance that incorporate such social preferences (Heinkel, Kraus, and Zechner, 2001; Pastor, Stambaugh, and Taylor, 2021; Pedersen, Fitzgibbons, and Pomorski, 2021; Broccardo, Hart, and Zingales, 2022; Gollier and Pouget, 2022).

Hence, as contribution to the literature on asset pricing, our results have important consequences for asset pricing in and out of equilibrium, whereby investors with social preferences could drive up the price of stocks of sustainable companies and drive down the prices of stocks of less sustainable companies (Heinkel et al., 2001; Pastor et al., 2021; Pedersen et al., 2021).

We also contribute to research that explores the impact of financial literacy on investors' financial decisions (e.g. Lusardi and Mitchell, 2008, 2011; van Rooij et al., 2011; von Gaudecker, 2015; Anderson and Robinson, 2022) as well as to studies focusing on how investors deal with fees associated with investment products (e.g. Sirri and Tufano, 1998; Hortacsu and Syverson, 2004;

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Barber et al., 2005; Choi et al., 2010; Barahona, 2020). Our findings underscore the pivotal role that financial literacy plays in the context of mutual funds and sustainable investments. The inclusion of sustainable investment funds in the fund menu results in low-literate investors paying even higher fees compared to a situation where they choose only from conventional funds.

Furthermore, the European Union's (EU) new regulation on sustainable finance (e.g. the Sustainable Finance Disclosure Regulation) has garnered criticism for its complexity and obscurity (e.g. FSUG, 2023), which poses significant challenges for investors attempting to adequately assess sustainability information. This issue is particularly alarming considering our discovery that investors with low financial literacy tend to overlook fees and erroneously believe that funds with higher fees will outperform others, even after accounting for these fees. This insight emphasizes the need for financial regulations to recognize and enhance the role of financial literacy in protecting investors. Our results also imply that regulation addressing financial literacy should also account for potential regional differences within countries (e.g. within the United States, see Bumcrot, Lin, and Lusardi, 2011), but also between countries (e.g. between different EU member states).

2. Data, experimental design, and variables

We base our analysis on a lab-in-the-field experiment, which was implemented in a large scale computer-assisted online survey among 5,162 households' financial decision makers in five European countries, namely France (1,007 respondents), Germany (1,009 respondents), the Netherlands (1,010 respondents), Poland (1,070 respondents), and Spain (1,066 respondents). The survey was carried out in collaboration with the professional market research institute Psyma+Consulting GmbH (Psyma) during May to July 2021 and had the goal to survey about 1,000 people per country (i.e. about 5,000 respondents in total). Among other tasks, Psyma was responsible in particular for programming the questionnaire, conducting the online survey, and recruiting the respondents from own online panels.

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2.1 Representativeness and survey quality

We adopted the following two-step approach to make the surveys as representative as possible for the retail investor space. First, Psyma recruited individuals in such a way that the samples of people who started the survey were, as close as possible, representative of citizens of at least 18 years of age for the respective country.[2] In a second step, we asked screening questions about the respondents' responsibility for financial decisions in their household and their current as well as previous investment experiences. Only individuals who either currently or previously owned investment products or reported to be sufficiently informed about investment products were allowed to proceed with the questionnaire and to participate in the lab-in-the-field experiment. In the next section, we will show that this sampling approach indeed led to a broad representation of investors in our sample.[3]

Together with Psyma, we implemented a number of measures to ensure good survey quality that are in line with recommendations for conducting surveys (see Stantcheva, 2023, for a recent summary of good practices), including conducting a pre-test and a soft launch, providing incentives for participants, performing quality checks, and offering support for participants.[4] These measures are explained in detail in Part A of the Internet Appendix.

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[2] For instance, whether invited persons responded to the survey differed for some strata of the invited population, and subsequent invitation waves were sent with higher weight for those strata that were less likely to respond (for example, if females less frequently opened the survey in the first invitation wave, they were sampled disproportionally in the subsequent invitation waves), such that in the end the distribution of age, gender, and region for people who finally started the survey are close to the respective distributions in the national official population statistics. The panels in each country are representative of the corresponding population in terms of age, gender, and region. All panels were regularly checked to ensure they still meet the representativeness criteria, taking into account panel mortality.

[3] As shown in the description of Table B.3 in the Internet Appendix, the approach for Germany was slightly different because we had prior information on the distribution of typical sociodemographic characteristics of individual investors from a previous study (Gutsche, Wetzel, and Ziegler, 2023).

[4] The invitation email and the landing page text for the survey are shown in Figure C.1 and in Figure C.2 in the Internet Appendix.

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2.2 Survey and sample structure

The study was pre-registered at OSF Registries[5] and our approach was ethically approved by the central ethics committee of one of the authors' universities. The survey consisted of nine different parts (A-I): Part A contained questions that allowed us to screen-out respondents not in the target group and gathered information on their current investments and household financial decision-making. Part B contained the core investment experiment, described in the next section. Part C included general questions on investment and consumption behavior. Part D focused on respondents' sustainable investment behavior and knowledge. Part E captured individual characteristics such as economic preferences and personal attitudes, particularly measures of risk, time, and social preferences in the context of the present study. Part F included questions on financial literacy. The final parts (G, H, and I) covered socio-demographic background information.

In line with our goal to survey countries with varying backgrounds, our data show that individual investors differ across countries with respect to the median net household income, age, gender, and education (see also Table B.1 in the Internet Appendix). Concerning net household income, the Netherlands ranks highest with a median class of €3,500 to €4,000, followed by France and Germany. The average age is similar across countries, ranging from 42.7 years in Spain to 48.3 years in the Netherlands. The share of female investors is higher in Poland and Spain compared to France, Germany, and the Netherlands. Nevertheless, the share of female investors is well below 50% in all countries. More than half of individual investors have a university education in Spain, Poland, and the Netherlands. Compared to the general populations in each of these countries (see Tables B.2 to B.6 in the Internet Appendix), we see that our investor samples tend to be overrepresented by male and older individuals. These investor characteristics are in line with the characteristics of investors in previous studies (e.g. Guiso, Sapienza, and Zingales, 2008; Kaustia and Torstila, 2011; van Rooij, Lusardi, and Alessie, 2011; Riedl and Smeets, 2017; Choi and Robertson, 2020).

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[5] https://osf.io/6kyja.

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2.3 Investment experiment

After the initial screening questions in Part A of the survey, we directly started with the incentivized investment experiment as the main part of our study. In this way, we minimize any priming effects, whereby investment behavior in the experiment could be influenced by previous questions. We described the basic setting to the respondents on the first screen of the experiment. Accordingly, respondents had the opportunity to make eight subsequent investment decisions, with a freely allocable endowment[6] in each decision situation.

To incentivize investment decisions, we informed the participants that ten of them would be randomly selected after finishing the survey in July 2021 and that their investment decisions would be realized (indeed we invested real money in accordance with the investment decisions after the field phase). We further explained that the investment would last for one year. After this year, in July 2022, the funds will be sold again and the selected participants will receive the value of their portfolio net of fees.[7] For further clarification, we included two examples to explain the procedure if a person were to be selected. We further guaranteed that all ten selected participants would be informed about their selection after the random selection is completed, and that all information would be true. Finally, we emphasized that respondents were totally free in their decision.[8]

Respondents were randomly assigned to two groups with equal probability and without their knowledge. Individuals assigned to the first group (Set A) were first asked to make four investment decisions regarding ETFs for the MSCI World Index and the MSCI World ESG Screened Index.

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[6] Following Falk et al. (2018), endowments were scaled by median household income in each country, expressed in local currency (€ for France, Germany, the Netherlands, and Spain, and Zł for Poland), and rounded to the next multiple of 100 to facilitate calculations. The reference endowment was €1000 in Germany, and scaling resulted in endowments of €1000 for France and the Netherlands, €600 for Spain, and €300 for Poland (rounded and converted to Zł1300).

[7] To provide participants with realistically high investment amounts and to reduce administrative complexity, we follow earlier experimental studies analyzing individual investment behavior and only a pay randomly chosen subset of participants (e.g. Kirchler, Lindner, and Weitzel, 2018). Results from various (review) studies show that such an approach leads to only minor differences, if any, compared to the case where all participants are paid (e.g. Charness, Gneezy, and Halladay, 2016; Clot, Grolleau, and Ibanez, 2018). After the survey, we did indeed invest real money according to the investment decisions.

[8] Figure C.3 in the Internet Appendix shows an exemplary screenshot of the first screen of our experiment.

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Thus, these respondents could choose between an ETF based on a broad (conventional) global stock index covering more than 1,600 stocks from 23 developed countries, namely the MSCI World Index, and an ETF based on a narrower (sustainable) stock index taking ESG criteria into account, namely the MSCI World ESG Screened Index. After these four decisions, we asked these respondents to make four additional investment decisions between an ETF based on the MSCI World Index and an ETF based on the MSCI World Climate Change Index. We thus again offered an ETF based on a broad (conventional) global stock index but replaced the rather generally oriented sustainable stock index by an index focusing on climate-related issues and transition risks towards a low-carbon economy. This distinction allows us to reveal to what extent individuals take different facets of sustainability into account and whether individual investors' fee sensitivity varies across different sustainable investment approaches.

When selecting the investment products used in the experiments, we deliberately chose ETFs, as these are straightforward investment products that enjoy a high degree of familiarity. The latter also applies to the MSCI World Index and its provider MSCI. By choosing MSCI, it was also possible to select two sustainable stock indices that are offered by the same financial services provider and are both based on the same parent index (the MSCI World Index). Ultimately, this approach also enables us to explore the extent to which investors are willing to move away from a broad market portfolio to invest sustainably instead.

To avoid order effects related to the type of sustainable ETF that was shown first, respondents assigned to the second group (Set B) were first asked to make four investment decisions between an ETF based on the MSCI World Index and an ETF based on the MSCI World Climate Change Index, and were then asked to make four investment decisions between an ETF based on the MSCI World Index and an ETF based on the MSCI World ESG Screened Index. Otherwise, the experimental design for the two groups was identical (i.e. all texts and explanations that did not concern the specific ETFs were the same).

On the second screen, we explained the specific decision situation. Accordingly, we described that respondents would be asked to allocate their endowment between two funds that are based on real

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ETFs in each decision situation.[9] Individuals were free in their allocation and could invest the entire amount into one single fund or distribute the amount equally or unequally between the two funds. The only constraint was that they had to invest a certain minimum amount of their available endowment if they wanted to invest in an ETF.[10] This minimum amount was 1/20 of the available endowment, and thus €50 in France, Germany, and the Netherlands, €30 in Spain, and Zł65 in Poland. In the following, individuals assigned to Set A received short descriptions about the MSCI World Index and the MSCI World ESG Screened Index and were then asked to make their first investment decision.[11] Analogously, individuals assigned to Set B received information on the MSCI World Index and the MSCI World Climate Change Index and were then asked to make their first investment decision.

Figure 1 shows a screenshot of an exemplary first decision situation for individuals from Set B (translated into English). This figure illustrates the key feature of our experiment: In addition to the short descriptions of the indexes in the upper part of this figure, we informed respondents about the fees charged on each ETF. Importantly, we did not provide any further specific information on the ETFs (e.g. past returns or a concrete International Securities Identification Number), which would allow individuals to identify these funds by, for example, searching on the internet.[12] This allowed us to set the fees charged on the ETF based on the MSCI World Index to a constant value of 0.20% in all eight decision situations per respondent, but to vary the fees charged on the sustainable ETFs.

For each of the two sustainability stock indices, we presented four different fee scenarios to each individual. The fees charged on the sustainable ETFs were 0.20%, 0.90%, 1.60%, and 2.30%. This fee range was based on the dispersion of ongoing costs for passive investment products in the EU (ESMA, 2020). The order of these four fee scenarios varied randomly across individuals.

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[9] Note that, similar to our design, for a given index, there can be several ETFs that can significantly differ with respect to fees (Hortacsu and Syverson, 2004; Choi et al., 2010).

[10] We introduced this minimum amount to avoid too small investments in any of the ETFs offered.

[11] The descriptions of the indexes were based on the official documents provided by MSCI.

[12] In fact, the performance of the three indices has been very similar over the past few years.

Therefore, for both sustainability stock indexes and each individual, we considered an investment decision in which the fees charged on the sustainable ETF were just equal to the fees charged on the conventional ETF. In the other three scenarios, the fees charged on the sustainable ETF were higher compared to the fees charged on the conventional ETF.

For example, if the value of 0.90% had been randomly selected as fee charged on the MSCI World Climate Change Index ETF in the first decision of a certain individual (see Figure 1), the fees charged on the sustainable ETF in the second decision situation, which was shown on the next screen, would be either 0.20%, 1.60%, or 2.30%. The fee charged on the sustainable ETF in the second decision would then be randomly selected from these three values. The fees for the third and fourth decision situations are determined accordingly.[13] This approach allows us to reveal to what extent individuals are willing to invest in a sustainable manner if fees differ, and thus how sensitively investors react to varying fees on sustainable investments.

< Figure 1 here >

2.4 Variables

2.4.1 Experimental variables

Share invested in sustainable ETFs

To gain insights into individuals' preferences towards sustainable ETFs, and in particular to compare individual sustainable investment behavior across the four fee scenarios, we construct the variable *Share of endowment invested in sustainable ETFs*. This variable measures an individual's investment in either the MSCI World ESG Screened Index fund or the MSCI World Climate Change Index fund in each of the eight investment decisions as share of their endowment (in %). This variable serves as dependent variable in our main analysis.[14]

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[13] For exemplary screenshots showing the second, third, and fourth decision in the experiment, see Figures C.4, C.5, and C.6 in the Internet Appendix.

[14] Thus, we use a slightly differently constructed dependent variable than described in the pre-analysis plan. However, this does not change our basic empirical strategy and all hypotheses can still be tested.

Fees

To capture respondents' sensitivities to higher fees on sustainable ETFs, we construct one dummy variable for each fee scenario, namely *Fees on sustainable ETF: 0.2%*, *Fees on sustainable ETF: 0.9%, Fees on sustainable ETF: 1.6%,* and *Fees on sustainable ETF: 2.3%*. These variables take the value of one if the corresponding fee scenario is considered, and zero otherwise.

Further variables

Finally, we construct several auxiliary variables. First, we construct eight dummy variables (*First decision*, *Second decision*, …, *Eighth decision*) that indicate the respective investment decision situation of each respondent to capture potential learning effects or fatigue. Second, to control for potential order effects, we also create the dummy variable *Saw ESG Screened ETF first* that takes the value of one if a respondent is assigned to the first group (Set A) which was first asked to make four investment decisions between the ETFs based on the MSCI World ESG Screened Index and the MSCI World Index, and zero otherwise. Third, to differentiate between the two sustainable investment strategies analyzed in our main analysis, we created a dummy variable called *MSCI World Climate Change Index ETF* that takes the value of one if the corresponding investment decision refers to an ETF based on the MSCI World Climate Change Index, and zero if the decision is related to an ETF based on the MSCI World ESG Screened Index.

2.4.2 Survey variables

We additionally create a wide variety of variables based on survey questions. Some of these variables allow us to measure individual social preferences, financial literacy, and return expectations and thus to analyze how these factors drive investors' sensitivities to higher fees on sustainable investments. The remaining variables are mainly used as control variables.

Social preferences

We capture social preferences using validated survey questions from the Global Preferences Survey Module (Falk et al., 2016; Falk et al., 2018). A large advantage of using these validated

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questions is that they are already available in the languages of the five countries considered in our study.[15] Moreover, using identical formulations as earlier studies increases the comparability of our data. Accordingly, we ask the question "How willing are you to give to good causes without expecting anything in return?" Respondents can indicate their willingness on an 11-point Likert scale ranging from 0 "completely unwilling" to 10 "completely willing." Based on these answers, we construct the variable *Social preferences* that captures responses to this statement and thus takes values from zero to ten.

Financial literacy and understanding the impact of fees for net returns

We use two measures to capture individual financial literacy. Our first measure is based on quiz questions developed by Lusardi and Mitchell (2008, 2011). These three quiz questions refer to interest rates, inflation, and risk diversification, respectively. The variable *Financial literacy* comprises the number of correct answers and thus ranges between zero and three. The average score on the financial literacy quiz is 2.21 correct answers. Table B.7 in the Internet Appendix contains the shares of correct answers for each of the questions. An additional comparison with the findings from the Eurobarometer survey shows that our scores are highly consistent with external data.

As these quiz questions aim to measure an individual's general financial knowledge, we additionally consider a second measure that directly indicates whether respondents understand the impact of fees for their net returns. After the experiment we ask participants: "Please assume that you have been selected. Please indicate the amount to be deducted from the value of your investment if the value of your investment in July 2022 is €1,000 and the fees are 2.3%." Respondents can choose between €0.23, €2.30, €23.00 (correct answer), €230.00, and "do not know." Accordingly, we construct the dummy variable *Did calculate fees correctly* that takes the

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[15] These questions can be downloaded from https://www.briq-institute.org/global-preferences/downloads (accessed on November 15, 2023). All other questions and texts are translated into the different languages by the survey institute and are cross-checked by the researchers involved in this project, with each of the researchers able to cover at least one of the five countries considered in our study.

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value of one if the person selects €23.00, and zero otherwise. 76.68% of all respondents answered this question correctly, 16.62% selected an incorrect answer, and 6.70% answered "do not know," indicating a substantial share of respondents not understanding how to calculate fees correctly.

Return expectations

To capture return expectations concerning sustainable versus conventional investments (e.g. Riedl and Smeets, 2017), we ask the question "What returns do you expect on the MSCI World ESG Screened Index fund?" Respondents can choose among "much lower returns compared to the MSCI World Index fund," "a little lower returns compared to the MSCI World Index fund," "neither lower nor higher returns compared to the MSCI World Index fund," "a little higher returns compared to the MSCI World Index fund," "much higher returns compared to the MSCI World Index fund," and "don't know." To capture return expectations concerning the MSCI World Climate Change Index ETF, we adjust the question accordingly, but use the same response categories.

In constructing the corresponding variables, we must account for the fact that we include all eight investment decision of each person in the main analysis. Thus, in four observations per person, the dependent variable *Share of endowment in sustainable ETFs* relates to ETFs based on the MSCI World ESG Screened Index and in the other four decisions to ETFs based on the MSCI World Climate Change Index. Thus, if we want to include return expectations as explanatory variables, they must also relate to the corresponding fund. Therefore, we construct one dummy variable for each of the response categories, namely *Much lower returns compared to MSCI World*, *A little lower returns compared to MSCI World*, *Neither lower nor higher returns compared to MSCI World*, *A little higher returns compared to MSCI World*, *Much higher returns compared to MSCI World*, and *Do not know returns*. These variables take the value of one if the respondent select the corresponding response category, and zero otherwise. However, the values of the variables in four decisions refer to the individuals' expectations on the returns of ETFs based on the MSCI World ESG Screened Index and in (the other) four decisions to the expectations on ETFs based on the MSCI World Climate Change Index. Therefore, the values of these variables may also vary within

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an individual if they have different return expectations for ETFs based on the MSCI World ESG Screened Index than for ETFs based on the MSCI World Climate Change Index.

Control variables

In addition, we also create a large set of control variables. To not only capture return expectations, but also individual risk perceptions concerning sustainable versus conventional investments, we ask respondents to indicate their agreement with the statements "The MSCI World ESG Screened Index fund is riskier than the MSCI World Index fund." and "The MSCI World Climate Change Index fund is riskier than the MSCI World Index fund." Consistent with the scale used by Riedl and Smeets (2017), for both statements, respondents can rate their agreement on a 7-point Likert scale ranging from 1 "fully disagree" to 7 "fully agree" or select "don't know." In constructing the variables for the main analysis, we proceed as in the previously described construction of the variables capturing individual return expectations. Accordingly, the variables refer to either ETFs based on the MSCI World ESG Screened Index or ETFs based on the MSCI World Climate Change Index. We construct three dummy variables. The dummy variable *Lower risk compared to MSCI World* takes the value of one if the respondent perceives the corresponding sustainable ETF to be less risky than the MSCI World Index fund (Likert scale 1-3), and zero otherwise. The dummy variable *Higher risk compared to MSCI World* takes the value of one if the respondent perceives the corresponding sustainable ETF to be riskier than the MSCI World Index fund (Likert scale 5-7), and zero otherwise. We additionally construct the dummy variable *Do not know risk* that takes the value of one if a respondent selects the option "don't know", and zero otherwise. Thus, the base category refers to equal risk perceptions (Likert scale 4).

We measure respondents' risk and time preferences by using validated survey questions from the Global Preferences Survey Module (Falk et al., 2016; Falk et al., 2018). Concerning risk preferences, we ask respondents to tell us, in general, how willing or unwilling they are to take risks, using a scale from 0 to 10, where 0 means "completely unwilling to take risks" and 10 means "very willing to take risks." The responses to this question are coded by the variable *Risk preferences*. Regarding time preferences, we ask respondents to indicate their willingness to give

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up something that is beneficial for them today to benefit more from that in the future. Respondents can indicate their willingness on an 11-point Likert scale ranging from 0 "completely unwilling" to 10 "completely willing." The answers to this question are captured by the variable *Time preferences*.

To capture potential signaling motives, we follow Riedl and Smeets (2017). Accordingly, we ask respondents for their agreement with the statement "I often talk about investments with others." on a 7-point Likert scale ranging from "fully disagree" (Likert scale 1) to "fully agree" (Likert scale 7). The variable *Signaling* captures responses to this statement and thus takes values from one to seven.

Finally, we consider socio-demographic and socio-economic variables. We construct the following variables: The variable *Age* denotes the respondents' age in years. The dummy variable *Female* takes the value of one if the respondent is a woman, and zero otherwise. The dummy variable *High education* takes the value of one if the respondent has at least a university entrance qualification, and zero otherwise. The dummy variable *Married* takes the value of one if a respondent is married or lives together with their partner, and zero otherwise. To capture the respondents' household net income, we construct four dummy variables, namely *Low income*, *Middle income*, *High income*, and *Do not know or report income*. *Low income* takes the value of one if the respondent's reported monthly net household income is below the median class in the sample for the respective country, and zero otherwise. *Middle income* takes the value of one if the respondent's reported monthly net household income is in the median class in the sample for the respective country, and zero otherwise. *High income* takes the value of one if the respondent's reported monthly net household income is above the median class in the sample for the respective country, and zero otherwise. Finally, *Do not know or report income* takes the value of one if the respondent does not know or disclose their monthly net household income, and zero otherwise.

Given the differences in religious affiliations across countries and possible resulting influences on sustainable investment behavior (e.g. Salaber, 2013), we also construct three dummy variables to capture respondents' religious affiliations: The dummy variable *Catholic* takes the value of one if

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a respondent belongs to the Roman Catholic Church, and zero otherwise. In the same manner, the dummy variables *Protestant* and *Other religion* take the value of one if the respondent belongs to the Protestant Church or has any other religious affiliation, respectively, and zero otherwise. The dummy variable *Do not report religion* takes the value of one if the respondent indicated that they are not willing to answer questions about the topic of religiosity, and zero otherwise. Finally, we construct the five country dummy variables *France*, *Germany*, *Netherlands*, *Poland*, and *Spain* that take the value of one if the respondent's main place of residence if in the corresponding country, and zero otherwise. We present an overview of selected descriptive statistics for all survey variables in Table B.1 in the Internet Appendix.

2.5 Comparison of our data with external data

To see to what extent the data we collected is representative of individual investors in the five countries, we cross-checked our data with various external data sources. Regarding *Financial literacy*, we find that the country differences observed in our sample closely align with those in a recent large-scale Eurobarometer survey (European Commission, 2023).[16] In both cases, the financial literacy scores are highest in the Netherlands and Germany.

Table B.8 in the Internet Appendix provides a comparison of *Age*, *Female*, and *High education* across the five countries in our sample and the same variables in other studies of individual investors (Betermier, Calvet, and Sodini, 2017; Riedl and Smeets, 2017; Choi and Robertson, 2020; Liu et al., 2022; Meeuwis et al., 2022). The average age of individual investors in these studies tends to be around 50 years, with a smaller share of investors being under 30 years of age. This is very similar to the age structure in our sample. Nearly all samples, including ours, also indicate a higher proportion of male individual investors compared to females, and that a significant number of these investors possess a high level of education. Furthermore, age, gender, and education in our sample are in line with the characteristics of investors in further previous

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[16] See Table B.7 in the Internet Appendix.

studies (e.g. Guiso, Sapienza, and Zingales, 2008; Kaustia and Torstila, 2011; van Rooij, Lusardi, and Alessie, 2011).[17]

3. Results

Figure 2 plots the share of the endowment individuals invest on average in sustainable ETFs in the four fee scenarios.[18] Respondents invest on average about 56% in a sustainable manner if the fees on the sustainable ETF and the MSCI World Index ETF are equal (grey bar). Respondents further react to increasing fees charged on sustainable investments by decreasing their sustainable investments on average. However, in both the 0.9% and the 1.6% scenario, the average shares of sustainable investments do not fall below 50% (light green and sand-colored bar). Even if the fees for the sustainable option are as high as 2.3%, the average share of sustainable investments remains at 48.0% (orange bar). Therefore, our findings align with previous studies indicating that, on average, investors are willing to pay for sustainable investments (such as Riedl and Smeets, 2017; Barber et al., 2021; Baker et al., 2022; Heeb et al., 2023).

< Figure 2 here >

Nevertheless, Table 1 shows that the observed reductions in the shares of sustainable funds are statistically significant compared to the 0.2% baseline scenario, also after controlling for individual-specific characteristics and experimental variables.[19] Evidence for different average

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[17] However, a direct comparison of those studies with our data is not feasible due to differences in the measurement of the investor characteristics across studies. For instance, based on a representative sample of Dutch individuals, Van Rooij, Lusardi, and Alessie (2011) report stock market participation for different subgroups of the sample, such as female (16.7% participation) or male (30.3% participation) individuals.

[18] Thus, to analyze our first research question, we pool all investment decisions and do not yet distinguish between the two sustainable investment strategies, i.e. whether an ETF is based on the MSCI World ESG Screened Index or the MSCI World Climate Change Index.

[19] Table 1 presents the results of fixed effects (column 1) and random effects estimations (columns 2 and 3). By applying the fixed effects estimation approach, we account for the panel data structure in our dataset with eight subsequent investment decisions per respondent and control for individual fixed effects that are time-invariant across these eight decisions. By using the random effects estimations approach, we also take the panel data structure in our data into account. However, this approach further allows us to analyze the relevance of potential determinants of individual sustainable investments and to compare our results with previous studies, analyzing the determinants of individual sustainable investment behavior. To ensure that our results are not influenced by extreme values or outliers, we conducted several robustness checks for the same models as in columns 2 and 3 of Table 1, as reported in Table

shares invested in sustainable ETFs across the fee scenarios is also supported by the corresponding non-parametric Friedmann test ($\chi2$ test statistic = 318.639, p-value = 0.000). This suggests that while individual investors are generally sensitive to higher fees charged on sustainable funds, they still invest a considerable amount in sustainable ETFs, even if the fees become more expensive.

< Table 1 here >

Table 1 further allows us to analyze whether we can replicate results from previous studies examining the determinants of sustainable investment behavior. We find that return expectations and risk perceptions play an important role in the (sustainable) investment decision (cf. Hartzmark and Sussman, 2019; Giglio et al., 2023). Individuals who expect higher returns on the sustainable alternative compared to MSCI World Index fund invest a significantly higher proportion of their endowment sustainably. In addition, respondents who expect lower returns also invest less in the corresponding fund, compared to respondents who expect neither lower nor higher returns. In terms of risk perceptions, a similar picture emerges. People who perceive the risks of sustainable funds as higher compared to the MSCI World Index fund invest less in the sustainable investment alternative than people who expect the same risks. If they expect lower risks, they also invest more than people expecting equal risks.

More interestingly, we find a statistically and economically significant effect of social preferences on the share of sustainable ETFs. This shows that different from standard finance theory, investors are also guided by non-pecuniary returns. The estimated social preference parameters imply that a one standard deviation (2.58) increase in a person's willingness to give to good causes is associated with an increase of between 2.19 (model 2) and 2.37 (model 3) percentage points in investment in the sustainable ETF.

B.9 in the Internet Appendix. We excluded participants with scores for the explanatory variables that deviated more or less than three standard deviations from the corresponding means. We also winsorized scores of participants on the explanatory variables at the 99th percentile and estimated median regression models. To demonstrate that our results are not influenced by respondent attrition, we used inverse probability weights that were estimated using logistic regression for the same models as in columns 2 and 3 of Table 1, as presented in Table B.10 in the Internet Appendix.

Regarding the other economic preferences, we find no evidence that risk preferences play a role. However, time preferences matter. It turns out that patient people invest a larger share of their endowment in sustainable investments. This finding is in line with the idea that societal and environmental benefits are most likely to occur in the long run and investors need to be patient for these effects to materialize. This result is also consistent with the finding that institutional investors with a longer term investment horizon invest more in companies with good ESG performance (Starks, Venkat, and Zhu, 2020). Concerning social signaling motives, individuals who talk about investing frequently, invest a lower proportion of their initial endowment in sustainable ETFs. Investing a small portion in sustainable investments enables individuals to discuss these investments with others to improve their reputation, without incurring significant additional costs (as noted in Riedl and Smeets, 2017).

Regarding other individual characteristics, respondents with higher levels of financial literacy tend to invest a lower percentage in a sustainable manner. The analysis in the next section will show that this result is driven in particular by fee sensitivity, because investors with high financial literacy reduce sustainable investments as fees increase, but low-literate investors keep investing in sustainable funds if fees are high. Moreover, women tend to invest a higher proportion of their investments sustainably than men. This finding is in line with previous literature, such as Bauer et al. (2021) who also find that female pension fund members are more likely to choose sustainable investments than male members. Catholic respondents invest significantly less in sustainable funds than respondents without religious affiliation.

Further, the third model in Table 1 gives us a first indication of possible country differences. The results show that French respondents (the omitted category) invest a significantly higher proportion in sustainable ETFs than respondents from the other countries, implying relatively stronger preferences for sustainable investments. Especially German investors have significantly weaker preferences for sustainable investments than respondents from the other countries.

Finally, considering our experimental controls, we find that respondents have slightly stronger preferences for sustainable investments that follow a rather narrow strategy with respect to climate

change than a broader ESG strategy. Our results further hold if we control for potential order effects by including the dummy variable *Saw ESG Screened fund first* and the indicators for the different decision situations.

3.1 What drives fee sensitivity of sustainable investors?

To analyze to what extent respondents' fee sensitivity is driven by social preferences or financial literacy, we extend model 3 in Table 1 and specify three additional models in the next step. In the first model, we interact the variable *Social preferences* with the dummy variables indicating the three fee scenarios of 0.9%, 1.6%, and 2.3%, respectively. These interaction terms allow us to analyze how individual fee sensitivity varies with different levels of social preferences. We proceed in an analogous manner with our two measures for financial knowledge, namely *Financial literacy* in the second model and *Did calculate fees correctly* in the third model. The corresponding estimation results are reported in Tables B.11 to B.13 in the Internet Appendix.

Based on the first model, Figure 3 shows the predicted shares of sustainable ETFs across the four fee scenarios for individuals with rather weak and strong social preferences. To represent rather weak social preferences, we consider the lowest quartile of the sample distribution of social preferences, which corresponds to a score of five (given a Likert-scale ranging from zero to ten). Rather strong social preferences are represented by the highest quartile of the sample distribution, corresponding to a score of nine, and thus almost the highest score on the scale.[20]

Two aspects become evident from this figure. First, the bars for each fee scenario increase with stronger social preferences. This pattern illustrates the estimated positive effect of social preferences on the share of sustainable ETFs as already noted based on Table 1 and implies a higher willingness to pay for sustainable investments. However, at both social preferences scores,

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[20] The pattern that we describe here by using the 25% and 75% quantiles does not change if we predict the shares of sustainable ETFs in the different fee scenarios at any other social preferences score from zero to ten.

the shares of sustainable investment decrease at a similar rate across the fee scenarios.[21] We thus find no support for the social preferences explanation, implying that individuals' sensitivities to fees on sustainable investments are not driven by social preferences.

Result 1a: Social preferences play a role in determining the share of sustainable investments, but they do not explain how investors react when faced with an increase in fees on sustainable investments.

< Figure 3 here >

However, we find strong evidence for the financial literacy explanation. Figure 4 illustrates that respondents' fee sensitivity increases with higher levels of financial literacy. Respondents with two and especially three correct answers react sensitively to increasing fees and decrease their share of sustainable ETFs if the corresponding fees go up. In contrast, persons with low levels of financial literacy rather react insensitively to higher fees.

We even find that respondents who answered none of the quiz questions correctly tend to increase their investments with increasing fees. As an example, in the scenario where fees are 0.2%, individuals who answer three questions correctly are predicted to invest approximately six percentage points more in sustainable investments than those who answer none correctly. In contrast, in the scenario with fees of 2.3%, individuals with the highest level of financial literacy significantly reduce their percentage of sustainable investments and are predicted to invest 14 percentage points less sustainably than those with the lowest level of financial literacy.[22] Thus, the estimated effects of financial literacy on sustainable investing behavior are also economically significant.

< Figure 4 here >

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[21] This pattern is also reflected by the estimated parameters for the interaction terms (see Table B.11 in the Internet Appendix), which are not significantly different from zero. Moreover, the result does not depend on the ETFs' sustainability strategy either, as can be seen from Figures C.7 and C.8 in the Internet Appendix.

[22] Figures C.9 and C.10 in the Internet Appendix show that these results do also not depend on the ETFs' sustainability strategy.

These results are confirmed when we consider the second measure for financial knowledge. Figure 5 plots the predicted shares of the endowment respondents invest on average in sustainable ETFs in the four different fee scenarios for persons who do not understand how to calculate fees, and those who do. In line with our findings concerning financial literacy, we find that individuals who do not understand the fee calculation task correctly react insensitively to higher fees on sustainable investments. In contrast, people who answer this question correctly are predicted to react sensitively to fees – similar to respondents with high levels of financial literacy.

The economic effects align with those previously discussed for financial literacy. In the scenario with 0.2% fees, individuals who correctly calculate fees are predicted to invest approximately five percentage points more in sustainable funds than their counterparts. However, in the scenario with 2.3% fees, individuals who understand how to calculate fees invest around six percentage points less than investors who do not calculate fees correctly. In summary, our analysis demonstrates that sensitivity to fees regarding sustainable investments is particularly dependent on individuals' financial knowledge.

Result 1b: Individuals with higher levels of financial literacy tend to decrease the percentage of their investments that are sustainable when these investment products become more expensive. In contrast, investors with lower levels of financial literacy tend to be less sensitive to higher fees on sustainable investments or even increase their investment in sustainable options as fees rise.

< Figure 5 here >

Finally, we test whether individuals in our experiment behave consistently with traditional finance models. Accordingly, individuals who expect higher returns from sustainable funds than from conventional funds would be less sensitive to rising fees on sustainable investments than their counterparts. To this end, we follow the empirical strategy described above and interact the dummy variables capturing individual return expectations with the dummy variables indicating the three fee scenarios of 0.9%, 1.6%, and 2.3%, respectively. Consistent with traditional assumptions, the

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results[23] show that return expectations play at least a moderate role in explaining fee sensitivity. Especially respondents who expect much higher returns on the sustainable ETF compared to the MSCI World Index ETF are significantly less fee sensitive.

3.2 Does fee sensitivity of sustainable investors vary across countries, and, if so, why?

In this section, we analyze how sensitivity to fees on sustainable investments varies across countries. Following our empirical strategy in the previous section, Figure 6 plots the average shares of their endowments respondents from the five different countries invested in sustainable ETFs in the four fee scenarios.[24]

< Figure 6 here >

In general, we find the same basic pattern for all countries, namely decreasing investments in sustainable ETFs with increasing fees. However, the plot also shows two important findings. First, if fees on sustainable and conventional funds are equal, preferences for sustainable investments seem to vary across countries, but only slightly.

Second, Dutch and German respondents react considerably more sensitively to increasing fees on sustainable investments than respondents from the other three countries. This result is graphically illustrated in Figure 6 by the fact that for Germany and the Netherlands, the height of the bars decreases significantly faster with increasing fees than for the other three countries. Here, the bars also decrease, but to a much lesser extent. These findings are statistically supported by the results of a regression analysis presented in Table B.15 in the Internet Appendix. The corresponding estimation results imply that Polish and Spanish respondents do not react significantly different to higher fees charged on sustainable investments than French respondents. Accordingly, Germans and the Dutch respond not only more sensitively to higher fees on sustainable investments than French respondents, but also than Polish and Spanish respondents.

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[23] See Table B.14 and Figure C.11 in the Internet Appendix.

[24] Thus, as in section 3.1, we do not distinguish between the two sustainable investment strategies, i.e. whether an ETF is based on the MSCI World ESG Screened Index or the MSCI World Climate Change Index.

Result 2a: The sensitivity to higher fees on sustainable funds varies across European countries and is highest in the Netherlands and Germany.

To analyze and explain the country differences in fee sensitivity observed above, we conduct an Oaxaca-Blinder decomposition (Oaxaca, 1973; Blinder, 1973). This method has traditionally been used to analyze wage discrimination between women and men and has been used in finance to analyze stock market participation (Grinblatt, Keloharju, and Linnainmaa, 2011) and financial distress (Parise and Peijnenburg, 2019). The potential number of analyses to conduct with the Oaxaca-Blinder decomposition is too large to report all results in a comprehensive manner. Since we find that the sensitivity to higher fees on sustainable funds is highest in the Netherlands and Germany, we compare the fee sensitivity in each of these two countries with each of the other three countries. In addition, we consider the two extreme fee scenarios of 0.2% and 2.3% and measure fee sensitivity by the difference in the individual investment amounts if fees increase from 0.2% to 2.3%.

Table 2 confirms our previous results that German and Dutch respondents react considerably more sensitively to higher fees charged on the sustainable ETF than respondents from the other three countries. For example, German respondents reduce their share of sustainable investments by 9.61 percentage points more than French respondents if fees increase from 0.2% to 2.3%. We find similar effects when we consider the other five country comparisons reported in Table 2.

< Table 2 here >

In the decomposition framework, we are particularly interested in the share of the total difference that can be explained by country differences in the explanatory variables, as well as identifying which explanatory variables account for the largest share. Considering Germany and France again, 40.27%[25] of the country differences can be explained by differences in the explanatory variables included in our estimation approach. When considering the other five comparisons, the explained

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[25] We derive the value of 40.27% by dividing the explained part of the country difference of 3.87 percentage points by the total difference of 9.61 percentage points.

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proportions in the country differences that can be explained by differences in the explanatory variables vary between 23.68% and 49.71%.

Among all explanatory factors included, financial literacy explains the largest share of the total differences between all the countries considered. For example, 23.93% of the total difference in the reduction of the share of sustainable investments between Germany and France can be explained by differences in financial literacy. In other words, if these two countries had the same level of financial literacy, 23.93% of the gap in fee sensitivity would be closed. In the other five comparisons, differences in financial literacy are of similar importance, explaining between 18.10% and 34.97% of the total country differences in fee sensitivity. We observe the highest values when comparing Germany with Poland (27.86%) and the Netherlands with Poland (34.97%). These are exactly the countries for which we observe the highest average values (Germany and the Netherlands) and the lowest average values (Poland) of financial literacy (see Table B.1 in the Internet Appendix). Besides financial literacy, differences in the other explanatory factors, except for expected returns, seem to explain country differences only to a small extent.

Result 2b: Differences in the levels of financial literacy account for the vast majority of the explained country differences in sensitivity to fees, while return expectations appear to play only a minor role.

In addition to the country differences in terms of fee sensitivity for sustainable investments, our analyses show some interesting similarities and differences with regard to investment motives between the countries. Table 3 shows that the expectation of higher returns on the sustainable compared to the conventional fund especially matter for German, Dutch, and Spanish respondents.[26] Risk perceptions of sustainable investments compared to the MSCI World play a role in all countries, but especially in France. In sum, our results show that financial motives do play a role in all countries, but they also reveal clear differences in the relevance of these motives.

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[26] As described before, we apply random effects estimations in order to account for the panel data structure of our dataset and to include explanatory variables, which are time-invariant across the eight investment decisions per respondent (e.g. age, gender, etc.).

< Table 3 here >

We also find country differences with regard to the relevance of individual preferences such as risk preferences, time preferences, or social signaling. It is therefore even more remarkable that social preferences are significantly positively related to the share invested in sustainable ETFs in all countries[27]. This result is consistent with previous studies considering sustainable investment behavior of Dutch investors (e.g. Riedl and Smeets, 2017; Bauer et al., 2021). It shows that social preferences play an important role for investment decisions, universally in all five different countries considered. However, in addition to these similarities, we see differences between individual countries. The estimated effects of social preferences are stronger in Germany and the Netherlands than in France, Poland and Spain. The estimated effects for France, Poland and Spain are not significantly different from each other.

Finally, we look at the other individual characteristics. The negative correlation between Catholic affiliation and sustainable investment behavior observed in the previous section, is especially driven by countries with the highest proportion of Catholics in the sample, namely France, Poland, and Spain. With respect to the other sociodemographic variables, there are no clear patterns, except for a few weakly significant results.[28]

Result 3: Social preferences play an important role in explaining sustainable investments in all five countries. The strength of the relation varies somewhat across countries, with the highest importance in Germany and the Netherlands.

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[27] The p-value for France is 0.078.

[28] With respect to the pooled estimation in Section 3.1, we can assume that the results related to gender are driven in particular by respondents from Germany and Spain (with the estimated coefficients in the Netherlands and Poland going in the same direction, although not significant at a 10% significance level). In Poland, we see mild evidence that individuals with higher levels of education are significantly less likely to invest in sustainable investments. In France, we find a weakly significant positive effect of married individuals on the selection of a sustainable option.

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3.3 Do the experimental choices reflect real-world behavior?

We next test the external relevance of our experiment (Levitt and List, 2007; Falk and Heckman, 2009). To this end, we asked respondents whether they currently hold sustainable investments and created a dummy variable that takes the value of one if a respondent answered the question in the affirmative, and zero otherwise. We then regressed this variable on the average share of the endowment that respondents invested in sustainable ETFs in the experiment. As our full sample also contains respondents that held no investment products at the time of the survey (but held investments in the past), and thus also cannot hold the usual sustainable investment products, we consider both the full sample and the subgroup of current investors.[29]

Table 4 shows for both samples that respondents who invest a larger average share of their endowment in sustainable ETFs are significantly more likely to hold sustainable investments in real life. For instance, when considering no further control variables, current investors who on average invested above 75% to 100% of their experimental endowment in sustainable ETFs are 17.8 percentage points more likely to hold sustainable investments in real life than investors who have invested between 0% and 25%. This result remains stable when we control for potential further individual determinants of sustainable investment such as financial expectations[30], social preferences, or signaling.

In further regressions (see Table B.17 in the Internet Appendix), we also control for social desirability motives captured by six items from the Balanced Inventory of Desirable Responding developed by Paulhus (1984, 1991).[31] In these cases, we also find the described significant positive

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[29] We denote as current investors those respondents who indicated to hold at least one of the following investment products at the time of the survey: Stocks, passively managed stock funds, actively managed stock funds, mixed funds, passively managed bond funds, actively managed bond funds, other non-fixed-income forms of investment, precious metals, and cryptocurrencies.

[30] See Table B.16 in the Internet Appendix.

[31] We included the following six items from the Balanced Inventory of Desirable Responding (BIDR) developed by Paulhus (1984, 1991) in a random order: a) "My first impression of people usually turns out to be right," b) "I am very confident of my judgement," c) "I always know why I like things," d) "I have received too much change from a salesperson without telling him or her," e) "I am always honest towards other people," and f) "There have been occasions when I have taken ad-vantage of someone." Items a) to c) capture self-deceptive enhancement and items d)

relationship between experimental and reported sustainable investment behavior. Thus, our results are in line with previous studies showing that social preferences elicited in experiments are reflected in the field (e.g. Karlan, 2005; Benz and Meier, 2008; Baran, Sapienza, and Zingales, 2010; Riedl and Smeets, 2017). The results are also in line with previous finance studies showing the relevance of surveys and survey experiments to explain investment behavior (e.g. Chinco, Hartzmark, and Sussman, 2022; Giglio et al, 2023). Together, this suggests that our findings are relevant for real-word investment behavior.

< Table 4 here >

3.4 Why are investors who have low financial literacy less sensitive to fees?

To test whether our results replicate and to more deeply understand why investors who have low financial literacy display reduced sensitivity to increased fees, we conducted a follow-up survey. We explore the potential channels of attention and return expectations. Attention has been identified as an important driver of investment decisions (e.g. Hartzmark and Sussman, 2019; Hartzmark, Hirshman, and Imas, 2021; Bordalo, Gennaioli, and Shleifer, 2012, 2013, 2022). Investors with low financial literacy might pay less attention to fees and rather focus on other attributes, such as sustainability, when deciding on their investments. Alternatively, investors with low financial literacy might (wrongly) expect that funds with higher fees outperform after fees. Consumers without wine knowledge who want to buy a high quality red wine may choose an expensive red wine because they expect higher quality to come with a higher price (e.g. Monroe, 1973). Similarly, investors might apply this same logic, incorrectly, to investment funds.

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to f) impression management. Respondents could rate their agreement with each statement on a five-point Likert scale ranging from "not at all" (Likert scale one) to "completely" (Likert scale five). After reversing the negative statements d) and f), we give one point for every four or five. The variables *Self-Deceptive Enhancement* and *Impression Management* are the sum of the points for the corresponding three items. Thus, both variables can take values from zero to three.

We recruited 451 German investors via the online platform Prolific[32] in May 2023. In line with our main survey, we focus on individuals with investment experiences. Our sample therefore consists of individuals of at least 18 years of age with investment experience in common stocks. The survey consisted of four parts. Part A included the investment experiment with some follow-up questions. We then asked questions to capture respondents' levels of financial literacy (Part B), individual preferences (Part C), and socio-demographic characteristics (Part D).[33] We paid respondents a participation reward of £2.50 – pounds are the standard currency on Prolific. The median time to complete the survey was 12 minutes, which translates into an average monetary reward of £12.24 per hour.

The investment experiment was a reduced version of the main investment experiment described in Section 2.3. We again explained the basic setting to the respondents on the first screen of the experiment, using the same text as in the main experiment. We also asked respondents to invest a freely allocable amount of €1,000 and they were told that the investment would run from May 2023 to May 2024. Because we were mainly interested in how investors with different levels of financial literacy consider and interpret fees, and not how they split their money between a sustainable and a conventional investment in different fee scenarios, we only asked respondents to make one investment decision this time. For the same reason, we did not incentivize the investment decisions and this was the only difference in the instructions compared to the main study.

Respondents were randomly assigned to one of five treatment groups.[34] Across treatments we vary whether investors choose between conventional or sustainable funds, and we vary which fund carries the highest fee. This allows us to test whether financial literacy affects fee sensitivity differently depending on whether the sustainable or conventional fund charges the highest fee.

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[32] Prolific provides good data quality (e.g. in terms of respondents' attention, non-naivety, and response time, but also with regard to the reproducibility of known psychological results) compared to alternative recruitment platforms (e.g. Peer, Brandimarte, Samat, and Acquisti, 2017; Douglas, Ewell, and Brauer, 2023) and has been used in other economic and financial studies (e.g. Huber and Huber, 2020; Chen and Hwang, 2021).

[33] See Table B.18 in the Internet Appendix for an overview of the respondents' characteristics in our first follow-up survey.

[34] See Table B.19 in the Internet Appendix for an overview of these five treatment groups.

The first two treatment groups were already considered in the main experiment. In these two groups, respondents were asked to allocate their endowment between an ETF based on the MSCI World Index and an ETF based on the MSCI World ESG Screened Index. For the first group, we set the fee charged on the conventional ETF to 0.2% and the fee charged on the sustainable ETF to 0.9%. For the second group, we set both fees to 0.2%. Investors' fee sensitivity may also depend on whether the sustainable fund or the conventional fund is more expensive. For the third group, we thus set the fee charged on the conventional ETF to 0.9% and the fee charged on the sustainable ETF to 0.2%.

Investors' fee sensitivity could also change if they do not have to choose between a sustainable and a conventional fund, but between two similar funds with the same index fund as basis. We thus asked respondents in the fourth group to allocate their endowment between two sustainable ETFs both based on the MSCI World ESG Screened Index and set the fee charged on the first ETF to 0.2% and the fee charged on the second ETF to 0.9%. Similarly, we asked respondents in the fifth group to allocate their endowment between two conventional ETFs based on the MSCI World Index, and again set the fee charged on the first ETF to 0.2% and the fee charged on the second ETF to 0.9%.

Replicating our main finding

We first examine whether we can reproduce the results of our main analysis that investors with lower financial literacy are less sensitive to higher fees. We construct the variable *Investment in ETF with higher fee* that captures the amount a respondent invested in the fund that charged the higher fee. Since the fees of the funds in the second group were both set to 0.2%, and thus none of the funds had a higher fee, we exclude these observations for this part of the analysis.

We use two measures to capture investors' financial literacy. First, we use the Big Three by Lusardi and Mitchell (2008, 2011) as in the main analysis. Second, we extend this basic measure by four rather sophisticated quiz questions (see Table B.20 in the Internet Appendix). We added these four questions to the follow-up survey to be prepared in the case that Prolific participants have a higher level of financial literacy than respondents in the main survey, which could lead to too little

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variation in our main measure based on the Big Three. Our alternative variable *Financial literacy index* denotes the number of correct answers in all seven questions, and thus can vary between zero and seven.

The first model in Table 5 shows that respondents with higher financial literacy invest significantly less in the ETF that charges a higher fee. This result holds if we use our alternative measure for financial literacy. The estimation results in the second model in Table 5 imply that investors invest €42.84 less in the ETF that charges a higher fee for each question answered correctly. Thus, in spite of some different characteristics of our new sample compared to the sample of German investors in our main analysis, we reproduce our main result that respondents with lower financial literacy are less sensitive to higher fees.

These results also hold after controlling for whether the sustainable or conventional fund charges the higher fee. This shows that our results from the main experiment in five countries do not depend on the design choice that ESG funds in that experiment have always higher or equal fees as the conventional fund.

< Table 5 here >

Financial literacy and attention to fees

We next analyze whether investors with low financial literacy pay less attention to fees. To observe what investors paid attention to, we asked respondents directly after their investment decisions to explain as briefly as possible (in five words or less) what was most important to them in making the investment decision. Based on these answers, we construct the dummy variable *Respondent mentions fees as important reason for decision* that takes the value of one if a respondent mentioned the terms "fee," "fees," or "costs," or used another similar formulation in the open question, and zero otherwise.

The results in models 3 and 4 in Table 5 imply that respondents with higher financial literacy are significantly more likely to mention fees as important reason for their investment decision. For each correctly answered Big Three question, the estimated average probability of mentioning fees

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as an important reason increases by 12.6 percentage points. Increasing our alternative financial knowledge index by one more correct answer implies an increase in the estimated average probability by 7.3 percentage points. We thus find that respondents with low financial literacy pay little attention to fees. Interestingly, we find these results in a setting where fees are very salient, since they are, for example, not hidden in a prospectus or presented within a list of further relevant financial performance measures.

Financial literacy and (wrong) return expectations

One reason that investors with low financial literacy are less fee sensitive could be that they expect funds with higher fees to financially outperform net of fees. We therefore asked respondents which of the two funds they think would perform better financially (net of fees). We construct the dummy variable *Respondent expects fund with higher fees to perform better* that takes the value of one if the respondents expects the more expensive fund to perform better.[35]

Regression results in both models in Table 6 show that financially literate respondents are significantly less likely to expect funds with higher fees to perform better after fees. For example, based on the results of model 1, we find that respondents who answered all Big Three questions correctly have an estimated average probability of 20.2% to state that funds with high fees perform better. For individuals without any correct answer, the estimated average probability is 23.6 percentage points higher, and thus more than twice as high. Thus, individuals with lower financial literacy tend to interpret higher fees as a signal of a higher quality fund (in the sense of better financial performance after fees).

< Table 6 here >

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[35] We again exclude respondent assigned to the second group, who only saw ETFs which charged the same fee of 0.2%.

Result 4: Investors with limited financial literacy tend to overlook fee structures, operating under the misconception that funds with higher fees will yield superior financial returns, even after the fees are deducted, compared to funds with lower fees.

3.5 Does ESG information reduce fee sensitivity of low literate investors?

Our research thus far indicates that low-literate investors tend to be unaffected by rising fees in sustainable funds or even increase sustainable investments as fees rise, largely due to incorrect return expectations and limited attention. However, this raises a critical question: Does the inclusion of sustainable funds in investment options further complicate decisions for these investors? This is because adding sustainable funds to the investment menu introduces additional attributes requiring scrutiny next to only financial attributes (cf. Weingarten, Rottenstreich, and Wu, 2023[36]). Our third experiment, designed to be more reflective of real-life investment scenarios, addresses this issue, thereby enhancing the practical applicability and significance of our findings.

In this experiment, we asked participants to invest a freely allocable amount of €10,000 for ten years. As in the previous follow-up experiment, each participant made only one non-incentivized investment decision.[37] Participants were offered six different equity funds in which to invest their €10,000 to construct their own portfolio. All six funds were real funds traded on the market. To make the investment situation more realistic, we not only listed the fees of these funds, but provided screenshots of the original Morningstar information for each of the funds. These screenshots included the usual information available to investors such as information on past performance, fees, fund volume, investment style, regional and sectoral structure, etc.[38] Participants could voluntarily access this information by clicking on the links for the screenshots.

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[36] The authors document similar effects of increasing the number of attributes in choices affecting decisions among risky gambles.

[37] The main results from our first non-incentivized follow-up experiment replicate those from our main experiment with incentives.

[38] See Panels a), d), and e) in Figure C.13 in the Internet Appendix.

Participants were randomly assigned to one of two treatment groups. The treatment groups differed in terms of whether participants could choose from only conventional equity funds or from both conventional and sustainable equity funds. Participants in the first group had a choice between six conventional funds with a global focus. The choice set contained both passively traded ETFs and actively traded equity funds. The cheapest fund was the SPDR® MSCI World UCITS ETF (EUR) with fees of just 0.12%.[39] For each of these funds, participants were able to access three Morningstar screenshots with typical information about the funds. However, these screenshots contained no information about the sustainability performance of the funds.

In the second treatment group, participants were also offered three of the six conventional funds available to participants in treatment group one. The SPDR® MSCI World UCITS ETF (EUR) was still available as the lowest-fee fund. Therefore, participants in the second group could also invest in a broadly diversified low-fee fund. However, in addition to these three conventional funds, the participants in treatment group two could also choose from three sustainable equity funds.[40] Participants in the second group, like those in the first group, were able to access typical fund information through the three Morningstar screenshots. In addition, we provided information about the funds' sustainability performance through two additional screenshots that displayed information about the Morningstar Sustainability Rating and the sustainability scores of each fund.

Consistent with our approach in the previous experiments, we again focus on individuals aged 18 and older who have experience investing in common stocks. Accordingly, we recruited 901 German investors via the Prolific online platform in December 2023 and January 2024. The survey had the same structure as our first follow-up study: We started with the investment experiment and some follow-up questions in Part A. In Part B, we asked questions about participants' financial literacy, followed by questions about individual preferences (Part C) and socio-demographic

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[39] See column 1 of Table B.21 in the Internet Appendix.
[40] See column 2 of Table B.21 in the Internet Appendix. In selecting the sustainable funds, we ensured that the same fund providers were represented in both treatment groups and that the fees of the sustainable funds were consistently higher than their conventional counterparts.

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characteristics (Part D).[41] We paid a participation reward of ₤2.25 to each respondent. The median time to complete the survey was about 15 minutes, which translates into an average monetary reward of ₤9.08 per hour. Due to missing information for some of these questions, nine people were excluded from further analysis, so that the following results are based on 892 observations.

Results

We first compare the average fees that individuals in the two treatment groups were willing to pay to build their portfolios. We find that individuals in the group with access to both conventional and sustainable funds paid on average €22.97 more in fees than individuals who could only choose between conventional funds (€59.38 vs. €36.41). We can explain this difference by individuals investing in the relatively more expensive sustainable funds. Consistent with previous results in this paper and the literature, this finding implies that investors are on average willing to pay higher fees to invest sustainably. Remarkably, we also see that in both treatment groups the average fees are significantly higher than the minimum possible fees of €12 that could be achieved if one were to invest entirely in the cheapest fund with 0.12% fees.

The estimation results in Table 7 provide information on the extent to which financial literacy influences the amount of fees paid and the extent to which the introduction of sustainable funds influences the ability to choose low-fee funds. As in the first follow-up experiment, we use two measures of financial literacy. The variable *Financial literacy* is again based on the Big Three by Lusardi and Mitchell (2008, 2011). To increase the variation in financial literacy among participants, we also added further, more difficult questions on financial knowledge and created the *Financial literacy index* accordingly.[42] The dummy variable *Sustainable funds included* allows us to differentiate between the two treatment groups.

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[41] See Table B.22 in the Internet Appendix for an overview of the respondents' characteristics in the second follow-up survey.

[42] The three quiz questions that are used in addition to the Big Three are shown in Table B.20 in the Internet Appendix. Our alternative variable *Financial literacy index* denotes the number of correct answers in all six questions, and thus can vary between zero and six.

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< Table 7 here >

Regardless of the choice of financial literacy measure, the estimation results in Table 7 confirm our previous findings in that the amount of fees paid decreases significantly with higher financial literacy. In this respect, our results above show a general pattern of investment behavior that also applies when no sustainable funds are offered. In line with the descriptive results discussed above, investors also pay significantly higher fees if they are offered sustainable funds in addition to conventional funds.

Importantly, the table shows significant negative interaction terms for the variables *Financial literacy x Sustainable funds included* and *Financial literacy Index x Sustainable funds included* in both models. This implies that investors with low financial literacy react even more insensitively to fees when they have to choose not only between conventional funds but between both conventional and sustainable funds. That is, the fee sensitivity of low-literate investors decreases even further when these investors have to choose between funds in different categories, i.e. conventional and sustainable funds.

Result 5: Investors with limited financial literacy tend to pay even higher fees if they are confronted with an additional layer of complexity introduced by including sustainable investments alongside conventional funds in their choice set.

Consistent with our results in the first follow-up experiment, the key explanation for this findings seems to be attention. When we asked investors to indicate the criteria which were most important to them when they selected the equity funds in the experiment, we observe a shift from fees to sustainability. Although we observe this shift for both low-literate and high-literate investors, the shift is much more pronounced for low financial literacy individuals.[43]

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[43] See Figure C.14 in the Internet Appendix.

4. Conclusion

We investigate whether investors' sensitivity to fees on sustainable investments can be explained by social preferences or financial literacy. We further ask whether the drivers of fee sensitivity are context-dependent and whether they vary across different European countries. We empirically analyze these questions, based on data from a large scale lab-in-the-field experiment among experienced household financial decision makers that have been conducted in France, Germany, the Netherlands, Poland, and Spain during May to July 2021. We find that social preferences play an important role in individual sustainable investment behavior in all five countries. Investors who are willing to give to others without expecting anything in return invest a larger fraction of their money in sustainable funds. However, social preferences do not explain how sensitively investors react to fees. Rather, investors with low financial literacy react insensitively to higher fees on sustainable investments. They pay less attention to fees and (wrongly) expect funds with higher fees to outperform net of fees. This suggest that investors pay high fees on sustainable investments because they do not fully understand the negative consequences for their financial returns.

We also find that the sensitivity to higher fees on sustainable funds varies across countries and is highest in the Netherlands and Germany. Interestingly, our data show that average financial literacy is higher in exactly these two countries than in the other three countries, France, Poland, and Spain. Indeed, our results based on Oaxaca-Blinder decompositions show that country differences in financial knowledge explain most of the country differences.

Our results have important implications for recently introduced financial regulation. In the EU, a 2022 amendment to the Markets in Financial Instruments Directive II (MiFID II) requires financial institutions to ask clients about their sustainable investment preferences. The European Securities and Markets Authority and consumer organizations are concerned that financial institutions can use this knowledge of their clients' sustainable investment preferences to charge higher fees (ESMA, 2022). Empirical evidence indeed shows that sustainable investment fees are higher than fees of conventional investments (Aragon, Jiang, Joenväärä, and Tiu, 2022; Baker et al., 2022).

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Our results suggest that this is a particular concern for individuals with low financial literacy. These individuals do not make a conscious choice to pay higher fees because they want to contribute to a better world, but they simply do not understand the impact of higher fees for their net returns. The regulation will likely have different consequences in the various European countries, depending on the average financial literacy. Investors in France, Spain and Poland could bear the risk of being charged particularly high fees. Future work can identify how specific financial education programs could be designed across countries to help investors to better understand the importance of fees (Hastings, Madrian, and Skimmyhorn, 2013; Lusardi and Mitchell, 2014; Kaiser, Lusardi, Menkhoff, and Urban, 2022).

Our results also have important implications for asset prices and speak against models in financial theory postulating that investors' decisions are grounded solely on risk-return considerations. In contrast, our results are in line with theoretical models considering social preferences and the integration of corporate externalities as potential drivers of investment decisions (e.g. Heinkel et al., 2001; Fama and French, 2007; Gollier and Pouget, 2022; Broccardo et al., 2022; Pastor et al., 2021; Pedersen et al., 2021). For instance, recent theory by Pastor et al. (2021) assumes that investors with stronger tastes for ESG are willing to pay more for assets that generate positive externalities for society. This willingness to pay for stocks of sustainable firms could translate into lower capital costs for sustainable firms.

Future research could investigate sustainable investment behavior in other European countries and different continents, as sustainable investments are becoming increasingly important around the world.

References

Anderson, Anders and David T Robinson, 2022, Financial Literacy in the Age of Green Investment. Review of Finance 26 (6), 1551–1584.

Aragon, George O., Yuxiang Jiang, Juha Joenväärä, and Christian Ioan Tiu, 2022, Responsible investing: Costs and benefits for university endowment funds, available at SSRN: https://ssrn.com/abstract=3446252 or https://dx.doi.org/10.2139/ssrn.3446252.

Baker, Malcolm, Mark L. Egan, and Suproteem K. Sarkar, 2022, How do investors value ESG? NBER Working Paper 30708.

Barahona, Ricardo, 2020, Why can't investors pick the right index fund? available at SSRN: https://ssrn.com/abstract=3981797 or http://dx.doi.org/10.2139/ssrn.3981797.

Baran, Nicole M., Paola Sapienza, and Luigi Zingales, 2010, Can we infer social preferences from the lab? Evidence from the trust game, NBER Working Paper 15654.

Barber, Brad M., Adair Morse, and Ayako Yasuda, 2021, Impact investing, Journal of Financial Economics 139 (1), 162-185.

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, Tobias Ruof, and Paul Smeets, 2021, Get real! Individuals prefer more sustainable investments, Review of Financial Studies 34 (8), 3976-4043.

Benz, Matthias and Stephan Meier, 2008, Do people behave in experiments as in the field – evidence from donations, Experimental Economics 11, 268-281.

Betermier, Sebastien, Laurent E. Calvet, and Paolo Sodini, 2017, Who are the value and growth investors?, The Journal of Finance 72 (1), 5-46.

Blinder, Alan S., 1973, Wage discrimination: Reduced form and structural estimates, The Journal of Human Resources 8 (4), 436-455.

Bonnefon, Jean-Francois, Augustin Landier, Parinitha R. Sastry, and David Thesmar, 2022, The moral preferences of investors: Experimental evidence, NBER Working Paper 29647.

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer, 2012, Salience theory of choice under risk, The Quarterly Journal of Economics 127 (3), 1243-1285.

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer, 2013, Salience and Asset Prices, American Economic Review 103 (3), 623-28.

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer, 2022, Salience, Annual Reviews of Economics 14, 521-544.

Brodback, Daniel, Nadja Guenster, Sebastian Pouget, and Ruichen Wang, 2022, The Valuation of Corporate Social Responsibility: A Willingness to Pay Experiment, available at: https://ssrn.com/abstract=4260824.

Broccardo, Eleonora, Oliver D. Hart, and Luigi Zingales, 2022, Exit vs. voice, Journal of Political Economy 130 (12), 3101-3145.

Bumcrot, Christopher B., Judy Lin, and Annamaria Lusardi, 2011, The geography of financial literacy, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1969650.

Charness, Gary, Uri Gneezy, and Brianna Halladay, 2016, Experimental methods: Pay one or pay all, Journal of Economic Behavior & Organization 131, 141-150.

Chen, Hailiang and Byoung-Hyoun Hwang, 2022, Listening in on investors' thoughts and conversations, Journal of Financial Economics 145 (2), 426-444.

Chinco, Alex, Samuel M. Hartzmark, and Abigail B. Sussman, 2022, A new test of risk factor relevance, The Journal of Finance 77 (4), 2183-2238.

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.

41

Choi, James J. and Adriana Robertson, 2020, What matters to individual investors? Evidence from the horse's mouth, The Journal of Finance 75 (4), 1965-2020.

Clot, Sophie, Gilles Grolleau, and Lisette Ibanez, 2018, Shall we pay all? An experimental test of Random Incentivized Systems, Journal of Behavioral and Experimental Economics 73, 93-98.

Douglas, Benjamin D., Patrick J. Ewell, and Markus Brauer, 2023, Data quality in human-subjects research: Comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA, PLoS ONE 18 (3), e0279720.

Dyck, Alexander, Karl V. Lins, Lukas Roth, and Hannes F. Wagner, 2019, Do institutional investors drive corporate social responsibility? International evidence, Journal of Financial Economics 131(3), 693-714.

ESMA, 2020, Performance and Costs of Retail Investment Products in the EU 2020, available at: https://www.esma.europa.eu/sites/default/files/library/esma50-165-1106-asr-performance_and_costs.pdf.

ESMA, 2022, Sustainable Finance Roadmap 2022-2024, available at: https://www.esma.europa.eu/sites/default/files/library/esma30-379-1051_sustainable_finance_roadmap.pdf.

European Commission, 2023, Monitoring financial literacy levels, available at: https://europa.eu/eurobarometer/surveys/detail/2953.

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.

Falk, Armin, Anke Becker, Thomas Dohmen, David Huffman, and Uwe Sunde, 2016, The preference survey module: A validated instrument for measuring risk, time, and social preferences, IZA Discussion Paper No. 9674.

Falk, Armin and James J. Heckman, 2009, Lab experiments are a major source of knowledge in the social sciences, Science 326 (5952), 535-538.

Fama, Eugene F. and Kenneth R. French, 2007, Disagreement, tastes, and asset prices, Journal of Financial Economics 83, 667-689.

FSUG, 2023, FSUG response to Sustainable Finance Disclosure Regulation (SFDR) consultations, available at: https://finance.ec.europa.eu/document/download/50c1ce93-64ec-4c41-baef-ff7bb40f4609_en?filename=fsug-opinions-231215-sfdr-consultations_en.pdf.

Gibson, Rajna G., Simon Glossner, Philipp Krueger, Pedro Matos, and Tom Steffen, 2022, Do responsible investors invest responsibly?, Review of Finance 26 (6), 1389–1432.

Giglio, Stefano, Matteo Maggiori, Johannes Stroebel, Zhenhao Tan, Stephen Utkus, and Xiao Xu, 2023, Four facts about ESG beliefs and investor portfolios, NBER Working Paper 31114.

Gollier, Christian and Sébastian Pouget, 2022, Investment strategies and corporate behaviour with socially responsible investors: A theory of active ownership, Economica 86 (356), 997-1023.

Grinblatt, Mark, Matti Keloharju, and Juhani Linnainmaa, 2011, IQ and stock market participation, The Journal of Finance 66 (6), 2121-2164.

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 & Finance 102, 1155-1182.

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., Samuel D. Hirshman, and Alex Imas, 2021, Ownership, learning, and beliefs, The Quarterly Journal of Economics 136 (3), 1665-1717.

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

Hastings, Justine S., Brigitte C. Madrian, and William L. Skimmyhorn, 2013, Financial literacy, financial education, and economic outcomes, Annual Review of Economics 5, 347-373.

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

Heinkel, Robert, Alan Kraus, and Josef Zechner, 2001, The effect of green investment on corporate behavior, Journal of Financial and Quantitative Analysis 36, 431-449.

Hortacsu, Ali and Chad Syverson, 2004, Product differentiation, search costs, and competition in the mutual fund industry: A case study of S&P 500 index funds, The Quarterly Journal of Economics 119 (2), 403-456.

Huber, Christoph and Jürgen Huber, 2020, Bad bankers no more? Truth-telling and (dis)honesty in the finance industry, Journal of Economic Behavior and Organization 180, 472-493.

Humphrey, Jacquelyn, Shimon Kogan, Jacob Sagi, and Laura Starks, 2021, The asymmetry in responsible investing preferences, NBER Working Paper 29288.

Kaiser, Tim, Annamaria Lusardi, Lukas Menkhoff, and Carly Urban, 2022, Financial education affects financial knowledge and downstream behaviors, Journal of Financial Economics 145 (2), 255-272.

Karlan, Dean S., 2005, Using experimental economics to measure social capital and predict financial decisions, American Economic Review 95 (5), 1688-1699.

Kaustia, Markku and Sami Torstila, 2011, Stock market aversion? Political preferences and stock market participation, Journal of Financial Economics 100, 98-112.

Kirchler, Michael, Florian Lindner, and Utz Weitzel, 2018, Ranking and risk-taking in the finance industry, The Journal of Finance 73 (5), 2271-2302.

Krueger, Philipp, Zacharias Sautner, and Laura T. Starks, 2020, The importance of climate risks for institutional investors, The Review of Financial Studies 33 (3), 1067-1111.

Levitt, Steven D. and John A. List, 2007, What do laboratory experiments measuring social preferences reveal about the real world?, Journal of Economic Perspectives 21 (2), 152-174.

Liu, Hongqi, Cameron Peng, Wei A. Xiong, and Wei Xiong, 2022, Taming the bias zoo, Journal of Financial Economics 143 (2), 716-741.

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.

Lusardi, Annamaria and Olivia S. Mitchell, 2014, The economic importance of financial literacy: Theory and evidence, Journal of Economic Literature, 5-44.

Meeuwis, Maarten, Jonathan A. Parker, Antoinette Schoar, and Duncan Simester, 2022, Belief disagreement and portfolio choice, The Journal of Finance 77 (6), 3191-3247.

Monroe, Kent B., 1973, Buyers' subjective perceptions of price, Journal of Marketing Research 10 (1), 70-80.

Morningstar, 2022, 2021 U.S. Fund Fee Study.

Oaxaca, Ronald, 1973, Male-female wage differentials in urban labor markets, International Economic Review 14 (3), 693-709.

Parise, Gianpaolo and Kim Peijnenburg, 2019, Noncognitive abilities and financial distress: Evidence from a representative household panel, The Review of Financial Studies 32 (10), 3884-3919.

Pastor, Lubos, Robert F. Stambaugh, and Lucian A. Taylor, 2021, Sustainable investing in equilibrium, Journal of Financial Economics 142 (2), 550-571.

Paulhus, Delroy L., 1984, Two-component models of socially desirable responding, Journal of Personality and Social Psychology 46 (3), 598-609.

Paulhus, Delroy L., 1991, Measurement and control of response bias, In: Measures of personality and social psychological attitudes (Eds: J. P. Robinson, P. R. Shaver, and L. S. Wrightman), 17–59. New York: Academic Press.

Pedersen, Lasse H., Shaun Fitzgibbons, and Lukasz Pomorski, 2021, Responsible investing: The ESG-efficient frontier, Journal of Financial Economics 142, 572-597.

Peer, Eyal, Laura Brandimarte, Sonam Samat, and Alessandro Acquisti, 2017, Beyond the Turk: Alternative platforms for crowdsourcing behavioral research, Journal of Experiment Social Psychology 70, 153-163.

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

Salaber, Julie, 2013, Religion and returns in Europe, European Journal of Political Economy 32, 149-160.

Stantcheva, Stefanie, 2023, How to run surveys: A guide to creating your own identifying variation and revealing the invisible, Annual Review of Economics 15, 205-234.

Starks, Laura T., Parth Venkat, and Qifei Zhu, 2020, Corporate ESG Profiles and investor horizons, available at https://ssrn.com/abstract=3049943.

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

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

Von Gaudecker, Hans-Martin, 2015, How does household portfolio diversification vary with financial literacy and financial advice?, The Journal of Finance 70 (2), 489-507.

Weingarten, Evan, Yuval Rottenstreich, and George Wu, 2023, Risk matters less when options differ qualitatively, available at https://ssrn.com/abstract=4635424.

Tables

TABLE 1 – SENSITIVITY TO FEES ON SUSTAINABLE INVESTMENTS

Dependent variable:	Share of endowment invested in sustainable ETFs		
Model:	(1)	(2)	(3)
Fee scenarios			
Fees on sustainable ETF: 0.9%	-3.094***	-3.025***	-3.025***
	(0.301)	(0.309)	(0.309)
Fees on sustainable ETF: 1.6%	-5.158***	-5.142***	-5.142***
	(0.358)	(0.367)	(0.367)
Fees on sustainable ETF: 2.3%	-7.763***	-7.790***	-7.790***
	(0.403)	(0.414)	(0.414)
Preferences			
Social preferences	--	0.850***	0.918***
		(0.129)	(0.129)
Risk preferences	--	0.005	-0.093
		(0.158)	(0.158)
Time preferences	--	0.565***	0.560***
		(0.172)	(0.171)
Signaling	--	-0.959***	-0.870***
		(0.191)	(0.192)
Return expectations			
Much higher returns compared to MSCI World	--	9.738***	9.524***
		(1.079)	(1.081)
A little higher returns compared to MSCI World	--	5.594***	5.528***
		(0.696)	(0.695)
A little lower returns compared to MSCI World	--	-1.370*	-1.262
		(0.792)	(0.791)
Much lower returns compared to MSCI World	--	-8.179***	-8.185***
		(1.397)	(1.394)
Do not know returns	--	-1.810	-1.814
		(1.129)	(1.129)
Risk perceptions			
Higher risk compared to MSCI World	--	-2.570**	-2.642**
		(0.691)	(0.692)
Lower risk compared to MSCI World	--	4.408***	4.419***
		(0.838)	(0.837)
Do not know risk	--	-0.947	-1.113
		(1.192)	(1.190)
Individual characteristics			
Financial literacy	--	-2.085***	-1.796***
		(0.375)	(0.377)
Age	--	-0.022	-0.022
		(0.022)	(0.022)
Female	--	2.255***	2.207***
		(0.641)	(0.640)

TABLE 1 (CONTINUED) – SENSITIVITY TO FEES ON SUSTAINABLE INVESTMENTS

High education	--	-0.829	-1.064*
		(0.630)	(0.639)
Married	--	1.486**	1.135
		(0.705)	(0.705)
High income	--	-0.018	0.055
		(0.927)	(0.932)
Low income	--	-0.422	-0.391
		(0.943)	(0.955)
Do not know or report income	--	0.134	0.132
		(1.382)	(1.394)
Catholic	--	-3.340***	-3.160***
		(0.707)	(0.744)
Protestant	--	-2.159	-0.475
		(1.347)	(1.381)
Other religion	--	-1.465	-1.343
		(1.624)	(1.634)
Do not report religion	--	-1.096	-0.738
		(0.949)	(0.946)
Germany	--	--	-6.953***
			(1.042)
Netherlands	--	--	-1.790*
			(1.036)
Poland	--	--	-2.728***
			(0.974)
Spain	--	--	-3.058***
			(0.945)
MSCI World Climate Change Index ETF	--	2.136***	2.144***
		(0.359)	(0.359)
Constant	55.788***	52.552***	54.850***
	(0.247)	(2.215)	(2.266)
Respondents	5,162	4,901	4,901
Decisions	41,296	39,208	39,208
R^2	0.009	0.077	0.082
Control for order effects	No	Yes	Yes
Individual fixed effects	Yes	No	No

This table reports the results of random effects estimations in linear regression models based on data from different country samples. The dependent variable captures the share of the endowments respondents invested in sustainable ETFs (i.e. either ETFs based on the MSCI World ESG Screened Index or ETFs based on the MSCI World Climate Change Index). The dummy variables "fees on sustainable ETF: 0.9%," "fees on sustainable ETF: 1.6%," and "fees on sustainable ETF: 2.3%" take the value one to indicate the amount of fees charged on the sustainable ETF, and zero otherwise. We additionally include interaction terms between the aforementioned dummy variables for the different fee scenarios and country dummy variables, which take the value of one if the respondent's main place of residence is in Germany, the Netherlands, Poland, or Spain, and zero otherwise. The base category is France. R^2 indicates the squared correlation between the observed and fitted values, reported as *overall R^2* when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE 2 – EXPLANATION OF COUNTRY DIFFERENCES IN FEE SENSITIVITY

Dependent variable:	Difference in share of endowment invested in sustainable ETFs between 0.20% and 2.30% fee scenarios											
Countries:	Germany						Netherlands					
	France		Poland		Spain		France		Poland		Spain	
Estimates:	Parameter	Share	Parameter	Share	Parameter	Share	Parameter	Share	Parameter	Share	Parameter	Share
Differences												
Total difference	-9.61*** (1.03)		-9.70*** (1.00)		-9.69*** (0.99)		-8.49*** (1.11)		-8.58*** (1.08)		-8.55*** (1.07)	
Explained part of difference	-3.87*** (0.58)	40.27%	-3.15*** (0.74)	32.51%	-2.29*** (0.58)	23.68%	-4.22*** (0.61)	49.71%	-3.15*** (0.82)	36.71%	-2.34*** (0.59)	27.37%
Contributions of variables to the explained part of the differences												
Main channels												
Social preferences	-0.06 (0.15)	0.62%	0.05 (0.11)	-0.52%	0.04 (0.14)	-0.41%	0.10 (0.09)	-1.18%	0.08 (0.05)	-0.93%	0.13 (0.08)	-1.52%
Financial literacy	-2.30*** (0.34)	23.93%	-2.70*** (0.33)	27.86%	-1.75*** (0.26)	18.10%	-2.65*** (0.40)	31.21%	-3.00*** (0.38)	34.97%	-2.01*** (0.30)	23.51%
Preferences												
Risk preferences	-0.57*** (0.16)	5.93%	-0.35*** (0.12)	3.61%	-0.12 (0.08)	1.24%	-0.14* (0.08)	1.65%	0.07 (0.08)	-0.82%	0.02 (0.03)	-0.23%
Time preferences	-0.00 (0.02)	0.00%	0.03 (0.04)	-0.31%	0.03 (0.04)	-0.31%	0.02 (0.04)	-0.24%	0.00 (0.02)	0.00%	0.13* (0.07)	-1.52%
Signaling	-0.10 (0.08)	1.04%	0.08 (0.07)	-0.83%	0.29** (0.15)	-3.00%	-0.01 (0.02)	0.12%	0.25** (0.11)	-2.91%	0.28 (0.22)	-3.27%
Return expectations												
Much higher returns compared to MSCI World	-0.73*** (0.22)	7.60%	-0.20** (0.09)	2.06%	-0.37*** (0.12)	3.83%	-0.69*** (0.23)	8.13%	-0.18* (0.10)	2.10%	-0.37*** (0.12)	4.33%
A little higher returns compared to MSCI World	-0.13* (0.08)	1.35%	-0.07 (0.07)	0.72%	-0.27* (0.14)	2.79%	0.15* (0.09)	-1.77%	0.21** (0.11)	-2.45%	-0.03 (0.04)	0.35%
A little lower returns compared to MSCI World	0.55** (0.25)	-5.72%	0.40* (0.21)	-4.13%	0.15 (0.15)	-1.55%	-0.32* (0.16)	3.77%	-0.28** (0.13)	3.26%	-0.19** (0.09)	2.22%
Much lower returns compared to MSCI World	-0.02 (0.04)	0.21%	-0.04 (0.06)	0.41%	-0.00 (0.03)	0.00%	0.00 (0.02)	0.00%	-0.01 (0.02)	0.12%	0.00 (0.01)	0.00%
Do not know returns	-0.09 (0.06)	0.94%	-0.26 (0.21)	2.68%	0.07 (0.05)	-0.72%	0.06 (0.09)	-0.71%	0.29 (0.25)	-3.38%	-0.02 (0.03)	0.23%

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Risk perceptions

Higher risk compared to MSCI World	0.16* (0.09)	-1.66%	-0.16* (0.09)	1.65%	0.39** (0.18)	-4.03%	-0.04 (0.07)	0.47%	-0.10 (0.07)	1.17%	-0.03 (0.17)	0.35%
Lower risk compared to MSCI World	-0.39*** (0.13)	4.06%	-0.52*** (0.15)	5.37%	-0.56*** (0.15)	5.79%	-0.16 (0.11)	1.88%	-0.36*** (0.12)	4.20%	-0.32** (0.14)	3.74%
Do not know risk	0.15 (0.10)	-1.56%	0.32*** (0.12)	-3.30%	-0.19** (0.09)	1.96%	-0.05 (0.11)	0.59%	0.09 (0.12)	-1.05%	-0.04 (0.07)	0.47%

Individual characteristics

Age	0.09 (0.08)	-0.94%	-0.05 (0.09)	0.52%	0.04 (0.18)	-0.41%	0.13 (0.11)	-1.53%	-0.06 (0.12)	0.70%	0.11 (0.22)	-1.29%
Female	-0.07 (0.06)	0.73%	-0.00 (0.11)	0.00%	-0.17 (0.12)	1.76%	-0.11* (0.06)	1.30%	-0.13 (0.12)	1.52%	-0.30** (0.13)	3.51%
High education	-0.03 (0.06)	0.31%	0.51*** (0.18)	-5.26%	0.16 (0.17)	-1.65%	-0.66*** (0.25)	7.77%	-0.07 (0.05)	0.82%	-0.02 (0.04)	0.23%
Married	-0.11 (0.12)	1.14%	-0.13 (0.13)	1.34%	0.07 (0.08)	-0.72%	0.00 (0.00)	0.00%	-0.01 (0.01)	0.12%	-0.05 (0.05)	0.58%
High income	-0.00 (0.01)	0.00%	0.08 (0.06)	-0.83%	0.07 (0.09)	-0.72%	0.03 (0.05)	-0.35%	0.01 (0.03)	-0.12%	-0.02 (0.06)	0.23%
Low income	-0.01 (0.04)	0.10%	-0.11 (0.28)	1.14%	-0.01 (0.13)	0.10%	-0.45** (0.19)	5.30%	0.11 (0.15)	-1.28%	-0.02 (0.04)	0.23%
Do not know or report income	-0.02 (0.06)	0.21%	-0.03 (0.03)	0.31%	0.04 (0.05)	-0.41%	0.44* (0.24)	-5.18%	0.13 (0.17)	-1.52%	0.46** (0.22)	-5.38%
Catholic	-0.01 (0.08)	0.10%	0.13 (0.57)	-1.34%	-0.19 (0.22)	1.96%	-0.18 (0.17)	2.12%	-0.59 (0.69)	6.88%	-0.50 (0.32)	5.85%
Protestant	-0.17 (0.29)	1.77%	-0.15 (0.31)	1.55%	-0.07 (0.29)	0.72%	0.25 (0.22)	-2.94%	0.32 (0.26)	-3.73%	0.34 (0.23)	-3.98%
Other religion	-0.01 (0.02)	0.10%	0.01 (0.07)	-0.10%	0.01 (0.04)	-0.10%	-0.01 (0.02)	0.12%	-0.02 (0.08)	0.23%	0.01 (0.05)	-0.12%
Do not report religion	0.02 (0.03)	-0.21%	0.02 (0.06)	-0.21%	0.03 (0.07)	-0.31%	0.07 (0.05)	-0.82%	0.11 (0.09)	-1.28%	0.09 (0.10)	-1.05%
Saw ESG Screened ETF first	-0.03 (0.04)	0.31%	-0.02 (0.03)	0.21%	-0.00 (0.03)	0.00%	-0.01 (0.04)	0.12%	-0.00 (0.03)	0.00%	0.02 (0.03)	-0.23%
Respondents	1,897		1,958		1,968		1,924		1,985		1,995	

This table reports the results of Oaxaca-Blinder decompositions of country differences in the sensitivity to fees charged on sustainable ETFs. Fee sensitivity is measured by the difference in individual investments in sustainable ETFs in the 0.2% and 2.3% fee scenario. The estimated parameters for the decomposition are from a pooled regression model. The shares indicate how much of the total country differences can be explained by the corresponding explanatory variable. For example, the estimated coefficient for financial literacy of -2.30 in the first column implies that differences in financial literacy between French and German respondents explain 2.30 percentage points (and thus 23.93%) of the total difference between German and French respondents in the share of sustainable investments (-9.61 percentage points). *** (**, *) indicates that the estimated parameters are significantly different from zero at the 1% (5%, 10%) significance level (standard errors in parentheses).

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Dependent variable:	Share of endowment invested in sustainable ETFs				
Country:	France	Germany	Netherlands	Poland	Spain
Fee scenarios					
Fees on sustainable ETF: 0.9%	-0.509	-6.609***	-5.626***	-0.728	-1.823***
	(0.715)	(0.665)	(0.728)	(0.680)	(0.648)
Fees on sustainable ETF: 1.6%	-2.539***	-9.833***	-8.821***	-1.737**	-3.039***
	(0.841)	(0.757)	(0.895)	(0.786)	(0.783)
Fees on sustainable ETF: 2.3%	-4.248***	-13.865***	-12.777***	-4.169***	-4.188***
	(0.954)	(0.855)	(1.020)	(0.882)	(0.868)
Preferences					
Social preferences	0.509*	1.154***	1.522***	0.839***	0.698**
	(0.289)	(0.312)	(0.321)	(0.253)	(0.272)
Risk preferences	0.074	0.093	-0.701*	0.239	-0.132
	(0.357)	(0.361)	(0.409)	(0.289)	(0.350)
Time preferences	0.212	1.014***	0.483	-0.136	0.951***
	(0.367)	(0.389)	(0.546)	(0.308)	(0.358)
Signaling	-0.879**	-2.405***	-0.606	0.074	-0.771*
	(0.399)	(0.461)	(0.510)	(0.389)	(0.402)
Return expectations					
Much higher returns compared to MSCI World	5.878***	13.725***	13.002***	2.745	13.453***
	(2.027)	(2.639)	(2.608)	(2.521)	(2.442)
A little higher returns compared to MSCI World	1.992	9.119***	8.443***	3.157**	4.870***
	(1.613)	(1.537)	(1.485)	(1.573)	(1.522)
A little lower returns compared to MSCI World	-2.345	0.501	-0.724	-2.842*	-0.821
	(2.000)	(1.663)	(1.651)	(1.686)	(1.870)
Much lower returns compared to MSCI World	-11.157***	-6.451**	-7.561**	-6.919***	-9.488***
	(3.469)	(3.040)	(3.110)	(2.571)	(3.335)
Do not know returns	1.335	-1.691	-4.079	-1.118	-5.974**
	(2.237)	(2.597)	(3.354)	(1.999)	(2.940)
Risk perceptions					
Higher risk compared to MSCI World	-2.187	-0.871	-3.475**	-2.651*	-4.066**
	(1.605)	(1.534)	(1.655)	(1.370)	(1.602)
Lower risk compared to MSCI World	8.224***	4.229**	4.804**	3.259**	0.801
	(2.166)	(1.769)	(1.964)	(1.575)	(1.978)
Do not know risk	-1.295	0.783	-1.771	-2.018	0.050
	(2.507)	(2.196)	(3.292)	(2.412)	(2.536)

Individual characteristics

Financial literacy	-0.521	-3.301***	-1.452	-1.730**	-1.577**
	(0.816)	(1.003)	(0.979)	(0.759)	(0.748)
Age	0.025	-0.001	-0.053	-0.010	-0.037
	(0.047)	(0.051)	(0.055)	(0.045)	(0.050)
Female	0.447	3.244**	2.092	2.049	2.361*
	(1.394)	(1.641)	(1.682)	(1.260)	(1.317)
High education	-0.166	-1.832	1.974	-2.166*	-1.624
	(1.458)	(1.644)	(1.516)	(1.253)	(1.310)
Married	2.839*	0.825	-1.495	2.267	2.142
	(1.645)	(1.667)	(1.869)	(1.410)	(1.392)
High income	-1.661	2.612	0.783	-0.138	1.052
	(2.177)	(2.784)	(2.773)	(1.525)	(1.975)
Low income	-1.106	0.873	2.788	-1.904	-0.635
	(2.206)	(2.794)	(2.779)	(1.709)	(1.989)
Do not know or report income	-5.016	1.298	4.770	-3.799	1.485
	(3.539)	(3.686)	(3.193)	(2.672)	(3.111)
Catholic	-5.213***	2.632	-2.388	-3.237**	-5.705***
	(1.637)	(1.969)	(1.985)	(1.641)	(1.447)
Protestant	-1.469	3.657*	-2.881	3.422	4.065
	(3.243)	(2.140)	(2.533)	(7.657)	(5.031)
Other religion	-6.202**	5.085	3.905	-10.084**	-1.144
	(3.061)	(3.675)	(3.431)	(5.009)	(3.721)
Do not report religion	-4.677**	0.956	1.715	0.613	-1.227
	(1.912)	(2.116)	(2.142)	(2.360)	(2.067)
MSCI World Climate Change Index ETF	1.546*	2.156***	1.833**	2.167***	2.786***
	(0.849)	(0.743)	(0.814)	(0.800)	(0.810)
Constant	54.593***	44.906***	52.691***	52.642***	50.125***
	(5.170)	(5.414)	(6.436)	(4.428)	(4.548)
Respondents	948	949	976	1,009	1,019
Decisions	7,584	7,592	7,808	8,072	8,152
R^2	0.060	0.141	0.124	0.054	0.074
Controls for order effects	Yes	Yes	Yes	Yes	Yes

This table reports the results of random effects estimations in linear regression models based on data from the five different regions. The dependent variable captures the share of the endowments respondents invested in sustainable ETFs (i.e. either ETFs based on the MSCI World ESG Screened Index or ETFs based on the MSCI World Climate Change Index). The dummy variables *Fees on sustainable ETF: 0.9%*, *Fees on sustainable ETF: 1.6%*, and *Fees on sustainable ETF: 2.3%* take the value of one to indicate the amount of fees charged on the sustainable ETF, and zero otherwise. Consequently, the (estimated) constant terms represent the reference scenario where the amount of fees charged on the sustainable ETF is 0.2%. We additionally control for individual preferences, return expectations, risk perceptions, other individual characteristics, and experimental variables. All variables are defined in Section 2.4. R^2 indicates the squared correlation between the observed and fitted values, reported as *overall R^2* when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE 4 – GENERALIZABILITY OF EXPERIMENTAL DECISIONS

Dependent variable:	Respondent reports to hold sustainable investments in real life			
Sample:	All	Only current investors	All	Only current investors
	(1)	(2)	(3)	(4)
Average share invested in sustainable ETFs in the experiment (reference category: 0% to 25%)				
Above 25% to 50%	0.032*	0.049**	0.049***	0.055**
	(0.019)	(0.025)	(0.018)	(0.025)
Above 50% to 75%	0.045**	0.071***	0.045**	0.057**
	(0.019)	(0.026)	(0.019)	(0.026)
Above 75% to 100%	0.114***	0.178***	0.088***	0.126***
	(0.025)	(0.034)	(0.024)	(0.032)
Preferences				
Social preferences	--	--	0.009***	0.013***
			(0.002)	(0.003)
Risk preferences	--	--	0.012***	0.008**
			(0.003)	(0.004)
Time preferences	--	--	0.012***	0.016***
			(0.003)	(0.004)
Signaling	--	--	0.026***	0.026***
			(0.003)	(0.005)
Return expectations				
Much higher returns compared to conventional investments	--	--	0.021	0.059*
			(0.022)	(0.032)
A little higher returns compared to conventional investments	--	--	0.019	0.036*
			(0.014)	(0.020)
A little lower returns compared to conventional investments	--	--	-0.060***	-0.087***
			(0.014)	(0.020)
Much lower returns compared to conventional investments	--	--	-0.035	-0.049
			(0.022)	(0.031)
Do not know returns	--	--	-0.089***	-0.120***
			(0.022)	(0.034)
Risk perceptions				
Higher risk compared to conventional investments	--	--	0.016	0.024
			(0.014)	(0.020)
Lower risk compared to conventional investments	--	--	0.031**	0.045**
			(0.014)	(0.020)
Do not know risk	--	--	-0.223***	-0.255***
			(0.033)	(0.044)

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TABLE 4 (CONTINUED) – GENERALIZABILITY OF EXPERIMENTAL DECISIONS

Individual characteristics

Financial literacy	--	--	0.004 (0.007)	-0.001 (0.010)
Age	--	--	-0.000 (0.000)	0.000 (0.001)
Female	--	--	-0.019* (0.011)	-0.016 (0.016)
High education	--	--	0.054*** (0.011)	0.050*** (0.015)
Married	--	--	0.011 (0.012)	0.020 (0.017)
High income	--	--	-0.011 (0.016)	-0.026 (0.022)
Low income	--	--	-0.044*** (0.017)	-0.052** (0.024)
Do not know or report income	--	--	-0.069*** (0.025)	-0.061* (0.036)
Catholic	--	--	0.013 (0.013)	0.009 (0.018)
Protestant	--	--	-0.022 (0.022)	-0.019 (0.031)
Other religion	--	--	0.016 (0.026)	0.003 (0.037)
Do not report religion	--	--	0.017 (0.017)	0.005 (0.024)
Germany	--	--	0.031* (0.019)	0.042 (0.026)
Netherlands	--	--	0.082*** (0.019)	0.114*** (0.026)
Poland	--	--	-0.073*** (0.016)	-0.072*** (0.024)
Spain	--	--	-0.033** (0.016)	-0.038 (0.024)
Respondents	5,162	3,250	4,901	3,124

This table reports, based on binary probit models, the estimates of average marginal and discrete probability effects of continuous and discrete explanatory variables, respectively. The dependent variable is a dummy variable that takes the value of one if a respondent reported to hold sustainable investments in real life, and zero otherwise. As explanatory variables, we consider the dummy variables Above 25% to 50%, Above 50% to 75%, and Above 75% to 100% that take the value of one if a respondent's average share of endowment invested in sustainable ETFs in the experiment (in %) falls into the respective interval, and zero otherwise. We control for return expectations, risk perceptions, individual preferences, other individual characteristics, and country-fixed effects. Our measures for return expectations and risk perceptions are defined in Table B.16 in the Internet Appendix. All further variables are defined in Section 2.4. The subsample of current investors only contains respondents who reported to hold at least one of the following investment products: Stocks, passively managed stock funds, actively managed stock funds, mixed funds, passively managed bond funds, actively managed bond funds, other non-fixed-income forms of investment, precious metals, and cryptocurrencies. *** (**, *) indicates that the estimated average probability effects are significantly different from zero at the 1% (5%, 10%) significance level (standard errors in parentheses).

TABLE 5 – INVESTMENT IN AND ATTENTION TO ETFS WITH HIGHER FEES

Dependent variable:	Investment in ETF with higher fee		Respondent mentions fees as important reason for decision	
Model:	(1)	(2)	(3)	(4)
Financial literacy	-65.444***	--	0.126***	--
	(25.204)		(0.027)	
Financial literacy index	--	-42.842***	--	0.073***
		(12.047)		(0.014)
MSCI World ESG Screened Index ETF	177.561***	184.499***	-0.248***	-0.257***
	(38.052)	(36.999)	(0.058)	(0.057)
Fee of second ETF is lower	--	--	0.350***	0.343***
			(0.060)	(0.059)
Fee of second ETF is higher	--	--	0.459***	0.467***
			(0.045)	(0.043)
Preferences				
Social preferences	-1.993	-1.183	0.014*	0.012
	(7.116)	(7.175)	(0.008)	(0.008)
Risk preferences	1.156	1.641	-0.009	-0.011
	(8.459)	(8.399)	(0.010)	(0.009)
Time preferences	-5.376	-7.649	-0.005	-0.001
	(7.313)	(7.167)	(0.008)	(0.008)
Signaling	-6.893	3.940	0.007	-0.011
	(11.818)	(11.861)	(0.013)	(0.013)
Constant	331.131**	303.465**	--	--
	(126.450)	(123.368)		
Individual characteristics	Yes	Yes	Yes	Yes
Respondents	359	359	450	450
Adjusted R^2	0.099	0.111	0.232	0.241

This table reports the results of Ordinary Least Squares (OLS) estimations in linear regression models (models 1 and 2) and the estimates of average marginal and discrete probability effects of continuous and discrete explanatory variables based on Maximum Likelihood (ML) estimations in binary probit models (models 3 and 4). The estimations in models (1) and (2) are based on the four experimental groups where one of the two ETFs offered charged a higher fee than the other ETF. The dependent variable in these two models captures the investment amount in € respondents invested in the ETF with the higher fee. The estimations in models (3) and (4) are based on all five experimental groups. The dependent variable in these two models takes the value of one if respondents mention fees as important reason for their investment decision with regard to the two ETFs offered. The main explanatory variables are *Financial literacy* and *Financial literacy index*. *Financial literacy* is defined in Section 2.4 and *Financial literacy index* in Section 3.4. We control for experimental and individual-specific characteristics. The dummy variable *MSCI World ESG Screened Index ETF* takes the value of one if the corresponding investment decision refers to an ETF based on the MSCI World ESG Screened Index , and zero otherwise. The dummy variable *Fee of second ETF is lower* takes the value of one if the fee of the second ETF offered is lower than the fee of the first alternative. The dummy variable *Fee of second ETF is higher* takes the value of one if the fee of the second ETF offered is higher than the fee of the first alternative. We additionally control for individual preferences and other individual characteristics. These variables are defined in Section 2.4. *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (robust standard errors in parentheses).

TABLE 6 – FINANCIAL LITERACY, FEES, AND PERFORMANCE EXPECTATIONS

Dependent variable:	Respondent expects fund with higher fees to perform better	
Model:	(1)	(2)
Financial literacy	-0.069**	--
	(0.030)	
Financial literacy index	--	-0.053***
		(0.015)
MSCI World ESG Screened Index ETF	0.177***	0.182***
	(0.042)	(0.041)
Preferences		
Social preferences	-0.006	-0.005
	(0.009)	(0.009)
Risk preferences	-0.004	-0.003
	(0.010)	(0.009)
Time preferences	-0.015*	-0.018**
	(0.008)	(0.008)
Signaling	-0.024*	-0.010
	(0.014)	(0.015)
Individual characteristics		
Age	0.001	0.002
	(0.003)	(0.003)
Female	-0.075	-0.086*
	(0.048)	(0.047)
High education	-0.000	0.000
	(0.047)	(0.047)
Married	-0.028	-0.044
	(0.063)	(0.061)
High income	0.149**	0.133*
	(0.072)	(0.072)
Low income	0.219***	0.190**
	(0.083)	(0.083)
Do not know or report income	-0.114	-0.124*
	(0.073)	(0.066)
Catholic	-0.020	-0.008
	(0.057)	(0.057)
Protestant	0.025	0.043
	(0.067)	(0.069)
Other religion	-0.044	-0.049
	(0.073)	(0.068)
Respondents	359	359
Pseudo R^2	0.091	0.107

This table reports, based on binary probit models, the estimates of average marginal and discrete probability effects of continuous and discrete explanatory variables, respectively. The dependent variable is a dummy variable that takes the value of one if a respondent expects the more expensive fund to perform better, and zero otherwise. The main explanatory variables are *Financial literacy* and *Financial literacy* index, respectively. *Financial literacy* is defined in Section 2.4 and *Financial literacy index* in Section 3.4. The dummy variable *MSCI World ESG Screened Index ETF* takes the value of one if the ETF with the higher fee is based on the MSCI World ESG Screened Index, and zero otherwise. We control for individual preferences and other individual characteristics. All further variables are defined in Section 2.4. *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (robust standard errors in parentheses).

TABLE 7 – FINANCIAL LITERACY, FEES, AND ESG INFORMATION

Dependent variable:	Total fees paid (in €)	
Model:	(1)	(2)
Financial literacy	-3.569***	--
	(1.324)	
Financial literacy index	--	-1.484**
		(0.740)
Sustainable funds included	35.284***	35.980***
	(5.575)	(4.859)
Financial literacy * sustainable funds included	-4.745**	--
	(2.129)	
Financial literacy index * sustainable funds included	--	-3.297***
		(1.182)
Preferences		
Social preferences	0.240	0.222
	(0.349)	(0.347)
Risk preferences	0.521	0.746*
	(0.415)	(0.416)
Time preferences	-1.300***	-1.263**
	(0.494)	(0.494)
Signaling	-1.576***	-1.364**
	(0.537)	(0.550)
Individual characteristics		
Age	0.119	0.137
	(0.104)	(0.103)
Female	7.068***	6.851***
	(2.007)	(2.000)
High education	1.071	0.938
	(1.924)	(1.928)
Married	-1.432	-1.669
	(1.917)	(1.910)
High income	-1.847	-2.233
	(3.001)	(3.053)
Low income	3.775	3.036
	(2.935)	(3.001)
Do not know or report income	6.782	5.819
	(4.571)	(4.583)
Catholic	-6.693***	-6.696***
	(2.473)	(2.472)
Protestant	-3.208	-2.436
	(2.565)	(2.537)
Other religion	8.532***	8.933***
	(2.190)	(2.207)
Respondents	892	892
Adjusted R^2	0.250	0.253

This table reports the OLS estimations results of two linear regression models. The dependent variable is the total fees (in €) a respondent paid for their portfolio. The main explanatory variables in model 1 are *Financial literacy*, the dummy variable *Sustainable funds included*, and the interaction term between these variables. In model 2, we consider the *Financial literacy index* instead of *Financial literacy*. *Financial literacy* is defined in Section 2.4 and *Financial literacy index* in Section 3.4. The dummy variable *Sustainable funds included* takes the value of one for respondents in the group who can invest in both conventional and sustainable funds. We control for individual preferences and other individual characteristics. All further variables are defined in Section 2.4. *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (robust standard errors in parentheses).

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Figures

In each of the following decision situations, you can now choose between two exchange traded funds (ETFs). In each investment situation, please allocate €1,000 between these two funds to create your own portfolio. You can invest the entire €1,000 in one fund or divide the amount equally or unequally between the two funds. To do this, please enter the desired investment amounts in euros in the corresponding columns. If you want to invest in one fund, you must invest at least €50.

In the first four decision situations, you have now a choice between one ETF on the MSCI World Index (left column) and one on the MSCI World Climate Change Index (right column).

The MSCI World Index is a stock index that covers the share price performance of more than 1,600 large and medium-sized stock companies from 23 industrialized countries. It is published by the U.S. financial services provider MSCI and is considered one of the most important stock indices worldwide.

The MSCI World Climate Change Index is also a stock index based on the MSCI World Index (its parent index). It therefore also includes large and medium-sized stock companies from 23 industrialized countries. Unlike the MSCI World Index, the MSCI World Climate Change Index is weighted more heavily toward companies that are more focused on the transition to a lower-carbon economy and weighs less heavily toward companies that are less focused on the transition to a lower-carbon economy.

Please make your first decision now:

	1	2
	MSCI World Index Fonds (?)	MSCI World Climate Change Index Fonds (?)
Fees	0.20%	0.90%
Your investment amount	[ ] €	[ ] €

When you have made your decision, please click 'Next'.

next ...

Figure 1: Screenshot of an exemplary choice set (translated into English)
This figure shows a screenshot of an exemplary first investment decision between an ETF based on the MSCI World Index with fees of 0.20% and an ETF based on the MSCI World Climate Change Index with fees of 0.20%. The upper part comprises a description of the first four investment decisions.
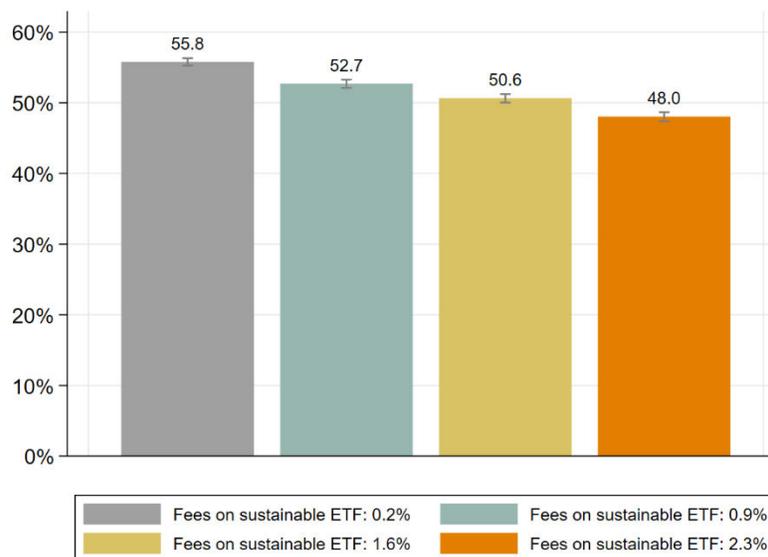
Figure 2: Investments in sustainable ETFs (full sample)
This graph shows the shares of the endowment respondents invested on average in sustainable ETFs, i.e. either in ETFs based on the MSCI World ESG Screened Index or in ETFs based on the MSCI World Climate Change Index, in the four different fee scenarios. Error bars represent 95% confidence intervals.

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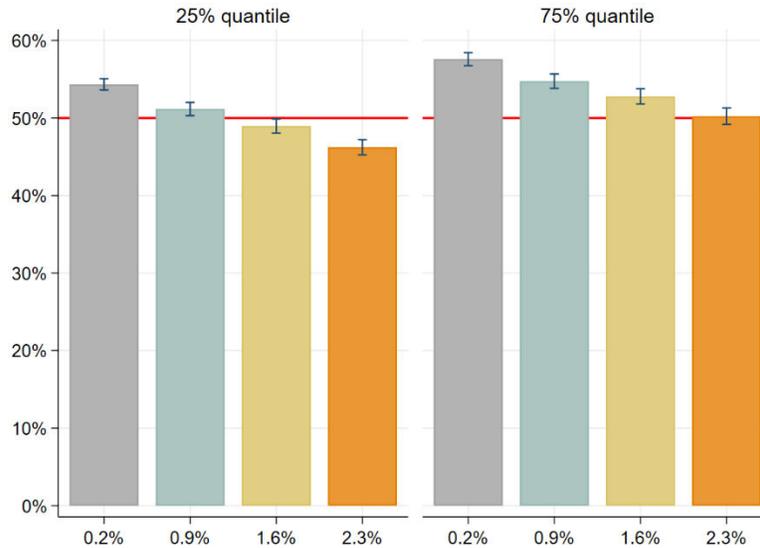
Figure 3: Fee sensitivity across different levels of social preferences
This graph shows the predicted shares of the endowment respondents invested on average in sustainable ETFs, i.e. either in ETFs based on the MSCI World ESG Screened Index or in ETFs based on the MSCI World Climate Change Index, in the four different fee scenarios at 25% and 75% quantiles of the sample distribution for social preferences, respectively. Social preferences are measured on a Likert-scale ranging from 0 to 10. The 25% quantile refers to a score of 5 and the 75% to a score of 9. Error bars represent 95% confidence intervals.
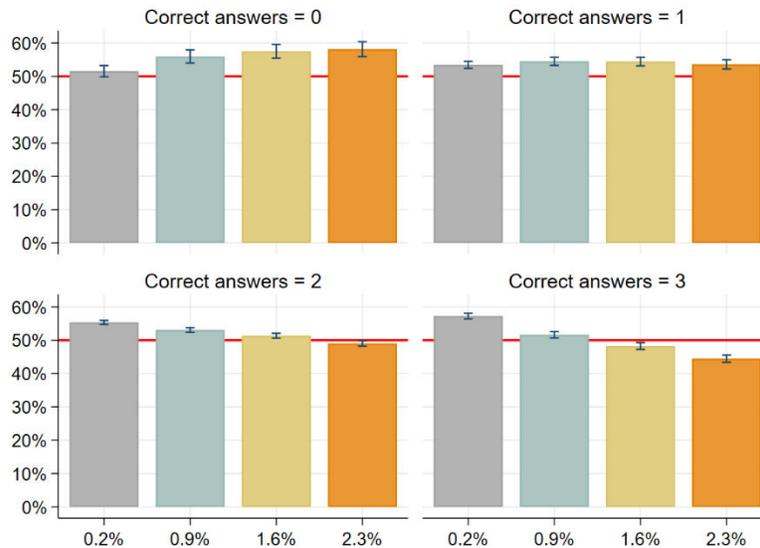
Figure 4: Fee sensitivity across different levels of financial literacy
This graph shows the predicted shares of the endowment respondents invested on average in sustainable ETFs, i.e. either in ETFs based on the MSCI World ESG Screened Index or in ETFs based on the MSCI World Climate Change Index, in the four different fee scenarios at different levels of financial literacy. Financial literacy is measured by counting the correct answers to three quiz questions. A higher number of correct answers indicates higher levels of financial literacy. Error bars represent 95% confidence intervals.
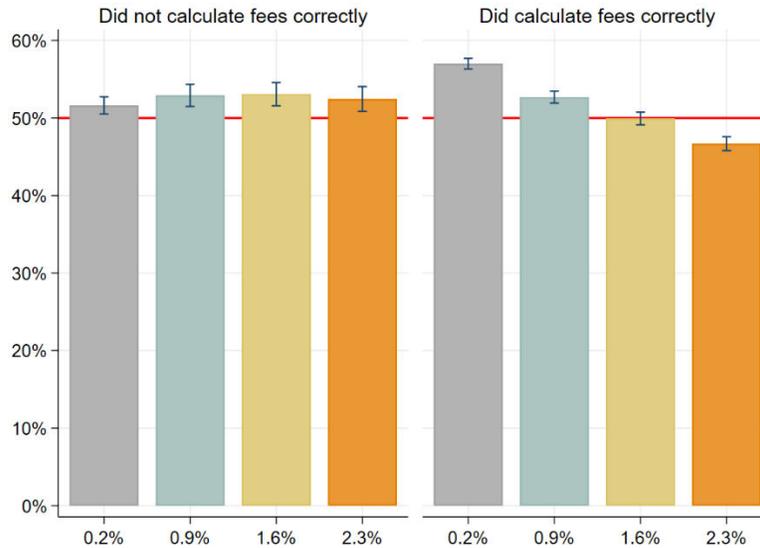
Figure 5: Fee sensitivity and understanding how to calculate fees
This graph shows the predicted shares of the endowment respondents invested on average in sustainable ETFs, i.e. either in ETFs based on the MSCI World ESG Screened Index or in ETFs based on the MSCI World Climate Change Index, in the four different fee scenarios for persons who do not understand how to calculate fees correctly, and those who do. A higher number of correct answers indicates higher levels of financial literacy. Error bars represent 95% confidence intervals.
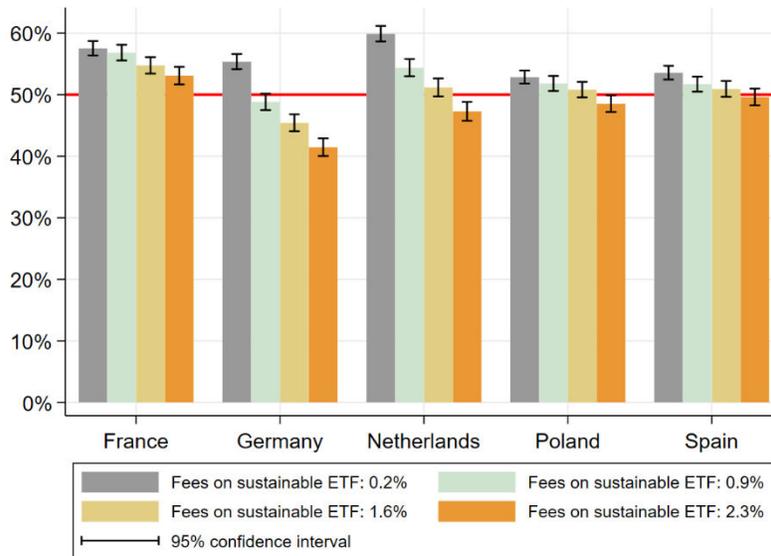
Figure 6: Investments in sustainable ETFs across countries
This graph shows the shares of the endowment respondents from the five different countries invested on average in sustainable ETFs, i.e. either in ETFs based on the MSCI World ESG Screened Index or in ETFs based on the MSCI World Climate Change Index, in the four different fee scenarios. Error bars represent 95% confidence intervals.

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Internet Appendix

Part A: Measures to ensure good survey quality

In the following, we describe the measures we took together with the professional market research institute Psyma to ensure good survey quality. First, Psyma accessed the panels of the online platforms. Using data from online platforms of professional market research institutes tend to provide nationally representative samples of the target population, especially in high-income countries such as the ones considered in our study (Stantcheva, 2023). Furthermore, conducting an online survey not only allowed us to implement the investment experiment, but also offered other significant advantages over face-to-face, telephone, or postal surveys (e.g. Stantcheva, 2023). In particular, respondents could complete the survey at their convenience, reducing potential selection bias due to respondents' availability during working hours, which could have been a potential issue, given our target group of experienced investors.

Additionally, to ensure the survey's efficacy, we conducted a pretest in January and February 2021 among about 76 participants. The median time for answering the survey in the pretest was about 20 minutes. After the pre-test, we reduced the survey duration by deleting some questions related to the energy efficiency of the residential property of our respondents, since we did not plan to consider them in this study. We also used a soft-launch over the first week of the survey. This means that the initial invitation wave was relatively small, resulting in a sample of 362 participants in the soft launch. The data from the soft launch allowed us to test the content, questions, and functionality of the survey. For instance, we checked whether the corresponding filters functioned correctly when specific questions were displayed only for a subset of respondents. As we did not identify issues during the soft-launch, the corresponding data is included in the study sample, and we allowed Psyma to send out the next invitation waves. The pretest data is not considered in this study since it was collected earlier than the data from the final survey. Throughout the study, the market research institute tracked quotas to ensure that they could step in if there were significant deviations of the distribution of age, gender, and region for people who finally started the survey from the respective distributions in the national official population statistics.

Participants were incentivized directly within the panels. The amount of the incentive depended on the length of the survey and the number of participants with similar characteristics. Slightly higher

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incentives were given to respondents with rarer characteristics, based on the inclusion criteria for our study (such as female individual investors). The amount of the incentive was displayed in the personalized invitation email. Therefore, panel members were informed of the incentive amount before participating in the survey, typically a low single-digit € amount. The incentives were paid out in the form of panel points, which could be exchanged for real prizes once a certain amount of panel points was accumulated. In addition to these panel points, participants could earn money in our experiment, as we discuss in more detail in section 2.3 of the main text.

Furthermore, the market research institute conducted quality checks (e.g. regarding systematic response patterns) on all completed questionnaires throughout the field time. Respondents for whom it became evident that they were not reading or answering the questions adequately due to systematic responses or too short completion time were excluded from the sample and new respondents were re-recruited accordingly.[1]

The median time for completion of the survey across all countries was 30.1 minutes. It is higher than the pretest median and indicates that many respondents took their time to answer the questions thoroughly. The 1st percentile of the fastest responses exceeded 10 minutes, suggesting that even the fastest participants spent a substantial amount of time on the survey. Of the 10,817 individuals who started the survey, 1,159 were screened out or excluded because the quotas for individuals who had started the survey were already filled. A total of 1,329 respondents quit at the first screen of the experiment, and 2,364 withdrew at the first investment decision screen in the experiment. Additionally, 803 respondents quit in other parts of the survey. Furthermore, 53 respondents failed several quality checks. In total, this results in a sample of 5,162 individual investors and an attrition rate of 41.07%.[2] This attrition rate is comparable to other online surveys that embed experiments (e.g. Hoy and Mager, 2021; Andre et al., 2022; Stantcheva, 2023). As shown in section 3 of the main text, when explicitly accounting for attrition, our results stay unchanged.

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[1] During the survey, participants were asked to select a specific response option ("Agree completely") at two predefined points, and only those who answered correctly could proceed. Incorrect answers were marked, leading to the exclusion of the majority of fast-moving respondents. In additional post-survey quality checks, the fastest respondents for each country were labeled as "bad quality." Question batteries in the survey were checked for "straightlining," and responses displaying uniform response behavior were labeled as "bad quality." Additional plausibility checks were performed by comparing whether the number of household members and the number of children were plausible. In total, 53 respondents were labeled as "bad quality" and excluded from the analysis.

[2] Of 10,817 individuals who started the survey, 4,496 (41.07%) quit at some point in the survey.

We implemented several other precautionary measures to mitigate potential measurement errors. For example, we use income brackets to gather information about participants' income, as this has been shown to encourage more accurate reporting of financial information compared to direct questions (e.g. Juster and Smith, 1997). Individuals also tend to answer more honestly in online surveys compared to paper-based surveys or telephone surveys (e.g. Chang and Krosnick, 2009). Participants from the panel subject pools also usually repeatedly answer surveys, which potentially reduces measurement error (e.g. Cantor, 2008).

In case of any problems or difficulties, participants were able to reach out to the local support teams. These support teams could be contacted through e-mail or via the contact form on the market research institute's website or app. During the registration process for the panel, panelists were informed about the terms and conditions, which include the possibility of exclusion from surveys due to poor response quality. The frequency of such exclusions depends on how often poor response behavior is identified by the market research institute, or how often it is reported by the companies that use the services of the market research institute. Once the internally defined limit for instances of poor response behavior is reached, the panelist will no longer receive invitations to participate in surveys.

To ensure that respondents are real people, an initial verification process occurs during registration in the panel. This process includes a plausibility check of address, postal code, and other details, as well as a check for duplicate entries. In cases of discrepancies or suspicious circumstances, a manual evaluation is conducted, involving contact through mail or telephone. Only after successfully passing this verification process, invitations to participate in surveys are sent out. Additionally, standard IP and browser checks are performed as part of the verification process. The results of these quality checks further contribute to ensuring that panelists are real individuals and not, for example, automated bots.

Part B: Additional tables

TABLE B.1 – DESCRIPTIVE STATISTICS OF SURVEY VARIABLES

Country:	All countries	France	Germany	Netherlands	Poland	Spain
Preferences						
Social preferences	5,023[a]	985	971	991	1,032	1,044
	6.76[b]	6.53	7.19	6.87	6.71	6.53
	7.00[c]	7.00	8.00	7.00	7.00	7.00
	2.58[d]	2.58	2.44	2.50	2.66	2.66
Risk preferences	5,065	982	991	1,002	1,046	1,044
	5.87	6.09	5.55	5.95	5.90	5.85
	6.00	6.00	6.00	7.00	6.00	6.00
	2.35	2.20	2.49	2.20	2.42	2.42
Time preferences	5,033	971	986	993	1,036	1,047
	6.77	6.81	6.77	6.72	6.65	6.89
	7.00	7.00	7.00	7.00	7.00	7.00
	2.08	2.07	2.21	1.77	2.28	2.03
Signaling	5,162	1,007	1,009	1,010	1,070	1,066
	3.45	3.18	3.43	3.22	3.50	3.88
	3.00	3.00	3.00	3.00	3.00	4.00
	1.83	1.83	1.83	1.72	1.82	1.85
Return expectations						
Much higher returns compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.09	0.16	0.06	0.06	0.08	0.10
	0.00	0.00	0.00	0.00	0.00	0.00
	0.29	0.36	0.24	0.25	0.27	0.30
A little higher returns compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.30	0.29	0.26	0.33	0.27	0.35
	0.00	0.00	0.00	0.00	0.00	0.00
	0.46	0.45	0.44	0.47	0.44	0.48
Neither higher nor lower returns compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.20	0.20	0.21	0.20	0.19	0.20
	0.00	0.00	0.00	0.00	0.00	0.00
	0.40	0.40	0.41	0.40	0.39	0.40
A little lower returns compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.21	0.15	0.29	0.24	0.16	0.20
	0.00	0.00	0.00	0.00	0.00	0.00
	0.41	0.35	0.46	0.43	0.37	0.40
Much lower returns compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.06	0.06	0.06	0.05	0.06	0.06
	0.00	0.00	0.00	0.00	0.00	0.00
	0.23	0.24	0.23	0.23	0.24	0.23
Do not know returns	5,162	1,007	1,009	1,010	1,070	1,066
	0.14	0.15	0.12	0.10	0.24	0.10
	0.00	0.00	0.00	0.00	0.00	0.00
	0.35	0.36	0.33	0.31	0.43	0.29

Risk perceptions

Higher risk compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.44	0.46	0.41	0.43	0.38	0.54
	0.00	0.00	0.00	0.00	0.00	1.00
	0.50	0.50	0.49	0.49	0.48	0.50
Equal risk compared to MSCI World	5,162	1,007	1,009	1,009	1,070	1,066
	0.22	0.19	0.23	0.22	0.25	0.21
	0.00	0.00	0.00	0.00	0.00	0.00
	0.42	0.39	0.42	0.41	0.43	0.41
Lower risk compared to MSCI World	5,162	1,007	1,009	1,010	1,070	1,066
	0.20	0.18	0.24	0.24	0.18	0.16
	0.00	0.00	0.00	0.00	0.00	0.00
	0.40	0.38	0.43	0.43	0.39	0.37
Do not know risk	5,162	1,007	1,009	1,010	1,070	1,066
	0.14	0.18	0.12	0.11	0.19	0.09
	0.00	0.00	0.00	0.00	0.00	0.00
	0.34	0.38	0.32	0.31	0.39	0.28

Individual characteristics

Financial literacy	5,162	1,007	1,009	1,010	1,070	1,066
	2.21	2.00	2.45	2.53	1.98	2.10
	2.00	2.00	3.00	3.00	2.00	2.00
	0.88	0.89	0.80	0.74	0.88	0.93
Did calculate fees correctly	5,162	1,007	1,009	1,010	1,070	1,066
	0.77	0.79	0.82	0.85	0.71	0.68
	0.42	0.41	0.38	0.36	0.46	0.47
Age	5,162	1,007	1,009	1,010	1,070	1,066
	45.95	45.85	47.72	48.27	45.42	42.72
	46.00	45.00	51.00	48.00	45.00	42.00
	15.62	14.94	17.51	16.25	14.56	14.11
Female	5,162	1,007	1,009	1,010	1,070	1,066
	0.41	0.41	0.36	0.36	0.46	0.47
	0.00	0.00	0.00	0.00	0.00	0.00
	0.49	0.49	0.48	0.48	0.50	0.50
High education	5,162	1,007	1,009	1,010	1,070	1,066
	0.46	0.35	0.35	0.56	0.53	0.52
	0.00	0.00	0.00	1.00	1.00	1.00
	0.50	0.48	0.48	0.50	0.50	0.50
Married	5,162	1,007	1,009	1,010	1,070	1,066
	0.69	0.71	0.61	0.71	0.71	0.68
	1.00	1.00	1.00	1.00	1.00	1.00
	0.46	0.45	0.49	0.45	0.45	0.46

High income	5,162	1,007	1,009	1,010	1,070	1,066
	0.39	0.37	0.37	0.39	0.41	0.42
	0.00	0.00	0.00	0.00	0.00	0.00
	0.49	0.48	0.48	0.49	0.49	0.49
Middle income	5,162	1,007	1,009	1,010	1,070	1,066
	0.14	0.12	0.10	0.10	0.25	0.14
	0.00	0.00	0.00	0.00	0.00	0.00
	0.35	0.33	0.29	0.30	0.44	0.35
Low income	5,162	1,007	1,009	1,010	1,070	1,066
	0.38	0.45	0.45	0.36	0.27	0.37
	0.00	0.00	0.00	0.00	0.00	0.00
	0.49	0.50	0.50	0.48	0.44	0.48
Do not know or report income	5,162	1,007	1,009	1,010	1,070	1,066
	0.08	0.06	0.08	0.15	0.07	0.06
	0.00	0.00	0.00	0.00	0.00	0.00
	0.28	0.23	0.28	0.35	0.25	0.25
Catholic	5,162	1,007	1,009	1,010	1,070	1,066
	0.36	0.30	0.23	0.17	0.67	0.42
	0.00	0.00	0.00	0.00	1.00	0.00
	0.48	0.46	0.42	0.37	0.47	0.49
Protestant	5,162	1,007	1,009	1,010	1,070	1,066
	0.07	0.02	0.19	0.11	0.01	0.02
	0.00	0.00	0.00	0.00	0.00	0.00
	0.25	0.14	0.39	0.32	0.08	0.12
Other religion	5,162	1,007	1,009	1,010	1,070	1,066
	0.04	0.05	0.05	0.05	0.02	0.03
	0.00	0.00	0.00	0.00	0.00	0.00
	0.19	0.22	0.21	0.21	0.14	0.16
No religion	5,162	1,007	1,009	1,010	1,070	1,066
	0.38	0.47	0.36	0.49	0.17	0.41
	0.00	0.00	0.00	0.00	0.00	0.00
	0.48	0.50	0.48	0.50	0.37	0.49
Do not report religion	5,162	1,007	1,009	1,010	1,070	1,066
	0.16	0.16	0.17	0.19	0.14	0.13
	0.00	0.00	0.00	0.00	0.00	0.00
	0.36	0.37	0.38	0.39	0.35	0.33

This table reports the [a]number of respondents, [b]means, [c]medians, and [d]standard deviations of all survey variables used in the main econometric analysis. Since the expected returns in four of the eight decisions refer to ETFs based on MSCI World ESG Screened Index and in the other four decisions to ETFs based on MSCI World Climate Change Index, the mean values and standard deviations for the categories reported in this table (e.g. "Much higher returns compared to MSCI World") result from averaging the two corresponding mean values or standard deviations for the respective categories, respectively.

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TABLE B.2 – REPRESENTATIVENESS OF THE FRENCH RESPONDENT SAMPLE

	Population (in %)	Persons who started the survey (in %)	Final sample of individual investors (in %)
Panel A: Gender			
Male	48.3	43.7	59.0
Female	51.7	56.1	41.0
Other	0.0	0.1	0.0
Panel B: Age			
18 to 24 years	10.2	8.7	6.5
25 to 29 years	7.2	8.3	9.7
30 to 39 years	15.8	16.9	21.7
40 to 49 years	16.5	16.7	22.4
50 to 64 years	24.5	29.6	24.9
65 years and older	25.7	20.0	14.8
Panel C: Region of main residence			
Île de France	18.3	18.7	21.4
Centre – Val de Loire	3.8	3.9	3.5
Bourgogne – Franche-Comté	4.2	4.2	5.0
Normandie	4.9	4.5	3.1
Hauts-de-France	8.9	11.7	9.8
Grand Est	8.2	7.9	8.1
Pays de la Loire	5.7	7.1	6.6
Bretagne	5.0	5.9	5.8
Nouvelle-Aquitaine	8.9	8.9	8.0
Occitanie	8.8	8.5	7.9
Auvergne-Rhône-Alpes	12.0	12.0	12.2
Provence-Alpes-Côte d'Azur	7.5	6.0	7.9
Corse	0.5	0.1	0.0
RUP FR — Régions Ultrapériphériques Françaises	3.3	0.5	0.1

The column *population (in %)* describes the population distribution in terms of age, gender, and region of main residence according to official population statistics derived from Eurostat. Since we had no prior information on the distribution of typical sociodemographic characteristics of the desired target group, i.e. individual investors in France, the survey institute recruited individuals in such a way that the sample of people who started the survey

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were, as close as possible, representative (in terms of age, gender, and region of main residence) of the French population with a minimum age of 18 years. Accordingly, the second column describes the distribution of all individuals who started the survey in terms of age, gender, and region of main residence. *Final sample of individual investors (in %)* describes the distribution of the final sample of experienced financial decision makers in terms of age, gender, and region of main residence, and thus the sample after screening out respondents who did not fulfil our criteria for experienced financial decision makers. Individuals who started the survey but were no financial decision maker in their household, did not hold investment products (e.g. stocks, funds, mutual funds, etc.) at the time of the survey or in the past, or did not inform themselves about those investment products were thus not part of the final sample.

TABLE B.3 – REPRESENTATIVENESS OF THE GERMAN RESPONDENT SAMPLE

	Population (in %)	Persons who started the survey (in %)	Final sample of individual investors (in %)
Panel A: Gender			
Male	49.3	62.0	64.4
Female	50.7	38.0	35.7
Other	0.0	0.0	0.2
Panel B: Age			
18 to 24 years	9.1	10.0	12.3
25 to 29 years	7.5	11.0	12.1
30 to 39 years	15.3	11.0	10.3
40 to 49 years	15.0	13.0	13.4
50 to 64 years	27.3	28.0	28.3
65 years and older	25.8	26.0	23.6
Panel C: Region of main residence			
Baden-Württemberg	13.3	11.0	12.3
Bayern	15.8	16.0	13.5
Berlin	4.4	5.0	7.3
Brandenburg	3.0	2.0	3.2
Bremen	0.8	1.0	0.4
Hamburg	2.2	2.0	4.0
Hessen	7.5	8.0	8.1
Mecklenburg-Vorpommern	1.9	1.0	1.0
Niedersachsen	9.6	9.0	9.6
Nordrhein-Westfalen	21.6	22.0	22.2
Rheinland-Pfalz	4.9	5.0	4.8
Saarland	1.2	1.0	1.2
Sachsen	4.9	6.0	4.8
Sachsen-Anhalt	2.7	3.0	1.9
Schleswig-Holstein	3.5	4.0	3.2
Thüringen	2.6	3.0	2.7

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The column *population (in %)* describes the population distribution in terms of age, gender, and region of main residence according to official population statistics derived from Eurostat. Since we had prior information on the distribution of typical sociodemographic characteristics of the desired target group, i.e. individual investors in Germany, based on a pilot study, the survey institute recruited individuals according to these quotas. Accordingly, the second column describes the distribution of all individuals who started the survey in terms of age, gender, and region of main residence. *Final sample of individual investors (in %)* describes the distribution of the final sample of experienced financial decision makers in terms of age, gender, and region of main residence, and thus the sample after screening out respondents who did not fulfil our criteria for experienced financial decision makers. Individuals who started the survey but were no financial decision maker in their household, did not hold investment products (e.g. stocks, funds, mutual funds, etc.) at the time of the survey or in the past, or did not inform themselves about those investment products were thus not part of the final sample.

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TABLE B.4 – REPRESENTATIVENESS OF THE DUTCH RESPONDENT SAMPLE

	Population (in %)	Persons who started the survey (in %)	Final sample of individual investors (in %)
Panel A: Gender			
Male	50.0	50.6	63.9
Female	50.0	49.0	35.9
Other	0.0	0.3	0.2
Panel B: Age			
18 to 24 years	10.7	7.0	8.0
25 to 29 years	8.0	6.2	7.6
30 to 39 years	15.0	14.4	18.1
40 to 49 years	16.0	21.1	18.8
50 to 64 years	25.6	26.9	28.6
65 years and older	24.7	24.3	18.8
Panel C: Region of main residence			
Groningen	3.4	4.3	3.9
Friesland (NL)	3.7	4.9	4.9
Drenthe	2.8	2.7	2.3
Overijssel	6.7	6.8	5.5
Flevoland	2.4	3.6	4.0
Gelderland	12.0	11.5	11.8
Utrecht	7.6	7.6	8.4
Noord-Holland	16.5	13.5	14.4
Zuid-Holland	21.5	20.1	19.5
Zeeland	2.2	2.7	2.5
Noord-Brabant	14.7	14.7	15.4
Limburg (NL)	6.4	7.6	7.5

The column *population (in %)* describes the population distribution in terms of age, gender, and region of main residence according to official population statistics derived from Eurostat. Since we had no prior information on the distribution of typical sociodemographic characteristics of the desired target group, i.e. individual investors in the Netherlands, the survey institute recruited individuals in such a way that the sample of people who started the survey were, as close as possible, representative (in terms of age, gender, and region of main residence) of the Dutch population with a minimum age of 18 years. Accordingly, the second column describes the distribution of all individuals who started the survey in terms of age, gender, and region of main residence. *Final sample of*

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individual investors (in %) describes the distribution of the final sample of experienced financial decision makers in terms of age, gender, and region of main residence, and thus the sample after screening out respondents who did not fulfil our criteria for experienced financial decision makers. Individuals who started the survey but were no financial decision maker in their household, did not hold investment products (e.g. stocks, funds, mutual funds, etc.) at the time of the survey or in the past, or did not inform themselves about those investment products were thus not part of the final sample.

TABLE B.5 – REPRESENTATIVENESS OF THE POLISH RESPONDENT SAMPLE

	Population (in %)	Persons who started the survey (in %)	Final sample of individual investors (in %)
Panel A: Gender			
Male	48.4	43.2	53.6
Female	51.6	56.6	46.4
Other	0.0	0.2	0.1
Panel B: Age			
18 to 24 years	8.1	7.9	7.0
25 to 29 years	9.8	8.3	9.0
30 to 39 years	20.8	19.6	23.2
40 to 49 years	18.4	17.3	20.4
50 to 64 years	21.6	24.0	27.7
65 years and older	21.3	22.8	12.8
Panel C: Region of main residence			
Dolnoslaskie	7.1	7.5	6.7
Kujawsko-Pomorskie	5.2	5.4	5.1
Lubelskie	6.0	5.5	5.9
Lubuskie	2.4	2.6	2.5
Lódzkie	7.6	6.4	7.9
Malopolskie	8.8	8.9	8.3
Mazowiec / Warszawski stoleczny	13.0	14.2	15.4
Opolskie	2.9	2.5	2.6
Podkarpackie	5.2	5.5	5.3
Podlaskie	3.4	3.0	3.2
Pomorskie	5.5	6.1	6.1
Slaskie	12.1	11.8	11.8
Swietokrzyskie	3.1	3.2	3.6
Warminsko-Mazurskie	3.7	3.7	3.2
Wielkopolskie	9.5	9.2	7.8
Zachodniopomorskie	4.5	4.4	4.3

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The column *population (in %)* describes the population distribution in terms of age, gender, and region of main residence according to official population statistics derived from Eurostat. Since we had no prior information on the distribution of typical sociodemographic characteristics of the desired target group, i.e. individual investors in Poland, the survey institute recruited individuals in such a way that the sample of people who started the survey were, as close as possible, representative (in terms of age, gender, and region of main residence) of the Polish population with a minimum age of 18 years. Accordingly, the second column describes the distribution of all individuals who started the survey in terms of age, gender, and region of main residence. *Final sample of individual investors (in %)* describes the distribution of the final sample of experienced financial decision makers in terms of age, gender, and region of main residence, and thus the sample after screening out respondents who did not fulfil our criteria for experienced financial decision makers. Individuals who started the survey but were no financial decision maker in their household, did not hold investment products (e.g. stocks, funds, mutual funds, etc.) at the time of the survey or in the past, or did not inform themselves about those investment products were thus not part of the final sample.

TABLE B.6 – REPRESENTATIVENESS OF THE SPANISH RESPONDENT SAMPLE

	Population (in %)	Persons who started the survey (in %)	Final sample of individual investors (in %)
Panel A: Gender			
Male	49.0	46.5	52.8
Female	51.0	53.5	47.2
Other	0.0	0.0	0.0
Panel B: Age			
18 to 24 years	8.3	10.7	10.7
25 to 29 years	6.5	9.0	8.6
30 to 39 years	16.2	19.3	24.3
40 to 49 years	20.2	21.3	23.7
50 to 64 years	25.2	25.4	24.9
65 years and older	23.6	14.4	7.8
Panel C: Region of main residence			
Galicia	5.7	6.1	6.0
Principado de Asturias	2.2	3.1	2.2
Cantabria	1.2	1.3	1.3
País Vasco	4.6	4.5	4.1
Comunidad Foral de Navarra	1.4	0.9	0.7
La Rioja	0.7	0.4	0.5
Aragón	2.8	3.4	2.9
Comunidad de Madrid	14.3	20.1	20.7
Castilla y León	5.1	5.0	4.9
Castilla-la Mancha	4.3	3.6	3.5
Extremadura	2.2	1.7	1.7
Cataluña	16.2	16.5	16.5
Comunitat Valenciana	10.6	5.1	6.2
Illes Balears	2.6	1.5	1.8
Andalucía	17.9	18.3	17.4
Región de Murcia	3.2	3.0	2.9
Ciudad de Ceuta	0.2	0.1	0.0

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Ciudad de Melilla	0.2	0.0	0.0
Canarias	4.7	5.4	6.9

The column *population (in %)* describes the population distribution in terms of age, gender, and region of main residence according to official population statistics derived from Eurostat. Since we had no prior information on the distribution of typical sociodemographic characteristics of the desired target group, i.e. individual investors in Spain, the survey institute recruited individuals in such a way that the sample of people who started the survey were, as close as possible, representative (in terms of age, gender, and region of main residence) of the Spanish population with a minimum age of 18 years. Accordingly, the second column describes the distribution of all individuals who started the survey in terms of age, gender, and region of main residence. *Final sample of individual investors (in %)* describes the distribution of the final sample of experienced financial decision makers in terms of age, gender, and region of main residence, and thus the sample after screening out respondents who did not fulfil our criteria for experienced financial decision makers. Individuals who started the survey but were no financial decision maker in their household, did not hold investment products (e.g. stocks, funds, mutual funds, etc.) at the time of the survey or in the past, or did not inform themselves about those investment products were thus not part of the final sample.

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TABLE B.7 – FINANCIAL LITERACY

Ranking of financial literacy scores based on the number of correct answers for the three statements:

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?"
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."
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.""

Country:	Netherlands	Germany	Spain	France	Poland
Our own investor sample	2.53	2.45	2.10	2.00	1.98
Eurobarometer investor sample	2.49	2.26	2.01	2.15	2.07

This table reports the scores for the *Financial literacy* variable in our main survey and the corresponding scores in a recent large Eurobarometer survey (European Commission, 2023). Investors in the Eurobarometer survey data are respondents who answered "an investment product (funds, stocks, or bonds)" to the question: "Which of the following financial products do you currently have or have you had in the last two years?" The order of the countries is based on the scores for *Financial literacy* in our main survey, beginning with the highest score. In the Eurobarometer, slightly different versions of the second question and third question were asked. The second question in the Eurobarometer was: "Now imagine the following situation. You are going to be given a gift of €1,000 in one year and, over that year, inflation stays at 2%. In one year's time, with the €1,000, will you be able to buy: 1. More than you could buy today, 2. The same amount, 3. Less than you could buy today, 4. Do not know." The third question in the Eurobarometer was: "An investment in a wide range of "company shares" is likely to be: 1. More risky than an investment in a single share, 2. Less risky than an investment in a single share, 3. As risky as an investment in a single share, 4. Do not know." The comparison shows that the country ranking of the scores for *Financial literacy* is very similar in both samples.

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TABLE B.8 – COMPARISON OF INDIVIDUAL INVESTOR CHARACTERISTICS WITH EXTERNAL DATA

Country:	Nether-lands I[a]	Ger-many[a]	France[a]	Spain[a]	Poland[a]	Nether-lands II[b]	United States I[b]	United States II[b]	Swe-den[b]	China[b]
Age										
Average	48.27	47.72	45.85	42.72	45.42	55.55	57.72	46.00	46.06	N.a.
< 30	0.16	0.24	0.16	0.19	0.16	N.a.	0.03	N.a.	N.a.	0.21
30 - < 40	0.18	0.10	0.22	0.24	0.23	N.a.	0.09	N.a.	N.a.	0.27
40 - < 50	0.19	0.13	0.22	0.24	0.20	N.a.	0.12	N.a.	N.a.	0.25
≥ 50	0.47	0.52	0.40	0.33	0.28	N.a.	0.75	N.a.	N.a.	0.27
Female	0.36	0.36	0.41	0.47	0.46	0.25	0.53	0.44	0.37	0.28
High education	0.71	0.61	0.71	0.68	0.71	N.a.	0.57	N.a.	0.85	0.92

This table reports the average age, the share of respondents in specific age groups, the share of female respondents, and the share of respondents with high education in [a]our five country samples and [b]samples of individual investors from other studies. *N.a.* indicates that the corresponding values were not available for the corresponding sample. Netherlands II: Sample of 38,382 individual investors who are customers of one of the largest mutual fund providers in the Netherlands (Riedl and Smeets, 2017). United States I: Sample of 877 individual investors that participated in a survey among members of Amazon's Mechanical Turk online labor market platform in the United States (Choi and Robertson, 2020). Numbers are based on the data provided with the replication code for the paper. United States II: Sample of millions of individual investors who are customers of a large financial institution in the United States (Meeuwis et al., 2022). Due to the proprietary and confidential nature of the data, the sample size is not disclosed. Sweden: Sample of 71,639 individual investors listed in administrative data (Swedish Income and Wealth Registry) in Sweden (Betermier et al., 2017). China: Sample of 11,268 individual investors that participated in a survey among investors listed in the Investor Education Center of the Shenzhen Stock Exchange in China (Liu et al., 2022).

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TABLE B.9 – ROBUSTNESS CHECKS FOR SENSITIVITY TO FEES ON SUSTAINABLE INVESTMENTS BY EXCLUDING OUTLIERS AND USING MEDIAN REGRESSIONS

Dependent variable:	Share of endowment invested in sustainable ETFs					
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Fee scenarios						
Fees on sustainable ETF: 0.9%	-3.053***	-3.053***	-3.025***	-3.025***	-0.729*	-0.815**
	(0.310)	(0.310)	(0.309)	(0.309)	(0.396)	(0.397)
Fees on sustainable ETF: 1.6%	-5.160***	-5.160***	-5.142***	-5.142***	-2.801***	-2.741***
	(0.369)	(0.369)	(0.367)	(0.367)	(0.493)	(0.498)
Fees on sustainable ETF: 2.3%	-7.806***	-7.806***	-7.790***	-7.790***	-5.615***	-6.000***
	(0.418)	(0.418)	(0.414)	(0.414)	(0.605)	(0.613)
Preferences						
Social preferences	0.873***	0.944***	0.851***	0.918***	0.701***	0.810***
	(0.131)	(0.130)	(0.129)	(0.129)	(0.140)	(0.139)
Risk preferences	0.012	-0.082	0.004	-0.094	-0.051	-0.151
	(0.160)	(0.160)	(0.158)	(0.158)	(0.156)	(0.160)
Time preferences	0.656***	0.654***	0.565***	0.560***	0.463***	0.523***
	(0.182)	(0.180)	(0.172)	(0.171)	(0.168)	(0.170)
Signaling	-1.016***	-0.929***	-0.960***	-0.871***	-0.891***	-0.873***
	(0.192)	(0.193)	(0.191)	(0.192)	(0.194)	(0.200)
Return expectations						
Much higher returns compared to MSCI World	9.761***	9.532***	9.738***	9.525***	15.727***	15.209***
	(1.085)	(1.088)	(1.079)	(1.081)	(1.472)	(1.520)
A little higher returns compared to MSCI World	5.559***	5.483***	5.594***	5.528***	5.624***	5.500***
	(0.699)	(0.698)	(0.696)	(0.695)	(0.734)	(0.725)
A little lower returns compared to MSCI World	-1.369*	-1.261	-1.370*	-1.263	-3.843***	-3.542***
	(0.796)	(0.795)	(0.792)	(0.791)	(0.862)	(0.831)
Much lower returns compared to MSCI World	-8.228***	-8.236***	-8.179***	-8.186***	-17.296***	-17.479***
	(1.418)	(1.416)	(1.397)	(1.394)	(2.879)	(2.682)
Do not know returns	-1.781	-1.785	-1.81	-1.814	-2.047**	-2.306**
	(1.140)	(1.140)	(1.129)	(1.129)	(0.835)	(0.909)
Risk perceptions						
Higher risk compared to MSCI World	-2.524***	-2.599***	-2.570***	-2.642***	-2.365***	-2.739***
	(0.693)	(0.694)	(0.691)	(0.692)	(0.665)	(0.677)
Lower risk compared to MSCI World	4.399***	4.413***	4.408***	4.419***	5.778***	5.951***
	(0.844)	(0.843)	(0.838)	(0.837)	(1.038)	(1.019)
Do not know risk	-0.963	-1.123	-0.947	-1.112	-0.237	-0.301
	(1.202)	(1.201)	(1.192)	(1.190)	(0.892)	(0.991)

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Individual characteristics

	(1)	(2)	(3)	(4)	(5)	(6)
Financial literacy	-2.011***	-1.717***	-2.083***	-1.794***	-1.836***	-1.588***
	(0.377)	(0.380)	(0.375)	(0.377)	(0.375)	(0.383)
Age	-0.025	-0.025	-0.022	-0.023	-0.031	-0.025
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Female	2.250***	2.214***	2.253***	2.204***	1.560**	1.573**
	(0.644)	(0.643)	(0.641)	(0.640)	(0.625)	(0.644)
High education	-1.000	-1.262**	-0.83	-1.066*	-0.067	-0.58
	(0.634)	(0.643)	(0.630)	(0.639)	(0.617)	(0.637)
Married	1.716**	1.357*	1.489**	1.139	1.160*	1.118
	(0.709)	(0.708)	(0.704)	(0.704)	(0.660)	(0.687)
High income	0.069	0.11	-0.018	0.055	-0.767	-0.626
	(0.928)	(0.933)	(0.927)	(0.932)	(0.873)	(0.904)
Low income	-0.273	-0.285	-0.422	-0.391	-0.871	-0.758
	(0.946)	(0.959)	(0.943)	(0.955)	(0.892)	(0.943)
Do not know or report income	0.306	0.253	0.135	0.132	-0.43	-0.453
	(1.386)	(1.397)	(1.381)	(1.394)	(1.329)	(1.414)
Catholic	-3.208***	-2.988***	-3.339***	-3.158***	-2.914***	-2.768***
	(0.712)	(0.749)	(0.707)	(0.744)	(0.684)	(0.727)
Protestant	-2.535*	-0.834	-2.158	-0.473	-1.397	-0.083
	(1.353)	(1.386)	(1.347)	(1.381)	(1.266)	(1.336)
Other religion	-1.538	-1.422	-1.467	-1.345	-0.316	0.535
	(1.628)	(1.635)	(1.624)	(1.634)	(1.424)	(1.481)
Do not report religion	-1.105	-0.723	-1.095	-0.736	-1.732*	-1.223
	(0.955)	(0.952)	(0.949)	(0.946)	(0.946)	(0.940)
Germany		-7.062***		-6.954***		-6.087***
	--	(1.049)	--	(1.042)	--	(1.054)
Netherlands		-1.698		-1.790*		-0.600
	--	(1.038)	--	(1.036)	--	(1.064)
Poland		-2.852***		-2.729***		-2.068**
	--	(0.981)	--	(0.975)	--	(0.975)
Spain		-2.931***		-3.060***		-1.806*
	--	(0.951)	--	(0.945)	--	(0.954)

Experimental controls

	(1)	(2)	(3)	(4)	(5)	(6)
MSCI World Climate Change Index ETF	2.114***	2.123***	2.136***	2.144***	1.689***	1.725***
	(0.362)	(0.362)	(0.359)	(0.359)	(0.376)	(0.379)
Saw ESG Screened ETF first	2.692***	2.653***	2.610***	2.580***	1.939***	1.927***
	(0.610)	(0.607)	(0.607)	(0.604)	(0.600)	(0.614)
Second decision	-1.042***	-1.042***	-1.070***	-1.070***	-1.095**	-0.915**
	(0.349)	(0.349)	(0.346)	(0.346)	(0.436)	(0.447)
Third decision	-0.521	-0.521	-0.537	-0.537	-1.304***	-1.238***
	(0.393)	(0.393)	(0.390)	(0.390)	(0.452)	(0.468)
Fourth decision	-1.379***	-1.379***	-1.373***	-1.373***	-1.377***	-1.347***
	(0.410)	(0.410)	(0.406)	(0.406)	(0.496)	(0.497)
Fifth decision	-0.306	-0.304	-0.296	-0.294	-0.468	-0.242
	(0.505)	(0.505)	(0.499)	(0.499)	(0.571)	(0.575)
Sixth decision	-0.882*	-0.880*	-0.874*	-0.872*	-0.939*	-0.711
	(0.502)	(0.502)	(0.499)	(0.499)	(0.568)	(0.597)
Seventh decision	-1.313***	-1.312***	-1.367***	-1.365***	-2.059***	-1.940***
	(0.494)	(0.494)	(0.490)	(0.490)	(0.550)	(0.577)
Eighth decision	-1.140**	-1.139**	-1.135**	-1.133**	-1.373**	-1.417**
	(0.494)	(0.494)	(0.491)	(0.491)	(0.537)	(0.553)
Constant	51.606***	53.861***	52.576***	54.880***	52.959***	53.773***
	(2.260)	(2.299)	(2.217)	(2.268)	(2.203)	(2.331)

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Respondents	4,827	4,827	4,901	4,901	4,901	4,901
Decisions	38,616	38,616	39,208	39,208	39,208	39,208
R^2	0.078	0.083	0.077	0.082	--	--
Individual fixed effects	No	No	No	No	No	No

This table reports the results of random effects estimations (columns 1 to 4) in linear regression models and median regression models (columns 5 and 6). In columns 1 and 2, respondents for whom the values for the variables *Social preferences*, *Risk preferences*, *Time preferences*, *Signaling*, *Financial literacy*, and *Age* are deviate more than three standard deviations from the corresponding mean are excluded. In columns 3 and 4, values for the same variables that fall below the 1st percentile or above the 99th percentile are winsorized. The models shown in columns 5 and 6 are based on data from the full sample. In all models, the investment decisions from all respondents are pooled. The dependent variable captures the share of the endowments respondents invested in sustainable ETFs (i.e. either ETFs based on the MSCI World ESG Screened Index or ETFs based on the MSCI World Climate Change Index). The dummy variables *Fees on sustainable ETF: 0.9%*, *Fees on sustainable ETF: 1.6%*, and *Fees on sustainable ETF: 2.3%* take the value of one to indicate the amount of fees charged on the sustainable ETF, and zero otherwise. Consequently, the (estimated) constant terms represent the reference scenario where the amount of fees charged on the sustainable ETF is 0.2%. In models 1, 3, and 5, we consider individual preferences, return expectations, risk perceptions, but also control for other individual characteristics, and experimental variables as further explanatory variables. In models 2, 4, and 6, we additionally include dummy variables to control for potential country differences (base category: France). All variables are defined in Section 2.4. For models 1 to 4, R^2 indicates the squared correlation between the observed and fitted values, reported as *overall R^2* when using the Stata command xtreg (Stata version 15.1). For models 5 and 6, R^2 is not reported, as it provides not much useful information in median regression models. *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE B.10 – SENSITIVITY TO FEES ON SUSTAINABLE INVESTMENTS USING PROBABILITY WEIGHTS

Dependent variable:	Share of endowment invested in sustainable ETFs	
Model:	(1)	(2)
Fee scenarios		
Fees on sustainable ETF: 0.9%	-2.760***	-2.760***
	(0.312)	(0.312)
Fees on sustainable ETF: 1.6%	-4.754***	-4.754***
	(0.370)	(0.370)
Fees on sustainable ETF: 2.3%	-7.300***	-7.300***
	(0.417)	(0.417)
Preferences		
Social preferences	0.848***	0.905***
	(0.129)	(0.129)
Risk preferences	-0.024	-0.117
	(0.157)	(0.157)
Time preferences	0.516***	0.513***
	(0.171)	(0.170)
Signaling	-0.876***	-0.781***
	(0.192)	(0.193)
Return expectations		
Much higher returns compared to MSCI World	11.340***	10.746***
	(1.090)	(1.093)
A little higher returns compared to MSCI World	5.472***	5.343***
	(0.740)	(0.736)
A little lower returns compared to MSCI World	-3.051***	-2.717***
	(0.882)	(0.874)
Much lower returns compared to MSCI World	-11.441***	-11.474***
	(1.492)	(1.488)
Do not know returns	-2.493**	-2.454**
	(1.107)	(1.100)
Risk perceptions		
Higher risk compared to MSCI World	-2.689***	-2.894***
	(0.700)	(0.703)
Lower risk compared to MSCI World	4.789***	4.793***
	(0.859)	(0.857)
Do not know risk	-0.636	-0.916
	(1.182)	(1.183)

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Individual characteristics

Financial literacy	-1.835***	-1.591***
	(0.375)	(0.378)
Age	-0.028	-0.030
	(0.022)	(0.022)
Female	2.185***	2.095***
	(0.647)	(0.647)
High education	-0.674	-0.812
	(0.632)	(0.641)
Married	1.478**	1.154
	(0.706)	(0.707)
High income	0.069	0.081
	(0.924)	(0.930)
Low income	-0.190	-0.232
	(0.941)	(0.956)
Do not know or report income	-0.069	-0.120
	(1.371)	(1.390)
Catholic	-3.488***	-3.235***
	(0.711)	(0.748)
Protestant	-2.359*	-0.855
	(1.345)	(1.380)
Other religion	-1.990	-1.909
	(1.653)	(1.661)
Do not report religion	-1.225	-0.923
	(0.944)	(0.944)
Germany		-6.578***
	--	(1.041)
Netherlands		-1.672
	--	(1.032)
Poland		-2.636***
	--	(0.978)
Spain		-2.992***
	--	(0.940)

Experimental controls

MSCI World Climate Change Index ETF	1.977***	2.001***
	(0.373)	(0.372)
Saw ESG Screened ETF first	2.668***	2.648***
	(0.609)	(0.607)
Second decision	-1.208***	-1.208***
	(0.349)	(0.349)
Third decision	-0.687*	-0.687*
	(0.394)	(0.394)
Fourth decision	-1.485***	-1.485***
	(0.412)	(0.412)

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Fifth decision	-0.345	-0.340
	(0.511)	(0.511)
Sixth decision	-0.883*	-0.878*
	(0.511)	(0.510)
Seventh decision	-1.382***	-1.377***
	(0.502)	(0.502)
Eighth decision	-1.179**	-1.174**
	(0.504)	(0.503)
Constant	53.019***	55.197***
	(2.239)	(2.278)
Respondents	4,901	4,901
Decisions	39,208	39,208
R^2	0.075	0.080
Individual fixed effects	No	No

This table reports the results of weighted two linear regression models with inverse probability weighting. Probability weights are estimated with a binary logit model with a dependent dummy variable that takes the value of one if a respondent completed the survey, and zero if a respondent quit the survey before it was finished. Respondents are considered for the estimation of probability weights if they saw the introduction screen of the experiment. The explanatory variables for the estimation of probability weights correspond to all variables that are gathered before the start of the experiment. Some of these variables are also used in some of the models shown in Table 1: *Age*, *Female*, the dummy variables to control for potential country differences, and *Saw ESG Screened ETF first*. We also consider several additional variables: The dummy variable *Joint decision* that takes the value of one if the respondent states to make financial decisions in their household together with their partner, and zero if the respondent states to make financial decisions in their household alone. The dummy variable *Current investor* takes the value of one (and zero otherwise) if the respondent states to currently invest in at least one of the following investment products: Stocks, passively managed stock funds, actively managed stock funds, mixed funds, passively managed bond funds, actively managed bond funds, other non-fixed-income forms of investment (e.g. warrants, certificates, open-ended real estate funds, real estate investment trusts, or closed-end funds), precious metals, and cryptocurrencies. The dummy variable *Past investor* takes the value of one (and zero otherwise) if the respondent states to have invested in at least one of the following investment products in the past: Stocks, passively managed stock funds, actively managed stock funds, mixed funds, passively managed bond funds, actively managed bond funds, other non-fixed-income forms of investment (e.g. warrants, certificates, open-ended real estate funds, real estate investment trusts, or closed-end funds), precious metals, and cryptocurrencies. The dummy variable *Knows investment products* takes the value of one (and zero otherwise) if the respondent states to have obtained detailed information about at least one of the following investment products: Stocks, passively managed stock funds, actively managed stock funds, mixed funds, passively managed bond funds, actively managed bond funds, other non-fixed-income forms of investment (e.g. warrants, certificates, open-ended real estate funds, real estate investment trusts, or closed-end funds), precious metals, and cryptocurrencies. In both models, the investment decisions from all respondents are pooled. If individuals have a high probability of finishing the survey, they will be given a lower weight and vice versa. The dependent variable captures the share of the endowments respondents invested in sustainable ETFs (i.e. either ETFs based on the MSCI World ESG Screened Index or ETFs based on the MSCI World Climate Change Index). The dummy variables *Fees on sustainable ETF: 0.9%*, *Fees on sustainable ETF: 1.6%*, and *Fees on sustainable ETF: 2.3%* take the value of one to indicate the amount of fees charged on the sustainable ETF, and zero otherwise. Consequently, the (estimated) constant terms represent the reference scenario where the amount of fees charged on the sustainable ETF is 0.2%. In model 1, we consider individual preferences, return expectations, risk perceptions, but also control for other individual characteristics, and experimental variables as further explanatory variables. In model 2, we additionally include dummy variables to control for potential country

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differences (base category: France). All variables are defined in Section 2.4. R^2 indicates the coefficient of determination. *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE B.11 – FEE SENSITIVITY AND SOCIAL PREFERENCES

Dependent variable:	Share of endowment invested in sustainable ETFs
Fees on sustainable ETF: 0.9% * social preferences	0.084 (0.127)
Fees on sustainable ETF: 1.6% * social preferences	0.142 (0.147)
Fees on sustainable ETF: 2.3% * social preferences	0.189 (0.165)
Fees on sustainable ETF: 0.9%	-3.593*** (0.931)
Fees on sustainable ETF: 1.6%	-6.106*** (1.081)
Fees on sustainable ETF: 2.3%	-9.067*** (1.205)
Social preferences	0.814*** (0.129)
Constant	55.553*** (2.279)
Preferences	Yes
Return expectations	Yes
Risk perceptions	Yes
Individual characteristics	Yes
Experimental controls	Yes
Country dummies	Yes
Respondents	4,901
Decisions	39,208
R^2	0.082

This table reports the estimation results of random effects estimations based on all eight decisions of all respondents. The dependent variable is the *Share of endowment invested in sustainable ETFs*. As explanatory variables, we consider individual preferences, return expectations, risk perceptions, but also control for other individual characteristics and experimental variables. We additionally include interaction terms between *Social preferences* and the dummy variables indicating the different fee scenarios variables. All variables are defined in Section 2.4. R^2 indicates the squared correlation between the observed and fitted values, reported as overall R^2 when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the estimated parameters are significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

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Dependent variable:	Share of endowment invested in sustainable ETFs
Fees on sustainable ETF: 0.9% * financial literacy	-3.341***
	(0.361)
Fees on sustainable ETF: 1.6% * financial literacy	-4.985***
	(0.415)
Fees on sustainable ETF: 2.3% * financial literacy	-6.467***
	(0.453)
Fees on sustainable ETF: 0.9%	4.412***
	(0.866)
Fees on sustainable ETF: 1.6%	5.954***
	(0.987)
Fees on sustainable ETF: 2.3%	6.604***
	(1.067)
Financial literacy	1.902***
	(0.377)
Constant	46.625***
	(2.259)
Preferences	Yes
Return expectations	Yes
Risk perceptions	Yes
Individual characteristics	Yes
Experimental controls	Yes
Country dummies	Yes
Respondents	4,901
Decisions	39,208
R^2	0.087

This table reports the estimation results of random effects estimations based on all eight decisions of all respondents. The dependent variable is the *Share of endowment invested in sustainable ETFs*. As explanatory variables, we consider individual preferences, return expectations, risk perceptions, but also control for other individual characteristics and experimental variables. We additionally include interaction terms between *Financial literacy* and the dummy variables indicating the different fee scenarios variables. All variables are defined in Section 2.4. R^2 indicates the squared correlation between the observed and fitted values, reported as overall R^2 when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the estimated parameters are significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

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TABLE B.13 – FEE SENSITIVITY AND UNDERSTANDING FEES

Dependent variable:	Share of endowment invested in sustainable ETFs
Fees on sustainable ETF: 0.9% * did calculate fees correctly	-5.602***
	(0.750)
Fees on sustainable ETF: 1.6% * did calculate fees correctly	-8.520***
	(0.853)
Fees on sustainable ETF: 2.3% * did calculate fees correctly	-11.155***
	(0.938)
Fees on sustainable ETF: 0.9%	1.302*
	(0.665)
Fees on sustainable ETF: 1.6%	1.440*
	(0.745)
Fees on sustainable ETF: 2.3%	0.827
	(0.811)
Did calculate fees correctly	5.385***
	(0.667)
Constant	50.510***
	(2.298)
Preferences	Yes
Return expectations	Yes
Risk perceptions	Yes
Individual characteristics	Yes
Experimental controls	Yes
Country dummies	
Respondents	4,901
Decisions	39,208
R^2	0.085

This table reports the estimation results of random effects estimations based on all eight decisions of all respondents. The dependent variable is the *Share of endowment invested in sustainable ETFs*. As explanatory variables, we consider individual preferences, return expectations, risk perceptions, but also control for other individual characteristics and experimental variables. We additionally include interaction terms between *Did calculate fees correctly* and the dummy variables indicating the different fee scenarios variables. All variables are defined in Section 2.4. R^2 indicates the squared correlation between the observed and fitted values, reported as overall R^2 when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the estimated parameters are significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE B.14 – FEE SENSITIVITY AND RETURN EXPECTATIONS

Dependent variable:	Share of endowment invested in sustainable ETFs
Fees on sustainable ETF: 0.9% * much higher returns compared to MSCI World	5.541*** (1.245)
Fees on sustainable ETF: 1.6% * much higher returns compared to MSCI World	7.460*** (1.387)
Fees on sustainable ETF: 2.3% * much higher returns compared to MSCI World	7.901*** (1.527)
Fees on sustainable ETF: 0.9% * a little higher returns compared to MSCI World	1.691** (0.839)
Fees on sustainable ETF: 1.6% * a little higher returns compared to MSCI World	2.650*** (0.972)
Fees on sustainable ETF: 2.3% * a little higher returns compared to MSCI World	2.223** (1.082)
Fees on sustainable ETF: 0.9% * a little lower returns compared to MSCI World	-1.484* (0.893)
Fees on sustainable ETF: 1.6% * a little lower returns compared to MSCI World	-1.678 (1.044)
Fees on sustainable ETF: 2.3% * a little lower returns compared to MSCI World	-2.865** (1.143)
Fees on sustainable ETF: 0.9% * much lower returns compared to MSCI World	0.342 (1.379)
Fees on sustainable ETF: 1.6% * much lower returns compared to MSCI World	0.864 (1.561)
Fees on sustainable ETF: 2.3% * much lower returns compared to MSCI World	1.349 (1.610)
Fees on sustainable ETF: 0.9% * do not know returns	1.873* (1.065)
Fees on sustainable ETF: 1.6% * do not know returns	4.071*** (1.260)
Fees on sustainable ETF: 2.3% * do not know returns	3.108** (1.365)
Fees on sustainable ETF: 0.9%	-4.006*** (0.694)
Fees on sustainable ETF: 1.6%	-6.870*** (0.808)
Fees on sustainable ETF: 2.3%	-9.080*** (0.893)

Much higher returns compared to MSCI World	4.297***
	(1.387)
A little higher returns compared to MSCI World	3.886***
	(0.882)
A little lower returns compared to MSCI World	0.246
	(0.996)
Much lower returns compared to MSCI World	-8.820***
	(1.624)
Do not know returns	-4.076***
	(1.276)
Constant	55.829***
	(2.293)
Preferences	Yes
Return expectations	Yes
Risk perceptions	Yes
Individual characteristics	Yes
Experimental controls	Yes
Respondents	4,901
Decisions	39,208
R^2	0.084

This table reports the estimation results of random effects estimations based on all eight decisions of all respondents. The dependent variable is the *Share of endowment invested in sustainable ETFs*. As explanatory variables, we consider individual preferences, return expectations, risk perceptions, but also control for other individual characteristics and experimental variables. We additionally include interaction terms between each of the variables capturing return expectations and the dummy variables indicating the different fee scenarios variables. All variables are defined in Section 2.4. R^2 indicates the squared correlation between the observed and fitted values, reported as overall R^2 when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the estimated parameters are significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE B.15 – COUNTRY DIFFERENCES IN FEE SENSITIVITY

Dependent variable:	Share of endowment invested in sustainable ETFs
Countries (references category: France)	
Germany	-2.165**
	(1.003)
Netherlands	2.371**
	(1.005)
Poland	-4.675***
	(0.885)
Spain	-3.964***
	(0.917)
Fees on sustainable ETF: 0.9%	-0.702
	(0.693)
Fees on sustainable ETF: 0.9% * Germany	-5.839***
	(0.953)
Fees on sustainable ETF: 0.9% * Netherlands	-4.813***
	(0.991)
Fees on sustainable ETF: 0.9% * Poland	-0.334
	(0.959)
Fees on sustainable ETF: 0.9% * Spain	-1.160
	(0.938)
Fees on sustainable ETF: 1.6%	-2.778***
	(0.814)
Fees on sustainable ETF: 1.6% * Germany	-7.159***
	(1.102)
Fees on sustainable ETF: 1.6% * Netherlands	-5.949***
	(1.196)
Fees on sustainable ETF: 1.6% * Poland	0.738
	(1.119)
Fees on sustainable ETF: 1.6% * Spain	0.145
	(1.116)
Fees on sustainable ETF: 2.3%	-4.441***
	(0.921)
Fees on sustainable ETF: 2.3% * Germany	-9.457***
	(1.246)
Fees on sustainable ETF: 2.3% * Netherlands	-8.173***
	(1.356)
Fees on sustainable ETF: 2.3% * Poland	0.118
	(1.260)
Fees on sustainable ETF: 2.3% * Spain	0.493
	(1.246)
Constant	57.535***
	(0.662)
Respondents	5,162
Decisions	41,296
R^2	0.019
Individual fixed effects	No

This table reports the results of random effects estimations in linear regression models based on data from different country samples. The dependent variable captures the share of the endowments respondents invested in sustainable

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ETFs (i.e. either ETFs based on the MSCI World ESG Screened Index or ETFs based on the MSCI World Climate Change Index). The dummy variables "fees on sustainable ETF: 0.9%," "fees on sustainable ETF: 1.6%," and "fees on sustainable ETF: 2.3%" take the value one to indicate the amount of fees charged on the sustainable ETF, and zero otherwise. We additionally include interaction terms between the aforementioned dummy variables for the different fee scenarios and country dummy variables, which take the value of one if the respondent's main place of residence is in Germany, the Netherlands, Poland, or Spain, and zero otherwise. The base category is France. R^2 indicates the squared correlation between the observed and fitted values, reported as overall R^2 when using the Stata command xtreg (Stata version 15.1). *** (**, *) indicates that the corresponding estimated parameter is significantly different from zero at the 1% (5%, 10%) significance level (cluster-robust standard errors in parentheses).

TABLE B.16 – QUESTIONS TO MEASURE RISK AND RETURN EXPECTATIONS

Question	Response categories	Variables
What returns do you expect on sustainable investments?	i) much lower returns compared to conventional investments; ii) a little lower returns compared to conventional investments; iii) neither lower nor higher returns compared to conventional investments; iv) a little higher returns compared to conventional investments; v) much higher returns compared to conventional investments; vi) don't know	One dummy variable for each response category, except for "neither lower nor higher returns compared to conventional investments," which serves as reference category.
Sustainable investments are riskier than conventional investments.	7-point Likert scale ranging from 1 "fully disagree" to 7 "fully agree"; "don't know"	Three dummy variables: 1) *Lower risk compared to conventional investments* (= 1 if Likert scale 1-3), and zero otherwise; 2) *Higher risk compared to conventional investments* (= 1 if Likert scale 5-7); the medium category (Likert scale 4) serves as reference category

This table reports the additional questions used to measure return expectations and risk perceptions in the main survey.

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TABLE B.17 – SUSTAINABLE INVESTMENTS IN REAL LIFE AND SOCIAL DESIRABILITY

Dependent variable:	Respondent reports to hold sustainable investments in real life	
Sample:	All	Only current investors
	(1)	(2)
Average share invested in sustainable ETFs in the experiment (reference category: 0% to 25%)		
Above 25% to 50%	0.048***	0.055**
	(0.018)	(0.025)
Above 50% to 75%	0.045**	0.057**
	(0.019)	(0.026)
Above 75% to 100%	0.088***	0.125***
	(0.024)	(0.032)
Social desirability motives		
Self-deceptive enhancement	0.002	0.009
	(0.005)	(0.007)
Impression management	-0.008	-0.008
	(0.005)	(0.007)
Preferences		
Social preferences	0.009***	0.013***
	(0.002)	(0.003)
Risk preferences	0.011***	0.007*
	(0.003)	0.004)
Time preferences	0.012***	0.015***
	(0.003)	(0.004)
Signaling	0.026***	0.025***
	(0.003)	(0.005)
Return expectations		
Much higher returns compared to conventional investments	0.022	0.057*
	(0.022)	(0.032)
A little higher returns compared to conventional investments	0.020	0.036*
	(0.014)	(0.020)
A little lower returns compared to conventional investments	-0.060***	-0.088***
	(0.014)	(0.020)
Much lower returns compared to conventional investments	-0.035	-0.050
	(0.022)	(0.031)
Do not know returns	-0.089***	-0.120***
	(0.022)	(0.034)

Risk perceptions		
Higher risk compared to conventional investments	0.016	0.023
	(0.014)	(0.020)
Lower risk compared to conventional investments	0.032**	0.045**
	(0.014)	(0.020)
Do not know risk	-0.221***	-0.254***
	(0.033)	(0.044)
Individual characteristics		
Financial literacy	0.005	0.000
	(0.007)	(0.010)
Age	0.000	0.001
	(0.000)	(0.001)
Female	-0.018	-0.016
	(0.011)	(0.016)
High education	0.054***	0.049***
	(0.011)	(0.015)
Married	0.010	0.018
	(0.012)	(0.017)
High income	-0.011	-0.026
	(0.016)	(0.022)
Low income	-0.044***	-0.051**
	(0.017)	(0.024)
Do not know or report income	-0.069***	-0.060*
	(0.025)	(0.036)
Catholic	0.013	0.008
	(0.013)	(0.018)
Protestant	-0.021	-0.019
	(0.022)	(0.031)
Other religion	0.016	0.003
	(0.026)	(0.037)
Do not report religion	0.017	0.005
	(0.017)	(0.024)
Germany	0.030	0.041
	(0.019)	(0.026)
Netherlands	0.082***	0.114***
	(0.019)	(0.026)
Poland	-0.073***	-0.071***
	(0.016)	(0.024)
Spain	-0.034**	-0.039
	(0.016)	(0.024)
Observations	4,901	3,124

This table reports, based on binary probit models, the estimates of average marginal and discrete probability effects of continuous and discrete explanatory variables, respectively. The dependent variable is a dummy variable that takes the value of one if a respondent reported to hold sustainable investments in real life, and zero otherwise. As explanatory variables, we consider the dummy variables *Above 25% to 50%*, *Above 50% to 75%*, and *Above 75% to 100%* that take the value of one if a respondent's average share of endowment invested in sustainable ETFs in the experiment (in %) falls into the respective interval, and zero otherwise. To capture social desirability motives, we include the variables *Self-deceptive enhancement* and *Impression management*, which are based on six items from the Balanced Inventory of Desirable Responding (BIDR) developed by Paulhus (1984, 1991), as described in footnote 38. We additionally control for return expectations, risk perceptions, individual preferences, and other individual characteristics and country-fixed effects. Return expectations are captured by asking the question "What returns do you expect on sustainable investments?" Respondents could choose among "much lower returns compared to conventional investments," "a little lower returns compared to conventional investments," "neither lower nor higher returns compared to conventional investments," "a little higher returns compared to conventional investments," "much higher returns compared to conventional investments," and "don't know." We construct one dummy variable for each response category, except for "neither lower nor higher returns compared to conventional investments," which serves as reference category. We capture risk perceptions concerning sustainable investments compared to conventional investments by asking respondents to indicate their agreement with the statement "Sustainable investments are riskier than conventional investments." Respondents could rate their agreement on a 7-point Likert scale ranging from 1 "fully disagree" to 7 "fully agree" or select "don't know." The dummy variable *Lower risk compared to conventional investments* takes the value of one if the respondent perceives sustainable investments to be less risky than conventional investments (Likert scale 1-3), and zero otherwise. The dummy variable *Higher risk compared to conventional investments* takes the value of one if the respondent perceives sustainable investments to be riskier than conventional investments (Likert scale 5-7), and zero otherwise. The medium category (Likert scale 4) serves as reference category. All further variables are defined in Section 2.4. The subsample of current investors only contains respondents who reported to hold at least one of the following investment products: Stocks, passively managed stock funds, actively managed stock funds, mixed funds, passively managed bond funds, actively managed bond funds, other non-fixed-income forms of investment, precious metals, and cryptocurrencies. *** (**, *) indicates that the estimated average probability effects are significantly different from zero at the 1% (5%, 10%) significance level (standard errors in parentheses).

TABLE B.18 – DESCRIPTIVE STATISTICS OF SURVEY VARIABLES IN PROLIFIC SAMPLE FOR THE FIRST FOLLOW-UP SURVEY

Sample:	Full sample	Group 1	Group 2	Group 3	Group 4	Group 5
First ETF (fee):	-	MSCI World (0.2 %)	MSCI World (0.2 %)	MSCI World (0.9 %)	MSCI World ESG (0.2 %)	MSCI World (0.2 %)
Second ETF (fee):	-	MSCI World ESG (0.9 %)	MSCI World ESG (0.2 %)	MSCI World ESG (0.2 %)	MSCI World ESG (0.9 %)	MSCI World (0.9 %)
Preferences						
Social preferences	450[a]	107	91	86	88	78
	5.91[b]	6.12	5.69	6.10	6.06	5.47
	6.00[c]	7.00	6.00	7.00	6.00	6.00
	2.64[d]	2.63	2.78	2.66	2.37	2.72
Risk preferences	450	107	91	86	88	78
	6.16	6.65	5.86	6.17	5.95	6.04
	7.00	7.00	7.00	7.00	6.00	7.00
	2.41	2.28	2.58	2.55	2.19	2.41
Time preferences	451	107	91	86	89	78
	6.06	6.26	6.20	5.62	6.34	5.82
	7.00	7.00	7.00	6.00	7.00	7.00
	2.54	2.55	2.38	2.73	2.43	2.57
Signaling	451	107	91	86	89	78
	3.49	3.69	4.43	3.34	3.47	3.50
	3.00	4.00	3.00	3.00	3.00	3.00
	1.64	1.67	1.69	1.64	1.62	1.55
Individual characteristics						
Financial literacy	451	107	91	86	89	78
	2.50	2.54	2.43	2.42	2.48	2.65
	3.00	3.00	3.00	3.00	3.00	3.00
	0.76	0.79	0.80	0.85	0.72	0.58
Financial literacy index	451	107	91	86	89	78
	4.04	4.18	3.93	4.01	3.96	4.12
	4.00	4.00	4.00	4.00	4.00	4.00
	1.55	1.52	1.62	1.70	1.51	1.38
Age	451	107	91	86	89	78
	29.46	30.06	29.42	29.73	28.57	29.38
	28.00	28.00	28.00	29.00	27.00	27.00
	8.21	8.60	7.94	7.82	7.53	9.22
Female	451	107	91	86	89	78
	0.26	0.19	0.32	0.23	0.31	0.24
	0.00	0.00	0.00	0.00	0.00	0.00
	0.44	0.39	0.47	0.42	0.47	0.43
High education	451	107	91	86	89	78
	0.64	0.68	0.59	0.67	0.66	0.58
	1.00	1.00	1.00	1.00	1.00	1.00
	0.48	0.47	0.49	0.47	0.48	0.50
Married	451	107	91	86	89	78
	0.21	0.26	0.15	0.22	0.18	0.21
	0.00	0.00	0.00	0.00	0.00	0.00
	0.41	0.44	0.36	0.42	0.39	0.41

High income	451	107	91	86	89	78
	0.46	0.50	0.42	0.48	0.53	0.38
	0.00	0.00	0.00	0.00	1.00	0.00
	0.50	0.50	0.50	0.50	0.50	0.49
Middle income	451	107	91	86	89	78
	0.10	0.10	0.09	0.10	0.11	0.06
	0.00	0.00	0.00	0.00	0.00	0.00
	0.29	0.31	0.28	0.31	0.32	0.25
Low income	451	107	91	86	89	78
	0.38	0.33	0.43	0.38	0.29	0.51
	0.00	0.00	0.00	0.00	0.00	1.00
	0.49	0.47	0.50	0.49	0.46	0.50
Do not know or report income	451	107	91	86	89	78
	0.06	0.07	0.07	0.03	0.07	0.04
	0.00	0.00	0.00	0.00	0.00	0.00
	0.23	0.26	0.25	0.18	0.25	0.19
Catholic	451	107	91	86	89	78
	0.15	0.15	0.07	0.14	0.27	0.13
	0.00	0.00	0.00	0.00	0.00	0.00
	0.36	0.36	0.25	0.35	0.45	0.34
Protestant	451	107	91	86	89	78
	0.14	0.17	0.16	0.07	0.13	0.17
	0.00	0.00	0.00	0.00	0.00	0.00
	0.35	0.38	0.37	0.26	0.34	0.38
Other religion	451	107	91	86	89	78
	0.10	0.08	0.09	0.10	0.10	0.10
	0.00	0.00	0.00	0.00	0.00	0.00
	0.29	0.28	0.28	0.31	0.30	0.31
No religion	451	107	91	86	89	78
	0.61	0.60	0.68	0.69	0.49	0.60
	1.00	1.00	1.00	1.00	0.00	1.00
	0.49	0.49	0.47	0.47	0.50	0.49

This table reports the [a]number of respondents, [b]means, [c]medians, and [d]standard deviations of all surveys variables used in the econometric analysis based on the Prolific sample for the first follow-up survey.

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Fund order:	ETF on the left		ETF on the right	
Fund characteristics:	Index	Fee	Index	Fee
Group 1:	MSCI World Index	0.2%	MSCI World ESG Screened Index	0.9%
Group 2:	MSCI World Index	0.2%	MSCI World ESG Screened Index	0.2%
Group 3:	MSCI World Index	0.9%	MSCI World ESG Screened Index	0.2%
Group 4:	MSCI World ESG Screened Index	0.2%	MSCI World ESG Screened Index	0.9%
Group 5:	MSCI World Index	0.2%	MSCI World Index	0.9%

This table presents an overview of the five treatment groups included in the first follow-up survey.

TABLE B.20 – QUESTIONS TO MEASURE ADVANCED FINANCIAL LITERACY IN THE FOLLOW-UP SURVEYS

Question	Response categories	Source
If the interest rate falls, what should happen to bond prices?	**i) they rise**, ii), they fall, iii) they stay the same, iv) do not know, v) no answer	Van Rooij et al. (2011)
True or false? If you buy a 10-year bond, it means you cannot sell it after 5 years without incurring a major penalty.	i) true, **ii) false**, iii) do not know, iv) no answer;	Van Rooij et al. (2011)
In 2021, what was the average difference in fees between actively and passively managed mutual funds in the United States? The average fees of actively managed mutual funds were …	i) 0.08% higher compared to passively managed mutual funds, **ii) 0.48% higher compared to passively managed mutual funds**, iii) 0.48% lower compared to passively managed mutual funds, iv) do not know, v) no answer	Own question, information taken from Morningstar (2022)
True or false? According to standard scientific finance theory, it is optimal for European investors to invest a larger fraction in European stocks than in US stocks.	i) true, **ii) false**, iii) do not know, iv) no answer.	Own question

This table reports the additional questions used to measure advanced financial literacy in the first follow-up survey. Correct answers are indicated in bold. In the second follow-up survey, we did not use the third statement "In 2021, what was the average difference in fees between actively and passively managed mutual funds in the United States? The average fees of actively managed mutual funds were …".

TABLE B.21 – OVERVIEW OF TREATMENT GROUPS IN THE SECOND FOLLOW-UP SURVEY

Group: Conventional funds only		Group: Sustainable funds included	
Fund name	Fee	Fund name	Fee
SPDR® MSCI World UCITS ETF (EUR)	0.12%	SPDR® MSCI World UCITS ETF (EUR)	0.12%
Deka MSCI World UCITS ETF	0.30%	Deka MSCI World UCITS ETF	0.30%
CT (Lux) - Global Equity Income 2EP (EUR Distribution)	1.07%	CT (Lux) - Global Equity Income 2EP (EUR Distribution)	1.07%
HSBC MSCI World UCITS ETF (EUR)	0.15%	HSBC MSCI World Climate Paris Aligned UCITS ETF (EUR)	0.18%
Fidelity Funds - Global Focus I-Acc-EUR	0.85%	Fidelity Funds- Sustainable Global Equity Income Fund A-Qinc-EUR	1.91%
BlackRock Global Funds - Systematic Global Equity High Income Fund I2 EUR	0.66%	BlackRock Global Funds-Sustainable Energy Fund I2 (EUR)	0.97%

This table presents an overview of the funds included in the second follow-up survey.

TABLE B.22 – DESCRIPTIVE STATISTICS OF SURVEY VARIABLES IN PROLIFIC SAMPLE FOR THE
SECOND FOLLOW-UP SURVEY

Sample:	Full sample	Conventional funds only	Sustainable funds included
Total fees paid	901[a]	447	454
	48.15[b]	36.69	59.44
	45.30[c]	36.90	62.77
	28.64[d]	19.63	31.51
Preferences			
Social preferences	897	444	453
	5.53	5.55	5.51
	6.00	6.00	6.00
	2.50	2.60	2.40
Risk preferences	898	445	453
	5.73	5.64	5.81
	6.00	6.00	6.00
	2.18	2.17	2.19
Time preferences	898	446	452
	7.37	7.39	7.35
	8.00	8.00	8.00
	1.83	1.78	1.89
Signaling	901	447	454
	3.85	3.81	3.89
	4.00	4.00	4.00
	1.66	1.67	1.65
Individual characteristics			
Financial literacy	901	447	454
	2.62	2.62	2.61
	3.00	3.00	3.00
	0.68	0.67	0.69
Financial literacy index	901	447	454
	4.00	4.00	3.99
	4.00	4.00	4.00
	1.34	1.31	1.36
Age	901	447	454
	30.47	31.15	30.60
	30.00	30.00	29.00
	18.00	8.56	8.63
Female	901	447	454
	0.25	0.24	0.25
	0.00	0.00	0.00
	0.43	0.43	0.44
High education	901	447	454
	0.70	0.71	0.69
	1.00	1.00	1.00
	0.46	0.45	0.46
Married	901	447	454
	0.49	0.52	0.46
	0.00	1.00	0.00
	0.50	0.50	0.50

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High income	901	447	454
	0.40	0.40	0.40
	0.00	0.00	0.00
	0.49	0.49	0.49
Middle income	901	447	454
	0.08	0.08	0.08
	0.00	0.00	0.00
	0.27	0.28	0.27
Low income	901	447	454
	0.47	0.47	0.48
	0.00	0.00	0.00
	0.50	0.50	0.50
Do not know or report income	901	447	454
	0.04	0.05	0.04
	0.00	0.00	0.00
	0.20	0.22	0.19
Catholic	901	447	454
	0.13	0.13	0.12
	0.00	0.00	0.00
	0.34	0.34	0.33
Protestant	901	447	454
	0.12	0.12	0.13
	0.00	0.00	0.00
	0.33	0.32	0.34
Other religion	901	447	454
	0.16	0.15	0.16
	0.00	0.00	0.00
	0.36	0.36	0.36
No religion	901	447	454
	0.59	0.59	0.59
	1.00	1.00	1.00
	0.49	0.49	0.49

This table reports the [a]number of respondents, [b]means, [c]medians, and [d]standard deviations of all survey variables used in the econometric analysis based on the Prolific sample for the second follow-up survey.

Part C: Additional figures

Hello [Firstname] [Lastname]!

A new survey is ready for you.

Topic: Financial investments

The survey will take approximately 20 minutes to complete and will be available until [SurveyOnlineUntil], or until the required number of interviews is reached! So the sooner you respond to this email, the better chance you have of participating.

When you complete the survey, you will receive [IncentivePanelPoints] points*.

*Even if you are not in the survey's sought-after target group, you will receive 5 points credited to your panel account for your efforts.

This questionnaire is mobile friendly - you can participate on any device.

<< Go to the survey >>

This survey is conducted by a certified partner.

Talk Online Panel Rewards

When you have collected enough points, you can exchange them for vouchers or cash transferred directly to your bank account!

Our promise

We guarantee that all your information will be kept strictly confidential and, in accordance with data protection regulations, will only be included in the statistical analysis in anonymous form. Participation in this survey is voluntary.

If you have problems clicking the button, please copy the following link directly into your browser:

[LinkToSurveyFirstQuestion].

Talk Online Panel - panel.de@mail.talkonlinepanel.com - www.talkonlinepanel.com

You are receiving this email because you are registered as a panel member on the Talk Online Panel. If you do not want to receive invitations to surveys in the future, you can manage your profile here:

Delete Profile - Update Personal Data

Figure C.1: Invitation email
This figure shows the invitation email that was sent to registered panelists (translated into English).

Good day,

We, the independent market research institute Psyma, are currently conducting a survey on the topic of financial investments. We would be pleased if you would participate in this exciting project. The survey will take about 20 minutes, participation in the survey is of course voluntary and you can view your consent to participate in this survey at any time. Furthermore, you can leave the survey pages immediately at any time to cancel the interview.

Your answers will of course be treated confidentially and evaluated purely statistically and anonymously. We guarantee that your name will not appear in the process and that the statutory data protection regulations will be strictly observed.

Furthermore, we assure you that neither your name nor the associated data will be passed on to third parties.

Thank you for your participation - your opinion is very important to us!

Your Psyma

Figure C.2: Landing page text
This figure shows the landing page text that appeared on the first screen of the survey (translated into English).

Please read the following text carefully, after 30 seconds you can go to 'Next'.

In the following, you have the possibility to make eight consecutive investment decisions. For each investment decision, you are allowed to invest a freely allocable amount of €1,000. Following the survey, 10 persons will be randomly selected among all participants. For each of these 10 persons, one of the eight investment decisions made will be randomly selected and realized by us after the end of the survey in July 2021.

The investment runs for exactly one year. After that, which means in July 2022, the investment will be dissolved, and the selected persons will receive the current value of their investment minus the applicable fees.

Examples:

If you are one of the 10 persons selected, one of your investment decisions will be randomly selected and realized in July 2021.

If the value if your investment increases by 10% to €1,100 by July 2022 and the fees are 2%, you will be paid €1,080
(which corresponds to an increase of 10%-2%=8%).

If on the other hand the value of your investment decreases by 10% to €900 by July 2022 and the fees are 2%, you will be paid €880
(which corresponds to a decrease of 10%+2%=12%).

The 10 randomly selected winners will be informed that they have been selected once the selection process is complete. We guarantee that all this information is true and will be implemented. Also note that you are completely free in this decision. Since the selection of the 10 winners is random, you should make your decision in each of the following selection situations as if you were drawn for sure.

Figure C.3: First screen of the investment experiment
This figure shows an exemplary screenshot of the first screen of the experiment (translated into English). In the upper part, we explain the general setting such as that respondents have the opportunity to make eight consecutive investment decisions, each of which allows them to invest an amount of €1,000. In addition, we explain the payout mechanism. In the lower part, we give concrete examples that show the amount the respondents would receive after one year if they were among the people randomly selected after the survey.

Please make your second decision now:

	1	2
	MSCI World Index Fonds (?)	MSCI World Climate Change Index Fonds (?)
Fees	0.20%	0.20%
Your investment amount	[____] €	[____] €

When you have made your decision, please click 'Next'.

Next …

Figure C.4: Exemplary second investment decision in the experiment
This figure shows a screenshot of an exemplary second investment decision between an ETF based on the MSCI World Index with fees of 0.20% and an ETF based on the MSCI World Climate Change Index with fees of 0.20% (translated into English).

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Please make your third decision now:

	1	2
	MSCI World Index Fonds (?)	MSCI World Climate Change Index Fonds (?)
Fees	0.20%	2.30%
Your investment amount	[ ] €	[ ] €

When you have made your decision, please click 'Next'.

Next …

Figure C.5: Exemplary third investment decision in the experiment
This figure shows a screenshot of an exemplary third investment decision between an ETF based on the MSCI World Index with fees of 0.20% and an ETF based on the MSCI World Climate Change Index with fees of 2.30% (translated into English).

Please make your fourth decision now:

	1	2
	MSCI World Index Fonds (?)	MSCI World Climate Change Index Fonds (?)
Fees	0.20%	1.60%
Your investment amount	[ ] €	[ ] €

When you have made your decision, please click 'Next'.

Next …

Figure C.6: Exemplary fourth investment decision in the experiment
This figure shows a screenshot of an exemplary fourth investment decision between an ETF based on the MSCI World Index with fees of 0.20% and an ETF based on the MSCI World Climate Change Index with fees of 1.60% (translated into English).

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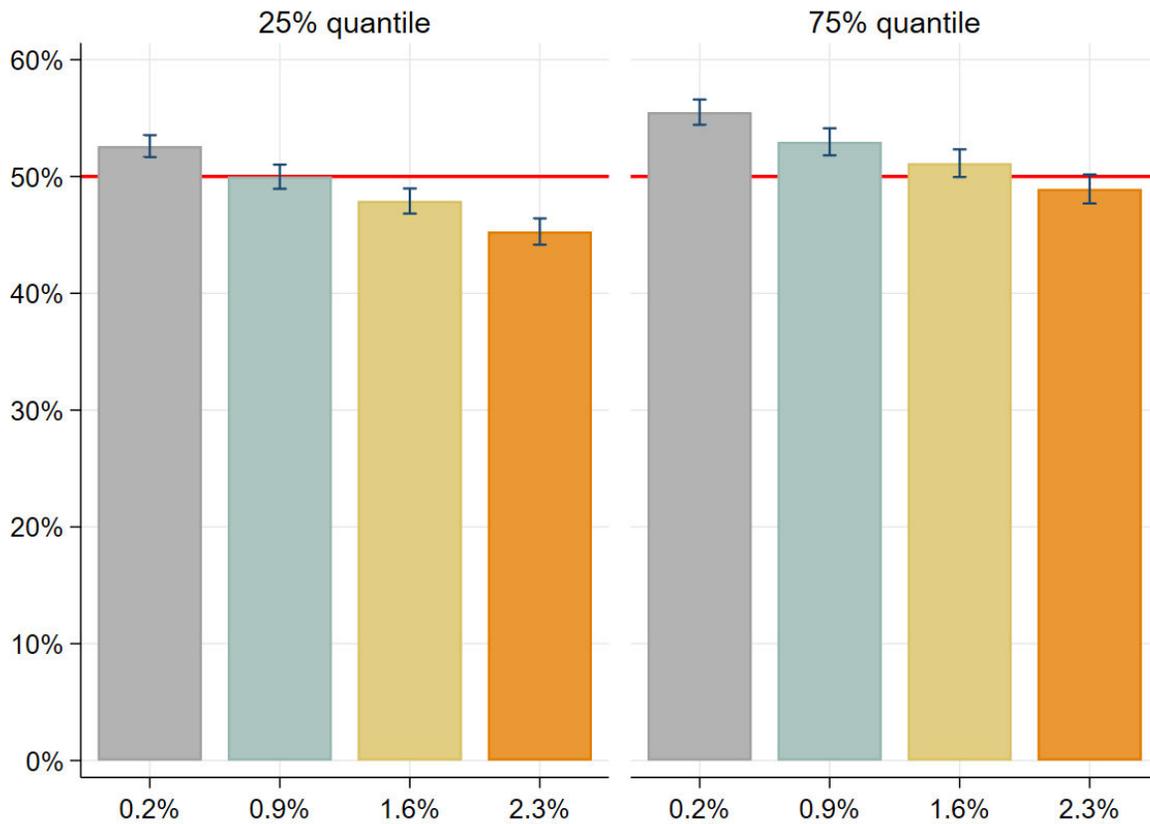
Figure C.7: Fee sensitivity across different levels of social preferences (only ETFs based on the MSCI World ESG Screened Index)

This graph shows the predicted shares of the endowment respondents invested on average in ETFs based on the MSCI World ESG Screened Index in the four different fee scenarios at 25% and 75% quantiles of the sample distribution for social preferences, respectively. Social preferences are measured on a Likert-scale ranging from 0 to 10. The 25% quantile refers to a score of 5 and the 75% to a score of 9. Error bars represent 95% confidence intervals.
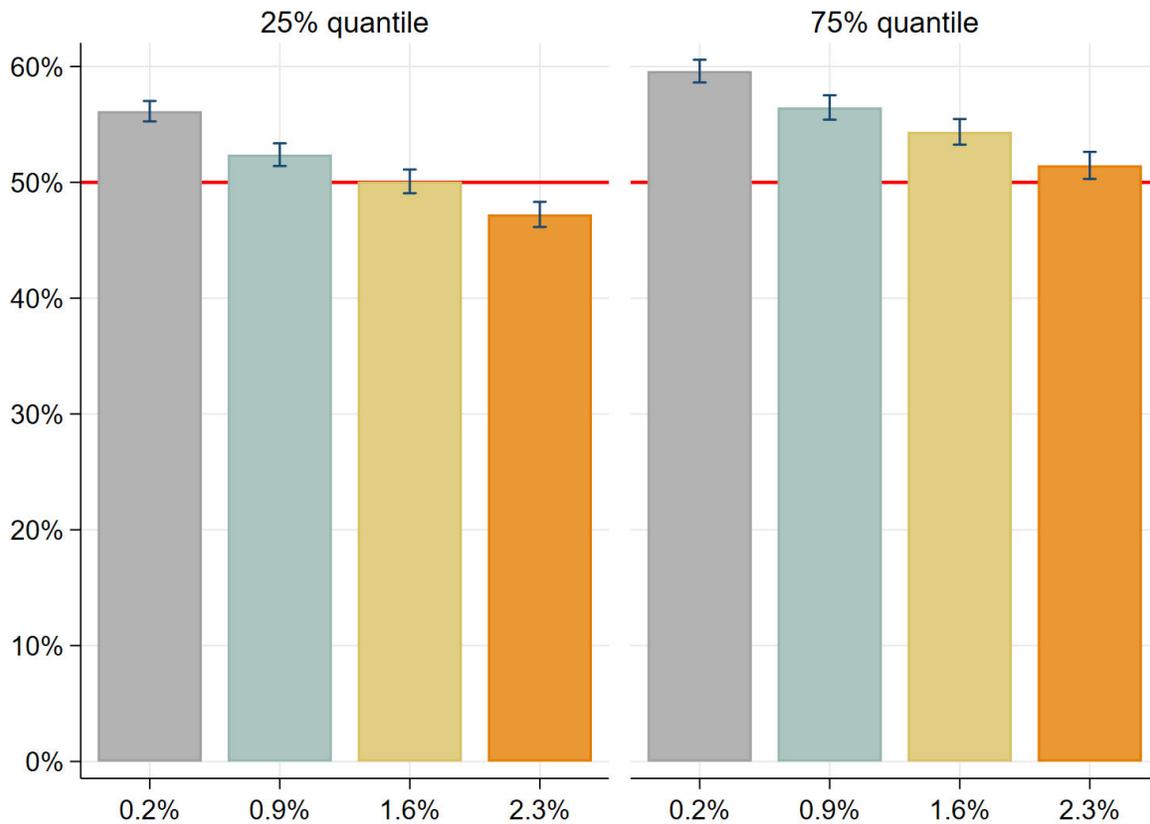
Figure C.8: Fee sensitivity across different levels of social preferences (only ETFs based on the MSCI World Climate Change Index)
This graph shows the predicted shares of the endowment respondents invested on average in ETFs based on the MSCI World Climate Change Index in the four different fee scenarios at 25% and 75% quantiles of the sample distribution for social preferences, respectively. Social preferences are measured on a Likert-scale ranging from 0 to 10. The 25% quantile refers to a score of 5 and the 75% to a score of 9. Error bars represent 95% confidence intervals.
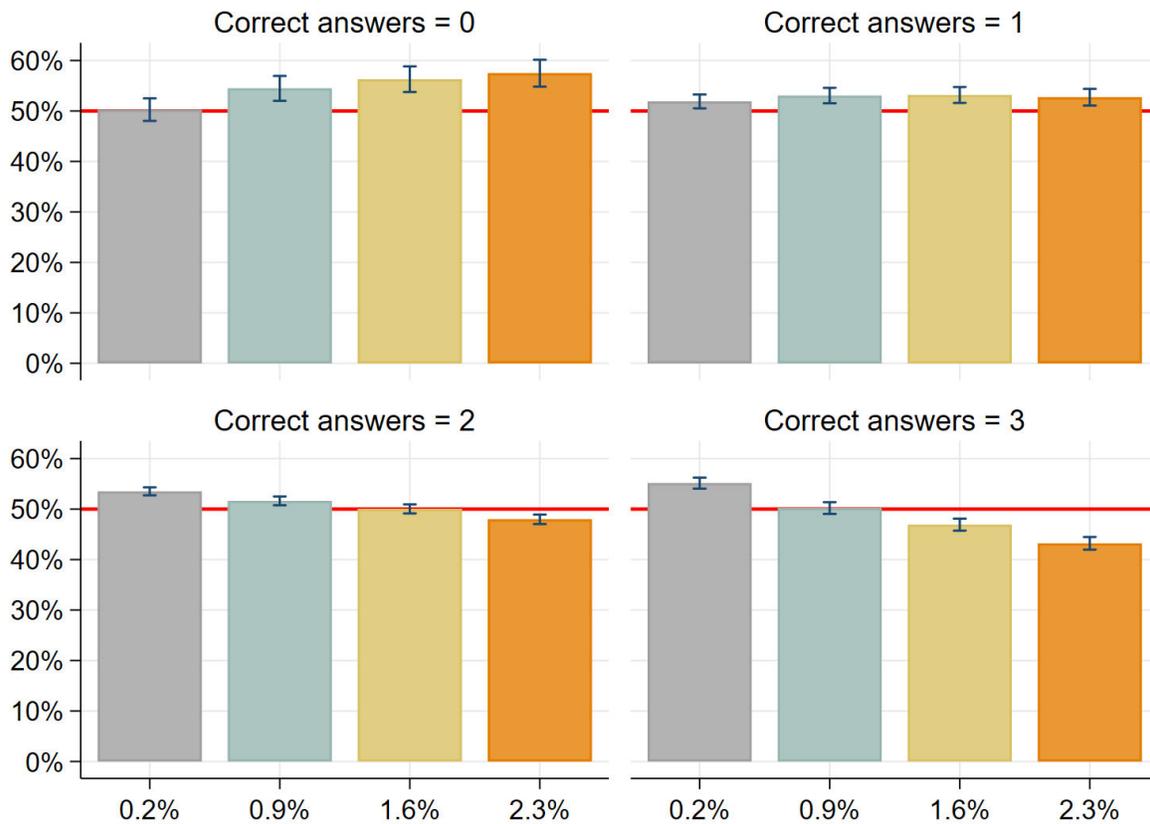
Figure C.9: Fee sensitivity across different levels of financial literacy (only ETFs based on the MSCI World ESG Screened Index)
This graph shows the predicted shares of the endowment respondents invested on average in ETFs based on the MSCI World ESG Screened Index in the four different fee scenarios at different levels of financial literacy. Financial literacy is measured by counting the correct answers to three quiz questions. A higher number of correct answers indicates higher levels of financial literacy. Error bars represent 95% confidence intervals.

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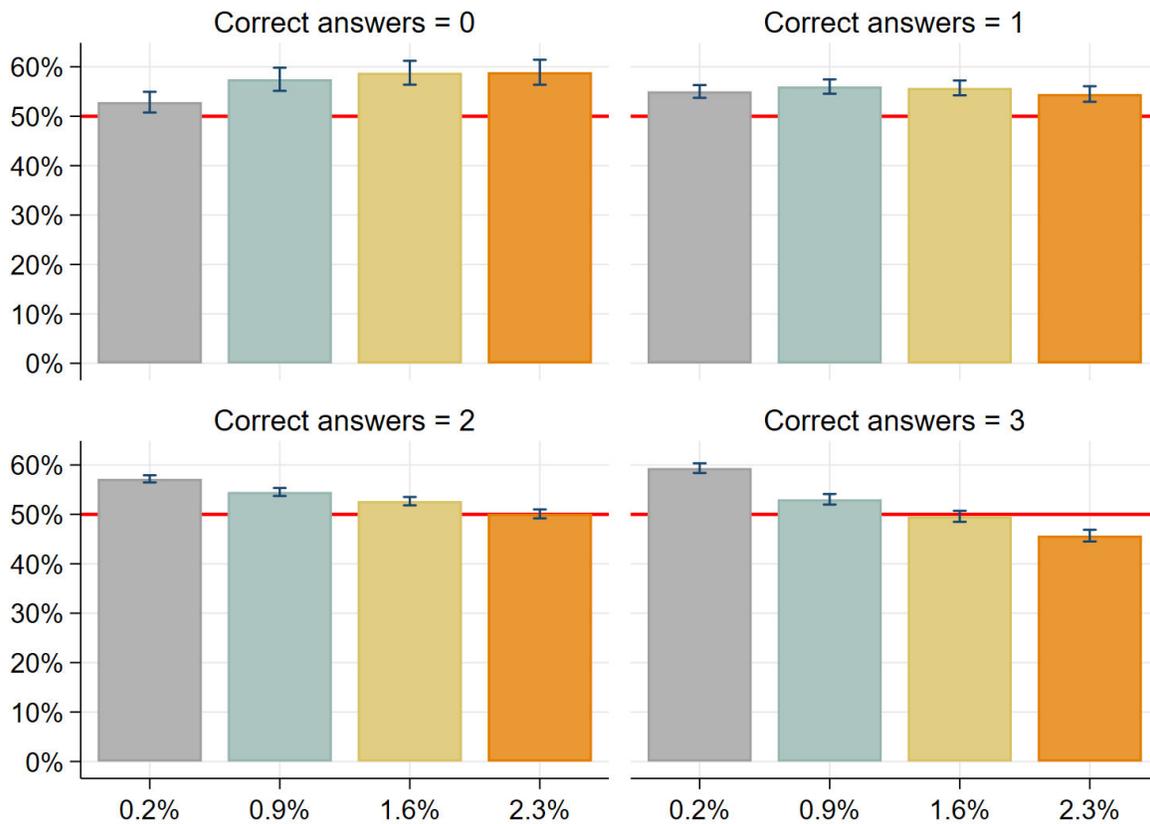
Figure C.10: Fee sensitivity across different levels of financial literacy (only ETFs based on the MSCI World Climate Change Index)

This graph shows the predicted shares of the endowment respondents invested on average in ETFs based on the MSCI World Climate Change Index in the four different fee scenarios at different levels of financial literacy. Financial literacy is measured by counting the correct answers to three quiz questions. A higher number of correct answers indicates higher levels of financial literacy. Error bars represent 95% confidence intervals.
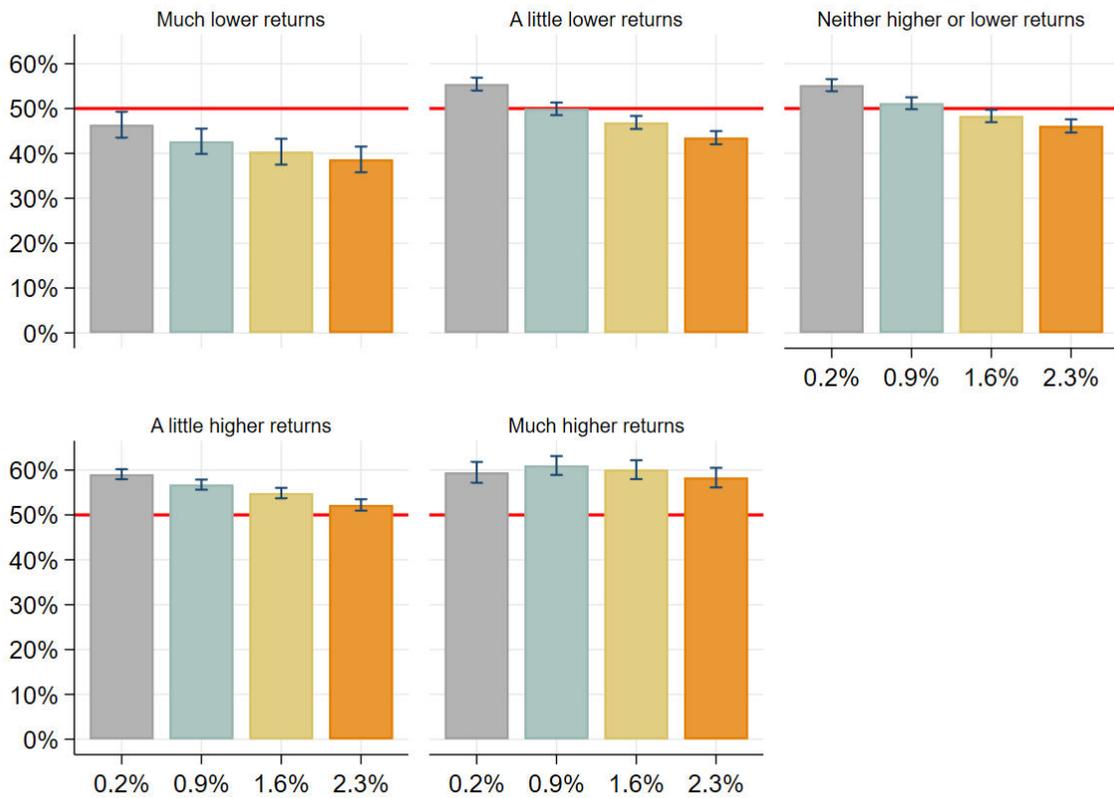
Figure C.11: Fee sensitivity across different levels of return expectations
This graph shows the predicted shares of the endowment respondents invested on average in sustainable ETFs, i.e. either in ETFs based on the MSCI World ESG Screened Index or in ETFs based on the MSCI World Climate Change Index, in the four different fee scenarios across different levels of return expectations. Error bars represent 95% confidence intervals.

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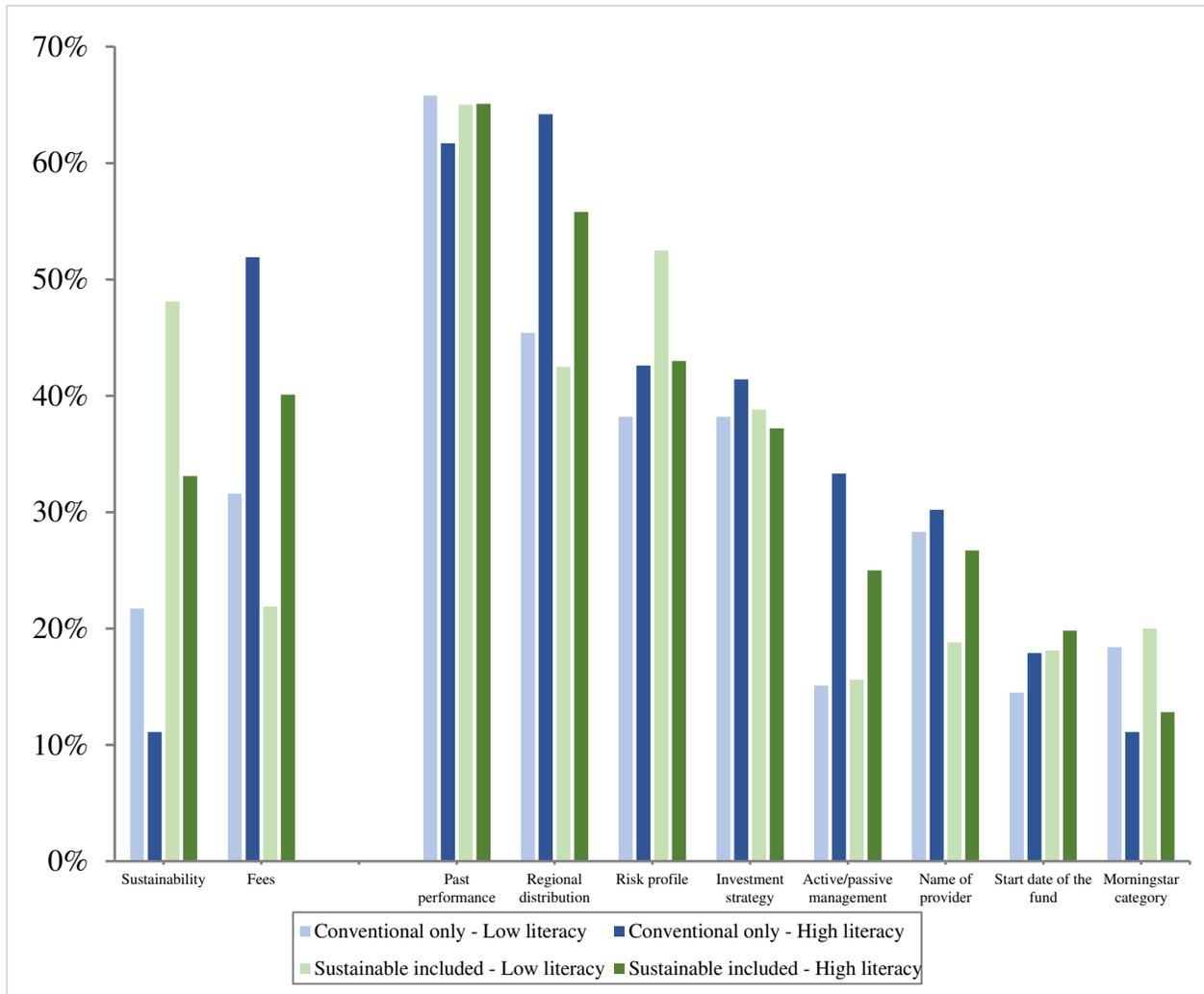
Figure C.12: Reasons for fund choice in the second follow-up experiment

The figures shows the proportion of participants who mentioned the above criteria as the most important criteria for choosing the equity funds in the experiment. The shares are shown separately for four different groups: i) Participants with a below median *Financial literacy index* who could choose from only conventional equity funds (Conventional funds only - Low literacy), ii) participants with an above median *Financial literacy index* who could choose from only conventional equity funds (Conventional funds only - High literacy), iii) i) participants with a below median *Financial literacy index* who could choose from both conventional and sustainable equity funds (Sustainable funds included - Low literacy), and iv) participants with an above median *Financial literacy index* who could choose from both conventional and sustainable equity funds (Sustainable funds included - High literacy).
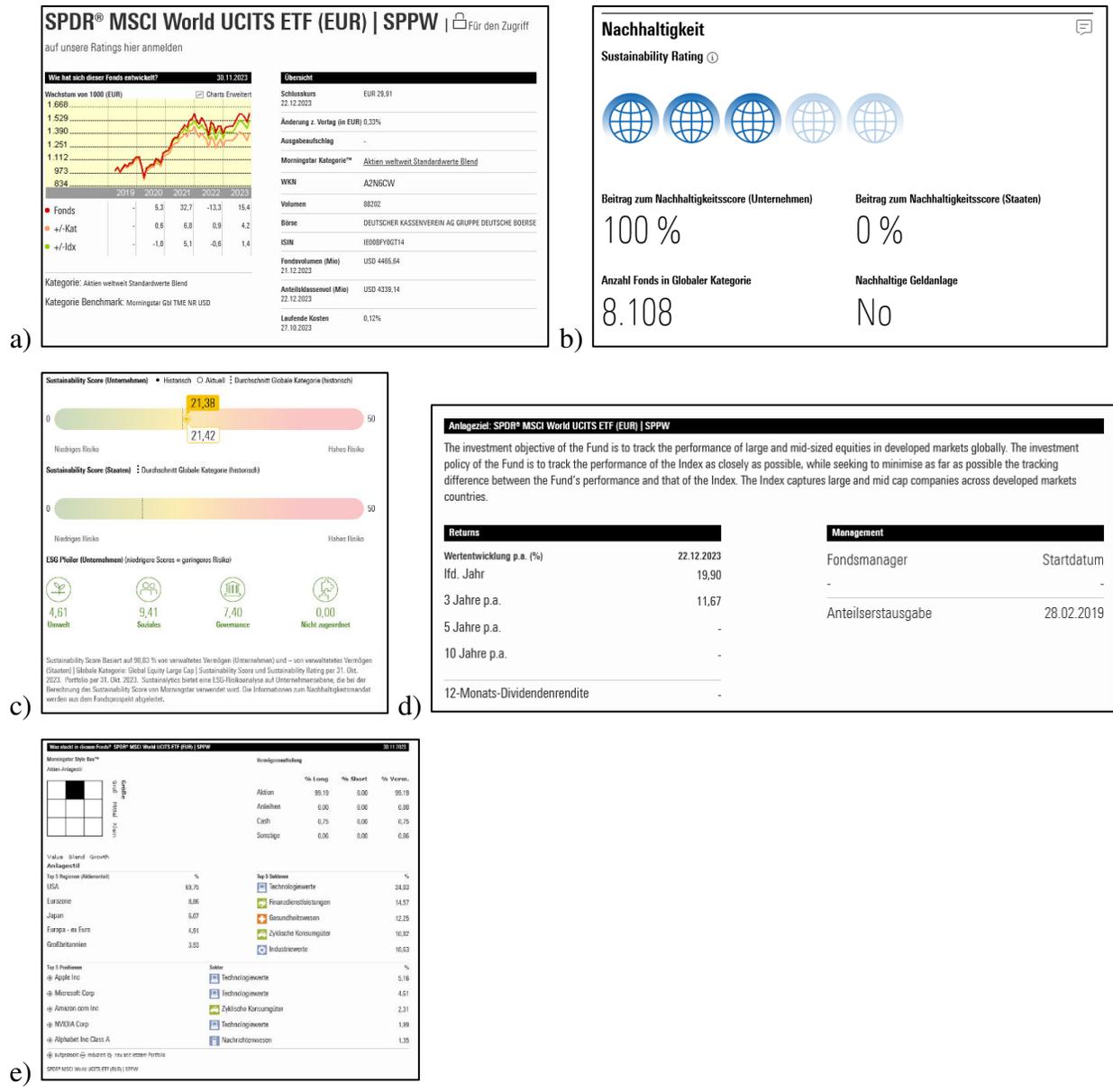
Figure C.13: Exemplary screenshots provided in the second follow-up experiment

This figure shows the Morningstar website screenshots for the SPDR® MSCI World UCITS ETF (EUR). Participants in the first treatment group, who had only six conventional funds to choose from, had access only to screenshots a), d), and e). Participants in the second treatment group, who could choose between three conventional and three sustainable funds, had access to all five screenshots.
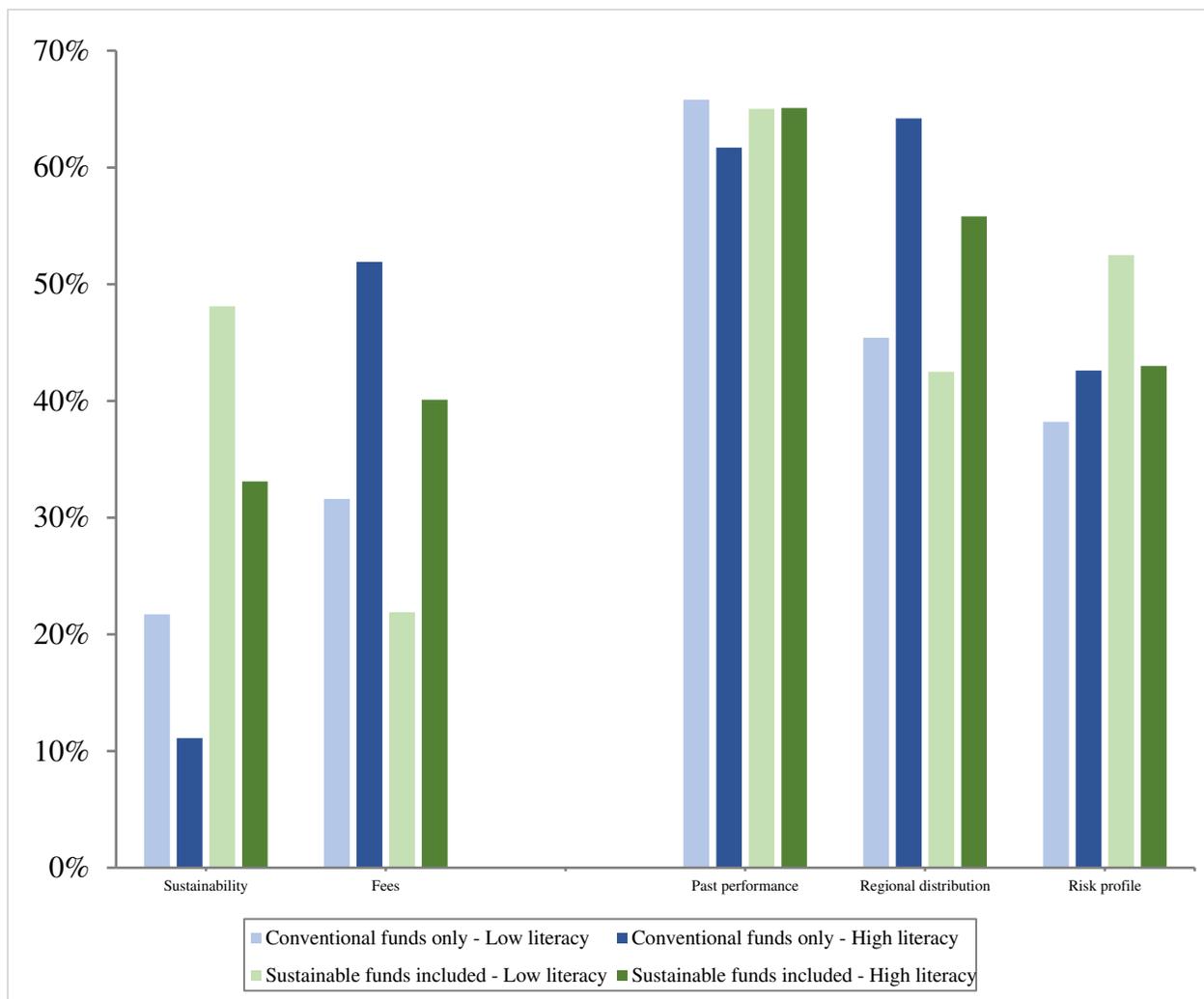
Figure C.14: Reasons for fund choice in the second follow-up experiment
This figure shows the percentage of participants who mentioned sustainability, fees, past performance, regional distribution, and risk profile as the most important criteria for selecting the equity funds in the experiment. In addition to sustainability and fees, only the top three reasons are reported. For a complete overview, see Figure C.12 in the Internet Appendix. The shares are shown separately for four different groups: i) Participants with a below median *Financial literacy index* who could choose from only conventional equity funds (Conventional funds only - Low literacy), ii) participants with an above median *Financial literacy index* who could choose from only conventional equity funds (Conventional funds only - High literacy), iii) participants with a below median *Financial literacy index* who could choose from both conventional and sustainable equity funds (Sustainable funds included - Low literacy), and iv) participants with an above median *Financial literacy index* who could choose from both conventional and sustainable equity funds (Sustainable funds included - High literacy).

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Part D: Survey questions for the variables in the econometric analysis (translated into English)

The following question is used to construct the explanatory variable 'Age:'

Please indicate your age: _____ years

The following question is used to construct the explanatory variable 'Female:'

Please indicate your gender:

Male	□
Female	□
Diverse	□

The following question is used to construct the explanatory variable 'Joint decision:'

Please indicate which of the following statements applies to you personally when it comes to financial matters, for example, investments or major purchases.

I decide on this alone in my household.	□
I decide on this together with at least one other person from my household.	□
I do not make decisions about this, someone else does.	□

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The following question is used to construct the explanatory variable 'Current investor:'

Please indicate in which of the following forms of investment you currently have your money invested. Please select all applicable answers.

Passbook	☐
Call money account	☐
Stocks	☐
Passively managed stock funds (i.e. also stock ETFs or stock index funds)	☐
Actively managed stock funds	☐
Mixed funds	☐
Bonds	☐
Passively managed bond funds (i.e. also bond ETFs or bond index funds)	☐
Actively managed bond funds	☐
Cooperative shares	☐
Other fixed-interest forms of investment (e.g. mortgage bonds, treasury bonds, savings contracts, savings bonds, fixed-term deposits, subordinated loans)	☐
Other non-fixed-income forms of investment (e.g. warrants, certificates, open-ended real estate funds, real estate investment trusts, or closed-end funds)	☐
Precious metals (e.g. gold, silver)	☐
Cryptocurrencies (e.g. Bitcoin, Ethereum)	☐
In none of the listed forms of investment	☐

The following question is used to construct the explanatory variable 'Past investor:'

Please indicate in which of the following forms of investment you have invested your money in the past. Please select all applicable answers.

Stocks	☐
Passively managed stock funds (i.e. also stock ETFs or stock index funds)	☐
Actively managed stock funds	☐
Mixed funds	☐
Bonds	☐
Passively managed bond funds (i.e. also bond ETFs or bond index funds)	☐
Actively managed bond funds	☐
Cooperative shares	☐
Other non-fixed-income forms of investment (e.g. warrants, certificates, open-ended real estate funds, real estate investment trusts, or closed-end funds)	☐
Precious metals (e.g. gold, silver)	☐
Cryptocurrencies (e.g. Bitcoin, Ethereum)	☐
In none of the listed forms of investment	☐

The following question is used to construct the explanatory variable 'Knows investment products:'

Please indicate which of the following types of investment you have already obtained detailed information about. Please select all applicable answers.

Stocks	☐
Passively managed stock funds (i.e. also stock ETFs or stock index funds)	☐
Actively managed stock funds	☐
Mixed funds	☐
Bonds	☐
Passively managed bond funds (i.e. also bond ETFs or bond index funds)	☐
Actively managed bond funds	☐
Cooperative shares	☐
Other non-fixed-income forms of investment (e.g. warrants, certificates, open-ended real estate funds, real estate investment trusts, or closed-end funds)	☐
Precious metals (e.g. gold, silver)	☐
Cryptocurrencies (e.g. Bitcoin, Ethereum)	☐
In none of the listed forms of investment	☐

The following questions are used to construct the explanatory variables 'Much lower returns compared to MSCI World,' 'A little lower returns compared to MSCI World,' 'Neither lower nor higher returns compared to MSCI World,' 'A little higher returns compared to MSCI World,' 'Much higher returns compared to MSCI World,' and 'Do not know returns:'

What returns do you expect on the MSCI World ESG Screened Index fund?

Much lower returns compared to the MSCI World Index fund	A little lower returns compared to the MSCI World Index fund	Neither lower nor higher returns compared to the MSCI World Index fund	A little higher returns compared to the MSCI World Index fund	Much higher returns compared to the MSCI World Index fund	Do not know
☐	☐	☐	☐	☐	☐

What returns do you expect on the MSCI World Climate Change Index fund?

Much lower returns compared to the MSCI World Index fund	A little lower returns compared to the MSCI World Index fund	Neither lower nor higher returns compared to the MSCI World Index fund	A little higher returns compared to the MSCI World Index fund	Much higher returns compared to the MSCI World Index fund	Do not know
☐	☐	☐	☐	☐	☐

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The following questions are used to construct the explanatory variables 'Lower risk compared to MSCI World takes,' 'Higher risk compared to MSCI World takes,' and 'Do not know risk:'

Please indicate to what extent you agree with the following statement:

"The MSCI World ESG Screened Index fund is riskier than the MSCI World Index fund"

Fully disagree						Fully agree	Do not know
1	2	3	4	5	6	7	
☐	☐	☐	☐	☐	☐	☐	☐

Please indicate to what extent you agree with the following statement:

"The MSCI World Climate Change Index fund is riskier than the MSCI World Index fund"

Fully disagree						Fully agree	Do not know
1	2	3	4	5	6	7	
☐	☐	☐	☐	☐	☐	☐	☐

The following question is used to construct the explanatory variable 'Did calculate fees correctly:'

Please indicate the amount to be deducted from the value of your investment if the value of your investment in July 2022 is €1,000 and the fees are 2.3%.

€0.23	€2.30	€23.00	€230.00	Do not know
☐	☐	☐	☐	☐

The following question is used to construct the explanatory variable 'Currently holds sustainable investments:'

Have you currently invested in sustainable investments?

Yes	☐
No	☐
Do not know	☐

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The following question is used to construct the explanatory variables 'Much lower returns compared to conventional investments,' 'A little lower returns compared to conventional investments,' 'Neither lower nor higher returns compared to conventional investments,' 'A little higher returns compared to conventional investments,' 'Much higher returns compared to conventional investments,' and 'Do not know returns of sustainable investments:'

What returns do you expect on sustainable investments?

1	2	3	4	5	6
Much lower returns compared to conventional investments	A little lower returns compared to conventional investments	Neither lower nor higher returns compared to conventional investments	A little higher returns compared to conventional investments	Much higher returns compared to conventional investments	Do not know
☐	☐	☐	☐	☐	☐

The following question is used to construct the explanatory variables 'Lower risk compared to conventional investments,' 'Neither lower nor higher risk compared to conventional investments,' 'Higher risk compared to conventional investments,' and 'Do not know risk of sustainable investments:'

Please indicate to what extent you agree with the following statement:

Sustainable investments are riskier than conventional investments.

Fully disagree						Fully agree	Do not know
1	2	3	4	5	6	7	
☐	☐	☐	☐	☐	☐	☐	☐

The following question is used to construct the explanatory variable 'Risk preferences:'

Please tell us, in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and a 10 means you are "very willing to take risks." You can also use any number between 0 and 10 to indicate where you see yourself on the scale by using (the numbers) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

Completely unwilling to take risks										Very willing to take risks	Do not know	No indication
0	1	2	3	4	5	6	7	8	9	10		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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The following question is used to construct the explanatory variable 'Time preferences:'

We now ask you about your willingness to behave in a certain way. Again, please use a scale from 0 to 10. 0 means "not at all willing to do this" and 10 means "very willing to do this." You can also use any number between 0 and 10 to indicate where you see yourself on the scale by using (the numbers) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

	Completely unwilling										Completely willing	Do not know / no indication
How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?	0	1	2	3	4	5	6	7	8	9	10	
	□	□	□	□	□	□	□	□	□	□	□	□

The following question is used to construct the explanatory variable 'Social preferences:'

We now ask you about your willingness to behave in a certain way. Please use a scale from 0 to 10. 0 means "completely unwilling" and 10 means "completely willing." You can also use any number between 0 and 10 to indicate where you see yourself on the scale by using (the numbers) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

	Completely unwilling										Completely willing	Do not know / no indication
How willing are you to give to good causes without expecting anything in return?	0	1	2	3	4	5	6	7	8	9	10	
	□	□	□	□	□	□	□	□	□	□	□	□

The following question is used to construct the explanatory variable 'Signaling:'

Please indicate to what extent you agree with the following statement:

"I often talk about investments with others"

Fully disagree						Fully agree	Do not know
1	2	3	4	5	6	7	
□	□	□	□	□	□	□	□

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The following questions are used to construct the explanatory variables 'Impression management' and 'Self-deceptive enhancement:'

Please indicate to what extent the following statements apply to you.

	Not true						Very true
	1	2	3	4	5	6	7
My first impression of people usually turns out to be right.	□	□	□	□	□	□	□
I am very confident of my judgement.	□	□	□	□	□	□	□
I always know why I like things.	□	□	□	□	□	□	□
I have received too much change from a salesperson without telling him or her.	□	□	□	□	□	□	□
I am always honest towards other people.	□	□	□	□	□	□	□
There have been occasions when I have taken ad-vantage of someone.	□	□	□	□	□	□	□

The following questions are used to construct the explanatory variable 'Financial literacy:'

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?

More than €102	Exactly €102	Less than €102	Do not know	Refuse to answer
☐	☐	☐	☐	☐

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.

More than today	Exactly the same	Less than today	Do not know	Refuse to answer
☐	☐	☐	☐	☐

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."

True	False	Do not know	Refuse to answer
☐	☐	☐	☐

In addition to the questions used to construct the explanatory variable 'Financial literacy', the following questions are used to construct the explanatory variable 'Financial literacy index:'

If the interest rate falls, what should happen to bond prices?

They rise	They fall	They stay the same	Do not know	Refuse to answer
☐	☐	☐	☐	☐

True or false? If you buy a 10-year bond, it means you cannot sell it after 5 years without incurring a major penalty.

True	False	Do not know	Refuse to answer
☐	☐	☐	☐

In 2021, what was the average difference in fees between actively and passively managed mutual funds in the United States? The average fees of actively managed mutual funds were…

0.08% higher compared to passively managed mutual funds	0.48% higher compared to passively managed mutual funds	0.48% lower compared to passively managed mutual funds	Do not know	Refuse to answer
☐	☐	☐	☐	☐

True or false? According to standard scientific finance theory, it is optimal for European investors to invest a larger fraction in European stocks than in US stocks.

True	False	Do not know	Refuse to answer
□	□	□	□

The following questions are used to construct the explanatory variables 'Catholic,' 'Protestant,' 'Other religion,' and 'Do not report religion:'

We now have a few questions on the subject of religiosity: Data on this is part of the information requiring special protection (Art. 9 DSGVO). Therefore, we also place particular emphasis on respecting your rights. If you would also like to answer questions about your religiosity in our survey, we need your personal consent.

I declare my consent to be questioned on the subject of religiosity after the above clarification	□
I do not want to answer any questions on the subject of religiosity	□

Do you belong to any of the following religious communities?

Roman Catholic Church	□
Protestant churches	□
Islam	□
Other religious community	□
No, I do not belong to any religious community	□

The following question is used to construct the explanatory variable 'Married:'

Please indicate your marital status:

Single	□
Living together but not married	□
Married and living with the spouse	□
Divorced or living separately	□
Widowed	□

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The following question is used to construct the explanatory variable 'High education:'

German version:

Please indicate your highest school or university degree:

I left school without a graduate	☐
I am currently going to school	☐
I am currently studying	☐
Elementary or secondary school degree (GDR: 8th grade)	☐
Secondary school degree ("Mittlere Reife") (GDR: 10th grade)	☐
Degree from a polytechnic high school (8th / 10th grade)	☐
Advanced technical college certificate	☐
High school degree ("Abitur") or higher education entrance qualification	☐
Degree from a university of applied sciences or from a vocational academy (GDR: engineering and technical high school degree)	☐
University or college degree	☐
Doctorate or habilitation	☐
Other qualifications with a high school degree ("Abitur") or a higher education entrance qualification	☐
Other qualifications without a high school degree ("Abitur") or a higher education entrance qualification	☐
Do not know	☐

French version:

Please indicate your highest school or university degree:

I left school without a graduate	□
I am currently going to school	□
I am currently studying	□
Certificate of professional competence (CAP)	□
Professional certificate (BP)	□
High school degree (bac) or higher education entrance qualification	□
University Diploma of Technology (DUT)	□
Degree from a university of applied sciences or from a vocational academy (BTS & DMA)	□
University or college degree / Bachelor´s degree (LMD)	□
Licence professionnelle	□
Magistrates, degrees in political science and degrees from the ENS, the EPHE or private faculties	□
Engineering degree	□
Degree or certificate from a business school (bac+5)	□
Master's degree (LMD)	□
Doctorate or habilitation	□
Other qualifications with a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Other qualifications without a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Do not know	□

Dutch version:

Please indicate your highest school or university degree:

I left school without a graduate	□
I am currently going to school	□
I am currently studying	□
Secondary vocational education (MBO) level 1: assistant	□
Secondary vocational education (MBO) level 2: basic professional	□
Secondary vocational education (MBO) level 3: professional	□
Secondary vocational education (MBO) level 4: middle management officer	□
Senior secondary general education (HAVO) / pre-university education (VWO)	□
Higher professional education (HBO)	□
University degree	□
Doctorate or habilitation	□
Engineering degree	□
Other qualifications with a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Other qualifications without a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Do not know	□

Polish version:

Please indicate your highest school or university degree:

I left school without a graduate	□
I am currently going to school	□
I am currently studying	□
Primary school/Gymnasium	□
Basic vocational school	□
Vocational technical school	□
General secondary school	□
Industry school of the first degree	□
Post-secondary school	□
First degree studies - bachelor studies	□
Single master studies	□
Second-degree studies - master studies	□
Doctorate or habilitation	□
Other qualifications with a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Other qualifications without a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Do not know	□

Spanish version:

Please indicate your highest school or university degree:

I left school without a graduate	□
I am currently going to school	□
I am currently studying	□
Compulsory Secondary Education - Second cycle (4th grade)	□
High school degree or higher education entrance qualification	□
Intermediate Level Training Cycles	□
Higher Level Training Cycles	□
University degree (less than 2 years)	□
Bachelor's degree (4 years)	□
Official Master's degree	□
Degree (5 and 6 years)	□
Doctorate or habilitation	□
Other qualifications with a high school degree ("Abitur") or a general / specialized higher education entrance qualification	□
Other qualifications without a high school degree ("Abitur") or a higher education entrance qualification	□
Do not know	□

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The following question is used to construct the explanatory variables 'Low income,' 'Middle income,' 'High income,' and *'Do not know or report income:'*

Please indicate the monthly net household income of all persons currently living permanently in your household:

(Household income is the sum of the incomes of all persons living together in a household and can be made up of various sources of income. Please refer to the current net monthly amount, i.e. after deduction of taxes and social security contributions, and please add regular payments such as pensions, unemployment benefits, housing benefits, child benefits, student loans, alimony payments, etc. If you are not sure, please estimate the monthly amount).

Less than €500	□
€500 to under €1,000	□
€1,000 to under €1,500	□
€1,500 to under €2,000	□
€2,000 to under €2,500	□
€2,500 to under €3,000	□
€3,000 to under €3,500	□
€3,500 to under €4,000	□
€4,000 to under €4,500	□
€4,500 to under €5,000	□
€5,000 to under €7,500	□
€7,500 to under €10,000	□
€10,000 or more	□
Do not know / no indication	□

The following question is used to construct the explanatory variable 'Respondent mentions fees as important reason for decision:'

Please explain to us as briefly as possible (in five words or less) what was most important to you when making your investment decision.

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The following question is used to construct the explanatory variable 'Respondent expects fund with higher fees to perform better:'

Which of the two funds do you think will perform better financially (net of fees)?

Fund one	Same performance	Fund two
☐	☐	☐

References: Internet Appendix

Andre, Peter, Carlo Pizzinelli, Christopher Roth, and Johannes Wohlfart, 2022, Subjective models of the macroeconomy: Evidence from experts and representative samples, The Review of Economic Studies 89 (6), 2958-2991.

Betermier, Sebastien, Laurent E. Calvet, and Paolo Sodini, 2017, Who are the value and growth investors?, The Journal of Finance 72 (1), 5-46.

Cantor, David, 2008, A review and summary of studies on panel conditioning, Handbook of longitudinal research: Design, measurement, and analysis, 123-138.

Chang, Linchiat and Jon A. Krosnick, 2009, National surveys via RDD telephone interviewing versus the Internet: Comparing sample representativeness and response quality, Public Opinion Quarterly 73 (4), 641-678.

Choi, James J. and Adriana Robertson, 2020, What matters to individual investors? Evidence from the horse's mouth, The Journal of Finance 75 (4), 1965-2020.

European Commission, 2023, Monitoring financial literacy levels, available at: https://europa.eu/eurobarometer/surveys/detail/2953.

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.

Hoy, Christopher and Franziska Mager, 2021, Why are relatively poor people not more supportive of redistribution? Evidence from a randomized survey experiment across ten countries, American Economic Journal: Economic Policy 13 (4), 299-328.

Juster, F. Thomas and James P. Smith, 1997, Improving the quality of economic data: Lessons from the HRS and AHEAD, Journal of the American Statistical Association 92 (440), 1268–1278.

Liu, Hongqi, Cameron Peng, Wei A. Xiong, Wei Xiong, 2022, Taming the bias zoo, Journal of Financial Economics 143 (2), 716-741.

Meeuwis, Maarten, Jonathan A. Parker, Antoinette Schoar, and Duncan Simester, 2022, Belief disagreement and portfolio choice, The Journal of Finance 77 (6), 3191-3247.

Paulhus, Delroy L., 1984, Two-component models of socially desirable responding, Journal of Personality and Social Psychology 46 (3), 598-609.

Paulhus, Delroy L., 1991, Measurement and control of response bias, In: Measures of personality and social psychological attitudes (Eds: J. P. Robinson, P. R. Shaver, and L. S. Wrightman), 17-59. New York: Academic Press.

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

Stantcheva, Stefanie, 2023, How to run surveys: A guide to creating your own identifying variation and revealing the invisible, Annual Review of Economics 15, 205-234.