

# Do Financial Advisors Charge Sustainable Investors a Premium?

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## Abstract

Despite growing concerns from regulators about potential price discrimination against sustainable investors, empirical evidence is lacking. To address this gap, we conduct two lab-in-the-field experiments with 415 professional financial advisors from the US and Europe. Our results show that these advisors impose a premium on sustainable investors compared to conventional investors. This premium persists even when differences in effort, skill, and costs, as well as higher gains from trade are ruled out. Notably, advisors charge the highest fees to sustainable investors with low financial literacy, while sustainable investors with high financial literacy pay no premium at all. These results are consistent with price discrimination.

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# 1 Introduction

The question of whether financial advisors engage in price discrimination against sustainable investors has been debated in the United States (US) and Europe. In the European Union (EU), the discussion has gained momentum due to a recent amendment to the Markets in Financial Instruments Directive II (MiFID II). This amendment mandates financial advisors to elicit their clients' socially responsible investing (SRI) preferences.<sup>1</sup>

Investor protection authorities like the European Securities and Markets Authority (ESMA) and consumer organizations are concerned that financial advisors may exploit the knowledge about their clients' sustainability preferences (ESMA, 2019). Specifically, financial advisors might target investors who are willing to pay a premium for sustainable investments and benefit through fee structures that allow them to engage in price discrimination<sup>2</sup> against these sustainable investors.

Prominent media outlets like *The Economist* and *The Wall Street Journal* have already implied price discrimination, where sustainable investors are charged a premium that cannot be justified by higher costs of managing sustainable investments.<sup>3</sup> However, professional asset managers argue that these fee differences do not represent price discrimination. They attribute them to higher management costs for sustainable investment products, such as expenses related to screening firms for sustainability (ESMA, 2019, p. 14).

This paper addresses two general aspects of this debate, which are relevant to any mandate for sustainable investment. Firstly, we examine whether financial advisors impose a premium for sustainable investment mandates. Secondly, and crucially, we investigate the driving force behind these potentially higher fees. It could be the case that advisors

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<sup>1</sup><https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN>

<sup>2</sup>In Europe, Bucher-Koenen, Hackethal, Koenen, and Laudenbach (2021) show that financial advisors engage in price discrimination by selectively offering discretionary rebates on upfront loads. In the US, Badoer, Costello, and James (2020) highlight how 12b-1 fees that serve as commissions paid to financial advisors for selling a fund's shares can result in price discrimination. Funds with high fees that benefit advisors are sold to less knowledgeable clients who struggle to understand the concept of indirect fees.

<sup>3</sup>*The Wall Street Journal* proclaimed sustainable investing the new cash cow, in which additional fees of around 6 basis points can be earned from passively managed sustainable exchange traded funds (ETFs) at no extra costs (Wursthorn, 2021). *The Economist* made similar claims that "although [sustainable investing practices] emerged in response to the preferences of investors, [...] asset managers have turned this to their advantage" (Tricks, 2022).

want to be compensated for higher costs and effort that go into sustainability screening, or for a higher required expertise. It could also be the case that advisors create more value when advising SRI clients, compared to conventional clients. In this case, the higher gains from trade may be equally split between the advisor and the client, which would justify a higher fee (see [Gennaioli, Shleifer, and Vishny \(2015\)](#) and [Chalmers and Reuter \(2020\)](#) for a related discussion). Alternatively, a fee premium on sustainable investments may represent price discrimination, where advisors use knowledge about their clients' preferences to extract additional profits from sustainable investors.

We administered two pre-registered online lab-in-the-field experiments with a total of 415 professional advisors in the US and Europe. Experiments offer some key advantages in our setting. Firstly, experiments allow us to exogenously manipulate whether clients give a sustainable or a conventional investment mandate, which allows us to causally identify the effect of these mandates on fees. Secondly, the experimental setting allows us to observe variables that are unobservable in the field, such as advisors' effort levels in providing portfolio advice.

Moreover, previous research has demonstrated the capacity of experiments to accurately predict financial decisions and sustainable investment behavior in the field ([Karlan, 2005](#); [Riedl & Smeets, 2017](#)). To enhance the external validity of our experiments, we incorporate important contextual elements from the natural decision-making environment of advisors ([Harrison & List, 2004](#)). To ensure the relevance of these contextual elements, we pre-tested them with a different group of financial professionals. Further, we recruited real professional financial advisors as participants, increasing the external validity of our findings, as their behavior has been shown to differ from that of student participants.<sup>4</sup>

We ran the first experiment in the US and the experimental design consisted of two stages. In the first stage, advisors managed a stock portfolio for their client with an investment budget of \$1,000. Advisors had access to basic information about their client's profile, including age, gender, income bracket, and risk appetite, as well as the client's investment mandate (conventional or socially responsible). The primary outcome variable

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<sup>4</sup>See [Haigh and List \(2005\)](#); [Alevy, Haigh, and List \(2007\)](#); [Kaustia, Alho, and Puttonen \(2008\)](#); [Roth and Voskort \(2014\)](#); [Kirchler, Lindner, and Weitzel \(2018\)](#); [Weitzel et al. \(2020\)](#)

of interest is the fee that advisors set for their service as a percentage (ranging from 0% to 4%) of the total invested amount.

In the second stage of the experiment, clients decided whether to take the advisor's advice and pay the fee determined by the advisor or to independently select their own portfolio of stocks with the same information as advisors. We implemented the chosen portfolio by purchasing the selected stocks on the market for an investment period of one year. Clients earned either the raw portfolio return (self-selected portfolio) or a net return after fees (advisor's portfolio). Therefore, all participants' decisions in the experiment held real consequences.

Our experimental design allows us to interpret a potentially higher fee for sustainable investors as price discrimination. Clients who did not pay for financial advice selected their own stocks based on the same information and the same decision screens as advisors. Hence, the value that advisors provided to clients was their time, effort, and expertise, which we measured and incorporated in our analyses. Clients who wanted to satisfy their sustainability preferences had to interpret straightforward, color-coded sustainability indicators, which was a trivial task and did not require industry-specific expertise. Therefore, SRI clients were able to satisfy their sustainability preferences without advice. As such, there is no room for significantly higher gains from trade for sustainable compared to conventional investment clients. Further, we employed a within-subject experimental design, in which every advisor in the experiment advised both types of clients in (balanced) random order, which rules out differences due to individual advisor skills. Finally, the experiment was designed such that firm-level sustainability information was free to advisors, which eliminated cost differences related to buying ESG ratings<sup>5</sup> in the experiment. There were no transaction costs in the experiment.

Our results show that financial advisors impose a premium for SRI mandates. Further, we detect no disparity in the time and effort invested by advisors when selecting portfolios for sustainable investment clients versus conventional clients. These results align with the notion of price discrimination, whereby advisors leverage clients' sustainable investment

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<sup>5</sup>The term ESG rating refers to a data-based classification of firms' sustainability in terms of their Environmental-, Social-, and Governance performance.

preferences to generate additional profits.<sup>6</sup>

To completely rule out alternative explanations, namely advisors providing a better service or generating higher gains from trade for sustainable investors, we simplified the investment task and sustainability information even more in a second experiment. European financial advisors selected one of six pre-allocated stock funds on behalf of their client. We designed an ESG rating for the funds, which ranged from the lowest rating of one leaf to the most sustainable rating of five leaves (cf. [Hartzmark and Sussman \(2019\)](#)). Thus, to satisfy clients' preferences for sustainability, advisors only had to count the number of green leaves of investment funds. This marginal effort is easily replicable by clients without any industry-specific expertise.

Additionally, in the second experiment, we expanded the client information available to advisors by incorporating the client's performance on three financial literacy questions ([Lusardi & Mitchell, 2008, 2011](#)). These questions assessed fundamental knowledge in finance and gave advisors an indication about how well their clients understood the impact of fees.

Again, we find that advisors charge a premium for sustainable investment mandates. Strikingly, advisors spend significantly less time and click through information significantly less when serving SRI clients. This suggests that advisors focus almost exclusively on the relatively simple leaf ratings for sustainable mandates, while they consider a broader set of financial information for conventional investment mandates.

Notably, we find that it is the SRI clients with low or unknown financial literacy who are charged a premium. The premium disappears when SRI client's financial literacy is known to be high. These results provide further support for the presence of price discrimination.

A strong indication for the external validity of our findings is the fact that the SRI premium that we observe (between 5.0 to 6.6 basis points in the first experiment and between 7.7 and 8.3 basis points in the second experiment) is similar to the SRI premium

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<sup>6</sup>We run several empirical robustness checks, which support the internal validity of our findings. All reported results are robust and often become even stronger when considering alternative model specifications and sub-samples. Throughout the paper, we report the most conservative results of the full sample.

observed in archival data (Aragon, Jiang, Joenväärä, & Tiu, 2022; Baker, Egan, & Sarkar, 2022). Therefore, our experiments predict fee differences charged in real-world scenarios, while allowing us to causally attribute the premium to price discrimination. The observed premium is economically significant, with an estimated premium of at least \$2.275 billion for individual/retail sustainable investment clients in the US alone in 2020.<sup>7</sup> The premium is not evenly distributed among clients, but a subset of clients is charged a relatively high premium. SRI mandates increase the probability of paying a premium by 6.4 percentage points and 19 percentage points for experiment 1 and 2 respectively. If an advisor charges an SRI client a premium, it is substantial at 47.8 and 42.4 basis points for experiment 1 and 2 respectively. Notably, SRI clients with high financial literacy pay no premium at all, while sustainable investors with low or unknown financial literacy bear the burden of high fees.

To address the question of whether the premium would persist in a market where clients have the choice to reject advice, we examined acceptance rates. In the US, sustainable clients were equally likely as conventional clients to purchase the advice, even when charged a premium. In Europe, clients were 30 percentage points more likely to purchase financial advice if it was based on an SRI mandate. These results highlight that providing advice to sustainable investment clients presents a realistic opportunity for advisors to earn higher fees.

Lab-in-the-field experiments have been shown to be a powerful tool for informing public policy (Levitt & List, 2009; Gneezy & Imas, 2017). However, results are often dismissed due to hindsight bias (“I knew this already”) (DellaVigna, Pope, & Vivaldi, 2019). To explore whether our results were in fact novel to policy experts, we conducted a prediction study before communicating our experimental outcomes. We recruited 53 professionals who work in regulation, policymaking, compliance, and supervision in the financial sector (henceforth, regulators).<sup>8</sup> The prediction study included a detailed de-

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<sup>7</sup>This is based on a back-of-the-envelope analysis, in which we multiply our most conservative premium (5.0 basis points) with US SIF’s 2020 estimate of SRI funds that were invested by money managers on behalf of individual/retail investors (\$4.55 trillion) and on behalf of all US SRI investors (\$17.1 trillion).

<sup>8</sup>The regulators in our sample include members of the European Commission’s high-level expert group on sustainable finance, who were involved in formulating the MiFID II amendment that requires financial advisors to elicit clients’ sustainability preferences. The regulators also work at the Dutch Central Bank,

scription of the main experiment (see Section B.6 for the full instructions). We then asked regulators to predict the outcome of our experiment (incentivized). While the majority of regulators correctly predicted that advisors would charge higher fees to SRI clients, a significant majority incorrectly predicted that advisors would exert more effort for SRI clients, contradicting our findings (See Table A13). Therefore, our results are novel to policy makers in our sample. Moreover, the novelty of our results can be demonstrated by the fact that, as previously highlighted, a consensus has not yet been reached among the press, investor protection authorities, and asset managers concerning the presence of discriminatory pricing against sustainable investors.

Our paper contributes to the expanding body of literature on sustainable finance,<sup>9</sup> particularly in the realm of examining fee differentials between sustainable and conventional funds.<sup>10</sup> Previous studies have shown that a group of investors holds sustainable investment products because of their social preferences (Riedl & Smeets, 2017; Barber, Morse, & Yasuda, 2021; Baker et al., 2022; Heeb, Kölbel, Paetzold, & Zeisberger, 2022). We show that this translates into a premium charged to sustainable investment clients, not because of higher effort, skill, or costs but because the advisors use price discrimination.

The findings also provide insights into potential advisor misconduct in bilateral advisor—client relationships, especially in a setting where clients have low financial literacy. On the one hand, conflicts of interests may cause advisors to extract additional profits to the detriment of less sophisticated investors. As investors with low financial literacy are more likely to pay high fees (Choi, Laibson, & Madrian, 2010), some financial advisors specialize in misconduct that extracts additional profits from clients with low financial literacy

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the Authority for Financial Markets (AFM), and the compliance departments of several European banks. Table A11 shows the demographics and job descriptions of the regulators in our sample. The occupation of most of the regulators in our sample is policy work. On a five-point Likert scale, the participants rated their experience in SRI at 3.15, where 3 refers to “average.” Thus, the regulators in our sample have slightly above-average experience with SRI-related projects and topics. The average number of years of experience in regulation is 7.83 years.

<sup>9</sup>See Heinkel, Kraus, and Zechner (2001); Benson and Humphrey (2008); Hong and Kacperczyk (2009); Białkowski and Starks (2016); Pedersen, Fitzgibbons, and Pomorski (2021); Gibson et al. (2020); Krueger, Sautner, and Starks (2020); Bauer, Ruof, and Smeets (2021); Berk and van Binsbergen (2021); Anderson and Robinson (2022); Gollier and Pouget (2022); Ceccarelli, Ramelli, and Wagner (2023)

<sup>10</sup>See Gil-Bazo, Ruiz-Verdú, and Santos (2010); Shanker (2019); Cao, Titman, Zhan, and Zhang (2020); Aragon et al. (2022); Raghunandan and Rajgopal (2022)

(Egan, Matvos, & Seru, 2019). Moreover, asset managers have been found to charge premiums when they anticipate that retail clients lack understanding of complex fee structures and their impact on investment outcomes (Carlin, 2009). In over-the-counter financial markets, advisors have been shown to engage in price discrimination against smaller, less sophisticated clients (Duffie, Gârleanu, & Pedersen, 2005; Hau, Hoffmann, Langfield, & Timmer, 2021).

On the other hand, less sophisticated investors may gain more from financial advice, for example because they have higher search costs (Roussanov, Ruan, & Wei, 2021). As argued by Gennaioli et al. (2015) and Chalmers and Reuter (2020), financial advisors may create, rather than destroy value for less sophisticated clients, who would forego the equity risk premium by abstaining from the stock market in the absence of advice. In turn, financial advisors may split the higher gains from trade by charging a higher fee. Our contribution to this literature is demonstrating that advisors engage in price discrimination for SRI mandates, particularly when they perceive that SRI mandates come from clients with low financial literacy. The higher fees that are charged cannot be justified by additional value created or higher gains from trade

Our research holds important implications for policies surrounding the elicitation of sustainable investment preferences, which the European Commission mandates since 2022. Our findings highlight potential unanticipated consequences of the regulation. In equilibrium, sustainable investors are already expected to receive lower financial returns (Pástor, Stambaugh, & Taylor, 2022). In addition, the potential impact of dominant sustainable investing in public markets has recently come under scrutiny (Berk & van Binsbergen, 2021; Kölbel, Heeb, Paetzold, & Busch, 2020; Hartzmark & Shue, 2023). When combined with higher fees, the attractiveness of sustainable investments is put at risk in the long-term.



## 2 General setup

This paper is based on two lab-in-the-field delegated choice experiments.<sup>11</sup> These experiments involved professional financial advisors and clients. As advisors, we recruited financial professionals, whom we selected based on two screenings.

In the first screening, we asked the participants to report the industry sector in which they were working. We included only those who selected financial services (e.g., banks and insurance companies).

In the second screening, we filtered out all participants whose jobs did not involve managing or brokering financial assets on behalf of clients in their professional lives. We included, for example, private bankers, investment advisors, and portfolio managers, but not IT support, auditors, or those in corporate finance.

We administered the first experiment with US financial advisors who selected single stocks on behalf of their clients, based on either an SRI mandate or a conventional investment mandate. We administered the second experiment with European financial advisors who selected stock funds on behalf of their clients. In the following, we separately explain each experimental design, followed directly by the respective results.

## 3 US Experiment

### 3.1 Advisor stage

In this stage, the advisors saw a client profile, selected stocks on behalf of that client with a \$1,000 investment budget. They also had to determine a fee for their service. Complete instructions for advisors can be found in Section B.1.

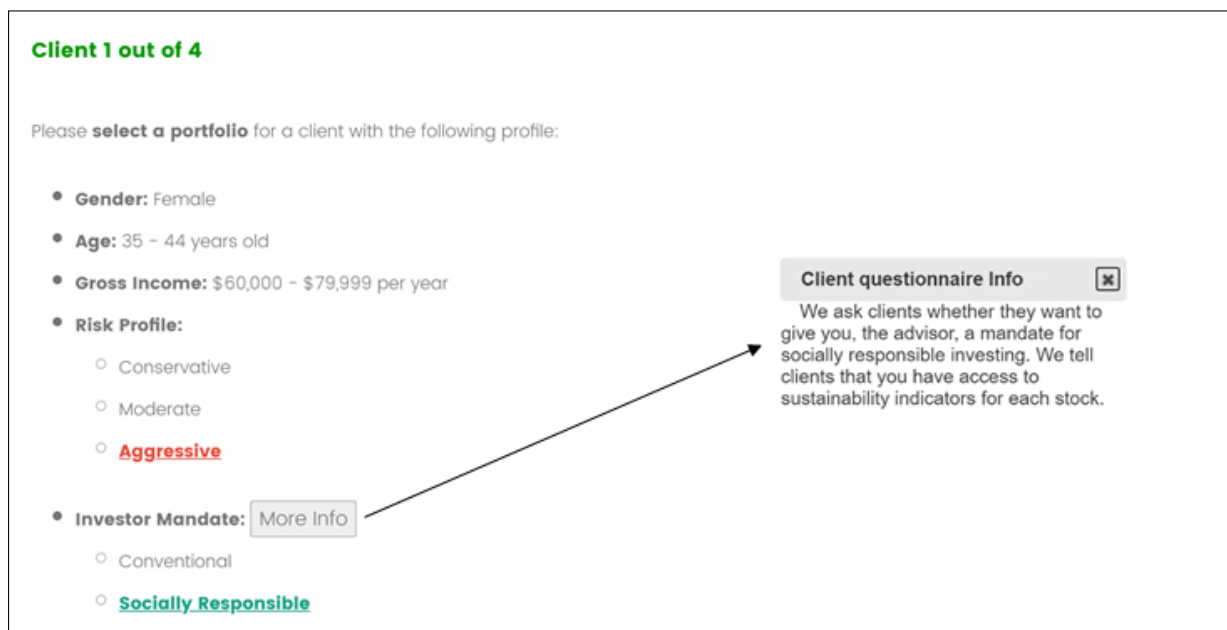
#### 3.1.1 Client profiles

For each client, advisors received information on gender, income, age, risk preferences, and investment mandate. Figure 1 shows an example of the information we provided

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<sup>11</sup>Both studies were pre-registered at the AEA RCT Registry (see <https://www.socialscisceregistry.org/trials/6026>) and ethically approved by the Ethical Review Committee of one of the authors' university under the reference: ERCIC 173 27 01 2020.

for each client. The primary treatment variable was the investment mandate, which could be either conventional or socially responsible. We included a pop-up window with further explanation for each investment mandate. Each advisor saw the profile of one socially responsible female client, one socially responsible male client, one conventional female client, and one conventional male client. The order in which we showed the client profiles was randomized and balanced across advisors. For each client profile, the age was shown to be either between 35 and 44 years old or between 45 and 54 years old. Gross income was randomized for each client profile, ranging from \$40,000 to \$59,999 or \$60,000 to \$79,999 per year. To ensure that the advisors could allocate all funds to equity and that the advisors' assumptions about clients' risk preferences did not drive the results, we recruited only clients who stated that they were willing to invest 100% of their experimental investment budget in stocks, which we referred to as the aggressive risk profile in our experiment.



**Figure 1: Client profile screenshot (Advisor stage)**

### 3.1.2 Stock information and selection

Below the client profile information, on the same screen, we asked advisors to select a portfolio for the client by assigning weights ranging from 0% to 100% to the 30 stocks in the Dow Jones Industrial Average. We provided advisors with two ESG ratings for each

stock, accompanied by detailed explanations through pop-up windows (see Figure 2).

One of the ESG ratings was a firm’s MSCI ESG score, a commonly used rating in both academic publications<sup>12</sup> and practice. The MSCI ESG score is a letter rating ranging from AAA to CCC. In line with the classification on the MSCI ESG website, we color-coded and named the letter classifications as follows: CCC and B were shown in gray (labeled “laggard”), BB, BBB, and A were shown in yellow (labeled “average”), and AA and AAA were shown in green (labeled “leader”).

Additionally, we included a binary indicator to denote whether a firm participated in the United Nations Global Compact (GC). Companies that join the United Nations GC commit to implementing sustainable and socially responsible practices and reporting on their progress. These participants also pledge to operate responsibly in accordance with the United Nations’ sustainability principles concerning human rights, labor, the environment, and anti-corruption. We color-coded United Nations GC participating companies with a green letter “Y” (for yes) or a black letter “N” (for no). The ESG ratings that we show have the advantage that they are easy to understand and interpret, and advisors do not need any previous knowledge of sustainable investing to select sustainable portfolios.

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<sup>12</sup>See for example Aragon et al. (2022); Avramov, Cheng, Lioui, and Tarelli (2022); Berg, Koelbel, and Rigobon (2022); Pástor et al. (2022); Pedersen et al. (2021)

**Select stocks for your client:**

- Please select your client's portfolio by weighting the 30 stocks of the Dow Jones below **(To increase the weight on one stock, first reduce the weight of another stock)**.
- The maximum weight per stock is 25%, so the portfolio must include at least 4 stocks.
- Per default, the weights are set as in the Dow Jones Industrial Average.
- Click on a stock's name for more financial information.
- Next to each company name, you see two indicators of social responsibility:
  - MSCI ESG Score (● means laggard; ● means average; ● means leader) More Info
  - Whether the company pledged to follow the principles of the UN Global Compact (Y if yes, N if no)

More Info →

United Nations Global Compact ✕



**United Nations Global Compact**

Participation in the UN Global Compact requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

More Info ↓

MSCI ESG Score ✕

MSCI ESG rate companies on a 'AAA to CCC' scale according to their exposure to Environmental, Social, and Governance risks and how well they manage those risks relative to peers.

**Figure 2: Portfolio screenshot 1 (Advisor stage)**

We also provided key financial information for each stock. To create a representative decision environment and, at the same time, prevent information overflow, we ran a pre-test to determine what financial information to show. In this pre-test, we asked financial professionals who were not part of the main experiment what information they primarily used in their decision-making processes.<sup>13</sup> On the decision screen, we displayed the six most important financial indicators. As an example, Figure 3 shows the pop-up window with the financial information that appeared when clicking on *Verizon*.

Based on this information, the advisors weighted all 30 stocks in the Dow Jones Industrial Average for the client. The order in which the 30 stocks were listed was

<sup>13</sup>Specifically, we asked 20 respondents to rank 22 distinct indicators that are most commonly and prominently displayed on platforms such as *Morningstar*, *Yahoo! Finance*, *Fidelity*, and *CNN Money* according to their importance in selecting portfolios of stocks. See Section B.5 for full instructions and Table A1 for the importance ranking of indicators according to the financial professionals in our sample.

randomized across advisors. By default, the weight per stock was set as in the Dow Jones Industrial Average, which the advisors were able to adjust with a slider (or by entering the weight directly). At the bottom of the table, we displayed the total for all weights. The advisors were able to proceed only if that total was exactly 100. The example in Figure 3 shows the weighting of 11 stocks at the bottom of the list of 30.

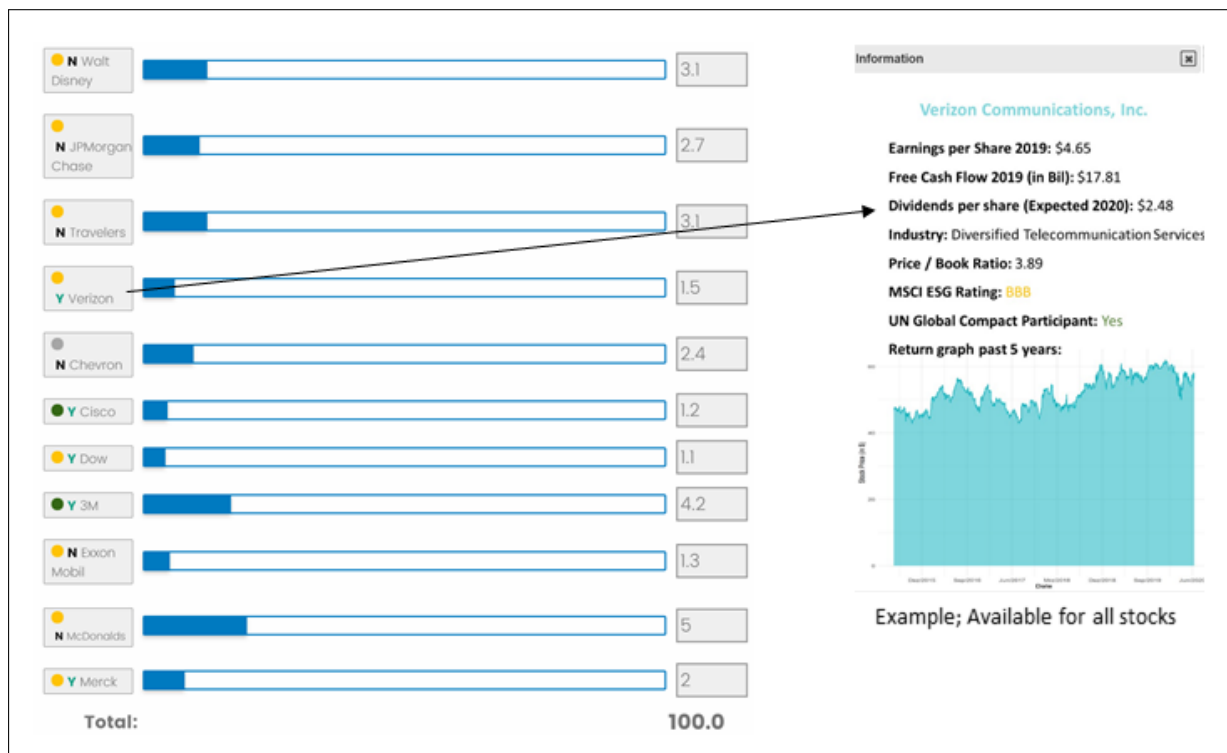
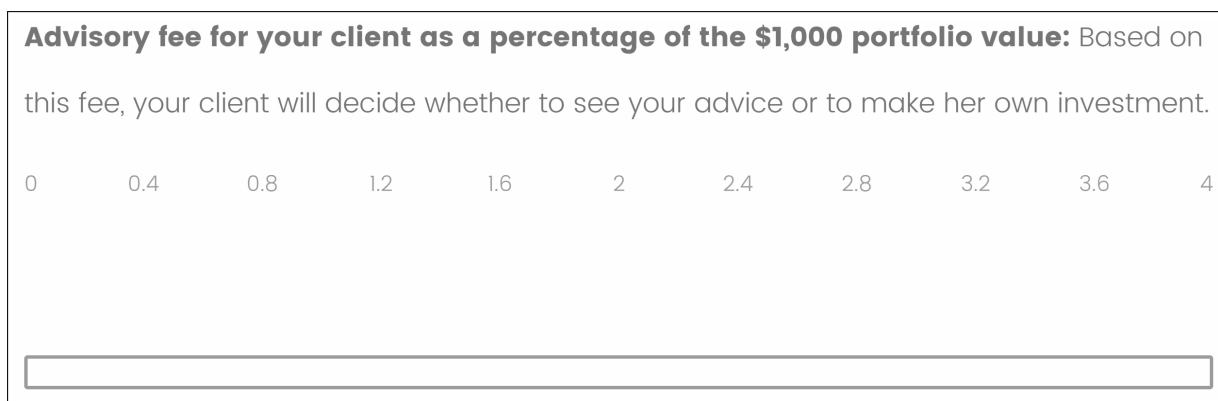


Figure 3: Portfolio screenshot 2 (Advisor stage)

### 3.1.3 Fee and payment relevance

After selecting stocks for a specific client profile, we asked advisors to set a fee for this service. They set the fee using a slider without an anchor (see Figure 4). They could set the fee to any percentage between 0% and 4% for each of the four client profiles. At the end of this stage, we randomly selected one of the four client profiles that was relevant for the advisor payment. The portfolio allocation and fee for this client profile were shown to a real client in the second experimental stage.



**Figure 4: Fee setting screenshot (Advisor stage)**

### 3.2 Client stage

Following the completion of the advisor stage, we proceeded to sample clients who matched the randomly selected client profiles from the advisor stage. To ensure appropriate matching, we administered screening questions regarding age, gender, income, risk tolerance, and investor mandate (please refer to Section 3.5 for further details). We informed participants that they would receive an experimental budget of \$1,000 to invest in the stock market and that a financial advisor had already selected a portfolio of stocks on their behalf. The clients saw the instructions that were given to the advisors, along with an example portfolio selection screen from the advisor stage. Subsequently, we assessed the clients' comprehension of the advisor stage through comprehension questions.

Next, the clients saw the fee that their respective advisor had set for selecting the portfolio (see Figure 5) and decided to either pay the fee and take the advice or not to pay the fee and select their own portfolio of stocks. In the latter case, the clients went through the same stock selection process as the advisors. The advisors' compensation was determined based on the decision made by their matched client.

## Investment Decision

A financial professional put together a portfolio for a client with your profile. He or she set the following advisory fee for creating this stock portfolio.

**Advisory Fee:** 1.4%

Would you like to invest in the stock portfolio that your advisor constructed on your behalf?

Yes, I will take the advice

No, I will select stocks myself

**Figure 5: Investment decision screenshot (Client stage)**

### 3.3 Payment

All participants received a show-up fee plus a variable payment that was contingent on their decisions in the experiment.<sup>14</sup> For the advisors, the additional payment depended on whether the client took the advice. Advisor  $j$  received the following:

$$\Pi_j = \begin{cases} \rho + Fee_i, & \text{if client } i \text{ selects the advisor portfolio} \\ \rho, & \text{otherwise,} \end{cases} \quad (1)$$

where  $\Pi_j$  refers to the payoff to advisor  $j$ , and  $\rho$  refers to the show-up fee. The fee was set as a percentage of the clients' \$1,000 investment budgets; thus, so a fee of 1.4% corresponded to a payment of \$14. The advisor payment was sufficiently large to ensure that the advisors took the task seriously. Disregarding outliers, participants spent around 14 minutes, on average, to complete the experiment and received an average payment of \$12.57, which means that the average hourly payoff was \$53.87. Participants reported a

<sup>14</sup>The show-up fee of \$2 was equal for advisors and clients and was offered on top of an undisclosed show-up fee that the market research company pays to all its clients for completed surveys.

gross annual income of \$110,637, which allows us to estimate participants' hourly net wage at \$31.39.<sup>15</sup> This means that the experimental payoff was around 1.7 times professionals' average net income per hour.

For clients, the variable payment depended on the performance of the selected investment. Every 10<sup>th</sup> client (randomly selected) received a variable payment. Clients who were not randomly selected received the show-up fee  $\rho$ . If randomly selected, client  $i$  received the following:

$$\Pi_i = \begin{cases} \rho + \$150 - Fee_i + r_j, & \text{if client } i \text{ selects the advisor portfolio} \\ \rho + \$150 + r_i, & \text{otherwise.} \end{cases} \quad (2)$$

The variable payment included a base payment of \$150. If the clients chose to view the advice, the fee was deducted from this payment. Additionally, we recorded the return of their chosen investment over the coming year. If a client took the advice, their payment depended on the performance of the advisor portfolio  $r_j$ . If a client did not take the advice, their payment depended on the performance of the portfolio they selected themselves,  $r_i$ . Although the overall earnings could not be lower than 0, the clients participated in gains as well as losses of selected stock portfolios due to the \$150 base payment.

### 3.4 External consequences of decisions

We took measures to ensure that the experiment carried real consequences for participants. Previous experimental studies have highlighted the differences in behavior between real and hypothetical situations (List & Gallet, 2001). This is especially relevant in our setting, where socially responsible investors care about the societal impact of purchasing stocks. To achieve this, we made actual stock purchases in the market based on participants' choices. For 1 in 10 participants, we purchased and held stocks according to the participant's selection until the end of the investment horizon, which lasted for one year. Participants were fully informed about this process and were assured that they would

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<sup>15</sup>In line with Kirchler et al. (2018), we assume an income tax of 40% and that advisors work 45 hours per week and 47 weeks per year.



receive documentation of all stock transactions made to implement their portfolios. We aggregated and anonymized all participant data to make it impossible to trace back any decisions made in the experiment.

### 3.5 Implementation

The data collection took place in the second half of 2020, with the implementation of the stock portfolios on December 11, 2020. All experimental stages were administered online with Qualtrics. We collected the data in collaboration with the market research agency Dynata.<sup>16</sup>

As advisors, we recruited financial professionals in the US, whom we selected based on the two screenings, as outlined in Section 2. As clients, we recruited a sample of individuals from the US who were not financial professionals. To match clients to the profiles that we presented to the advisors, we screened out clients whose annual household income was below \$40,000 or above \$79,999 or whose age was below 35 or above 54. In addition, we asked the clients about their risk preferences in investing and selected only those who were willing to invest their entire experimental investment budget in stocks.<sup>17</sup> Finally, we asked the clients about their investor mandate to create a match with the respective profile shown to the advisor. Specifically, we asked clients: “Do you want to give your advisor a mandate for socially responsible investing?”

The sample included 345 professional financial advisors from 45 different states in the US (see Figure A1). As every advisor created a portfolio and set a fee on behalf of four different clients, we observed a total of 1,380 client—advisor relationships. An overview of the characteristics of the sample is provided in Table A3.

Before we discuss the results of the experiment, we first investigate whether the treatment was successfully implemented in the sense that the advisors catered to the sustainability preferences of their clients. Table A2 shows the outcome of four OLS regressions. Each column has a different sustainability indicator as a dependent variable. The de-

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<sup>16</sup>Dynata has access to more than 62 million consumers and business professionals and is specialized in B2B surveys, with over 40 years of experience in this area.

<sup>17</sup>Clients did not know what characteristics we were screening on. Therefore, clients could not game the survey to increase their chances of being able to participate.

pendent variable of the first regression, *United Nations GC* of client  $i$ , is defined as follows:

$$United\ Nations\ GC_i = \sum (Weight\ of\ stock\ k\ (in\ \%) * United\ Nations\ GC_k), \quad (3)$$

where  $United\ Nations\ GC_k \in \{0; 1\}$  is equal to 1 if firm  $k$  participated in the United Nations GC and 0 otherwise. Thus, the maximum value that this variable could take for a client was 100, which means that 100% of the portfolio value is invested in companies that participate in the United Nations GC. The minimum value that this variable could take for a client was 0. The MSCI ESG (Letter Coded) dependent variable of the regression shown in column 2 was defined as follows:

$$MSCI\ ESG\ (Letter\ Coded)_i = \sum (Weight\ of\ stock\ k\ (in\ \%) * MSCI\_ESG\_Letter_k), \quad (4)$$

where  $MSCI\_ESG\_Letter_k \in \{0; \frac{1}{6}; \frac{1}{3}; \frac{1}{2}; \frac{2}{3}; \frac{5}{6}; 1\}$ . This variable represents the quantified MSCI ESG letter rating of stock  $k$ , which corresponds to CCC, B, BB, BBB, A, AA, and AAA, respectively. Similarly, MSCI ESG (Color Coded), the dependent variable of the regression shown in column 3, is defined as follows:

$$MSCI\ ESG\ (Color\ Coded)_i = \sum (Weight\ of\ stock\ k\ (in\ \%) * MSCI\_ESG\_Color_k), \quad (5)$$

where  $MSCI\_ESG\_Color_k \in \{0; 0.5; 1\}$  corresponds to the MSCI ESG color ratings gray, yellow, and green, respectively. Both quantifications of the MSCI ESG scores take a value between 0 and 100 as the dependent variable in column 1. Finally, column 4 shows a regression with an overall ESG rating, defined as

$$Overall\ ESG\ Rating_i = \frac{United\ Nations\ GC_i + MSCI\ ESG\ (Letter\ Coded)_i}{2}. \quad (6)$$

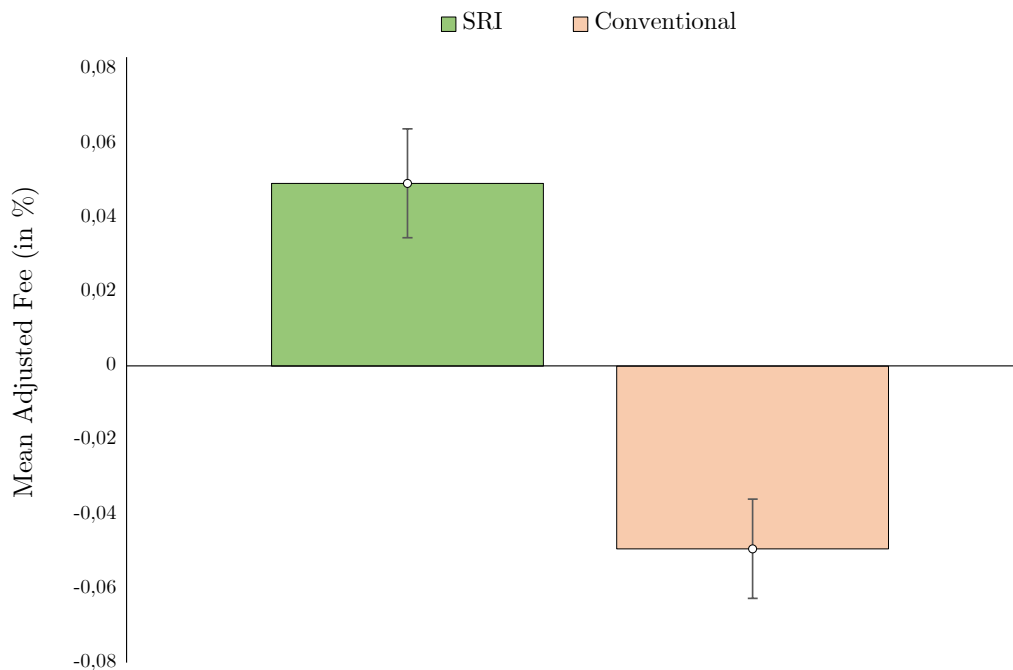
Table A2 shows that irrespective of the rating considered, advisors create more sustainable portfolios under an SRI mandate. Therefore, we are confident that our treatment was administered successfully.

## 3.6 Results

### 3.6.1 SRI mandates lead to a premium

**Result 1:** *US financial advisors charge SRI clients a premium.*

**Support:** The average fee charged by advisors to clients in our sample is  $\mu = 1.92\%$  (SD = 0.97), which is slightly lower than fees reported in recent studies on retail financial advice (Foerster, Linnainmaa, Melzer, & Previtero, 2017; Linnainmaa, Melzer, & Previtero, 2021). Figure 6 shows the average mean adjusted fee charged by investor mandate. The whiskers in the figure indicate that advisors charge a significantly higher fee when a client communicates sustainable investment preferences compared to a client who communicates conventional investment preferences.



**Figure 6:** Average mean adjusted fee charged by investment mandate

*Notes:* The figure shows the average mean adjusted fee in % charged by investor mandate. We form pairs of clients, who have the same gender and the same advisor, but who differ in their investment mandate. For client  $i$ , the mean adjusted fee is the fee that is charged by advisor  $j$  to client  $i$  minus the average fee charged by advisor  $j$  to both clients in this client pair. The whiskers represent +/- one standard error.

We formally test this using the following model:

$$\begin{aligned}
 Fee_i = \alpha + \beta_1 * \psi + \beta_2 * \theta + \beta_3 * SRI\_Mandate_i + \beta_4 * Female_i + \beta_5 * High\_Age_i \\
 + \beta_6 * High\_Income_i + \beta_7 * Round_i + \epsilon_i,
 \end{aligned}
 \tag{7}$$

where client  $i$ 's fee is determined by  $\psi$  (a vector of advisor fixed effects),  $\theta$  (a vector of round fixed effects),  $SRI\_Mandate_i \in \{1 \text{ if a client gave an SRI mandate, } 0 \text{ otherwise}\}$ ,  $Female_i \in \{1 \text{ if a client identified as female, } 0 \text{ if a client identified as male}\}$ ,  $High\_Age_i \in \{1 \text{ if a client was between 45 and 54 years old, } 0 \text{ if a client was between 35 and 44 years old}\}$ , and  $High\_Income_i \in \{1 \text{ if a client had a gross annual income between } \$60,000 \text{ and } \$79,999, 0 \text{ if a client had a gross annual income between } \$40,000 \text{ and } \$59,999\}$ .

Table 1 presents the results of two Tobit regressions.<sup>18</sup> In Column 1, we examine the effect of a client's investment mandate on the fee charged by advisors, without including any control variables. The results indicate that advisors impose a premium of 5.1 basis points ( $p = 0.003$ ) when a client mandates SRI. Column 2 shows the outcome of regression equation 7. The estimated effect size remains significant at 5.0 basis points ( $p = 0.004$ ) when all control variables are included. Although we see that the coefficient on *Female* is negative, indicating a lower fee charged to women, this difference is not significant at conventional levels ( $p = 0.063$ ). Furthermore, none of the other client characteristics have explanatory power in fee differences.

These results demonstrate that advisors charge sustainable investors a premium at the aggregate level. We further explore the heterogeneity of these premiums. Specifically, we investigate whether the aggregate fee difference is driven by a moderate premium for SRI clients charged by all advisors or by a substantial premium charged to a subset of clients. To examine this, we create pairs of clients with the same gender and advisor but differing investment mandates. We assign a binary indicator to each client, equal to 1 if they were charged a higher fee than the other client in the pair, and 0 otherwise. We then perform a probit regression using this binary indicator as the dependent variable. Column 1 of Table 2 presents the marginal effects of this probit regression, revealing that

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<sup>18</sup>The dependent variable  $Fee_i$  is censored on the right side, as it is bound between 0 and 4%.

**Table 1: Advisors charge higher fees to SRI clients**

Dependent Variable:	(1)	(2)
	Fee (in%)	
SRI Mandate	0.051*** (0.017)	0.050*** (0.017)
Female		-0.032 (0.017)
High Age		-0.001 (0.022)
High Income		0.014 (0.021)
$\alpha$	1.975*** (0.015)	1.980*** (0.034)
Advisor FE	Yes	Yes
Round FE	No	Yes
Observations	1,380	1,380
Uncensored Observations	1,328	1,328
Log Likelihood	-398.2	-392.4

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1 and 2 show the coefficient estimates of Tobit regressions. Both regressions have the fee (in percent) charged by an advisor to a client as the dependent variable. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

SRI mandates increase the probability of being charged a premium by 6.4 percentage points.

Additionally, we consider the magnitude of the premium when it is charged. We re-estimate our main model using the subset of client pairs in which the SRI client was charged a higher fee. This reduces the sample size to 504 clients, which represents 36.5% of the full sample. Column 2 of Table 2 shows the coefficient estimates of the Tobit

**Table 2: Fee premium to SRI clients**

Dependent Variable:	(1) Probit Premium charged	(2) Tobit Fee (in %)
SRI Mandate	0.064** (0.089)	0.478*** (0.026)
Female	0.008 (0.035)	-0.091** (0.042)
High Age	-0.004 (0.073)	0.040 (0.039)
High Income	0.024 (0.073)	0.005 (0.031)
$\alpha$	-0.668*** (0.116)	1.937*** (0.137)
Advisor FE	No	Yes
Round FE	Yes	Yes
Observations	1,380	504
Uncensored Observations		494
Pseudo- $R^2$	0.01	
Log Likelihood		-71.73

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1 shows the marginal effects of a Probit regression. We form pairs of clients, who have the same gender and the same advisor, but who differ in whether they give an SRI mandate or a conventional investment mandate. The dependent variable is a binary indicator that is equal to 1, if a client was charged a higher fee than the other client in this pair and 0 otherwise. Column 2 shows the coefficient estimates of a Tobit regression on the subset of client pairs, among which the SRI client was charged a higher fee. The dependent variable is the fee (in percent) charged by an advisor to a client. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

regression. The dependent variable is the fee (in percent) charged to clients by advisors. The coefficient estimates indicate that when advisors impose a premium on SRI clients,

it is substantial, amounting to 47.8 basis points.

### 3.6.2 SRI mandates do not require more time and effort

**Result 2:** *US financial advisors neither spend more time on nor exert more effort for SRI clients.*

**Support:** The first two columns of Table 3 present the results of OLS regressions, where the natural logarithm of the time spent constructing a client’s portfolio is the dependent variable. In both specifications, we find no significant difference in the time spent by advisors on SRI clients compared to conventional clients. This suggests that advisors allocate a similar amount of time to constructing portfolios for both types of clients.

Columns 3 and 4 show the outcome of OLS regressions, with the natural logarithm of the number of clicks that advisors spend on constructing a client’s portfolio as the dependent variable. This variable serves as a proxy for the effort exerted by advisors when constructing portfolios on behalf of clients. The findings indicate no significant difference in how often advisors click when a client mandates SRI versus when a client mandates conventional investment. Moreover, once round fixed effects are included, no other client characteristics provide explanatory power for the number of advisor clicks.

Taken together, these results suggest that advisors do not differ in the time spent or effort exerted when constructing portfolios for SRI clients compared to conventional clients.

### 3.6.3 SRI clients are not more likely to reject advice

**Result 3:** *US sustainable investors are as likely (as conventional investors) to pay for advice, even when asked to pay a premium.*

**Support:** An important question is whether SRI clients are more likely to reject advice. If this were the case, clients ultimately would not end up paying the premium. However, SRI clients are as likely to accept the advice as conventional clients were.

**Table 3: Advisors do not exert more effort for SRI clients**

Dependent Variable:	(1)	(2)	(3)	(4)
	Log(Time)		Log(Clicks+1)	
SRI Mandate	0.046 (0.057)	0.046 (0.045)	0.027 (0.044)	0.024 (0.039)
Female	0.110 (0.058)	0.070 (0.046)	0.063 (0.042)	0.042 (0.038)
High Age	-0.051 (0.063)	0.030 (0.054)	-0.092** (0.047)	-0.042 (0.041)
High Income	0.079 (0.072)	0.061 (0.053)	0.006 (0.052)	-0.010 (0.046)
$\alpha$	1.303*** (0.049)	2.122*** (0.055)	-0.023 (0.035)	0.461*** (0.051)
Advisor FE	Yes	Yes	Yes	Yes
Round FE	No	Yes	No	Yes
Observations	1,380	1,380	1,380	1,380
Adjusted $R^2$	0.64	0.78	0.80	0.84

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. All columns show the coefficient estimates of OLS regressions. The dependent variable in columns 1 and 2 is the logarithm of time in seconds that advisors take to create a portfolio for a client (Obtained from metadata). The dependent variable in columns 3 and 4 is the logarithm of the number of clicks (+1) that advisors take to create a portfolio for a client (Obtained from metadata). SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

Overall, 66.83% of the clients took the advice, while the remaining 33.17% selected stocks for themselves. Table 4 shows the marginal effects of two probit regressions. Column 1 shows a regression of client SRI preference on a binary variable indicating whether the advice was taken without including any controls. Column 2 shows the regression results of the same model, while controlling for other client characteristics, including gender, age, and income. In both model specifications, we see a tendency for



SRI clients to accept advice more often, which, however, is not statistically significant. The fee charged cannot explain any variation in propensity to take advice.

**Table 4: SRI clients are not more likely to reject advice**

Dependent Variable:	(1)	(2)
	Was the Advice Taken?	
SRI Mandate	0.035 (0.180)	0.041 (0.184)
Fee		0.018 (0.094)
Female		0.035 (0.183)
High Age		0.030 (0.186)
High Income		-0.010 (0.182)
$\alpha$	0.389*** (0.123)	0.319 (0.261)
Observations	208	208
Pseudo- $R^2$	0.00	0.01

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors in brackets. Columns 1 and 2 show the marginal effects of probit regressions, where the dependent variable is 1 if a client took the advice and 0 otherwise. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. High Literacy is equal to 1 if a client answered all financial literacy questions correctly and 0 if a client has answered one or more financial literacy questions incorrectly. Fee is the fee (in %) charged by the advisor. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

### 3.6.4 Additional robustness checks

In additional analyses, we exclude all advisors who take less than five minutes to complete the experiment. We also exclude advisors who make more than one mistake in the comprehension questions. We refer to this sample as the REDUCED sample. Table [A4](#)

provides an overview of the characteristics of the REDUCED sample. When running our analyses with the REDUCED sample, our findings remain the same qualitatively and effect sizes often even increase. Table A5 shows that under all definitions of social responsibility, advisors in the REDUCED sample create more sustainable portfolios when a client mandates SRI. Table A6 shows an estimation of the regression equation 7 with the REDUCED sample. Although the results remain the same qualitatively, the effect of an SRI mandate on the charged fee increases from 5.0 basis points to 5.5 basis points. Table A7 shows that among advisors in the reduced sample, an SRI mandate increases the probability of being charged a premium by 7.1 percentage points and if an advisor charges an SRI client a premium, it was 47.2 basis points. Finally, Table A8 shows that in the REDUCED sample, advisors do not exert significantly more time or effort to construct portfolios for SRI clients. This is in line with our finding when using the full sample.

### **3.7 Interim conclusion**

Taken together, our results from the US experiment show that US financial advisors charge sustainable investors a premium, and that this premium is also accepted and paid. Outside of our experimental setting, skill, effort, and costs could play a role and even increase fees further, but we show that even when they do not play a role, fees are higher for sustainable investors.

## **4 European Experiment**

We expand upon our initial findings by conducting a second experiment in Europe, aiming to address important questions that provide deeper insights into the conditions under which financial advisors charge sustainable investors a premium.

Firstly, we examine whether our original findings hold for European financial advisors. Previous research on institutional investors has indicated potential differences in the behavior of sustainable investors across countries (Dyck, Lins, Roth, & Wagner, 2019;

Gibson et al., 2020). Additionally, regulatory variations exist in terms of the extent to which advisors personally benefit from client fees<sup>19</sup> These factors justify an investigation into the reproducibility of our initial findings with European financial advisors.

Secondly, we investigate whether our findings hold in a fund selection setting. Many financial advisors recommend pre-allocated financial products, such as mutual funds, to their clients, rather than selecting individual stocks. Thus, we explore whether a premium is charged in the context of fund selection.

Thirdly, we examine whether our findings hold in a setting that eliminates the additional effort associated with sustainable investing. In our initial experiment, we infer the effort put in by advisors by analyzing metadata, such as the number of clicks that advisors take to put together stock portfolios on behalf of clients, and we do not find a difference between clients by mandate. We additionally explore whether we can detect a sustainability premium in a setting in which we do not have to proxy for higher advisor effort but rule it out by design.

Fourthly, we investigate whether client financial literacy influences the premium that sustainable investors are charged. Specifically, we consider the possibility that one driver of fee differences is the assumption made by advisors that SRI clients have lower financial literacy, which allows them to charge a premium. This implies that advisors do not impose a premium on SRI clients when they can signal high financial literacy.

## 4.1 Experimental setup

As in the US experiment, our experimental design consisted of two stages.<sup>20</sup> In the first stage, advisors saw a client profile, invested €1,000 on behalf of that client, and set a fee for their service. We implemented two major design changes in the advisor stage. Firstly, we showed the clients' financial literacy to the advisors. Secondly, we had a fund selection task instead of a stock selection task.

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<sup>19</sup>For example, some European countries like the Netherlands and the UK ban kickbacks to financial advisors.

<sup>20</sup>We provide the full experimental instructions in Section B.3.

#### 4.1.1 Client financial literacy

The advisors again received information about their clients' gender, income, age, risk preferences, and investment mandate. In addition, we provided information on clients' financial literacy. We defined financial literacy in terms of their clients' relative performance in the big three financial literacy questions, first suggested by [Lusardi and Mitchell \(2008\)](#). Advisors received information about their clients' relative scores<sup>21</sup> on this quiz. In total, each advisor saw six different client profiles: three SRI clients (with high financial literacy, low financial literacy, or unknown financial literacy) and three conventional clients (with high financial literacy, low financial literacy, or unknown financial literacy). The advisors first selected funds for the two clients with unknown financial literacy in random order and then for the remaining four clients in random order.

#### 4.1.2 Fund information and selection

We made several adjustments to the selection task for advisors when choosing funds on behalf of their clients. Instead of selecting individual stocks, we asked advisors to choose one of six funds. We designed the fund selection task in such a way that the SRI clients would not require any additional effort.

We informed the advisors that all stocks in the funds were among the largest 200 stocks in the MSCI World index, based on market capitalization. We created artificial funds to have more control over their characteristics and to avoid any influence from existing real-world fees. We assigned a number as an identifier to each fund, rather than naming them, to minimize noise caused by framing effects. If advisors asked for more information, they could open pop-up windows containing fund-level indicators, such as the portfolio beta, the forward dividend yield, the price/book value, and the fund's investment style (proportion invested in value-, core-, and growth stocks; see [Figure 7](#)). We slightly adjusted the factors from the US experiment to those most relevant for mutual funds.

Crucially, we aggregated sustainability information into a simple ESG rating that was

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<sup>21</sup>Whether a client performed above or below the median client in the sample

trivial for advisors to understand. This form of fund-level sustainability information is common in the field. On platforms like Morningstar, mutual funds’ sustainability is given in terms of sustainability globes, where a rating of one to five globes is assigned to funds. In our experiment, a fund was awarded one leaf if between 0% and 20% of companies in the fund participate in the United Nations GC. Two, three, four, and five leaves were awarded if more than 20%, 40%, 60%, and 80% of companies in the fund participate in the United Nations GC, respectively. We provided advisors with an explanation of how this ESG rating was calculated in a pop-up window. Figure 7 illustrates an example screen for the fund selection task. With the aggregated ESG rating, selecting a sustainable fund became as straightforward as counting to five. We randomized and counterbalanced the order in which funds were shown.



**Figure 7: Fund selection screenshot (Advisor stage)**

## 4.2 Implementation

We administered the European experiment in the first half of 2022. We recruited only financial professionals in Europe and selected them based on the screenings outlined in Section 2. Our sample includes 70 advisors who passed all screenings. As every advisor selected a fund and set a fee on behalf of six different clients, our data set includes a total of 420 client—advisor relationships. As clients, we recruited a sample of individuals from

Europe who are not financial professionals in the same way as in the US experiment.

We first evaluate whether our treatment (i.e., SRI mandates) had any effect on financial advice. If advisors cater to the sustainability preferences of their clients, we expect them to select funds with higher ESG ratings on behalf of SRI clients. To assess this question, we run a set of Tobit regressions<sup>22</sup> with the number of leaves associated with the selected funds as the dependent variable. The results are shown in Table A10. Advisors select funds with a higher ESG rating (on average, 2.3 more leaves) for SRI mandates. Thus, we can be confident that our treatment was recognized by the advisors and translated into action.

## 4.3 Results

### 4.3.1 SRI mandates lead to a premium in a fund selection setting

**Result 4:** *European financial advisors charge a premium for SRI fund selection.*

**Support:** To examine whether our main finding replicates in the new experimental setting, we first consider only fees for clients whose financial literacy is not known to advisors, as this was also the case in the US experiment. We conduct a Tobit regression with the charged fee as the dependent variable, controlling for all client characteristics that were communicated to advisors and including advisor and round fixed effects. The results, presented in Table 7, demonstrate that in both model specifications, the coefficient for SRI Mandate is positive and statistically significant. Moreover, the coefficient size is larger than that observed for US advisors, indicating that European advisors charge SRI clients a premium ranging from 7.7 to 8.3 basis points. No other client characteristic has explanatory power on the charged fee.

As in Section 3.6.1, we also explore whether the probability of being charged a premium increases for SRI clients. For that purpose, we form client pairs with identical financial literacy levels and the same advisor but differing investment mandates. Each

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<sup>22</sup>The dependent variable, the amount of sustainability leaves of the selected portfolio, is censored on the right side, as it is bound between 0 and 5.

**Table 5: Advisors charge higher fees to SRI clients**

Dependent Variable:	(1)	(2)
	Fee (in%)	
SRI Mandate	0.083*** (0.029)	0.077*** (0.028)
Female		-0.043 (0.033)
High Age		-0.050 (0.031)
High Income		0.004 (0.032)
$\alpha$	2.058*** (0.102)	2.074*** (0.081)
Advisor FE	Yes	Yes
Round FE	No	Yes
Observations	140	140
Uncensored Observations	139	139
Log Likelihood	44.28	48.86

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1 and 2 show the coefficient estimates of Tobit regressions. Both regressions have the fee (in percent) charged by an advisor to a client as the dependent variable. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

client is then assigned a binary indicator, taking a value of 1 if they were charged a higher fee than the other client in the pair, and 0 otherwise. The marginal effects from a probit regression with this binary indicator as the dependent variable are shown in Column 1 of Table 6. The results reveal that SRI mandates increase the probability of being charged a premium by 19 percentage points.

We then estimate our main model for the subset of client pairs, among which the

**Table 6: Fee premium to SRI clients**

Dependent Variable:	(1) Probit Premium charged	(2) Tobit Fee (in %)
SRI Mandate	0.190*** (0.281)	0.424*** (0.052)
Female	-0.065 (0.254)	-0.086 (0.054)
High Age	-0.078 (0.270)	-0.035 (0.068)
High Income	-0.028 (0.238)	-0.014 (0.076)
$\alpha$	-1.186*** (0.337)	1.639*** (0.135)
Advisor FE	No	Yes
Round FE	Yes	Yes
Observations	140	40
Uncensored Observations		39
Pseudo- $R^2$	0.12	
Log Likelihood		10.87

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1 shows the marginal effects of a Probit regression. We form pairs of clients, who have the same financial literacy and the same advisor, but who differ in whether they give an SRI mandate or a conventional investment mandate. The dependent variable is a binary indicator that is equal to 1, if a client was charged a higher fee than the other client in this pair and 0 otherwise. Column 2 shows the coefficient estimates of a Tobit regression on the subset of client pairs, among which the SRI client was charged a higher fee. The dependent variable is the fee (in percent) charged by an advisor to a client. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

SRI client was charged a higher fee. Column 2 of Table 6 shows the coefficient estimates of a Tobit regression that we run on this subset. The dependent variable is the fee (in



percent) charged by an advisor to a client. The coefficient estimates show that if an advisor charges a premium to an SRI client, this premium lies at 42.4 basis points, on average.

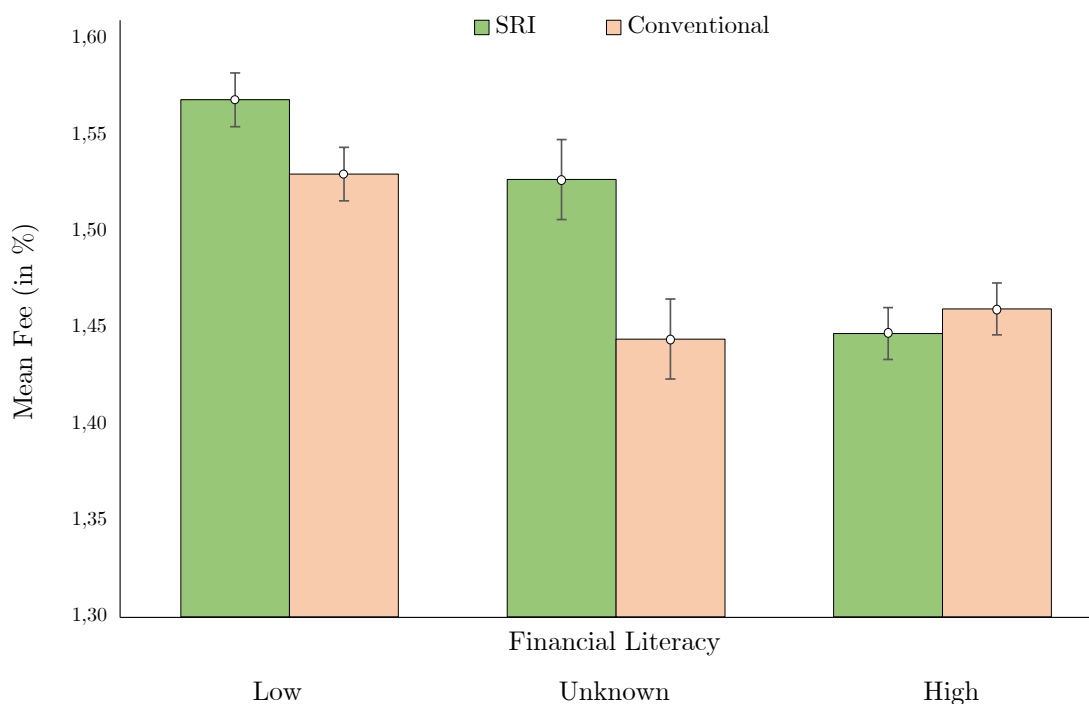
### 4.3.2 The role of financial literacy

**Result 5:** *Advisors charge sustainable investors with unknown or low financial literacy a premium, but do not charge sustainable investors with high financial literacy a premium.*

**Support:** We next consider how advisors set fees when they know their clients' financial literacy. Looking at descriptives, the mean fee in the entire sample charged to clients is  $\mu = 1.50\%$  (SD = 0.76), in which clients with low financial literacy are charged the most ( $\mu = 1.55\%$ ; SD = 0.78), clients with high financial literacy are charged the least ( $\mu = 1.45\%$ ; SD = 0.74), and clients whose financial literacy is not revealed are charged a fee that lies between the two ( $\mu = 1.49\%$ ; SD = 0.75).

Figure 8 graphically shows the mean fee that advisors charge by investor mandate for each financial literacy subset. The figure reveals some interesting patterns. Advisors charge the highest fee to SRI clients with low financial literacy. Furthermore, advisors charge clients with high financial literacy a relatively low fee, with no significant fee difference by investor mandate. Therefore, only those clients who cannot signal high financial literacy bear the burden of an SRI premium.

To test fee differences by client financial literacy, we run a Tobit regression for the subset of clients whose financial literacy is shown to be low (column 2 of Table 7), for the subset of clients whose financial literacy is shown to be high (column 3 of Table 7), and for a combined subset (column 1 of Table 7). The coefficient for High Financial Literacy in Column 1 shows that clients with low financial literacy are charged an additional 9.8 basis points. Column 2 shows that when client financial literacy is low, advisors charge a premium of around 4.8 basis points to SRI clients. Column 3 shows a coefficient that is statistically zero for SRI Mandate when client financial literacy is high.



**Figure 8: Average fee charged by investment mandate and financial literacy**

*Notes: The first and second bar show the average fee charged to SRI / conventional investment clients with low financial literacy, respectively. The third and fourth bar show the average fee charged to clients with unknown financial literacy who give an SRI-/conventional mandate, respectively. The fifth and sixth bar show the average fee charged to SRI / conventional investment clients with high financial literacy, respectively. The whiskers represent +/- one standard error of the mean adjusted fee.*

### 4.3.3 SRI mandates require less time and effort in a fund selection setting

**Result 6:** *European financial advisors spend less time and exert less effort when selecting funds for SRI clients.*

**Support:** Our experimental design rules out effort, skill, and cost differences as drivers of the premium charged to sustainable clients in this setting. Nevertheless, it is interesting to explore whether any differences in time and effort exist by mandate. Table 8 shows that the European advisors in our sample spend significantly less time and click significantly less through fund-level information when selecting funds for sustainable clients. Specifically, the clicking behavior suggests that advisors focus almost exclusively on ESG ratings for SRI clients but consider a much broader set of fund-level information for conventional

**Table 7: Fees charged by client financial literacy**

Dependent Variable:	(1)	(2)	(3)
Financial literacy:	Low & High	Low	High
SRI Mandate	0.018 (0.026)	0.048** (0.021)	-0.007 (0.019)
High Financial Literacy	-0.098*** (0.027)		
Female	-0.005 (0.033)	0.017 (0.020)	-0.025 (0.023)
High Age	-0.013 (0.033)	0.013 (0.023)	-0.055** (0.025)
High Income	-0.025 (0.035)	-0.015 (0.021)	-0.065*** (0.024)
$\alpha$	1.933*** (0.046)	1.981*** (0.034)	2.037*** (0.045)
Advisor FE	Yes	Yes	Yes
Round FE	Yes	Yes	Yes
Observations	280	140	140
Uncensored Observations	279	140	139
Log Likelihood	25.64	109.8	112.6

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1, 2, and 3 show the coefficient estimates of Tobit regressions. All regressions have the fee (in percent) charged by an advisor to a client as the dependent variable. We run the regressions separately for client subgroups by financial literacy, as shown to advisors. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. High Financial Literacy is equal to 1 if a client's financial literacy was reported to be high to advisors and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between €60,000 and €79,999, 0 if a client has a gross annual income between €40,000 and €59,999.*

investment mandates. This makes the premium charged to SRI clients even more noteworthy and supports the notion that the premium can be interpreted as extraction of additional profits from clients' sustainable investment preferences.

**Table 8: European advisors exert less effort for SRI clients**

Dependent Variable:	(1)	(2)	(3)	(4)
	Log(Time)		Log(Clicks)	
SRI Mandate	-0.202*** (0.068)	-0.263*** (0.060)	-0.289*** (0.068)	-0.320*** (0.066)
Female	-0.011 (0.069)	0.026 (0.053)	-0.043 (0.067)	-0.018 (0.064)
High Age	-0.158** (0.070)	-0.038 (0.051)	-0.138 (0.072)	-0.080 (0.064)
High Income	0.054 (0.075)	0.020 (0.059)	0.021 (0.063)	0.007 (0.063)
$\alpha$	3.725*** (0.096)	4.554*** (0.101)	2.614*** (0.082)	3.056*** (0.101)
Advisor FE	Yes	Yes	Yes	Yes
Round FE	No	Yes	No	Yes
Observations	420	420	420	420
Adjusted $R^2$	0.45	0.70	0.51	0.59

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. All columns show the coefficient estimates of OLS regressions. The dependent variable in columns 1 and 2 is the logarithm of time in seconds that advisors take to create a portfolio for a client (Obtained from metadata). The dependent variable in columns 3 and 4 is the logarithm of the number of clicks that advisors take to create a portfolio for a client (Obtained from metadata). SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between €60,000 and €79,999, 0 if a client has a gross annual income between €40,000 and €59,999.*

#### 4.3.4 SRI clients are more likely to pay for advice

**Result 7:** *Sustainable investors in Europe are more likely to pay for advice, even when they are asked to pay a premium.*

**Support:** To test whether clients' SRI preferences affect their propensity to pay for financial advice, we run two probit regressions with a binary indicator for whether a

client took the advice as the dependent variable. We report the marginal effects in Table 9. The results show that SRI clients are around 31 percentage points more likely to pay for advice. As in the first experiment, the fee that is charged does not have explanatory power on the propensity to take advice.

**Table 9: SRI clients are more likely to pay for advice**

Dependent Variable:	(1)	(2)
	Was the advice taken?	
SRI Mandate	0.311*** (0.221)	0.316*** (0.230)
High Financial Literacy		-0.080 (0.262)
Fee		-0.026 (0.128)
Female		0.070 (0.229)
High Age		0.042 (0.229)
High Income		-0.102 (0.227)
$\alpha$	0.086 (0.147)	0.145 (0.371)
Observations	157	157
Pseudo- $R^2$	0.16	0.20

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors in brackets. Columns 1 and 2 show the marginal effects of probit regressions, where the dependent variable is 1 if a client took the advice and 0 otherwise. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. High Literacy is equal to 1 if a client answered all financial literacy questions correctly and 0 if a client has answered one or more financial literacy questions incorrectly. Fee is the fee (in %) charged by the advisor. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between €60,000 and €79,999, 0 if a client has a gross annual income between €40,000 and €59,999.*

## 4.4 Interim conclusion

Our results show that European financial advisors charge SRI clients a premium in a fund selection setting while spending less time and exerting less effort. Financial advisors do not price discriminate against SRI clients who signal high financial literacy, but against SRI clients who cannot signal high financial literacy. Educating consumers may therefore be an effective policy intervention to counteract premiums charged because of SRI mandates. We discuss policy interventions in more detail in the next section.

## 5 Conclusion

Despite the increasing popularity of sustainable investment mandates and the regulatory requirements for financial institutions to elicit clients' sustainability preferences, the question about discriminatory pricing in this context has remained unanswered. This is concerning considering the global surge in SRI investments and the potential impact on fees paid to advisors. To address this gap, we conducted two lab-in-the-field experiments with financial advisors, controlling for various factors that could explain fee differences. Our consistent findings reveal that advisors charge a premium to clients who express sustainable investment preferences. Importantly, our experimental design rules out effort, skill, and cost differences as drivers of this fee disparity. In fact, we even observed that advisors spend less time and exert less effort for SRI mandates, suggesting that they rely on a narrower information set.

Interestingly, when clients can signal high financial literacy, the premium disappears. However, SRI clients without the ability to signal high financial literacy bear the burden of higher fees. It is noteworthy at this point that client financial literacy is available to financial advisors in the European Union, as the elicitation of client sophistication in financial matters is mandated by the MiFID II directive. However, in combination with the requirement to elicit sustainability preferences, this may be detrimental to clients. Charging higher fees to clients with sustainability preferences and low financial literacy is a form of discriminatory pricing that raises concerns, as it can negatively impact consumer

welfare and the long-term appeal of sustainable investing.

To derive policy implications from our results, we conducted a survey with regulators (see Section 1 for more detail on the regulators sample). After presenting them with our findings, a significant majority of the regulators (81%) believes that our results warranted attention from policymakers (see Table A12). We asked regulators to name suitable policy interventions. Two research assistants independently categorized the responses. The most frequently mentioned policy intervention was transparency (30%), followed by standardized fees (25%) and consumer education (17%).

Increased transparency in fee compositions have already been shown to reduce price discrimination. For example, [Badoer et al. \(2020\)](#) show that the implementation of disclosure requirements aimed at enhancing the transparency of indirect fees and facilitating the comparison of fund expenses lead to a reduction in the success of price discrimination strategies.

Signaling high financial literacy can also serve as a remedy for pricing differences, highlighting the importance of enhancing consumer education efforts. While the impact of consumer education interventions on financial literacy has shown mixed results in previous studies ([Fernandes, Lynch Jr, & Netemeyer, 2014](#)), recent research has reported more effective programs ([Kaiser, Lusardi, Menkhoff, & Urban, 2022](#)). Future research should focus on developing and testing field interventions based on promising consumer education initiatives to address and mitigate discriminatory pricing of sustainable preferences.

## References

- Alevy, J. E., Haigh, M. S., & List, J. A. (2007). Information cascades: Evidence from a field experiment with financial market professionals. *The Journal of Finance*, *62*(1), 151–180.
- Anderson, A., & Robinson, D. T. (2022). Financial literacy in the age of green investment. *Review of Finance*, *26*(6), 1551–1584.
- Aragon, G. O., Jiang, Y., Joenväärä, J., & Tiu, C. I. (2022). Responsible investing: costs and benefits for university endowment funds. *Available at SSRN 3446252*.
- Avramov, D., Cheng, S., Lioui, A., & Tarelli, A. (2022). Sustainable investing with esg rating uncertainty. *Journal of Financial Economics*, *145*(2), 642–664.
- Badoer, D. C., Costello, C. P., & James, C. M. (2020). I can see clearly now: The impact of disclosure requirements on 401 (k) fees. *Journal of Financial Economics*, *136*(2), 471–489.
- Baker, M., Egan, M. L., & Sarkar, S. K. (2022). *How do investors value esg?* (Tech. Rep.). National Bureau of Economic Research.
- Barber, B. M., Morse, A., & Yasuda, A. (2021). Impact investing. *Journal of Financial Economics*, *139*(1), 162–185.
- Bauer, R., Ruof, T., & Smeets, P. (2021). Get real! individuals prefer more sustainable investments. *The Review of Financial Studies*, *34*(8), 3976–4043.
- Benson, K. L., & Humphrey, J. E. (2008). Socially responsible investment funds: Investor reaction to current and past returns. *Journal of Banking & Finance*, *32*(9), 1850–1859.
- Berg, F., Koelbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of esg ratings. *Review of Finance*, *forthcoming*.
- Berk, J., & van Binsbergen, J. H. (2021). The impact of impact investing. *Stanford University Graduate School of Business Research Paper*.
- Białkowski, J., & Starks, L. (2016). SRI funds: Investor demand, exogenous shocks and esg profiles. *Working paper*.
- Bucher-Koenen, T., Hackethal, A., Koenen, J., & Laudenbach, C. (2021). Gender differ-



- ences in financial advice. *SAFE Working Paper No. 309*.
- Cao, J., Titman, S., Zhan, X., & Zhang, W. (2020). *ESG preference, institutional trading, and stock return patterns* (Tech. Rep.). National Bureau of Economic Research.
- Carlin, B. I. (2009). Strategic price complexity in retail financial markets. *Journal of Financial Economics*, *91*(3), 278–287.
- Ceccarelli, M., Ramelli, S., & Wagner, A. F. (2023). Low-carbon mutual funds. *Review of Finance*, *forthcoming*.
- Chalmers, J., & Reuter, J. (2020). Is conflicted investment advice better than no advice? *Journal of Financial Economics*, *138*(2), 366–387.
- Choi, J. J., Laibson, D., & Madrian, B. C. (2010). Why does the law of one price fail? an experiment on index mutual funds. *The Review of Financial Studies*, *23*(4), 1405–1432.
- DellaVigna, S., Pope, D., & Vivaldi, E. (2019). Predict science to improve science. *Science*, *366*(6464), 428–429.
- Duffie, D., Gârleanu, N., & Pedersen, L. H. (2005). Over-the-counter markets. *Econometrica*, *73*(6), 1815–1847.
- Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? international evidence. *Journal of financial economics*, *131*(3), 693–714.
- Egan, M., Matvos, G., & Seru, A. (2019). The market for financial adviser misconduct. *Journal of Political Economy*, *127*(1), 233–295.
- ESMA. (2019). *Esma’s technical advice to the european commission on integrating sustainability risks and factors in mifid ii (esma35-43-1737, 30 april 2019)* (Tech. Rep.). European Securities and Markets Authority. Retrieved from [https://www.esma.europa.eu/sites/default/files/library/esma35-43-1737\\_final\\_report\\_on\\_integrating\\_sustainability\\_risks\\_and\\_factors\\_in\\_the\\_mifid\\_ii.pdf](https://www.esma.europa.eu/sites/default/files/library/esma35-43-1737_final_report_on_integrating_sustainability_risks_and_factors_in_the_mifid_ii.pdf)
- Fernandes, D., Lynch Jr, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, *60*(8), 1861–

1883.

- Foerster, S., Linnainmaa, J. T., Melzer, B. T., & Previtro, A. (2017). Retail financial advice: does one size fit all? *The Journal of Finance*, *72*(4), 1441–1482.
- Gennaioli, N., Shleifer, A., & Vishny, R. (2015). Money doctors. *The Journal of Finance*, *70*(1), 91–114.
- Gibson, R., Glossner, S., Krueger, P., Matos, P., Steffen, T., et al. (2020). *Responsible institutional investing around the world* (Tech. Rep.). Swiss Finance Institute.
- Gil-Bazo, J., Ruiz-Verdú, P., & Santos, A. A. (2010). The performance of socially responsible mutual funds: The role of fees and management companies. *Journal of Business Ethics*, *94*(2), 243–263.
- Gneezy, U., & Imas, A. (2017). Lab in the field: Measuring preferences in the wild. In *Handbook of economic field experiments* (Vol. 1, pp. 439–464). Elsevier.
- Gollier, C., & Pouget, S. (2022). Investment strategies and corporate behaviour with socially responsible investors: A theory of active ownership. *Economica*, *89*(356), 997–1023.
- Haigh, M. S., & List, J. A. (2005). Do professional traders exhibit myopic loss aversion? an experimental analysis. *The Journal of Finance*, *60*(1), 523–534.
- Harrison, G. W., & List, J. A. (2004). Field experiments. *Journal of Economic Literature*, *42*(4), 1009–1055.
- Hartzmark, S. M., & Shue, K. (2023). Counterproductive impact investing: The impact elasticity of brown and green firms. *Available at SSRN 4359282*.
- Hartzmark, S. M., & Sussman, A. B. (2019). Do investors value sustainability? a natural experiment examining ranking and fund flows. *The Journal of Finance*, *74*(6), 2789–2837.
- Hau, H., Hoffmann, P., Langfield, S., & Timmer, Y. (2021). Discriminatory pricing of over-the-counter derivatives. *Management Science*, *67*(11), 6660–6677.
- Heeb, F., Kölbel, J. F., Paetzold, F., & Zeisberger, S. (2022). Do investors care about impact? *The Review of Financial Studies*, *forthcoming*.
- Heinkel, R., Kraus, A., & Zechner, J. (2001). The effect of green investment on corporate

- behavior. *Journal of financial and quantitative analysis*, 36(4), 431–449.
- Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of Financial Economics*, 93(1), 15–36.
- Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2022). Financial education affects financial knowledge and downstream behaviors. *Journal of Financial Economics*, 145(2), 255–272.
- Karlan, D. S. (2005). Using experimental economics to measure social capital and predict financial decisions. *American Economic Review*, 95(5), 1688–1699.
- Kaustia, M., Alho, E., & Puttonen, V. (2008). How much does expertise reduce behavioral biases? the case of anchoring effects in stock return estimates. *Financial Management*, 37(3), 391–412.
- Kirchler, M., Lindner, F., & Weitzel, U. (2018). Rankings and risk-taking in the finance industry. *The Journal of Finance*, 73(5), 2271–2302.
- Köbel, J. F., Heeb, F., Paetzold, F., & Busch, T. (2020). Can sustainable investing save the world? reviewing the mechanisms of investor impact. *Organization & Environment*, 33(4), 554–574.
- Krueger, P., Sautner, Z., & Starks, L. T. (2020). The importance of climate risks for institutional investors. *The Review of Financial Studies*, 33(3), 1067–1111.
- Levitt, S. D., & List, J. A. (2009). Field experiments in economics: The past, the present, and the future. *European Economic Review*, 53(1), 1–18.
- Linnainmaa, J. T., Melzer, B. T., & Previtro, A. (2021). The misguided beliefs of financial advisors. *The Journal of Finance*, 76(2), 587–621.
- List, J. A., & Gallet, C. A. (2001). What experimental protocol influence disparities between actual and hypothetical stated values? *Environmental and Resource Economics*, 20(3), 241–254.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American economic review*, 98(2), 413–17.
- Lusardi, A., & Mitchell, O. S. (2011). *Financial literacy and planning: Implications for retirement wellbeing* (Tech. Rep.). National Bureau of Economic Research.

- Pástor, L., Stambaugh, R. F., & Taylor, L. A. (2022). Dissecting green returns. *Journal of Financial Economics*, *146*(2), 403–424.
- Pedersen, L. H., Fitzgibbons, S., & Pomorski, L. (2021). Responsible investing: The esg-efficient frontier. *Journal of Financial Economics*, *142*(2), 572–597.
- Raghunandan, A., & Rajgopal, S. (2022). Do esg funds make stakeholder-friendly investments? *Review of Accounting Studies*, 1–42.
- Riedl, A., & Smeets, P. (2017). Why do investors hold socially responsible mutual funds? *The Journal of Finance*, *72*(6), 2505–2550.
- Roth, B., & Voskort, A. (2014). Stereotypes and false consensus: How financial professionals predict risk preferences. *Journal of Economic Behavior & Organization*, *107*, 553–565.
- Roussanov, N., Ruan, H., & Wei, Y. (2021). Marketing mutual funds. *The Review of Financial Studies*, *34*(6), 3045–3094.
- Shanker, H. (2019). Social preferences of investors and sustainable investing. *Working paper*.
- Tricks, H. (2022). A broken system needs urgent repairs. *The Economist*. Retrieved from <https://www.economist.com/special-report/2022/07/21/a-broken-system-needs-urgent-repairs>
- Weitzel, U., Huber, C., Huber, J., Kirchler, M., Lindner, F., & Rose, J. (2020). Bubbles and financial professionals. *The Review of Financial Studies*, *33*(6), 2659–2696.
- Wursthorn, M. (2021). Tidal wave of esg funds brings profit to wall street. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/tidal-wave-of-esg-funds-brings-profit-to-wall-street-11615887004>

## A Appendix

**Table A1: Information ranked to be most important by participants**

Information	Average Rating (1-22)	Importance Ranking
Earnings per share (last year)	9.38	1
Price chart (last 5 years)	9.71	2
Free cash flow (last year)	9.71	2
Dividends (expected next year)	9.86	4
Industry	10.10	5
Price / book ratio	10.10	5
Price / Earnings Ratio (last year's earnings)	10.19	5
Volatility (last year)	10.48	6
Dividends (last year)	10.67	7
Annual Profit (last year)	10.95	8
Revenue Growth (last 3 years)	11.33	9
Earnings per share (expected next year)	11.38	10
Market Capitalization	11.57	11
Risk/return ratio, e.g., Sharpe ratio (last year)	11.76	12
Annual Revenue (last year)	12.14	13
Trade volume	12.48	14
Average price (last year)	12.52	15
Average price (expected by analysts next year)	12.71	16
Price range (last year)	13.24	17
Previous day's trading volume	13.71	18
Previous year's trading volume	14.05	19
Beta (last year)	14.95	20

**Table A2: Advisors create more socially responsible portfolios for SRI clients**

	(1)	(2)	(3)	(4)
Dependent Variable:	United Nations GC	MSCI ESG (Letter Coded)	MSCI ESG (Color Coded)	Overall ESG Rating
SRI Mandate	4.266*** (0.814)	1.388*** (0.297)	1.351*** (0.342)	2.827*** (0.501)
$\alpha$	22.967*** (0.407)	60.989*** (0.148)	25.175*** (0.171)	41.978*** (0.250)
Advisor FE	Yes	Yes	Yes	Yes
Observations	1,380	1,380	1,380	1,380
Adjusted $R^2$	0.59	0.55	0.50	0.62

Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. All columns show the coefficient estimates of OLS regressions. The dependent variables in column 1, 2, 3, and 4 are defined in equation 3, 4, 5, and 6, respectively. SRI Mandate is equal to 1 if a client gave a mandate for SRI and 0 otherwise.

**Table A3: Summary statistics advisors study 1**

	Mean	Median	SD	N
Age	43.51	39.50	11.00	345
Female	0.45	0.00	0.50	345
Experience	11.16	10.00	6.42	345
Annual Income	110,637	105,000	54,071.53	345

Notes: Age was given in brackets (18–24, 25–34, 35–44, 45–54, 55–64, 65 and older), which we converted to rounded midpoints per bracket (21, 29.5, 39.5, 49.5, 59.5, 65, respectively). Female is a categorical variable (1 = female, else 0) for the gender of participants. Experience was given in years, where “Less than 1 year” was re-coded to 1 and “More than 20 Years” was re-coded to 20. Annual Income (Gross in \$) was given in brackets (under 20,000, 20,000–29,999, 30,000–39,999, 40,000–49,999, 50,000–59,999, 60,000–69,999, 70,000–79,999, 80,000–89,999, 90,000–99,999, 100,000–109,999, 110,000–119,999, 120,000–129,999, 130,000–139,999, 140,000–149,999, 150,000–199,999, 200,000 or higher), which we converted to rounded midpoints per bracket (20,000; 24,999.5; 34,999.5; 44,999.5; 54,999.5; 64,999.5; 74,999.5; 84,999.5; 94,999.5; 104,999.5; 114,999.5; 124,999.5; 134,999.5; 144,999.5; 174,999.5; 200,000; respectively).

**Table A4: Summary statistics advisors study 1 (REDUCED sample)**

	Mean	Median	SD	N
Age	43.86	39.50	11.01	327
Female	0.46	0.00	0.50	327
Experience	11.18	10.00	6.47	327
Annual Income	110,198	105,000	54,337.93	327

*Notes: Age was given in brackets (18-24, 25-34, 35-44, 45-54, 55-64, 65 and older), which we converted to rounded midpoints per bracket (21, 29.5, 39.5, 49.5, 59.5, 65, respectively). Female is a categorical variable (1 = female, else 0) for the gender of participants. Experience was given in years, where “Less than 1 year” was re-coded to 1 and “More than 20 Years” was re-coded to 20. Annual Income (Gross in \$) was given in brackets (under 20,000, 20,000-29,999, 30,000-39,999, 40,000-49,999, 50,000-59,999, 60,000-69,999, 70,000-79,999, 80,000-89,999, 90,000-99,999, 100,000-109,999, 110,000-119,999, 120,000-129,999, 130,000-139,999, 140,000-149,999, 150,000-199,999, 200,000 or higher), which we converted to rounded midpoints per bracket (20,000; 24,999.5; 34,999.5; 44,999.5; 54,999.5; 64,999.5; 74,999.5; 84,999.5; 94,999.5; 104,999.5; 114,999.5; 124,999.5; 134,999.5; 144,999.5; 174,999.5; 200,000; respectively).*

**Table A5: Advisors create more socially responsible portfolios for SRI clients (REDUCED sample)**

	(1) United Nations Global Compact	(2) MSCI (Letter Coded)	(3) MSCI (Color Coded)	(4) Overall ESG Rating
SRI Mandate	4.500*** (0.856)	1.465*** (0.312)	1.425*** (0.360)	2.983*** (0.528)
$\alpha$	22.850*** (0.428)	60.951*** (0.156)	25.137*** (0.180)	41.900*** (0.264)
Advisor FE	Yes	Yes	Yes	Yes
Observations	1,308	1,308	1,308	1,308
Adjusted R2	0.59	0.55	0.50	0.62

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. All columns show the coefficient estimates of OLS regressions. The dependent variables in column 1, 2, 3, and 4 are defined in equation 3, 4, 5, and 6, respectively. SRI Mandate is equal to 1 if a client gave a mandate for SRI and 0 otherwise.*

**Table A6: Advisors charge higher fees to SRI clients (REDUCED sample)**

Dependent Variable:	(1)	(2)
	Fee (in%)	
SRI Mandate	0.056*** (0.018)	0.055*** (0.018)
Female		-0.030** (0.018)
High Age		-0.006 (0.022)
High Income		0.018 (0.021)
$\alpha$	1.972*** (0.016)	1.969*** (0.034)
Advisor FE	Yes	Yes
Round FE	No	Yes
Observations	1,308	1,308
Uncensored Observations	1,265	1,265
Log Likelihood	-363.7	-357.1

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1 and 2 show the coefficient estimates of Tobit regressions. Both regressions have the fee (in percent) charged by an advisor to a client as the dependent variable. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*



**Table A7: Fee premium to SRI clients (REDUCED sample)**

Dependent Variable:	(1) Probit Premium charged	(2) Tobit Fee (in %)
SRI Mandate	0.071** (0.090)	0.472*** (0.027)
Female	0.005 (0.036)	-0.078 (0.043)
High Age	-0.008 (0.073)	0.055 (0.040)
High Income	0.036 (0.075)	0.010 (0.032)
$\alpha$	-0.696*** (0.120)	1.922*** (0.139)
Advisor FE	No	Yes
Round FE	Yes	Yes
Observations	1,308	480
Uncensored Observations		470
Pseudo- $R^2$	0.01	
Log Likelihood		-71.51

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Column 1 shows the marginal effects of a Probit regression. We form pairs of clients, who have the same gender and the same advisor, but who differ in whether they give an SRI mandate or a conventional investment mandate. The dependent variable is a binary indicator that is equal to 1, if a client was charged a higher fee than the other client in this pair and 0 otherwise. Column 2 shows the coefficient estimates of a Tobit regression on the subset of client pairs, among which the SRI client was charged a higher fee. The dependent variable is the fee (in percent) charged by an advisor to a client. SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

**Table A8: Advisors do not exert more effort for SRI clients (REDUCED sample)**

Dependent Variable	(1)	(2)	(3)	(4)
	Log(Time)		Log(Clicks+1)	
SRI Mandate	0.042 (0.059)	0.042 (0.046)	0.029 (0.046)	0.025 (0.041)
Female	0.120** (0.060)	0.075 (0.049)	0.062 (0.045)	0.039 (0.039)
High Age	-0.059 (0.066)	0.026 (0.056)	-0.088 (0.049)	-0.033 (0.043)
High Income	0.058 (0.074)	0.054 (0.056)	-0.008 (0.054)	-0.018 (0.048)
$\alpha$	1.307*** (0.125)	2.132*** (0.057)	-0.022 (0.036)	0.466*** (0.054)
Advisor FE	Yes	Yes	Yes	Yes
Round FE	No	Yes	No	Yes
Observations	1,308	1,308	1,308	1,308
Adjusted $R^2$	0.62	0.76	0.79	0.83

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. All columns show the coefficient estimates of OLS regressions. The dependent variable in columns 1 and 2 is the logarithm of time in seconds that advisors take to create a portfolio for a client (Obtained from metadata). The dependent variable in columns 3 and 4 is the logarithm of the number of clicks (+1) that advisors take to create a portfolio for a client (Obtained from metadata). SRI Mandate is equal to 1 if a client gives a mandate for SRI and 0 otherwise. Female is equal to 1 if a client is female and 0 if a client is male. High Age is equal to 1 if a client is between 45 and 54 years old, 0 if a client is between 35 and 44 years old. High Income is equal to 1 if a client has a gross annual income between \$60,000 and \$79,999, 0 if a client has a gross annual income between \$40,000 and \$59,999.*

**Table A9: Summary statistics advisors study 2**

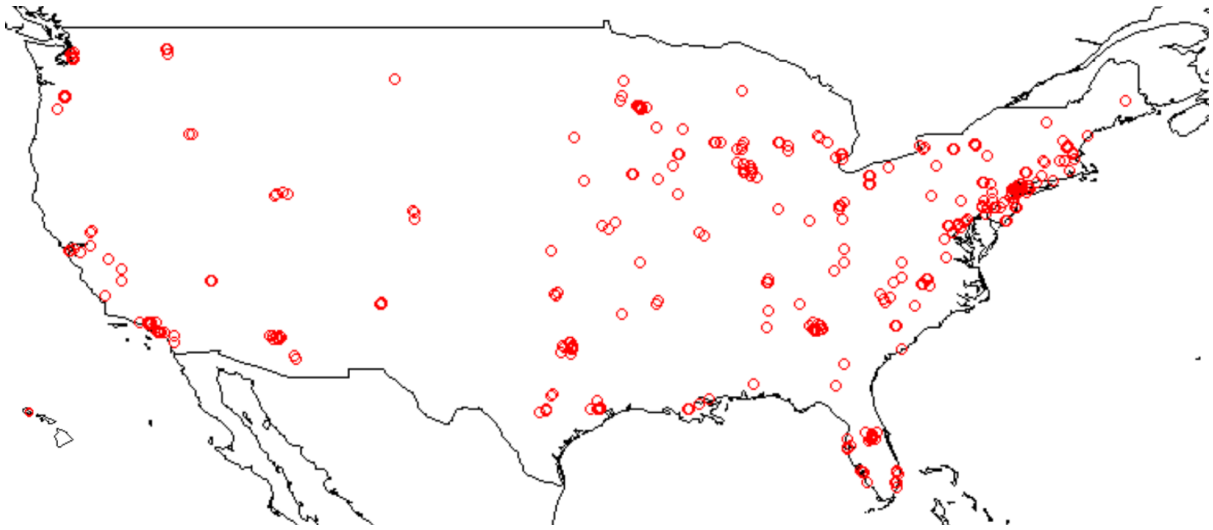
	Mean	Median	SD	N
Age	42.79	39.50	9.44	70
Female	0.04	0.00	0.20	70
Experience	14.81	16.00	5.68	70
Annual Income	121,285	115,000	503,08.46	70

*Notes: Age was given in brackets (18–24, 25–34, 35–44, 45–54, 55–64, 65 and older), which we converted to rounded midpoints per bracket (21, 29.5, 39.5, 49.5, 59.5, 65, respectively). Female is a categorical variable (1 = female, else 0) for the gender of participants. Experience was given in years, where “Less than 1 year” was re-coded to 1 and “More than 20 Years” was re-coded to 20. Annual Income (Gross in EUR) was given in brackets (under 20,000, 20,000–29,999, 30,000–39,999, 40,000–49,999, 50,000–59,999, 60,000–69,999, 70,000–79,999, 80,000–89,999, 90,000–99,999, 100,000–109,999, 110,000–119,999, 120,000–129,999, 130,000–139,999, 140,000–149,999, 150,000–199,999, 200,000 or higher), which we converted to rounded midpoints per bracket (20,000; 24,999.5; 34,999.5; 44,999.5; 54,999.5; 64,999.5; 74,999.5; 84,999.5; 94,999.5; 104,999.5; 114,999.5; 124,999.5; 134,999.5; 144,999.5; 174,999.5; 200,000; respectively).*

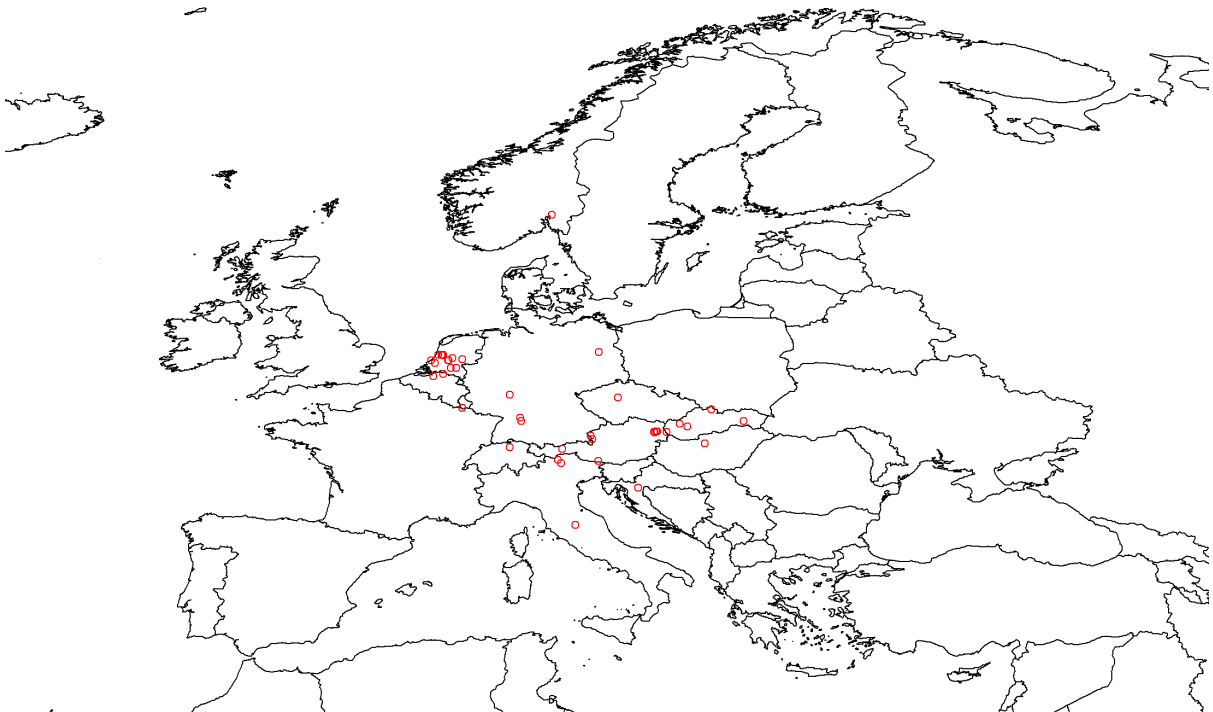
**Table A10: Advisors select more socially responsible funds for SRI clients**

	(1)	(2)
Dependent Variable:	Number of sustainability leaves	
SRI Mandate	2.329***	2.366***
	(0.180)	(0.143)
$\alpha$	2.898***	2.677***
	(0.127)	(0.552)
Advisor FE	No	Yes
Observations	420	420
Uncensored Observations	257	257
Log Likelihood	-634	-529.5

*Notes: \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Standard errors, clustered at the advisor level, in brackets. Columns 1 and 2 show coefficient estimates from two separate Tobit regressions. The dependent variables in both columns is the number of sustainability leaves of the portfolio that was selected on behalf of a client. SRI Mandate is equal to 1 if a client gave a mandate for SRI and 0 otherwise.*



**Figure A1: Location of advisors Experiment US**



**Figure A2: Location of advisors Experiment Europe**

**Table A11: Summary statistics regulators**

	Mean	Median	SD	N
Female	0.43	0.00	0.50	53
Age	38.75	39.50	11.72	53
Experience in SRI (5-pt Likert)	3.15	3.00	1.25	53
Experience in Regulation (in Years)	7.83	5.00	8.47	53
Policy Work	0.23			53
Research	0.13			53
Supervision	0.11			53
Analysis	0.15			53
Other	0.36			53

*Notes: Female is a categorical variable (1 = female, else 0) for the gender of participants. Age was given in brackets (18–24, 25–34, 35–44, 45–54, 55–64, 65 and older), which we converted to rounded midpoints per bracket (21, 29.5, 39.5, 49.5, 59.5, 65, respectively). Experience in SRI represents the response to the question: “Compared to the average colleague in your organization, how much work experience do you have with projects/topics that are related to our experiment?” (1 = “Far below average”, 2 = “Somewhat below average”, 3 = “Average”, 4 = “Somewhat above average”, 5 = “Far above average”). Experience in Regulation represents the answer given to the question: “How much work experience do you have related to regulation and/or policy work in general? (Please enter years of experience).” Policy Work, Research, Supervision, Analysis, and Other represent the current job of participants (multiple answers per participant are possible).*

**Table A12: Policy implications**

	Share of Regulators
Do you think that the results from our research study require attention from regulators?	0.81
What do you think would be a suitable policy intervention?	
Transparency	0.30
Standardized Fees	0.25
Consumer Education	0.17
Other	0.21

*Notes: The question “Do you think that the results from our research study require attention from regulators?” was asked with possible responses “Yes” or “No.” The share of regulators refers to the proportion of regulators who selected “Yes.” The question “What do you think would be a suitable policy intervention?” was asked as an open question. The responses given by the regulators were coded independently by two research assistants (RAs). Disagreements between the two RAs were resolved by the researchers. Some regulators’ responses fit into multiple categories. A total of 21% of the respondents either did not believe that our research study requires attention from regulators or did not fill out the text box.*

**Table A13: Predictions by mandate**

	Higher for SRI	Higher for Conventional	No Difference	p
Fee	0.92	0.02	0.06	0.00***
Effort	0.60	0.17	0.23	0.00***

*Notes: The table shows the proportions of responses given to the questions: “Who do you believe financial advisors charged a higher fee to in the research study?” and “Who do you believe financial advisors exerted more effort for in the research study?,” respectively. The final column shows the p-values of a  $\chi^2$  goodness-of-fit test against the null-hypothesis that all responses were given equally frequently (\*\* $p < 0.05$ ; \*\*\* $p < 0.01$ ).*

## **B Internet appendix**

**B.1 Instructions advisors US Experiment**

**B.2 Instructions clients US Experiment**

**B.3 Instructions advisors European Experiment**

**B.4 Instructions clients European Experiment**

**B.5 Instructions selection survey**

**B.6 Instructions regulators survey**

## B.1 Instructions advisors study 1

Start of Block: Welcome

Welcome

- Thank you for participating in the survey. Participation will take less than 15 minutes.
- Upon full completion of the survey, you will receive a completion fee of \$2.
- In addition, depending on the decisions that you and other survey participants make, you can earn up to \$45.
- All earnings will be paid out in points that correspond to the dollar value indicated in this study.
- We will depersonalize all data and will only use them for scientific purposes.

This study adheres to the principles of economic experiments: participants are not deceived and earnings are paid out for real.

- Marten Laudi (Maastricht University)
- Prof. Dr. Paul Smeets (Maastricht University)
- Prof. Dr. Utz Weitzel (VU Amsterdam, Radboud University)

\*\*\* Please click below to start. \*\*\*

End of Block: Welcome

---

Start of Block: Informed Consent



## Informed Consent

- Before you decide whether or not take part in the study, we will give you some information. Please take time to read the information carefully.
- What does my participation involve? Participation involves you filling out the following survey, which will take around 15 Minutes. Participation is voluntary. You can decide to quit the survey at any moment.
- What happens to the data collected in this survey? We will depersonalize all data and will only use them for scientific purposes. The anonymized research data is accessible to other scientists for a period of at least 10 years. The data cannot be traced back to you.
- Ethical assessment This research study has been approved by the Maastricht University Ethical Review Committee Inner City Faculties (ERCIC).
- More information? Should you want more information on this research study, please contact [m.laudi@maastrichtuniversity.nl](mailto:m.laudi@maastrichtuniversity.nl)

I agree

I do not agree

End of Block: Informed Consent

---

Start of Block: Screener Finance

Which industry sector are you working in?

▼ Agriculture, forestry & fishing ... Transport

End of Block: Screener Finance

---

Start of Block: Screener Invest

Which of the following best describes your current job? (Please select a maximum of 2)

- account manager
- accounting/controlling
- analysis/research/valuation
- area manager
- asset liability mgmt
- compliance
- consulting in management
- consulting in processes
- corporate finance
- acquisitions
- client advisor
- customer support
- fund management
- fund placement
- general mgmt/admin
- investment advisor

- investment banking
- IT-support/mgmt
- planning, financial
- portfolio management
- private equity/banking
- product manager
- project developer
- regulation, financial
- relationship manager
- risk management
- sales
- supervision, financial
- trading/brokerage
- treasury
- wealth management
- other:

---

---

End of Block: Screener Invest

---

Start of Block: Job Function Description

Please provide a brief description of the main tasks in your job.

---

---

End of Block: Job Function Description

---

Start of Block: Instructions 1

Instructions (1/3)

- Please read the following instructions carefully. We will ask you to answer two questions about them afterwards.
- You have two chances to answer the comprehension questions correctly.
- If you fail to do so, you will not be able to complete the survey and you will not receive the completion fee of \$2.
  
- In the following, you will select a portfolio of stocks on behalf of a client.

- This client is a real person, a US citizen, who is not a financial professional.
- The portfolio has a starting value of \$1,000.
- For selecting stocks on behalf of your client, you can determine an advisory fee.

Your client has two options:

- Take your advice: Your client will pay the advisory fee to you and will see the stock portfolio that you selected in return.
- Not to take your advice: Your client will not pay the advisory fee to you and will not see the portfolio that you selected. The client will then select a portfolio of stocks for him-/herself.

End of Block: Instructions 1

---

Start of Block: Instructions 2

## Instructions (2/3)

Payment to your client:

- Your client's payment is based on the return of the portfolio over the coming 12 months.
- If they choose your portfolio, the fee you receive will be deducted from this payment.
- Your client will be paid out 12 months after the survey is completed.
- Every 10th client (randomly drawn) will be paid.

Payment to you:

- If your client decides to see the portfolio you created, you receive the advisory fee that you set.
- If your client decides not to see the portfolio you created, you receive no additional payment.
- You will be paid within two weeks after the survey is completed.
- Example 1: You set an advisory fee of  $\$e{\text{round}(e://Field/Instr\_Fee,1)}\%$ . Your client invests in your portfolio. You will be paid  $\$1,000 * \$e{\text{round}(e://Field/Instr\_Fee,1)}\% = \$e{\text{round}(e://Field/Instr\_Fee,1) * 10}$ .
- Example 2: You set an advisory fee of  $\$e{\text{round}(e://Field/Instr\_Fee,1)}\%$ . Your client does not invest in your portfolio. You will be paid \$0.

End of Block: Instructions 2

---

Start of Block: Instructions 3

### Instructions (3/3)

- In total, you will create 4 different portfolios for 4 clients.
- You will set a fee for each of these 4 clients.
- 1 out of your 4 clients (randomly selected) will be able to invest in the portfolio that you created for them.
- The fee of this selected portfolio will then be relevant for your payment.
- The selected portfolio will be bought in real life for every 10th client.
- Proof of stock transactions and earnings calculations will be communicated by the research team to you and the client (using depersonalized data). This is to ensure that all information above is transparent and credible.

End of Block: Instructions 3

---

Start of Block: Comprehension Questions

### Comprehension Quiz

You have two chances to answer both comprehension questions correctly.

If you fail to do so, you will not be able to complete the survey and you will not receive the completion fee of \$2.

-----

What is not a possible investment for your clients?

- A stock portfolio that they select themselves
  - The stock portfolio that you select on their behalf
  - A money market investment
-

Consider the following scenario. You set an advisory fee of  $\$e^{\text{round}(\text{e://Field/Quiz\_Fee}, 1)}$ %. Your client decides to take your portfolio advice. How much will you be paid?

- \$0
- $\$e^{\text{round}(\text{e://Field/Quiz\_Fee}, 1)}$
- $\$e^{\text{round}(\text{e://Field/Quiz\_Fee}, 1) * 10}$

End of Block: Comprehension Questions

---

Start of Block: Message wrong answers

Wrong Answer (Only shown if there was a mistake in the comprehension questions)

At least one of your answers was not correct. Do you want to see the instructions again or would you like to retry answering?

- See the instructions
- Answer again

End of Block: Message wrong answers

---

Start of Block: Message wrong answers 2

Wrong Answer (Only shown if there was a mistake in the comprehension questions twice → End of Survey)

At least one of the answers you gave was not correct.

End of Block: Message wrong answers 2

---

Start of Block: Client Allocations



[Advisors allocated stock portfolios and set fees on behalf of four different clients. Here, one example is shown]

### Client 1 out of 4

Please **select a portfolio** for a client with the following profile:

- **Gender:** Female
- **Age:** 35 - 44 years old
- **Gross Income:** \$60,000 - \$79,999 per year
- **Risk Profile:**
  - Conservative
  - Moderate
  - Aggressive**
- **Investor Mandate:** [More Info](#)
  - Conventional
  - Socially Responsible**

#### Client questionnaire Info

We ask clients whether they want to give you, the advisor, a mandate for socially responsible investing. We tell clients that you have access to sustainability indicators for each stock.

### Select stocks for your client:

- Please select your client's portfolio by weighting the 30 stocks of the Dow Jones below (*To increase the weight on one stock, first reduce the weight of another stock*).
- The maximum weight per stock is 25%, so the portfolio must include at least 4 stocks.
- Per default, the weights are set as in the Dow Jones Industrial Average.
- Click on a stock's name for more financial information.
- Next to each company name, you see two indicators of social responsibility:
  - MSCI ESG Score (● means laggard; ● means average; ● means leader) [More Info](#)
  - Whether the company pledged to follow the principles of the UN Global Compact (**Y if yes, N if no**) [More Info](#)

#### MSCI ESG Score

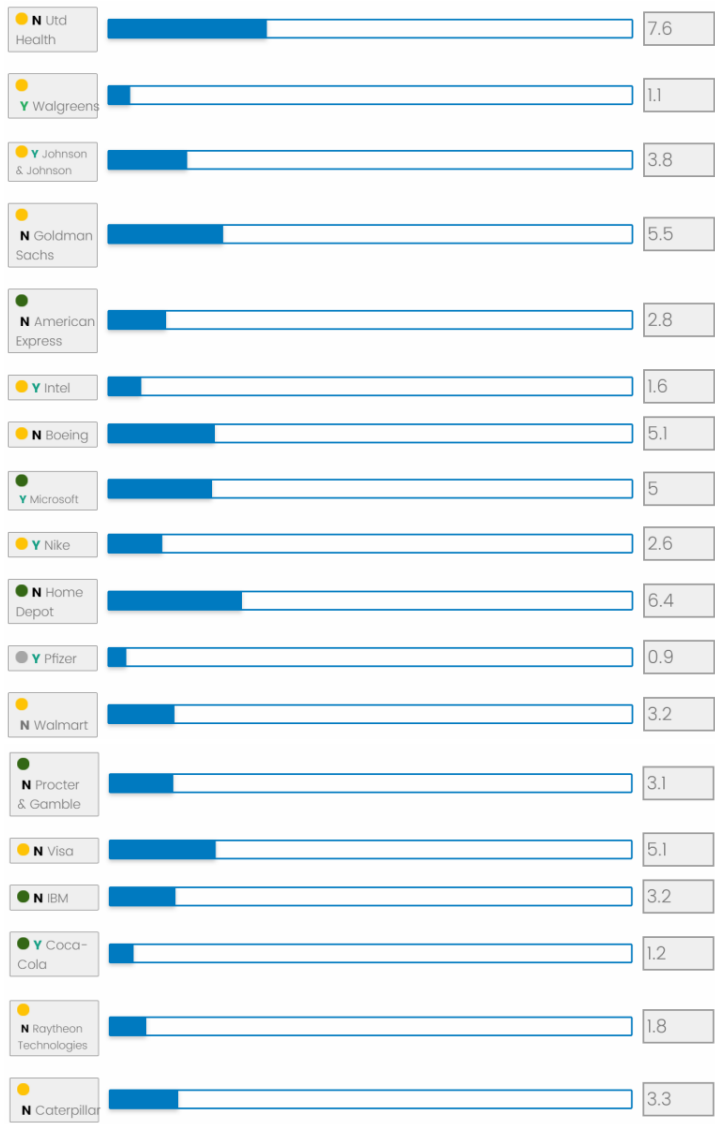
MSCI ESG rate companies on a 'AAA to CCC' scale according to their exposure to Environmental, Social, and Governance risks and how well they manage those risks relative to peers.

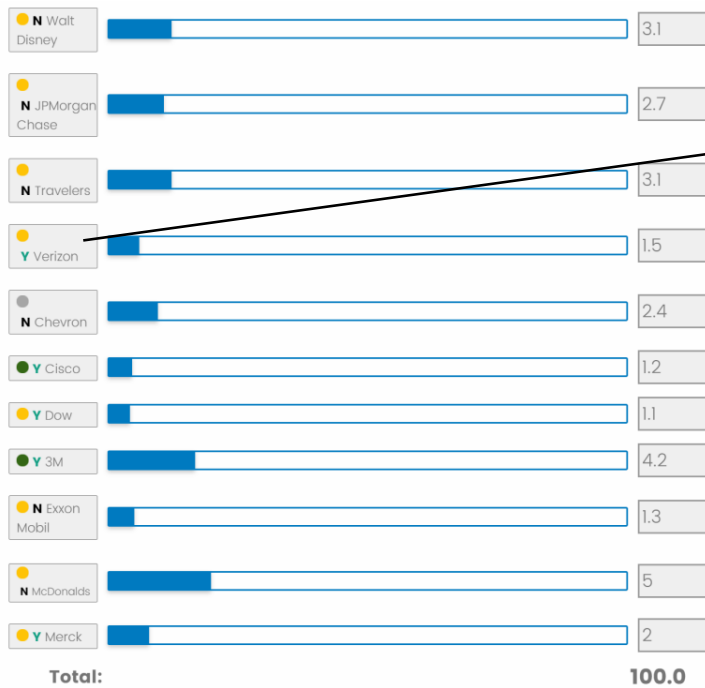
#### United Nations Global Compact



**United Nations**  
Global Compact

Participation in the UN Global Compact requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

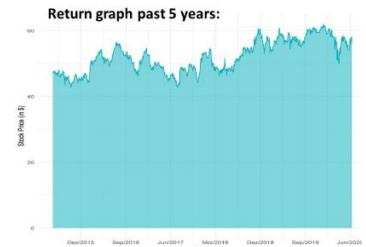




Information ✕

**Verizon Communications, Inc.**

**Earnings per Share 2019:** \$4.65  
**Free Cash Flow 2019 (in Bil):** \$17.81  
**Dividends per share (Expected 2020):** \$2.48  
**Industry:** Diversified Telecommunication Services  
**Price / Book Ratio:** 3.89  
**MSCI ESG Rating:** BBB  
**UN Global Compact Participant:** Yes



Example; Available for all stocks

**Client 1 out of 4**

Please **select a portfolio** for a client with the following profile:

- **Gender:** Female
- **Age:** 35 - 44 years old
- **Gross Income:** \$60,000 - \$79,999 per year
- **Risk Profile:**
  - Conservative
  - Moderate
  - Aggressive**
- **Investor Mandate:** More Info
  - Conventional
  - Socially Responsible**

**Advisory fee for your client as a percentage of the \$1,000 portfolio value:** Based on this fee, your client will decide whether to see your advice or to make her own investment.

0      0.4      0.8      1.2      1.6      2      2.4      2.8      3.2      3.6      4

End of Block: Client Allocations

---

Start of Block: Instructions client perceptions

### About Your Clients

- In the following, please answer a few questions about the four different clients.
- We also ask these questions to the clients.
- We will randomly select one of the questions that you answered about one client.
- If your answer matches the answer given by the client, you get an additional \$5.

End of Block: Instructions client perceptions

---

Start of Block: Client Perceptions



How much does your client enjoy to take investment decisions?

	1	2	3	4	5	6	7	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	A lot

How much investment experience does your client have?

	1	2	3	4	5	6	7	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	A lot

What yearly gross return does your client expect to make on the selected portfolio? (In %)

▼ Less than -15 ... More than 15
----------------------------------

End of Block: Client Perceptions

Start of Block: Exit Survey

Finally, last screen with questions:

What is your gender?

- Male
  - Female
  - Other
- 

What is your age?

▼ 18 - 24 years old ... 65 and older

---

What is the highest level of school you have completed or the highest degree you have received?

▼ Less than high school degree ... Professional degree (JD, MD)

---

Which industry sector are you working in?

- Agriculture, forestry & fishing
  - Automotive/Aerospace
  - Business & other services
  - Communications (e.g. Telecommunications and Postal services)
  - Construction
  - Distribution (wholesale & retail trade)
  - Education
  - Financial services (e.g. Banks and Insurance companies)
  - Health and Social work
  - Hotels & Catering
  - IT services
  - Manufacture of chemical products
  - Manufacture of food products
  - Manufacturing (other)
  - Mining & Utilities (e.g. Energy companies)
  - Public administration
  - Transport
-



Which of the following best describes your current job?

▼ account manager ... other:

---

What was your gross annual household income last year?

▼ under \$20,000 ... 200,000 or more

---

*Display This Question:*

*If Which industry sector are you working in? = Financial services (e.g. Banks and Insurance companies)*

At which type of financial institution are you currently employed? (multiple answers possible)

- Bank
  - Insurance
  - Investments
  - Pension fund
  - Financial holding
  - Credit and loan
  - Mortgage
  - Leasing
  - Hedge fund
  - other (please specify below)
- 
- 

In which state do you currently reside?

▼ Alabama ... I do not reside in the United States

---

In general, how would you describe your own political viewpoint?

▼ Very conservative ... Not sure

---

How willing are you to give to good causes without expecting anything in return?

	1	2	3	4	5	6	7	8	9	10	11	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very willing

---

How many years of experience do you have in the financial sector?

▼ Less than 1 ... More than 20

---

How would you rate your willingness to take risks...

	1: Not at all willing to take risks	2	3	4	5	6	7: Very willing to take risks
... generally in life:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... in financial matters:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Exit Survey

---

Start of Block: PLEASE VISIT URL

In about 3 weeks, you will be able to see proof of all stock transactions that we undertook to implement the portfolios. All data will be aggregated and anonymized, so that it is impossible to trace back any decision taken in the survey.

The information will be posted on this web page:

<https://feedback001.wordpress.com/>

Please write down the address of the web page if you want to visit it in 3 weeks.

Thank you very much for participating.

\*\*\* Please click below to complete the survey \*\*\*

End of Block: PLEASE VISIT URL

---

## B.2 Instructions clients study 1

Start of Block: Welcome

Welcome

- Thank you for participating in the survey. Participation will take less than 10 minutes.
- Upon full completion of the survey, you will receive a completion fee of \$2.
- In addition, you can earn up to \$150 and more, depending on your decisions in the survey and a random draw.
- All earnings will be paid out in points that correspond to the dollar value indicated in this study.
- We will depersonalize all data and will only use them for scientific purposes.

This study adheres to the principles of economic experiments: participants are not deceived and earnings are paid out for real.

- Marten Laudi (Maastricht University)
- Prof. Dr. Paul Smeets (Maastricht University)
- Prof. Dr. Utz Weitzel (VU Amsterdam, Radboud University)

\*\*\* Please click below to start. \*\*\*

End of Block: Welcome

---

Start of Block: Informed Consent

## Informed Consent

- Before you decide whether or not to take part in the study, we will give you some information. Please take time to read the information carefully.
- What does my participation involve? Participation involves you filling out the following survey, which will take around 10 minutes. Participation is voluntary. You can decide to quit the survey at any moment.
- What happens to the data collected in this survey? We will depersonalize all data and will only use them for scientific purposes. The anonymized research data is accessible to other scientists for a period of at least 10 years. The data cannot be traced back to you.
- Ethical assessment This research study has been approved by the Maastricht University Ethical Review Committee Inner City Faculties (ERCIC).
- More information? Should you want more information on this research study, please contact [m.laudi@maastrichtuniversity.nl](mailto:m.laudi@maastrichtuniversity.nl)

I agree

I do not agree

End of Block: Informed Consent

---

Start of Block: Screener

What is your gender?

Male

Female

Other

---

What is your age?

▼ 18 - 24 years old ... 65 and older

---

What was your gross combined, annual household income last year?

▼ under \$20,000 ... 200,000 or more

---

Which industry sector are you working in?

▼ Agriculture, forestry & fishing ... Transport

End of Block: Screener

---

Start of Block: Instructions 1

Instructions (1/3): Your task

- In this survey, you can choose a portfolio of stocks.
- You can select the stocks yourself or let a financial professional do this for you.
- For one out of ten participants in this survey, randomly selected, the selected stocks will be purchased in real life.
- We, the researchers conducting this study, will invest \$1,000 on behalf of each randomly selected participant.
- All randomly selected participants will be paid in one year, according to the return of the selected stock portfolio.
- On the following screen, we will explain how earnings are calculated for each randomly selected participant.
- Proof of stock transactions and earnings calculations will be communicated by the research team to the participants (using depersonalized data) after the stocks are bought and sold. This is to ensure that all information above is transparent and credible.

---

Do you want to see a preview of the stock selection screen? Depending on your decision later in the survey, either you or a financial professional (for you) will use such a screen to select a portfolio of stocks.

Yes

No

---



Display This Question:

If Do you want to see a preview of the stock selection screen? Depending on your decision later in t... = Yes

Stock selection (Illustration, not the actual decision screen)

- Please select your portfolio by weighting the 30 stocks of the Dow Jones below (To increase the weight on one stock, first reduce the weight of another stock).
- The maximum weight per stock is 25%, so the portfolio must include at least 4 stocks.
- Per default, the weights are set as in the Dow Jones Industrial Average.
- Click on a stock's name for more financial information.
- Next to each company name, you see two indicators of social responsibility:
  - MSCI ESG Score (● means laggard; ● means average; ● means leader) More Info
  - Whether the company pledged to follow the principles of the UN Global Compact (Y if yes, N if no)

**MSCI ESG Score**

MSCI ESG rate companies on a 'AAA to CCC' scale according to their exposure to Environmental, Social, and Governance risks and how well they manage those risks relative to peers.

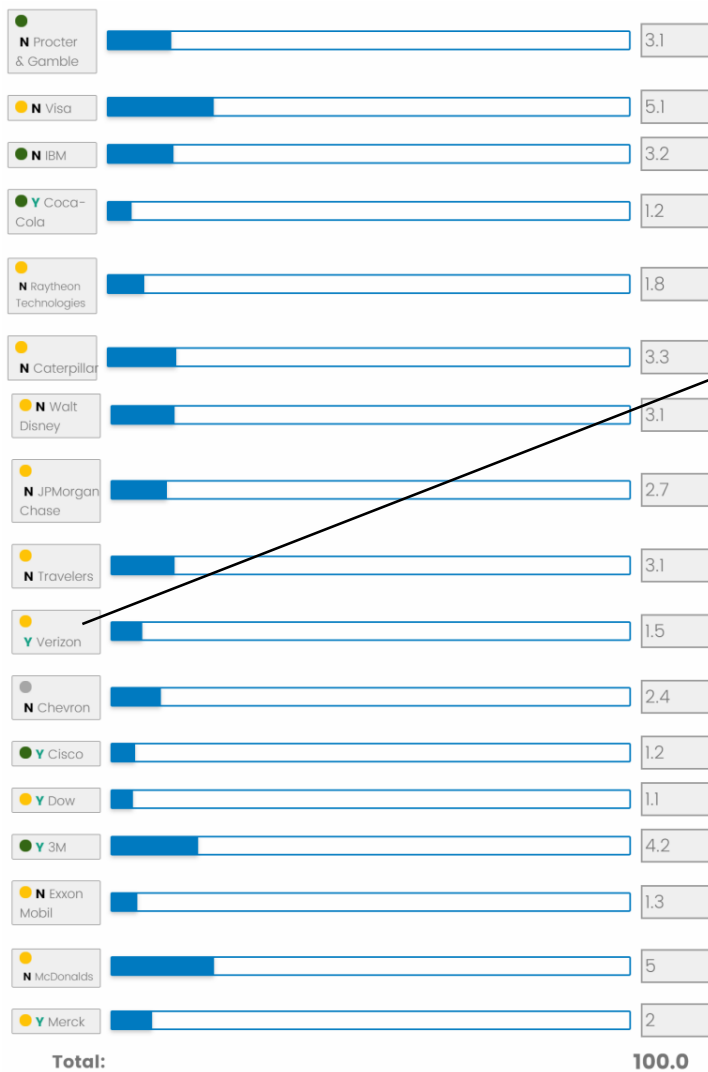
More Info

● N Utd Health		7.6
● Y Walgreens		1.1
● Y Johnson & Johnson		3.8
● N Goldman Sachs		5.5
● N American Express		2.8
● Y Intel		1.6
● N Boeing		5.1
● Y Microsoft		5
● Y Nike		2.6
● N Home Depot		6.4
● Y Pfizer		0.9
● N Walmart		3.2

**United Nations Global Compact**

United Nations Global Compact

Participation in the UN Global Compact requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

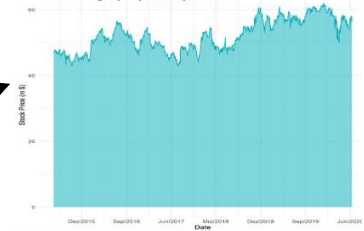


Information ✕

**Verizon Communications, Inc.**

**Earnings per Share 2019:** \$4.65  
**Free Cash Flow 2019 (in Bil):** \$17.81  
**Dividends per share (Expected 2020):** \$2.48  
**Industry:** Diversified Telecommunication Services  
**Price / Book Ratio:** 3.89  
**MSCI ESG Rating:** BBB  
**UN Global Compact Participant:** Yes

**Return graph past 5 years:**



Example; Available for all stocks

End of Block: Instructions 1

Start of Block: Instructions 2

### Instructions (2/3): Financial Advisor

- You can either select stocks yourself, or you can take professional advice.
- If you decide for professional advice, we assign a financial advisor to you, who selects the stocks for you.
- The stock selection of the advisor will be based on your profile (age, income, gender) and on your investment preferences, which you can specify later.
- For constructing this stock portfolio, your financial advisor has set an advisory fee.

### Payment to you (if randomly selected):

- You receive a base payment of \$150.
- Over the next year we will record the return of your stock portfolio (with a starting value of \$1000).
- This return will be added to (if positive) or deducted from (if negative) your base payment.
- If you choose to take the advice of the financial advisor, an advisory fee will be deducted from your payment.
- If you choose to select the stocks yourself, no advisory fee will be deducted from your payment.
- You never owe us any money. If a negative stock return and the advisory fee exceed your base payment of \$150, you simply do not receive any money from us (Except for the survey completion fee).
- If you are randomly selected, you will be paid out one year after the survey is completed. Maastricht University and VU Amsterdam guarantee that all earnings will be paid out.

### Payment to your advisor:

- If you take the advice, your advisor receives the advisory fee three weeks after this survey is completed
- If you choose to select the stock portfolio yourself, you will not receive any advice and your advisor receives no fee.

End of Block: Instructions 2

---

Start of Block: Instructions 3

### Instructions (3/3): Examples

Example 1: You invest according to your advisor's suggestion. Your advisor has set an advisory fee of  $\$e\{ \text{round}( e://Field/Instr\_Fee ,1 ) \}\%$ . After one year, the portfolio has generated a return of  $\$e\{ \text{round}( e://Field/Instr\_Ret\_Pos ,1 ) \}\%$ . If you are randomly selected, the following will be relevant for your payment:

- Your base payment of \$150.
- The advisory fee:  $\$1,000 * (\$e\{ \text{round}( e://Field/Instr\_Fee ,1 ) \}\%) = \$\$e\{ \text{round}( e://Field/Instr\_Fee , 1 ) * 10 \}$
- The return of the portfolio:  $\$1,000 * (\$e\{ \text{round}( e://Field/Instr\_Ret\_Pos ,1 ) \}\%) = \$\$e\{ \text{round}( e://Field/Instr\_Ret\_Pos ,1 ) * 10 \}$ .
- Hence, your total payout will be  $\$150 - \$\$e\{ \text{round}( e://Field/Instr\_Fee , 1 ) * 10 \} + \$\$e\{ \text{round}( e://Field/Instr\_Ret\_Pos , 1 ) * 10 \} = \$\$e\{ (15 - \text{round}( e://Field/Instr\_Fee , 1 ) + \text{round}( e://Field/Instr\_Ret\_Pos , 1 )) * 10 \}$

Example 2: You invest according to your advisor's suggestion. Your advisor has set an advisory fee of  $\$e\{ \text{round}( e://Field/Instr\_Fee ,1 ) \}\%$ . After one year, the portfolio has generated a return of  $\$e\{ \text{round}( e://Field/Instr\_Ret\_Neg ,1 ) \}\%$ . If you are randomly selected, the following will be relevant for your payment:

- Your base payment of \$150.
- The advisory fee:  $\$1,000 * (\$e\{ \text{round}( e://Field/Instr\_Fee ,1 ) \}\%) = \$\$e\{ \text{round}( e://Field/Instr\_Fee , 1 ) * 10 \}$
- The return of the portfolio:  $\$1,000 * (\$e\{ \text{round}( e://Field/Instr\_Ret\_Neg ,1 ) \}\%) = \$\$e\{ \text{round}( e://Field/Instr\_Ret\_Neg ,1 ) * 10 \}$
- Hence, your total payout will be  $\$150 - \$\$e\{ \text{round}( e://Field/Instr\_Fee , 1 ) * 10 \} + \$\$e\{ \text{round}( e://Field/Instr\_Ret\_Neg ,1 ) * 10 \} = \$\$e\{ (15 - \text{round}( e://Field/Instr\_Fee , 1 ) + \text{round}( e://Field/Instr\_Ret\_Neg ,1 )) * 10 \}$

End of Block: Instructions 3

---

Start of Block: Comprehension Questions

### Comprehension Quiz

- Please answer the questions below about the instructions on the previous screens.
  - You have two chances to answer both comprehension questions correctly.
  - If you fail to do so, you will not be able to complete the survey and you will not receive the completion fee of \$2.
- 

What is not a possible investment for you?

- A stock portfolio that your advisor selects on your behalf
  - A stock portfolio that you select yourself
  - A savings account
- 

Consider the following scenario. Your advisor set a fee of  $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1)\}\%$ . You decide to take the portfolio advice. The selected portfolio has a return of  $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Ret}, 1)\}\%$ . How much will you be paid? Remember: Your base payment is \$150.

- \$0
- $\$e\{(15 - \text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1) + \text{round}(e://\text{Field}/\text{Quiz\_Ret}, 1))\}$
- $\$e\{(15 - \text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1) + \text{round}(e://\text{Field}/\text{Quiz\_Ret}, 1)) * 10\}$

End of Block: Comprehension Questions

---

Start of Block: Wrong Answer 1

Wrong Answer (Only shown if there was a mistake in the comprehension questions)

At least one of your answers was not correct. Do you want to see the instructions again or would you like to retry answering?

- See the instructions
- Answer again

End of Block: Wrong Answer 1

---

Start of Block: Wrong Answer 2

Wrong Answer (Only shown if there was a mistake in the comprehension questions twice → End of Survey)

At least one of the answers you gave was not correct.

End of Block: Wrong Answer 2

---

Start of Block: Advisor Mandate

Advisor mandate

- Before you choose whether you like to receive advice, we have two questions.
  - These questions will be used to match you to the right financial advisor.
-

Do you want to give your advisor a mandate for socially responsible investing? For all selectable stocks, your advisor will receive two indicators on the firm's social responsibility: MSCI ESG [Clickable button for more info] and the UN Global Compact [Clickable button for more info]. Should your advisor take these into account when selecting your stock portfolio?

Yes

No

---

How would you like your investment budget to be allocated between a savings account (0% interest rate) and a stock portfolio?

Aggressive (100% in stocks)

Moderate (50% in the savings account, 50% in stocks)

Conservative (100% in the savings account)

End of Block: Advisor Mandate

---

Start of Block: Allocation Decision

Investment Decision

A financial professional put together a portfolio for a client with your profile. He or she set the following advisory fee for creating this stock portfolio.

Advisory Fee:  $\$e\{\text{//Field/Fee}\}\%$

---

Would you like to invest in the stock portfolio that your advisor constructed on your behalf?

- Yes, I will take the advice
- No, I will select stocks myself
- 

[Depending on their answer, participants are then either directly sent to the exit survey, or have to allocate their own stock portfolio]

End of Block: Allocation Decision

---

Start of Block: Exit Survey (Demographics)

Finally, last screen, please answer the following questions:

---

Which industry sector are you working in?

▼ Agriculture, forestry & fishing ... Transport

---



How knowledgeable are you in financial matters?

- Not knowledgeable
  - More or less knowledgeable
  - Knowledgeable
  - Very knowledgeable
- 

What is the highest level of school you have completed or the highest degree you have received?

▼ Less than high school degree ... Professional degree (JD, MD)

---

In which state do you currently reside?

▼ Alabama ... I do not reside in the United States

---

Have you invested before, or are you planning to invest in the future (e.g., into stocks, bonds, investment funds, real estate)?

- Yes
  - No
-



How much investment experience do you have?

	1	2	3	4	5	6	7	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	A lot

---

What yearly gross return do you expect to make on your selected stock portfolio? (In %)

▼ Less than -15 ... More than 15

End of Block: Exit Survey (Demographics)

---

Start of Block: PLEASE VISIT URL

In about 3 weeks, you will be able to see proof of all stock transactions that we undertook to implement the portfolios. All data will be aggregated and anonymized, so that it is impossible to trace back any decision taken in the survey.

The information will be posted on this web page:

<https://feedback001.wordpress.com/>

Please write down the address of the web page if you want to visit it in 3 weeks.

---

Thank you very much for participating.

\*\*\* Please click below to complete the survey \*\*\*

End of Block: PLEASE VISIT URL

## B.3 Instructions advisors study 2

Start of Block: Welcome

Welcome

- Thank you for participating in the survey, which will take less than 15 minutes.
- You can earn up to €40, depending on the decisions that you and other survey participants make.
- You can get exclusive early access to the results of this study and what it was about.
- We will depersonalize all data and will only use them for scientific purposes.

This study adheres to the principles of economic experiments: participants are not deceived and earnings are paid out for real.

- Marten Laudi (Maastricht University)
- Prof. Dr. Paul Smeets (Maastricht University)
- Prof. Dr. Utz Weitzel (VU Amsterdam, Radboud University)

\*\*\* Please click below to start. \*\*\*

End of Block: Welcome

---

Start of Block: Informed Consent

Informed Consent

- Before you decide whether or not take part in the study, we will give you some information. Please take time to read the information carefully.
- What does my participation involve? Participation involves you filling out the following survey, which will take less than 15 Minutes. Participation is voluntary. You can decide to quit the survey at any moment.
- What happens to the data collected in this survey? We will depersonalize all data and will only use them for scientific purposes. The anonymized research data is

accessible to other scientists for a period of at least 10 years. The data cannot be traced back to you.

- How do I receive my payment and early access to the results? At the end of the survey you can *optionally* provide us with your IBAN for payment transfer and *optionally* with your email for receiving the results. Your IBAN and email will both be permanently deleted from the data once we completed the payments and sent you the results.
- Ethical assessment This research study has been approved by the Maastricht University Ethical Review Committee Inner City Faculties (ERCIC).
- More information? Should you want more information on this research study, please contact [m.laudi@maastrichtuniversity.nl](mailto:m.laudi@maastrichtuniversity.nl)

I agree

I do not agree

End of Block: Informed Consent

---

Start of Block: Instructions 1

### Instructions (1/3)

- Please read the following instructions carefully. We will ask you to answer two questions about them afterwards.

### Your role:

- In the following, you take on the role of a financial advisor to a client.
- You will select a portfolio of stocks on behalf of this client.
- The client is a real person, who is not a financial professional.
- The portfolio has a starting value of €1,000.
- For selecting the stock portfolio on behalf of your client, you can determine an advisory fee.

### Your decisions are consequential

- For every 10th client (randomly drawn), the selected portfolio of €1,000 will be bought in real life (and the returns paid out).
- Proof of stock transactions and earnings calculations will be communicated by the research team to you and the client (using depersonalized data). This is to ensure that all information above is transparent and credible.

---

Do you want to see an example of the portfolio selection task? (Will be shown below)

- Yes
- No
-

Display This Question:

If Do you want to see an example of the portfolio selection task? (Will be shown below) = Yes

### Example, not the actual selection screen:

- Please select one of the portfolios below.
- All stocks in the portfolios are among the largest 200 stocks in the MSCI World, by market capitalization.
- The portfolios have numbers as identifiers. These identifiers are random and should not play a role in your selection.
- Click on a portfolio's name for more financial information.
- Next to each portfolio name, you see an indicator of social responsibility More Info

#### United Nations Global Compact

% of Portfolio invested in Companies that participate in the UN Global Compact	Descriptive Rank	Rating Icon
80 – 100%	High	
60 – 80%	Above Average	
40 – 60%	Average	
20 – 40%	Below Average	
0 – 20%	Low	

We classify a portfolio's social responsibility according to the proportion of companies in the portfolio participating in the UN Global Compact. Participation requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

- Portfolio 13 (Click for more Info)
- Portfolio 22 (Click for more Info)
- Portfolio 36 (Click for more Info)
- Portfolio 4 (Click for more Info)
- Portfolio 23 (Click for more Info)
- Portfolio 32 (Click for more Info)

#### Information

##### Portfolio 22

**Portfolio Beta:** 1.00

**Forward Dividend Yield:** 2.31%

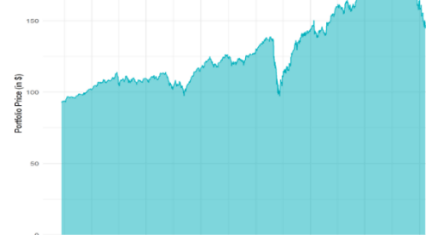
**Price / Book Value:** 11.66

**Sustainability Score:** 100 / 100

**Investment Style:**

Value	Core	Growth
27%	47%	27%

**Return graph past 5 years:**



End of Block: Instructions 1

Start of Block: Instructions 2

### Instructions (2/3)

- Once you finish this survey, the fee that you set for your client will be shown to this client.

#### Your client has two options:

- Take your advice: Your client will pay the advisory fee to you. Your client's investment budget will be invested in the stock portfolio that you selected.
- Not to take your advice: Your client will not pay the advisory fee to you and will not see the stock portfolio that you selected. The client will then select a stock portfolio for him-/herself.

End of Block: Instructions 2

---

Start of Block: Instructions 3



### Instructions (3/3)

#### Payment to your client:

- Every 10th client is randomly selected to be eligible for payment.
- These clients receive a base payment of €150.
- The return of a client's chosen portfolio (with a starting value of €1,000) is added to (if positive) or deducted from (if negative) this base payment.
- If they choose your portfolio, your fee will be deducted from this payment/return.
- If they choose to select their own portfolio, the fee will not be deducted from this payment/return.
- Your client will be paid out 12 months after the survey is completed.

#### Payment to you:

- If your client decides to take your advice, you receive the advisory fee that you set.
- If your client decides not to take your advice (and to select his/her own portfolio), you receive no payment.
- You will be paid within twelve weeks after the study is completed.
- Example 1: You set an advisory fee of  $\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee},1)\}\%$ . Your client invests in your portfolio. You will be paid  $\text{€}1,000 * \$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee},1)\}\% = \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee},1) * 10\}$ .
- Example 2: You set an advisory fee of  $\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee},1)\}\%$ . Your client decides to select his or her own portfolio. You will be paid €0.

End of Block: Instructions 3

---

Start of Block: Comprehension Questions

## Comprehension Quiz

What is not a possible investment for your client?

- The stock portfolio that you select on their behalf
  - A stock portfolio that they select themselves
  - A money market investment
- 

Consider the following scenario. After selecting a stock portfolio, you set an advisory fee of  $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1)\}\%$ . Your client decides to take your portfolio advice. How much will you be paid?

- €0
- € $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1)\}$
- € $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1) * 10\}$

End of Block: Comprehension Questions

---

Start of Block: Message wrong answers

Wrong Answer (Only shown if there was a mistake in the comprehension questions)

At least one of your answers was not correct. Do you want to see the instructions again or would you like to retry answering?

- See the instructions
- Answer again

End of Block: Message wrong answers

---

Start of Block: Message wrong answers 2

Wrong Answer (Only shown if there was a mistake in the comprehension questions twice)

At least one of your answers was not correct. Please see below for the correct answers and proceed with the survey.

---

What is not a possible investment for your clients?

Correct answer: A money market investment

---

Consider the following scenario. After selecting a stock portfolio, you set an advisory fee of  $\$e{\text{round}( e://Field/Quiz\_Fee ,1 ) }%$ . Your client decides to take your portfolio advice. How much will you be paid?

Correct answer:  $\text{€}e{\text{round}( e://Field/Quiz\_Fee , 1 ) * 10}$

End of Block: Message wrong answers 2

---

Start of Block: Start Portfolio Selection

## Start of the Portfolio Selection

- On the following 6 screens, you will select 6 different portfolios for 6 clients.
- You will be able to set a fee for each of these 6 clients.
- At the end of this survey, 1 out of your 6 clients will be randomly selected. The fee for this client will then be relevant for your payment.
- *All clients have an aggressive risk profile, which indicates that they want 100% of their experimental budget to be invested in stocks.*
- Click below to start.

End of Block: Start Portfolio Selection

---

Start of Block: Client Allocations

[Advisors allocated stock portfolios and set fees on behalf of six different clients. Here, one example is shown]

### Client 1 out of 6

Please **select a portfolio of stocks** for client 1, who has the following profile:

- **Gender:** Male
- **Age:** 45 - 54 years old
- **Gross Income:** €40,000 - €59,999 per year
- **Risk Profile:** Aggressive
- **Financial Sophistication:** [More Info](#)
  - Low
  - High
  - Not Available**
- **Investor Mandate:** [More Info](#)
  - Conventional
  - Socially Responsible**

#### Client questionnaire Info

Financial sophistication is the ability to understand and make use of a variety of financial skills, including personal financial management, budgeting, and investing. It also means comprehending certain financial principles and concepts, such as time value of money, compound interest, managing debt, and financial planning. Clients complete a validated questionnaire that has been designed to measure financial sophistication and that is frequently used in academia and also by practitioners. We report the relative performance of this client below. We report "Not Available", if the questionnaire has not been filled out.

#### Client questionnaire Info

We ask clients whether they want to give you, the advisor, a mandate for socially responsible investing. We tell clients that you have access to social responsibility scores.

**Select a portfolio of stocks for your client:**

- Please select one of the portfolios below for this client.
- All stocks in the portfolios are among the largest 200 stocks in the MSCI World, by market capitalization.
- The portfolios are given numbers as identifiers, these are random and should not play a role in your selection.
- Click on a portfolio's name for more financial information.
- Next to each portfolio name, you see an indicator of social responsibility More Info

Portfolio 16 (Click for more Info)
   
 Portfolio 27 (Click for more Info)
   
 Portfolio 34 (Click for more Info)
   
 Portfolio 19 (Click for more Info)
   
 Portfolio 33 (Click for more Info)
   
 Portfolio 5 (Click for more Info)

**United Nations Global Com...** ✕

% of Portfolio invested in Companies that participate in the UN Global Compact	Descriptive Rank	Rating Icon
80 – 100%	High	
60 – 80%	Above Average	
40 – 60%	Average	
20 – 40%	Below Average	
0 – 20%	Low	

We classify a portfolio's social responsibility according to the proportion of companies in the portfolio participating in the UN Global Compact. Participation requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

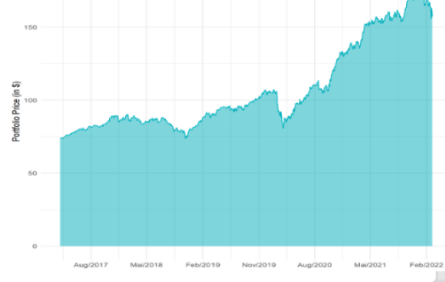
**Information** ✕

**Portfolio 27**

- Portfolio Beta:** 0.90
- Forward Dividend Yield:** 3.44%
- Price / Book Value:** 9.62
- Sustainability Score:** 100 / 100
- Investment Style:**

Value	Core	Growth
47%	27%	27%

**Return graph past 5 years:**



**Advisory fee for your client as a percentage of the €1,000 portfolio value:** Based on this fee, your client will decide whether to take your advice.

0      0.4      0.8      1.2      1.6      2      2.4      2.8      3.2      3.6      4

End of Block: Client Allocations

---

Start of Block: Exit Survey

Finally, last screen with questions:

---

Gender What is your gender?

- Male
  - Female
  - Other
- 

Age What is your age?

▼ 18 - 24 years old ... 65 and older

---

Education What is the highest level of school you have completed or the highest degree you have received?

▼ Less than high school degree ... Professional degree (JD, MD)

---

Which industry sector are you working in?

- Agriculture, forestry & fishing
  - Automotive/Aerospace
  - Business & other services
  - Communications (e.g. Telecommunications and Postal services)
  - Construction
  - Distribution (wholesale & retail trade)
  - Education
  - Financial services (e.g. Banks and Insurance companies)
  - Health and Social work
  - Hotels & Catering
  - IT services
  - Manufacture of chemical products
  - Manufacture of food products
  - Manufacturing (other)
  - Mining & Utilities (e.g. Energy companies)
  - Public administration
  - Transport
-

Which of the following best describes your current job?

- account manager
- accounting/controlling
- analysis/research/valuation
- area manager
- asset liability mgmt
- compliance
- consulting in management
- consulting in processes
- corporate finance
- acquisitions
- client advisor
- customer support
- fund management
- fund placement
- general mgmt/admin
- investment advisor
- investment banking
- IT-support/mgmt
- planning, financial



- portfolio management
- private equity/banking
- product manager
- project developer
- regulation, financial
- relationship manager
- risk management
- sales
- supervision, financial
- trading/brokerage
- treasury
- wealth management
- other:

-----  
--

-----

Please provide a brief description of the main tasks in your job.

-----  
-----

-----

Are you an independent financial advisor?

Yes

No

---

What was your gross annual household income last year?

▼ under €20,000 ... 200,000 or more

---

*Display This Question:*

*If Which industry sector are you working in? = Financial services (e.g. Banks and Insurance companies)*

At which type of financial institution are you currently employed? (multiple answers possible)

- Bank
- Insurance
- Investments
- Pension fund
- Financial holding
- Credit and loan
- Mortgage
- Leasing
- Hedge fund
- other (please specify below)

-----  
--

-----

In which country do you currently reside?

▼ Albania ... Zimbabwe

-----



In general, how would you describe your own political viewpoint?

▼ Very conservative ... Not sure

---

*Display This Question:*

*If Does your job involve socially responsible investing? = Yes*

How many years of experience do you have with socially responsible investing in your work?

▼ Less than 1 ... More than 20

End of Block: Exit Survey

---

Start of Block: PLEASE VISIT URL

Q289 In about 3 weeks, you will be able to see proof of all stock transactions that we undertook to implement the portfolios. All data will be aggregated and anonymized, so that it is impossible to trace back any decision taken in the survey. The information will be posted on this web page:

<https://feedback002.wordpress.com/>

*Please copy and save the address of the web page if you want to visit it in 3 weeks.*

---

**IMPORTANT FOR PAYMENT:**

If you want to be eligible for payment, please enter your IBAN below (optional).

Entering your IBAN is completely voluntarily and the information will only be used for payment. Your IBAN will be deleted from the raw data once we completed the payments. After this, all data will be completely de-personalized and cannot be traced back to individuals. All data will be used for academic research purposes only. If you do

not enter your IBAN or an incorrect IBAN we assume that you do not want to be eligible for any payment.

-----  
-----  
-----

IMPORTANT FOR EARLY ACCESS TO RESULTS:

If you want to receive the results of this study, please enter your email below (optional).

Entering your email is completely voluntarily and the information will only be used for sending you the results. Your email will be deleted from the raw data once we sent you the results. After this, all data will be completely de-personalized and cannot be traced back to individuals. All data will be used for academic research purposes only. If you do not enter your email or an incorrect email we assume that you do not want to receive any results.

-----  
-----  
-----

Thank you very much for participating.

\*\*\* Please click below to complete the survey \*\*\*

End of Block: PLEASE VISIT URL

---

## B.4 Instructions clients study 2

Start of Block: Welcome

Welcome

- Thank you for participating in the survey. Participation will take less than 10 minutes.
- Upon full completion of the survey, you will receive a completion fee of €2 (~£1.70).
- In addition, you can earn up to €150 (~£127.50) and more, depending on your decisions in the survey and a random draw.
- All earnings will be paid out in points that correspond to the dollar value indicated in this study.
- We will depersonalize all data and will only use them for scientific purposes.

This study adheres to the principles of economic experiments: participants are not deceived and earnings are paid out for real.

- Marten Laudi (Maastricht University)
- Prof. Dr. Paul Smeets (Maastricht University)
- Prof. Dr. Utz Weitzel (VU Amsterdam, Radboud University)

\*\*\* Please click below to start. \*\*\*

End of Block: Welcome

---

Start of Block: Informed Consent

## Informed Consent

- Before you decide whether or not to take part in the study, we will give you some information. Please take time to read the information carefully.
- What does my participation involve? Participation involves you filling out the following survey, which will take around 10 minutes. Participation is voluntary. You can decide to quit the survey at any moment.
- What happens to the data collected in this survey? We will depersonalize all data and will only use them for scientific purposes. The anonymized research data is accessible to other scientists for a period of at least 10 years. The data cannot be traced back to you.
- Ethical assessment This research study has been approved by the Maastricht University Ethical Review Committee Inner City Faculties (ERCIC).
- More information? Should you want more information on this research study, please contact [m.laudi@maastrichtuniversity.nl](mailto:m.laudi@maastrichtuniversity.nl)

I agree

I do not agree

End of Block: Informed Consent

---

Start of Block: Screener

What is your gender?

Male

Female

Other

---



What is your age?

▼ 18 - 24 years old ... 65 and older

---

What was your gross combined, annual household income last year?

▼ under €20,000 (~£17,000) ... €200,000 or more (-£170,000)

---

Which industry sector are you working in?

▼ Agriculture, forestry & fishing ... Transport

---

Suppose you had £100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- More than £102
  - Exactly £102
  - Less than £102
-

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy...

- More than today
  - Exactly the same as today
  - Less than today
- 

Do you think the following statement is true or false?

Buying a single company stock usually provides a safer return than a stock mutual fund.

- True
- False

End of Block: Screener

---

Start of Block: Instructions 1

Instructions (1/3): Your task

- In this survey, you can choose a portfolio of stocks. You can select this portfolio yourself or let a financial professional do this for you.
- For one out of ten participants in this survey, randomly selected, the selected stocks will be purchased in real life.
- We, the researchers conducting this study, will invest €1,000 (~£850) on behalf of each randomly selected participant.
- All randomly selected participants will be paid in one year, according to the return of the selected stock portfolio.
- On the following screen, we will explain how earnings are calculated for each randomly selected participant.
- To make the instructions simpler, we will only give € values from here on out. After the experiment, we will use the current exchange rate to convert your earnings to £ values.
- Proof of stock transactions and earnings calculations will be communicated by the research team to the participants (using depersonalized data) after the stocks are bought and sold. This is to ensure that all information above is transparent and credible.

---

Do you want to see a preview of the portfolio selection screen? Depending on your decision later in the survey, either you or a financial professional (for you) will use such a screen to select a portfolio of stocks.

Yes

No

---

*Display This Question:*

*If Do you want to see a preview of the portfolio selection screen? Depending on your decision later... = Yes*

**Example, not the actual selection screen:**

- Please select one of the portfolios below.
- All stocks in the portfolios are among the largest 200 stocks in the MSCI World, by market capitalization.
- The portfolios have numbers as identifiers. These identifiers are random and should not play a role in your selection.
- Click on a portfolio's name for more financial information.
- Next to each portfolio name, you see an indicator of social responsibility More Info

United Nations Global Compact		
% of Portfolio invested in Companies that participate in the UN Global Compact	Descriptive Rank	Rating Icon
80 – 100%	High	
60 – 80%	Above Average	
40 – 60%	Average	
20 – 40%	Below Average	
0 – 20%	Low	

We classify a portfolio's social responsibility according to the proportion of companies in the portfolio participating in the UN Global Compact. Participation requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

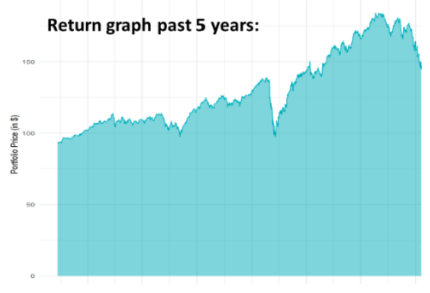
- Portfolio 13 (Click for more Info)
- Portfolio 22 (Click for more Info)
- Portfolio 36 (Click for more Info)
- Portfolio 4 (Click for more Info)
- Portfolio 23 (Click for more Info)
- Portfolio 32 (Click for more Info)

**Information**

**Portfolio 22**

**Portfolio Beta:** 1.00  
**Forward Dividend Yield:** 2.31%  
**Price / Book Value:** 11.66  
**Sustainability Score:** 100 / 100  
**Investment Style:**

Value	Core	Growth
27%	47%	27%



End of Block: Instructions 1

Start of Block: Instructions 2

### Instructions (2/3): Financial advisor

- You can either select stocks yourself, or you can take professional advice.
- If you decide for professional advice, we assign a financial advisor to you, who selects the stock portfolio for you.
- The stock selection of the advisor will be based on your profile (age, income, gender, etc.) and on your investment preferences, which you can specify later.
- For constructing this stock portfolio, your financial advisor has set an advisory fee.

### Payment to you (if randomly selected):

- You receive a base payment of €150
- Over the next year we will record the return of your stock portfolio (with a starting value of €1000).
- This return will be added to (if positive) or deducted from (if negative) your base payment.
- If you choose to take the advice of the financial advisor, an advisory fee will be deducted from your payment.
- If you choose to select the stocks yourself, no advisory fee will be deducted from your payment.
- You never owe us any money. If a negative stock return and the advisory fee exceed your base payment of €150, you simply do not receive any money from us (Except for the survey completion fee).
- If you are randomly selected, you will be paid out one year after the survey is completed.
- Maastricht University and VU Amsterdam guarantee that all earnings will be paid out.

### Payment to your advisor:

- If you take the advice, your advisor receives the advisory fee three weeks after this survey is completed.
- If you choose to select the stock portfolio yourself, you will not receive any advice and your advisor receives no fee.

## Instructions (3/3): Examples

Example 1: You invest according to your advisor's suggestion. Your advisor has set an advisory fee of  $\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1)\}\%$ . After one year, the portfolio has generated a return of  $\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Pos}, 1)\}\%$ . If you are randomly selected, the following will be relevant for your payment:

- Your base payment of €150.
- The advisory fee:  $\text{€}1,000 * (\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1)\}\%) = \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1) * 10\}$
- The return of the portfolio:  $\text{€}1,000 * (\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Pos}, 1)\}\%) = \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Pos}, 1) * 10\}$ .
- Hence, your total payout will be  $\text{€}150 - \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1) * 10\} + \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Pos}, 1) * 10\} = \text{€}\$e\{(15 - \text{round}(e://\text{Field}/\text{Instr\_Fee}, 1) + \text{round}(e://\text{Field}/\text{Instr\_Ret\_Pos}, 1)) * 10\}$

Example 2: You invest according to your advisor's suggestion. Your advisor has set an advisory fee of  $\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1)\}\%$ . After one year, the portfolio has generated a return of  $\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Neg}, 1)\}\%$ . If you are randomly selected, the following will be relevant for your payment:

- Your base payment of €150.
- The advisory fee:  $\text{€}1,000 * (\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1)\}\%) = \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1) * 10\}$
- The return of the portfolio:  $\text{€}1,000 * (\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Neg}, 1)\}\%) = \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Neg}, 1) * 10\}$
- Hence, your total payout will be  $\text{€}150 - \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Fee}, 1) * 10\} + \text{€}\$e\{\text{round}(e://\text{Field}/\text{Instr\_Ret\_Neg}, 1) * 10\} = \text{€}\$e\{(15 - \text{round}(e://\text{Field}/\text{Instr\_Fee}, 1) + \text{round}(e://\text{Field}/\text{Instr\_Ret\_Neg}, 1)) * 10\}$

### Comprehension Quiz

- Please answer the questions below about the instructions on the previous screens.
  - You have two chances to answer both comprehension questions correctly.
  - If you fail to do so, you will not be able to complete the survey and you will not receive the completion fee of €2.
- 

What is not a possible investment for you?

- A stock portfolio that your advisor selects on your behalf
  - A stock portfolio that you select yourself
  - A savings account
- 

Consider the following scenario. Your advisor set a fee of  $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1)\}\%$ . You decide to take the portfolio advice. The selected portfolio has a return of  $\$e\{\text{round}(e://\text{Field}/\text{Quiz\_Ret}, 1)\}\%$ . How much will you be paid? Remember: Your base payment is €150.

- €0
- $\$e\{(15 - \text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1) + \text{round}(e://\text{Field}/\text{Quiz\_Ret}, 1))\}$
- $\$e\{(15 - \text{round}(e://\text{Field}/\text{Quiz\_Fee}, 1) + \text{round}(e://\text{Field}/\text{Quiz\_Ret}, 1)) * 10\}$

End of Block: Comprehension Questions

---

Start of Block: Wrong Answer 1

Wrong Answer (Only shown if there was a mistake in the comprehension questions)

At least one of your answers was not correct. Do you want to see the instructions again or would you like to retry answering?

- See the instructions
- Answer again

End of Block: Wrong Answer 1

---

Start of Block: Wrong Answer 2

Wrong Answer (Only shown if there was a mistake in the comprehension questions twice → End of Survey)

At least one of the answers you gave was not correct.

End of Block: Wrong Answer 2

---

Start of Block: Advisor Mandate

Advisor mandate

- Before you choose whether you like to receive advice, we have two questions.
- These questions will be used to match you to the right financial advisor.

---

Do you want to give your advisor a mandate for socially responsible investing? For all selectable stocks, your advisor will receive an indicator of social responsibility [Clickable button for more info]. We classify a portfolio's social responsibility according to the



proportion of companies in the portfolio participating in the UN Global Compact. Participation requires a commitment from a company's chief executive with support from the Board. This commits an organization to meet fundamental responsibilities in four areas: human rights, labour, environment and anti-corruption. All participants are required to produce an annual communication on progress that outlines a company's efforts to operate responsibly and support society.

Yes

No

---

How would you like your investment budget to be allocated between a savings account (0% interest rate) and a stock portfolio? Note: You will only be able to continue with the survey if you agree to have your experimental budget invested in stocks (Aggressive risk profile).

Aggressive (100% in stocks)

Moderate (50% in the savings account, 50% in stocks)

Conservative (100% in the savings account)

End of Block: Advisor Mandate

---

Start of Block: Allocation Decision

Investment Decision

A financial professional selected a portfolio for a client with your profile. He or she set the following advisory fee for creating this stock portfolio.

Advisory Fee:  $\$e://Field/Fee\%$

---

Would you like to invest in the stock portfolio that your advisor selected on your behalf?

- Yes, I will take the advice
- No, I will select stocks myself

---

[Depending on their answer, participants are then either directly sent to the exit survey, or have to allocate their own fund]

End of Block: Allocation Decision

---

Start of Block: Exit Survey (Demographics)

Finally, last screen, please answer the following questions:

---

Which industry sector are you working in?

▼ Agriculture, forestry & fishing ... Transport

How knowledgeable are you in financial matters?

- Not knowledgeable
  - More or less knowledgeable
  - Knowledgeable
  - Very knowledgeable
- 

What is the highest level of school you have completed or the highest degree you have received?

▼ Less than high school degree ... Professional degree (JD, MD)

---

In which country do you currently reside?

▼ Albania ... Zimbabwe

---

Have you invested before, or are you planning to invest in the future (e.g., into stocks, bonds, investment funds, real estate)?

- Yes
  - No
-



How much investment experience do you have?

	1	2	3	4	5	6	7	
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	A lot

---

What yearly gross return do you expect to make on your selected stock portfolio? (In %)

▼ Less than -15 ... More than 15

End of Block: Exit Survey (Demographics)

---

Start of Block: PLEASE VISIT URL

In about 3 weeks, you will be able to see proof of all stock transactions that we undertook to implement the portfolios. All data will be aggregated and anonymized, so that it is impossible to trace back any decision taken in the survey.

The information will be posted on this web page:

<https://feedback002.wordpress.com/>

Please write down the address of the web page if you want to visit it in 3 weeks.

---

Thank you very much for participating.

\*\*\* Please click below to complete the survey \*\*\*

End of Block: PLEASE VISIT URL

---

## B.5 Instructions selection survey

Start of Block: Welcome Screen

Welcome

Thank you for participating in the survey. Participation will take less than 10 minutes. Upon full completion of the survey you will receive a participation fee of \$10. You will receive your participation fee in points. All data will be depersonalized and will exclusively be used for the purpose of academic research.

\*\*\* Please click below to start. Note that you will not be able to go back to previous pages throughout the whole study. \*\*\*

End of Block: Welcome Screen

---

Start of Block: SCREENER INDUSTRY

Which industry sector are you working in?

▼ Agriculture, forestry & fishing ... Transport

End of Block: SCREENER INDUSTRY

---

Start of Block: SCREENER INVEST

Which of the following best describes your current job?

End of Block: SCREENER INVEST

---

Start of Block: Performance Indicators

Imagine that you are considering purchasing stocks today, which you would like to sell twelve months from now. Please indicate how important each of the following

information is for you when deciding on particular companies to invest in.

Please rank the following pieces of information, depending on how important they are in your decision process to invest in a particular stock. Drag the most important indicators to the top of the list and the least important indicators to the bottom.

- \_\_\_\_\_ Price range (last year)
  - \_\_\_\_\_ Price chart (last 5 years)
  - \_\_\_\_\_ Average price (expected by analysts next year)
  - \_\_\_\_\_ Average price (last year)
  - \_\_\_\_\_ Volatility (last year)
  - \_\_\_\_\_ Dividends (last year)
  - \_\_\_\_\_ Dividends (expected next year)
  - \_\_\_\_\_ Industry
  - \_\_\_\_\_ Previous day's trading volume
  - \_\_\_\_\_ Previous year's trading volume
  - \_\_\_\_\_ Market Capitalization
  - \_\_\_\_\_ Price / Earnings Ratio (last year's earnings)
  - \_\_\_\_\_ Earnings per share (last year)
  - \_\_\_\_\_ Earnings per share (expected next year)
  - \_\_\_\_\_ Price / Book Ratio
  - \_\_\_\_\_ Annual Revenue (last year)
  - \_\_\_\_\_ Revenue Growth (last 3 years)
  - \_\_\_\_\_ Annual Profit (last year)
  - \_\_\_\_\_ Free Cash Flow (last year)
  - \_\_\_\_\_ Beta (last year)
  - \_\_\_\_\_ Trade volume
  - \_\_\_\_\_ Risk/return ratio, e.g., Sharpe ratio (last year)
-

Please specify any other indicators that we may have missed and that you consider to be part of the five most important pieces of information for your decision process to invest in a particular stock.

-----  
-----  
-----  
-----  
-----  
-----  
-----  
-----

End of Block: Performance Indicators

---

Start of Block: Sustainability Indicators

In your investment decisions, do you consider any indicators on firms' abilities to meet environmental, social, and governance criteria?

▼ Definitely yes ... Definitely not

-----



How important are the following indicators in your decision-making?

	Not at all important	Unimportant	More or less unimportant	Neither important nor unimportant	More or less important	Important	Very important
Thompson Reuters ESG Scores (Asset4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MSCI ESG Rating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MSCI KLD Scores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainalytics ESG Rating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Sustainability Indicators

---

Start of Block: Exit Survey non-demographics

Please answer the following questions:

-----

How would you rate your willingness to take risks ...

	1: Not at all willing to take risks	2	3	4	5	6	7: Very willing to take risks
... generally in life:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... in financial matters:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

How important is it for you to be the best at what you do?

	1	2	3	4	5	6	7	
Not important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

---

Social status is primarily defined by financial success.

	1	2	3	4	5	6	7	
Fully agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Completely disagree

---

How important is it for you what others think about you?

	1	2	3	4	5	6	7	
Not important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

---

How willing are you to give to good causes without expecting anything in return?

	1	2	3	4	5	6	7	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

---

In general, how would you describe your own political viewpoint?

▼ Very conservative ... Not sure

---

What is your present religion, if any?

▼ Protestant ... Other

---

How important is religion in your life?

▼ Very important ... Not at all important

---

In our society there are groups which tend to be towards the top and groups which tend to be towards the bottom of the income scale.

If 1 equaled the bottom of the scale and 100 equaled the top of the scale, where would you put yourself now on this scale?

-----  
-----

---

And where would you put the household you grew up in on the same scale?

-----  
-----

---

What has been the main source of your household's wealth?

- Inheritance or family assets
- Salary
- Income from own business
- Property
- Lottery
- Other (please specify)

---

End of Block: Exit Survey non-demographics

---

Start of Block: Exit survey demographics

Finally, last screen, please answer the following questions:

---

What is your gender?

- Male
  - Female
  - Other
- 

What is your age?

▼ 18 - 24 years old... 65 and older

---

What is the highest level of school you have completed or the highest degree you have received?

▼ Less than high school degree... Professional degree (JD, MD)

---

At which type of financial institution are you currently employed? (multiple answers possible)

---

What is the total amount your household donated to charitable causes last year (in \$)?  
If you are unsure, please make an estimate.

-----  
-----

What was your gross combined, annual household income last year?

▼ under \$20,000 ... 200,000 or more

How important are concerns for sustainability in your work?

▼ Not at all important ... Very important

Does your current work contract include a bonus clause?

Yes

No

*Display This Question:*

*If Does your current work contract include a bonus clause? = Yes*

Did you receive a bonus in the last three years?

Yes

No

*Display This Question:*

*If Does your current work contract include a bonus clause? = Yes*

In relation to your fixed income, how large was the bonus payment? (If you received several bonuses, please state the average annual bonus payment.)

▼ less than 10% of fixed income... more than 500% of fixed income

End of Block: Exit survey demographics

---

Start of Block: Thank you

Thank you very much for participating.

\*\*\* Please click below to complete the survey \*\*\*

End of Block: Thank you

---

## B.6 Instructions regulators survey

Start of Block: Welcome

Welcome

Thank you very much for participating.

A few months ago we completed a research study with professional financial advisors in the United States.

- The research study investigated what fees advisors require
  - for socially responsible and for conventional investment mandates
  - from male and from female clients.

In this survey we are interested in *your opinion about our research study*.

- Upon full completion of this survey (less than 11 minutes), you will
  - receive early, preferential access to our research study results;
  - you can earn €20, depending on the answers you give in this survey;
  - make an important contribution to research.

All data will be depersonalized and will only be used for scientific purposes.

Thank you very much for participating!

- Marten Laudi (Maastricht University)
- Prof. Dr. Paul Smeets (Maastricht University)
- Prof. Dr. Utz Weitzel (VU Amsterdam, Radboud University)

\*\*\* *Please click below to start.* \*\*\*

End of Block: Welcome

---



Start of Block: description RESEARCH STUDY 1

## Description of the RESEARCH STUDY

First, we will briefly describe the RESEARCH STUDY that we completed with financial advisors. You don't need to take any decisions in this part.

The goal of the RESEARCH STUDY was to find out:

- Whether financial advisors charge a different fee to clients who give them a mandate for socially responsible investing (SRI), than to clients who give them a conventional investing mandate.
- Whether financial advisors charge a different fee to female clients than to male clients.

Background of the RESEARCH STUDY:

- For that purpose, we ran an online experiment in which we matched real financial advisors with real clients, who invested real money to buy real stocks.
- We recruited 345 financial advisors in the US who are involved in managing or brokering financial assets on behalf of clients in their professional life.
- We included, for example, private bankers, investment advisors, and portfolio managers, but not IT support, auditors, or those working in corporate finance.
- We also recruited 345 individual clients in the US (not financial professionals), who were willing to invest \$1000 each (which we provided) in the stock market.
- We randomly matched each client with one financial advisor.

Page Break 

---

## Description of the RESEARCH STUDY

Portfolio task for the financial advisor:

- In the experiment, each advisor was asked to manage the \$1000 stock portfolio of the matched client by weighting 30 stocks in the Dow Jones Industrial Average.
- Advisors saw some information about the client, including gender and a mandate from the client: (either a socially responsible investing (SRI) mandate, or a conventional mandate).
- We also provided the advisor with financial and SRI information for each stock.

Please click below to see an example of the client information and the portfolio task of the advisor.

- Show an example of the portfolio allocation screen (Will be shown below)

End of Block: description RESEARCH STUDY 1

---

Start of Block: description RESEARCH STUDY 2 and Example Screen Fee

## Description of the RESEARCH STUDY

After the portfolio task, each advisor was asked to set a fee for his/her service.

The advisor knew that clients were not obliged to accept the fee, because the clients could also choose to build their own portfolio.

EXAMPLE SCREEN for setting a fee by advisors: (Feel free to click on all buttons in the example)

[EXAMPLE SCREEN WAS DISPLAYED HERE]

End of Block: description RESEARCH STUDY 2 and Example Screen Fee

---

Start of Block: description RESEARCH STUDY 3

## Description of the RESEARCH STUDY

Client decision:

- After the advisor had built a portfolio and set a fee, the matched client made a simple decision:
  - Either: pay the fee as set by the advisor and use the advisor's portfolio.
  - Or: do not pay the fee and build their own portfolio (without seeing the advisor's portfolio).
- In both cases the chosen portfolio was bought for real on the stock market and held for one year by the research team.

Payouts:

- If the client decided to pay a fee,
  - the advisor received the fee as a real payment,
  - and the client received the portfolio returns after one year after deduction of the fee.
- If the client decided against paying a fee,
  - the advisor received nothing,
  - and the client received the raw portfolio returns after one year.

In all cases, the lowest possible payout for the client was 0.

End of Block: description RESEARCH STUDY 3

---

Start of Block: Comprehension Quiz

## Comprehension Quiz RESEARCH STUDY

- Please answer the two questions on the RESEARCH STUDY below:

What is not a possible investment for clients?

- A stock portfolio that they select themselves
- The stock portfolio that the advisor selects on their behalf
- A savings account

Which was not a potential investment mandate that could be given by the client to the advisor?

- A conventional investment mandate
- A socially responsible investing mandate
- A low-turnover investment mandate

Page Break

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[ON THIS PAGE, PARTICIPANTS RECEIVED FEEDBACK ON WHETHER THEY ANSWERED THE QUESTION CORRECTLY]

End of Block: Comprehension Quiz

---

Start of Block: Prediction Fee short

You have now finished the explanation, which is the largest part of the completion time.

Lets now start with your predictions.

When you finish this survey, we will randomly select one of your predictions.

If your prediction matches the actual findings from our study, you will receive €20.

[NOTE: THE ORDER OF THE QUESTIONS, AS WELL OF THE ORDER OF THE ANSWERS WERE RANDOMIZED]

Prediction: Fees by Gender

- In the RESEARCH STUDY, the clients differed in terms of their gender.
  - Who do you believe financial advisors charged a higher fee to in the RESEARCH STUDY?
- Higher fee charged to male clients
- Higher fee charged to female clients
- No difference in fees

Prediction: Fees by Mandate

- In the RESEARCH STUDY, the clients were able to give their advisor a mandate for socially responsible investing.
  - Who do you believe financial advisors charged a higher fee to in the RESEARCH STUDY?
- Higher fee charged to clients who gave a mandate for socially responsible investing
- Higher fee charged to clients who gave a conventional investment mandate
- No difference in fees

End of Block: Prediction Fee short

---

Start of Block: Prediction Effort

In the RESEARCH STUDY, we also measured advisors' effort exerted to construct a portfolio for each client.

Effort includes the time, as well as the number of clicks an advisor spent to construct a portfolio for a client.

[NOTE: THE ORDER OF THE QUESTIONS, AS WELL OF THE ORDER OF THE ANSWERS WERE RANDOMIZED]

Prediction: Effort by Gender

- Who do you believe financial advisors exerted more effort for in the RESEARCH STUDY?
- Higher effort exerted for male clients
- Higher effort exerted for female clients
- No difference in effort

Prediction: Effort by Mandate

- Who do you believe financial advisors exerted more effort for in the RESEARCH STUDY?
- Higher effort exerted for clients who gave a mandate for socially responsible investing
- Higher effort exerted for clients who gave a conventional investment mandate
- No difference in effort

End of Block: Prediction Effort

---

Start of Block: External Validity of Findings

Do you believe that the findings from our RESEARCH STUDY are informative about the behavior of financial advisors in the field?

...in the United States?

- Not informative
- Hardly informative
- Somewhat informative
- Informative
- Very informative

...in the European Union?

- Not informative
- Hardly informative
- Somewhat informative
- Informative
- Very informative

Page Break

---

End of Block: External Validity of Findings

---

Start of Block: Implications

## Implications of our results

*Suppose* the results of our RESEARCH STUDY would show that advisors charge higher fees to clients with a socially responsible investment mandate (vis-a-vis conventional mandates) without exerting any extra effort.

Do you think that such results from our RESEARCH STUDY would require attention from regulators?

Yes

No

Page Break

---

What do you think would be a suitable policy intervention? [ONLY SHOWN IF THE RESPONSE TO THE PREVIOUS QUESTION WAS YES]

-----  
-----

In the European Union, a forthcoming amendment to the Markets in Financial Instruments Directive II (MiFID II) will require financial advisors to ask clients whether they want to give an SRI mandate. Do you think that this regulation will be costly to asset managers?

No, asset managers will save money

No, it will not be costly

Yes, it will be costly

Yes, it will be very costly



If the MiFID II amendment turns out to be costly, who do you think should bear these additional costs?

- Clients who give an SRI mandate
- All clients
- No client should bear these costs

End of Block: Implications

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Start of Block: Exit survey

Finally, last screen, please answer the following questions:

What is your gender?

- Male
- Female
- Other

Is socially responsible investing the main focus of your current work/function?

- Yes
- No

What is your age?

▼ 18 - 24 years old ... 65 and older

Compared to the average colleague in your organization, how much work experience do you have with projects/topics that are related to our experiment?

- Far below average
- Somewhat below average
- Average
- Somewhat above average
- Far above average

What is the highest level of school you have completed or the highest degree you have received?

▼ Less than high school degree ... Professional degree (JD, MD)

Which of the following best describes your current job? (Multiple answers possible)

- Regulation
- Supervision
- Policy work
- Analysis
- Research
- Management
- Teaching
- Other (please specify below)

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How much work experience do you have related to regulation and/or policy work in general? (Please enter years of experience)

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If you want to receive early access to the results of the research study and be eligible for payment, please enter you email address below (optional).

Entering your email is completely voluntarily and the information will only be used for sending you early results and for payment. Your email address will be deleted from the raw data once we sent the results and completed the payments. After this, all data will be completely de-personalized and cannot be traced back to individuals. All data will be used for academic research purposes only. If you do not enter your email address we

assume that you do not want to receive early results and that you also do not want to be eligible for any payment.

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Would you like to donate your earnings from this survey to a charitable organization?

Yes

No

Which organization would you like to donate to? [ONLY SHOWN IF THE RESPONSE TO THE PREVIOUS QUESTION WAS YES]

▼ The Albert Schweitzer Foundation (Animal Welfare) ... Give Directly

End of Block: Exit survey

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Start of Block: Thank You

Thank you very much for participating.

\*\*\* Please click below to complete the survey \*\*\*

End of Block: Thank You

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