Sustainable investors: value and values*

Hans Degryse^a, Alberta Di Giuli^b, Naciye Sekerci^c, and Francesco Stradi^d

^aKU Leuven and CEPR ^bESCP Business School ^cKU Leuven and KWC, Lund University ^dKU Leuven

> First version: April 6, 2023 This version: July 16, 2025

Abstract

Using a representative sample of the Dutch population, we investigate the determinants of the two main motivations for investing sustainably. Specifically, we study which individual characteristics are associated with sustainable investors who invest primarily for social reasons (social sustainable investors) and those who do so primarily for financial reasons (financial sustainable investors). Compared to non-sustainable investors, social sustainable investors have a higher level of social preferences, education, trust, and are more likely left-wing and risk averse. Financial sustainable investors have a lower level of social preferences and are more sensitive to recommendations from (social) media and word of mouth.

JEL classification: D14, G11, G41

Keywords: sustainable investments, household finance, decision making, information.

Contact: Degryse: hans.degryse@kuleuven.be; Di Giuli (corresponding author): adigiuli@escp.eu; Sekerci: naciye.sekerci@kuleuven.be; Stradi: francesco.stradi@kuleuven.be.

^{*}A previous version of this paper circulated with the title "Sustainable Investments: One for the Money, Two for the Show". The authors thank Aurore Burietz, Adrian Buss, Diana Bonfim, Marco Ceccarelli, Jeroen Derwall, Bert D'Espallier, Fatima Zahra Filali Adib, Luca Gambarelli, Nickolay Gantchev, Andrej Gill, Matti Keloharju, Paul Kharenke, Luc Laeven, Michelle Lowry, Roberto Mura, Stefano Ramelli, Paul Smeets, Lara Spaans, Yao Tianhao, Riccardo Valente, Alexander Wagner, Rafael Zambrana, Olivier David Zerbib and seminar participants at the 1st HEC-HKUST Workshop on Impact and Sustainable Finance, the European Central Bank, the Deutsche Bundesbank, the 7th Household Finance Workshop (SAFE), the Frankfurt School of Finance and Management, FMA Europe 2024, the 31st Finance Forum, ESADE Business School, the Hanken School of Economics, Lund University, the European Sustainable Finance PhD Workshop, the Belgian Environmental Economics Day, Corporate Finance Days, EFMA 2024, and the University of Antwerp for their helpful comments. We gratefully acknowledge financial support from KU Leuven and ESCP Business School. Stradi gratefully acknowledges the financial support from Research Foundation Flanders (FWO) Grant 11P7A24N. All remaining errors are our own.

1 Introduction

Sustainable investment decisions are driven by mainly two motivations. Some sustainable investors have been typically portraited as individuals who invest beyond expected payoffs and are willing to accept a lower return (e.g., Riedl and Smeets, 2017; Bauer et al., 2021). Other sustainable investors are primarily driven by standard financial reasons (e.g., Pedersen et al., 2021; Gantchev et al., 2024). These two main motivations for sustainable investing are at the heart of the current debate between values-driven vs. value-driven sustainable investments (Starks, 2023).

Our paper is the first in the household finance literature to investigate the determinants of these two motivations. Specifically, we investigate what drives sustainable investments by unpacking investors into two groups, *social* sustainable investors (who can be regarded as *primarily* values-driven investors) and *financial* sustainable investors (who can be regarded as *primarily* value-driven investors). We then analyze why households do *not* invest sustainably as the knowledge on non-sustainable investors is limited.

Following the practices in related literature that utilize the benefits of survey methodology (Krueger et al., 2020; Block et al., 2024; Edmans et al., 2024), we design a survey to elicit information on households' characteristics, their motivations and decisions regarding whether or not to hold sustainable investments, which would not be adequately observable through other methods, such as studying transaction data. We designed and directed our survey to a sample of Dutch households using the LISS (Longitudinal Internet Studies for the Social Sciences) panel, which is widely considered one of the most comprehensive, reliable, and representative samples used in the household finance literature. In addition to the survey

¹Previous studies have particularly pointed out the importance of social motives in sustainable investments of households empirically (Riedl and Smeets, 2017; Brodback et al., 2019; Bauer et al., 2021) and theoretically (e.g., Pástor et al., 2021; Broccardo et al., 2022; Gollier and Pouget, 2022). Recently, Pedersen et al. (2021) present a theory of responsible investing and model, next to sustainability-motivated individuals, sustainability-aware investors that primarily take into consideration financial reasons when they choose their sustainable investments.

we designed, the LISS panel allowed us to draw on previous waves that provided household characteristics identified in the literature as relevant for financial decisions (for a review of important factors in household financial decisions, see Gomes et al., 2021).

Our summary statistics indicate that sustainable investors indeed consist of two equally important groups: those that invest primarily for pro-social reasons and those that invest primarily for financial reasons. *Financial* sustainable investors are more prevalent than social ones, but the volume of sustainable investments done by *social* sustainable investors is on average larger.

Our main findings are as follows. The drivers of sustainable investing differ significantly when we unpack sustainable investors into socially and financially motivated ones. Compared to non-sustainable investors, *social* sustainable investors have a higher level of social preferences, education, trust, are more likely left-wing and risk averse, while *financial* sustainable investors are more sensitive to investment recommendations from (social) media or friends and have a lower level of social preferences. Moreover, the two groups of sustainable investors are both characterized by high sustainable finance literacy.

Hereby, we elaborate on our main findings. Compared to non-sustainable investors, financial sustainable investors are associated with lower social preferences, while social sustainable investors have higher social preferences. This unpacking of sustainable investors into social and financial ones proves to be essential as the literature that treated sustainable investors as a homogenous group so far documents a positive association between social preferences and sustainable investing (Riedl and Smeets, 2017; Bauer et al., 2021). Moreover, having a university degree associated with being a social sustainable investor can be related to previous studies that show that education is positively associated with civic engagement in all its forms (Putnam, 1995), and the premise that education increases pro-environmental behaviors causally (e.g., Meyer, 2015). Furthermore, the result that social sustainable investors have higher trust can potentially be explained by our findings showing that social

sustainable investors rely more on bank advisors and labeling to assess the sustainability of an investment. Next, social sustainable investors being associated with left-wing political views can be related to studies showing that individuals with left-wing views are more willing to pay for the protection of the environment (e.g., Aldy et al., 2012; Bakaki and Bernauer, 2017; Andre et al., 2024). Moreover, the greater risk aversion of social sustainable investors can be explained by the evidence that certain security designs can encourage household risktaking (Calvet et al., 2023). Finally, "financial hype"—which refers to considering investing in financial products because (social) media or friends recommend them—is positively and significantly associated, in particular, with financial sustainable investors. This variable is based on the concept of narrative contagion, which highlights how investors' behavior is shaped by enthusiasm spread through word of mouth, traditional media, and social media (e.g., Shiller, 2020). This relationship aligns with previous studies showing the influence of media (e.g., Barber and Odean, 2008; Engelberg and Parsons, 2011), social media (e.g., Chen et al., 2014; Bartov et al., 2018; Gu and Kurov, 2020), and peer effects (e.g., Kaustia and Knüpfer, 2012; Bursztyn et al., 2014; Ouimet and Tate, 2020; Balakina et al., 2023) on traditional investments, where investors are shown to be susceptible to such recommendations when making decisions.

These results are robust to the inclusion of a widely used and longstanding measure of an individual's susceptibility to social desirability bias in survey responses (Crowne and Marlowe, 1960).²

As the next step in our analysis, we investigate the main reasons why most individuals do not invest sustainably. We find that the most important reason is a lack of sufficient information, which is reported by 42.1% of households. Only 5.4% think that sustainable financial products are merely greenwashing, while a scant 3.8% state that sustainable assets have low returns as their reason for not investing sustainably. We further show that a lack of

²Social desirability bias is the tendency to underreport socially undesirable attitudes and behaviors and to overreport more desirable ones.

(sustainable) financial literacy significantly and positively explains the decision not to invest sustainably due to information barriers.

As a lack of information in general and sustainable finance literacy in particular seems to be an important barrier to sustainable investments, both for *social* and *financial* sustainable investors, we further dig deeper into the drivers of sustainable finance literacy. We find that social preferences, financial hype, financial literacy, and having a university degree are positively related to sustainable finance literacy, while being a woman and age are negatively associated with it. Financial magazines are the only source of financial information that is (positively) associated with sustainable financial knowledge.

As additional analyses, we provide insights regarding the characteristics of potential sustainable investors that are not (yet) investing sustainably. Following the literature (e.g., Weber et al., 2013; Egan et al., 2014; Rossi et al., 2019), we ask a hypothetical question to individuals that do not currently invest in sustainable assets: what would they prefer when having the choice between an investment fund with a return linked to "all the companies in the Netherlands" and "a selection of sustainable companies in the Netherlands". We particularly find that women would be more likely to choose a sustainable fund (over a conventional one). When asked which sustainability dimension of ESG is the most important for hypothetical and sustainable investors, women are more likely to choose "social". While these are only hypothetical choices, they shed light on possible channels to foster sustainable investments.

Our findings are related to several strands of the literature. First, our paper contributes to the literature on the determinants of households' sustainable investments (e.g., Riedl and Smeets, 2017; Gutsche and Ziegler, 2019; Hartzmark and Sussman, 2019; Rossi et al., 2019; Anderson and Robinson, 2022; Brunen and Laubach, 2022; Engler et al., 2023; An et al., 2023; Famulok et al., 2023; Andersen et al., 2023; Filippini et al., 2024; Ceccarelli and Ramelli, 2024). Previous studies either treat sustainable investors as a homogeneous group or

document the social motives of households when they invest in sustainable assets (e.g., Riedl and Smeets, 2017; Bauer et al., 2021). We enhance this literature by treating sustainable investors as a non-homogenous group studying the drivers of socially and financially motivated sustainable investors. Although these two types of sustainable investors are postulated in theoretical models (e.g., Pedersen et al., 2021) and frequently discussed in the literature (e.g., Starks, 2023), to the best of our knowledge, our study is the first to study their drivers. We further add to this literature stream by analyzing the role of new potential determinants, namely financial hype and greenwashing beliefs.

In a related paper, Giglio et al. (2025), by surveying wealthy retail investors at Vanguard funds, elicit investors' motivations to invest in ESG assets (besides their expectations of long-term ESG equity returns). They document heterogeneity across investors in their motives for ESG investing: among the investors who see reasons to invest in ESG, 53.8% would invest in ESG assets primarily for financial reasons while 46.2% would do so primarily for "ethical" reasons.³ This is in line with what we also observe in our study: 53.8% of sustainable investors invest sustainably primarily for financial reasons (financial sustainable investors), while 38.7% did it for social motives (social sustainable investors). Our paper differs from theirs along several dimensions. First, we study what household characteristics drive these socially and financially motivated sustainable investors' investments, which is not covered in their analysis. Thus, we complement their findings by showing that socially and financially motivated sustainable investments are associated with specific individual characteristics regarding social preferences, education, trust, political orientation, and risk preferences. Second, our study differs from theirs in terms of sample composition. While their sample mainly includes relatively wealthy, older, and male retail investors from one single fund (Vanguard), we rely on a representative sample of all Dutch households, also in-

 $^{^3}$ In particular, they reported 6% of investors motivated primarily by return expectations, 22% by climate hedge motives, which are explained as 'ESG portfolios are more likely to hold their value—or increase in value—if climate risks materialize,' and 24% by ethical considerations. The 53.8% stems from (6% + 22%)/(6% + 24% + 22%), while 46.2% is obtained by 24% /(6% + 24% + 22%).

cluding non-investors. Finally, the response rate in our sample is 72% (4% for the Vanguard sample in their case). Both our sample composition and response rate mitigate possible differences between respondents and non-respondents across key demographics and increase the representativeness of our analysis.

Finally, we contribute to the literature on financial literacy and sustainable finance literacy. Previous studies underline the role of information availability (e.g., Gutsche and Zwergel, 2020; Anderson and Robinson, 2022; Filippini et al., 2024) in driving the choice of sustainable investments. We find that the information barrier, driven by individuals' limited ability to assess which investments are sustainable and which are not (sustainable finance literacy), is the primary driver of not investing sustainably.

2 Data and survey design

We designed a survey on individuals' preferences, motives, and decisions regarding their sustainable investments. We directed the survey to a representative sample of Dutch households through the LISS panel, which is widely considered one of the most comprehensive, reliable, and representative samples used in the household finance literature (e.g., Noussair et al., 2014; Dimmock et al., 2015, 2016; Parise and Peijnenburg, 2019). The LISS panel is based on a probability sample of households drawn from the population register of the Netherlands and administered by Centerdata (Tilburg University). Centerdata is a non-profit research institute focused on academic, social, and policy-related research. Over the past 25 years, the institute has become a prominent player in conducting surveys, policy analysis, and consumer research. The LISS Data Archive offers scholars longitudinal data on various subjects, such as health, family, employment, income, values, and more, so researchers can connect their survey answers with previously collected individual data. Thanks to the LISS staff's expertise, our questions were refined to be understandable by the population at large and thus to avoid possible survey response biases.

Moreover, using a survey enables us to elicit individuals' preferences and motives regarding their sustainable investments. In general, surveys are commonly used in the literature to obtain information in relation to important research questions which are otherwise difficult to study. For example, surveys are used to investigate institutional investors' perceptions of the importance of firms' climate risk (Krueger et al., 2020) and to explore whether and how equity portfolio managers incorporate firms' environmental and social (ES) performance into investment decisions (Edmans et al., 2024).

Our survey on sustainable investments was conducted in October 2022. Our questionnaire was sent to 2140 individuals of the LISS panel aged 18 or older. The response rate was exceptionally high compared to most surveys employed in the sustainable finance literature since 72.4% (1550) of the individuals contacted responded to the invitation to complete our survey. In addition, our respondents to the survey overall look similar to non-respondents in the LISS panel in terms of key characteristics.⁴

In the first part of the survey, we obtained information about individuals' general characteristics and preferences. Specifically, we asked for standard variables in household finance, such as self-assessed financial knowledge (financial literacy) similar to Bauer and Smeets (2015) and Riedl and Smeets (2017), the source of information primarily used to make financial decisions (as in Von Gaudecker, 2015), and a validated measure of social preferences (Falk et al., 2018, 2023). In the literature investigating the determinants of sustainable investing, the same measure for social preferences has been used by Bauer et al. (2021), Heeb et al. (2023), and Engler et al. (2023), among others. We also acquired novel information about

⁴To support the representativeness of our sample, we compared our respondents to the full LISS sample across some basic demographics (Appendix G). As mentioned previously, the full LISS sample is widely regarded as representative of the Dutch population. Overall, our respondents are significantly older than non-respondents from the LISS sample (55 years on average versus 51), similar to other papers that employ surveys. They are marginally more likely to be male (49% versus 51%, significant at the 10% level) and have a slightly higher net income (2,092 versus 1,923 euros, significant at the 10% level). There is no significant difference in the level of education, approximated by having a university degree. Thus, we can conclude that the demographic differences between those who answered our survey, and the rest of the population are minor.

their self-assessed sustainable finance knowledge (sustainable finance literacy, defined as the perceived ability to distinguish between a sustainable investment and a non-sustainable one), financial hype (considering investing in a financial product because (social) media or friends recommend it), and greenwashing beliefs (considering sustainable finance a marketing trick). We introduced the last two variables, financial hype and greenwashing beliefs, respectively, given i) the recent hype on sustainable investments,⁵ ii) the uncertainty in using sustainability ratings to assess the sustainability level of an asset (Berg et al., 2022), and the considerable number of articles in economics newspapers on greenwashing,⁶ as well as a growing interest from academic research regarding greenwashing (e.g., Yang, 2022; Gibson Brandon et al., 2022; Dumitrescu et al., 2022; Heath et al., 2023). We further note that the concept of financial hype is distinct from the usual sources individuals use to make significant financial decisions. This is because it gauges an individual's psychological sensitivity to investment recommendations. Our unreported results show a correlation of only 0.3 between financial hype and using social media or friends as typical sources for financial decisions.

In the second part of the survey, we obtained information about individuals' sustainable investments. First, we asked whether individuals own sustainable investments. If the answer was positive, we asked the *most* important reason for them to invest sustainably (*financial* reason or *social* motives). The *financial* reason was represented as "expecting that sustainable investments would yield a higher risk-adjusted return (profit) than non-sustainable investments". In contrast, *social* motive was represented as "opting for sustainable investments because of the positive impact on society" and "would have been willing to accept a lower risk-adjusted return when investing sustainably". In our study, we refer to the first group as *financial* sustainable investors and the other as *social* sustainable investors.

Next, we asked all sustainable investors about the most crucial sustainability topic for them (environment, social, or governance), the absolute and percentage volume invested

⁵https://www.ft.com/content/50eb893d-98ae-4a8f-8fec-75aa1bb98a48

⁶https://www.ft.com/greenwashing

sustainably, the types of sustainable investments held (for instance, mutual funds, stocks, bonds, ETFs), and the following sustainable investment criteria (positive screening, negative screening, impact investing). We also gathered the sources individuals use to assess if the asset was sustainable.

Furthermore, we asked respondents who did not have any sustainable investments (89.40% of the sample) the reason why they do not invest sustainably. As an experimental question (similar to Weber et al., 2013; Egan et al., 2014; Rossi et al., 2019) we further inquired whether they would prefer to invest in a conventional investment or a sustainable one, whether their motive in this investment would primarily be for *financial* or *social* reasons, and what the most crucial dimension of ESG for them would be (environment, social, or governance). Finally, we also asked all individuals who do not invest sustainably how they would allocate a fixed amount of money between a sustainable investment and a standard one.

2.1 Considerations on measuring sustainable investments and motives behind it

As with almost all measures, our way of measuring sustainable investment, which is similar to that of Rossi et al. (2019) and Filippini et al. (2024), has both advantages and disadvantages. Our measure is advantageous for the following reasons. First, Engler et al. (2023) use a measure to classify sustainable investors, that is similar to ours, to validate their incentivized experimental measure of sustainable investing. In particular, Engler et al. (2023) show that investors who report holding sustainable investments in real life allocate a larger share of their endowment to sustainable ETFs in an incentivized experiment. Hence, given this prior literature using a similar measure as the dependent variable and showing its correlation with investing more in sustainable ETFs in incentivized choices, it is difficult to argue that our dependent variable represents mere cheap talk. Second, concerns about individuals wanting to provide socially desirable answers are attenuated by the fact that responses were anonymous in our survey, and there was no incentive to provide a certain answer to the question.

Lastly, our sustainable investing measure is purposefully generic, especially given that there is no commonly accepted definition of sustainable investing.

One easy critique of the variable we use to determine if an individual is a sustainable investor is that we directly ask individuals whether they own sustainable investments rather than using transaction data to capture sustainable investing. Nevertheless, transaction data would have its own drawbacks. First, there are several ways to classify mutual funds as ESG-oriented (Farroukh et al., 2024). Studies using transaction data rely on the labeling of sustainable funds to classify sustainable investors. However, relying on labeling can be problematic, as the researcher must decide which label to choose and thus may overlook sustainable investors who invest according to different criteria. Alternatively, one could rely on using ESG scores to define a stock or fund as sustainable, which might also be problematic due to recent studies showing substantial disagreements and critiques related to ESG metrics (e.g., Berg et al., 2021, 2022; Derrien et al., 2022). Second, transaction data would not consider whether the ESG rating of a fund or firm was salient to the investor (e.g., an investor might invest in a sustainable company without knowing it is sustainable, as opposed to consciously choosing it because of its sustainability).

Furthermore, our measure of financial and non-financial motives for sustainable investing can also be related to other previous studies. For example, to investigate the importance of financial and non-financial motives, Anderson and Robinson (2022) use the beliefs that "a clean planet is more important than financial welfare" (as a proxy for non-financial motives) and that "environmentally sustainable investments generate higher returns in the long run" (as a proxy for financial motives) and analyze how these beliefs correlate with sustainable investing. Compared to theirs, our measure allows us to distinguish directly between primarily financially and non-financially driven sustainable investors, as we elicit these investor characteristics by directly asking sustainable investors what their most important reason for investing sustainably is. This method also enables us to estimate what percentage of

sustainable investors can be categorized as primarily (non)financially-focused.

Lastly, one might also argue against our measures of financial and non-financial reasons for investing sustainably. As we already mentioned, we are not the first to use it (see, for instance, Starks, 2023). An investor, of course, can invest for both reasons, but by asking them what their *primary* motive is (similar to Giglio et al., 2025), we learn which aspect of sustainable investing is more crucial to them. In other words, our survey elicits information about whether the *primary* motive of sustainable investors is financial or social. Our analysis aims to highlight this tradeoff and does not imply that financial sustainable investors do not care about social aspects and vice versa that social sustainable investors do not care about financial returns. Accordingly, this allows us to identify the widely discussed overarching categories of sustainable investors (value- and values-driven) and their characteristics.

3 Descriptive analysis

Table 1 shows the summary statistics of the main variables employed in our multivariate analysis, for the full sample. In what follows, we write these variables in *italics*. Appendix A describes in detail the variables we employ in the following sections. Our complete survey is in Appendix B.

Table 1 reports that, as of 2022, 10.6% of the Dutch population invests in sustainable assets (sustainable investors). The percentage of sustainable investors in our sample is similar to previous studies (e.g., Rossi et al., 2019). Only 19.6% of individuals invest in financial markets (sustainable investors and traditional investors, who have investments other than sustainable ones); among investors, the majority have sustainable investments (54.1%).

Table 1 further shows that 53.8% of sustainable investors (and 5.7% of the individuals in the full sample) invest sustainably primarily for *financial* reasons (*financial* sustainable

⁷54.1% is obtained by dividing the percentage of sustainable investors (10.6%) by the total percentage of individuals investing in financial markets (19.6%), which includes both *sustainable* and *traditional investors* in Table 1.

investors), while 38.7% (and 4.1% of the individuals in the full sample) did it for social motives (*social* sustainable investors).⁸ As mentioned in the introduction, these percentages are in line with Giglio et al. (2025). In their sample, among the investors who see reasons to invest in ESG, 53.8% would do so primarily for financial reasons, while 46.2% would do so primarily for "ethical" reasons.

We also note that a small percentage of sustainable investors (7.5%, or 0.8% of our sample) claimed to invest for non-financial reasons but were not willing to accept lower returns. We regard them more as sustainable investors who tend to evaluate financial and social motives equally. Given this ambiguity in their response and their small size, we will not consider them in our analysis.

The existence of two primary groups of sustainable investors, financial sustainable investors and social sustainable investors, is consistent with recent theoretical literature (e.g., Pedersen et al., 2021) and the ongoing debate on "value" and "values" driven sustainable investors suggesting that individuals make sustainable investment decisions for mainly financial or social reasons. Financial motivations for sustainable investing typically revolve around the expectation of higher risk-adjusted returns, while social motivations can be driven by a desire to make a positive societal impact through investments, even if it might mean accepting lower risk-adjusted returns.

Below we provide further insights about sustainable investing inferred from the descriptive analysis of our survey. Sustainable stocks (40.9% of sustainable investors invested in them) and mutual funds (39.2%) are the most popular sustainable assets, followed by ETFs (17.5%) and bonds (16.4%) (Figure 1). The roles of banks and labelling emerge as key factors when we inquired about how sustainable investors mainly assess the sustainability of an investment. Specifically, 23.8% of sustainable investors trust their bank advisor, and 17.7%

 $^{^853.8\%}$ is the result of dividing the proportion of individuals who are *financial* sustainable investors (5.7%) by the proportion of those who are *sustainable investors* overall (10.6%). 38.7% is the result of dividing the proportion of individuals who are *social* sustainable investors (4.1%) by the proportion of those who are *sustainable investors* overall (10.6%).

rely on labelling. Others use information from the internet (12.2%) and sustainability reports (10.4%). These and other sources of information are detailed in Figure 2.9 In addition, financial sustainable investors are less inclined than social sustainable investors to rely on bank advisers and labeling when assessing the sustainability of investments (Figure 3).

Using individual's unique identifier, we retrieve from the primary LISS panel waves other relevant variables, such as individual demographics, economic conditions, trust, risk loving, personality traits and binary variables indicating if the individual has left-wing political views, is a member or donates to an environmental organization. These variables were unavailable for some individuals responding to our survey as the related questions were not asked during earlier waves. Hence, we have fewer observations for these variables than those we directly collected in our survey.

In our univariate analyses in this section, we compare three groups of individuals: sustainable investors, divided into financial sustainable investors and social sustainable investors, and non-sustainable investors.¹¹

We start our univariate tests by analyzing how sustainable investors differ from non-sustainable investors, in line with the strategy followed by previous studies using a representative sample of the population (Rossi et al., 2019; Anderson and Robinson, 2022). In Table 2, Panel A, we find that sustainable investors tend to have higher social preferences, lower greenwashing beliefs, higher financial hype, greater financial literacy, and higher sustainable finance literacy compared to non-sustainable investors. They are also more likely to hold left-wing views, show greater trust in others, be more risk-loving, and donate more to environmental organizations. In terms of demographics, they are more likely to be male and

 $^{^9{}m The}$ sum of the percentages reported does not equal 100% because respondents were allowed to choose multiple options.

¹⁰In other words, these individuals did not participate in these questions since, in total, LISS has more than 10,000 members, but on average, only 6,000 individuals are selected to answer a questionnaire, and these variables come from separate questionnaires.

¹¹Appendix C compares financial and social sustainable investors with traditional investors and non-investors separately.

younger, to live in urban areas (significant at the 10% level), and have higher *income*. They are also more likely to hold a university *degree*.

Our findings are in line with those of previous studies that show that sustainable investors differ significantly from other groups in terms of social preferences (as in Bauer et al., 2021; Engler et al., 2023), literacy (both financial and sustainable, as in Anderson and Robinson, 2022; Filippini et al., 2024), political orientation (as in Gutsche and Ziegler, 2019), proenvironmentalist behaviors (e.g., Brunen and Laubach, 2022; An et al., 2023; Famulok et al., 2023), and level of education (e.g., Rossi et al., 2019).

Given our main research question, below we conduct the univariate analysis also for the two sub-groups of sustainable investors.

When we split sustainable investors into financial and social ones, we show that distinct patterns emerge (Table 2, Panel B). Compared to non-sustainable investors (Column 4), financial sustainable investors show significantly higher financial hype, financial literacy, and sustainable finance literacy. They also report higher levels of trust (significant at the 10% level) and are more risk-loving. Demographically, they are less likely to be female, they are younger, and have higher income. They are also more likely to hold a university degree.

Social sustainable investors, compared to non-sustainable investors (Column 5), exhibit higher social preferences, lower greenwashing beliefs, higher financial hype, greater financial literacy (significant at the 10% level), and higher sustainable finance literacy. They are also more likely to hold left-wing views, show greater trust, and donate more to environmental organizations. In terms of demographics, they have higher income, and are more likely to hold a university degree.

When we compare *social* and *financial* sustainable investors to each other (Column 6), important differences emerge. *Social* sustainable investors demonstrate higher *social preferences*, are less likely to have *greenwashing* beliefs and be influenced by *financial hype* (at the 10% significance level), have stronger *left-wing views*, and higher levels of *trust*. They also

tend to be less *risk-loving*, *donate* more to environmental organizations, and are more likely to be *female* (significant at the 10% level), older, and hold a university *degree*.

In unreported results, we further find that on average financial sustainable investors (compared to social sustainable investors) use significantly more financial magazines and financial advisors as the main sources of information when making important financial decisions. Other differences are that financial sustainable investors are more likely to have (sustainable) ETFs, and less likely to have (sustainable) mutual funds. Finally, they are less likely to choose environment and more likely to select governance as the most critical ESG dimension.

Finally, *social* sustainable investors have, on average, significantly higher absolute and percentage volume (of their total investment portfolio) invested sustainably (Column 6, Table 2, Panel B).

4 Sustainable investments: drivers and barriers

In this section, we discuss the drivers of and barriers to sustainable investments. Our approach initially adheres to previous literature and considers sustainable investors as a homogenous group. Next, we treat sustainable investors as a heterogeneous group by studying the drivers of *social* and *financial* sustainable investments. In the final subsections, we discuss the barriers to *social* and *financial* sustainable investments.

4.1 What drives sustainable investments?

We present our findings on the factors associated with the decision to hold sustainable investments. To do so, we build on the existing literature and introduce new variables (financial hype and greenwashing beliefs).

Consistent with prior research in sustainable finance using a representative sample of a country's population (e.g., Rossi et al., 2019; Anderson and Robinson, 2022), we compare

sustainable investors with non-sustainable investors (i.e., the rest of the population). In Appendix D, we separately compare (financial and social) sustainable investors with both non-investors and traditional investors, and also directly compare financial with social sustainable investors. The results are qualitatively similar to those presented in this section.

Table 3 presents the results of linear probability models with a binary dependent variable (the results are qualitatively the same if probit or logit regressions are used, which are available upon request). First, to compare our findings with previous literature, we consider sustainable investors as a uniform group and present the results of our analyses in the first two columns of Table 3. Then, we categorize sustainable investors based on their primary motivation for investing sustainably, which can be either financial (Columns 3-4) or social (Columns 5-6). The binary dependent variables indicate whether the individual is a sustainable investor (1) or a non-sustainable investor (0) (Columns 3-4), a social sustainable investor (1) or a non-sustainable investor (0) (Columns 5-6).

Results in Columns 1-2 show that financial hype, sustainable finance literacy, university degree, left-wing political views, and trust are positively associated with holding sustainable investments. After disaggregating sustainable investors, we find that being a financial sustainable investor (Columns 3-4) is positively associated with financial hype. Having higher social preferences correlates negatively with being a financial sustainable investor (Column 3-4) while correlating positively with being a social sustainable investor (Column 5-6). Furthermore, results in Columns 5-6 show that having left-wing views, higher trust, being more risk averse, and possessing a university degree are positively correlated with social sustainable investing. Both financial and social sustainable investors are characterized as having high sustainable finance literacy.

We now further elaborate on these findings from Table 3. Individuals' social preferences are not, ceteris paribus, associated with the decision to invest in sustainable assets

(Columns 1-2 of Table 3). Yet, when we consider financial and social sustainable investors separately, social preferences continue to play an essential role in sustainable investing: compared to non-sustainable investors, financial sustainable investors are associated with lower social preferences, while social sustainable investors have higher social preferences. Social preferences linked to being a social sustainable investor are consistent with the premise that social preferences are a strong indicator of individuals' willingness to act on societal concerns. For instance, they have been shown to be the strongest predictor of willingness to pay to fight climate change (Andre et al., 2024). Overall, unpacking sustainable investors based on their motives proves to be essential, as the literature that treated sustainable investors as a homogenous group so far documents a positive association between social preferences and sustainable investing (Riedl and Smeets, 2017; Bauer et al., 2021).

We further show that financial hype ("considering investing in financial products because (social) media or friends recommend them") is positively related to investing in sustainable assets. Peer effect, a similar concept, has also been found to affect investment choices in financial markets (e.g., Bursztyn et al., 2014) and environmental behaviours (Bernard et al., 2025). Moreover, Barber and Odean (2008) find that stocks receiving media attention attract investors. Therefore, similar psychological drivers may also operate in the context of sustainable investing. In particular, we notice that financial hype is positively associated with financial sustainable investors (Table 3, Columns 3-4), but not with social sustainable investors (in Columns 5-6 of Table 3). Consequently, the tendency to consider investments based on recommendations about them is significantly related mainly to those investors who prioritize higher risk-adjusted returns, i.e., financial sustainable investors.

We find that *sustainable finance literacy* is significantly positively related to sustainable investments (as in Filippini et al., 2024), regardless of also the sub-groups of sustainable investors considered. This variable captures an individual's self-assessed ability to understand an investment's sustainability level rather than an objective sustainable finance knowledge

as measured by Filippini et al. (2024).

Furthermore, our results show that having a university degree is positively associated with sustainable investing, particularly those with social motives (Table 3, Columns 1-2 and Columns 5-6). The role of university degree can be related to studies finding that education is positively associated with civic engagement in all its forms Putnam (1995), and the premise that education increases pro-environmental behaviors causally (e.g., Meyer, 2015).

We further find that *left-wing* individuals are more likely to be sustainable investors, in particular with *social* motives (Table 3, Column 2 and 6). This could be related to studies showing that individuals with left-wing views are more willing to pay for the protection of the environment (e.g., Aldy et al., 2012; Bakaki and Bernauer, 2017; Andre et al., 2024)).

Table 3 further reports that trust, a key factor for investing in stocks (e.g., Guiso et al., 2008; Georgarakos and Pasini, 2011), also plays a role for sustainable investments (Column 1). Our results are in line with those of Ceccarelli and Ramelli (2024) and Löfgren and Nordblom (2024), which show that labelling is important for sustainable investors. We further find that trust is particularly associated with *social* sustainable investors (Column 6). This could be particularly explained by our descriptive evidence that *social* sustainable investors are more likely than the *financial* ones to rely on bank advisors and on labelling to assess the sustainability of the investment (Figure 3).

Furthermore, we show that *social* sustainable investors are more risk-averse: when values play a significant role in sustainable investment decisions, risk-related considerations become relatively less important. This aligns with the literature suggesting that certain security designs can encourage household risk-taking (Calvet et al., 2023).

We also conduct additional analyses. In further tests, as the outcome variable, we looked at sustainable investments measured in volume and as the percentage of an individual's portfolio in Appendix E. When we focus within the set of sustainable investors, we confirm the finding from Section 3 that *financial* sustainable investors have less absolute volume

and percentage of their portfolio invested in sustainable investments than *social* sustainable investors. Sustainable finance literacy is also the only variable that is positively associated with the absolute volume invested sustainably regardless of the sample considered (Appendix E).

A potential critique of our survey is that reporting sustainable investment holdings, as well as identifying as a *financial* or *social* sustainable investor, may be influenced by social desirability bias. To address this concern, in Appendix F, we investigate whether social desirability bias affects our analysis by using a widely used and longstanding measure of an individual's susceptibility to such bias in survey responses (Crowne and Marlowe, 1960), as collected by LISS.¹² Importantly, the variable *social desirability* shows no significant association with being a sustainable investor in general, nor with being either a *financial* or *social* sustainable investor (Appendix F). Furthermore, including this measure in our regressions does not alter any of our results, underscoring the robustness of our findings.

4.2 Why do people NOT invest in sustainable investments?

Sustainable investors consist of about 10.6% of the population in our sample (similar to the 8.5% as in Rossi et al., 2019). We asked 89.4% of the individuals in our sample that do not hold sustainable investments to identify the reasons (or barriers) preventing them from investing sustainably.

As reported in Table 4, Panel A, the most important reason for not having sustainable investments by far is "not having enough information", which has been selected by 41.1%

¹²Social desirability is measured using the questionnaire developed by Crowne and Marlowe (1960) and is defined as the number of items among the following that the individual answered in a socially desirable way, based on the criteria outlined in their paper: "I never hesitate to go out of my way to help someone in trouble"; "I have never intensely disliked anyone"; "There have been times when I felt like rebelling against people in authority even though I knew they were right"; "I can remember 'playing sick' to get out of something"; "When I don't know something, I don't at all mind admitting it"; "I am always courteous, even to people who are disagreeable"; "At times, I have really insisted on having things my own way"; "I would never think of letting someone else be punished for my wrongdoings"; "There have been times when I was quite jealous of the good fortune of others"; "I am sometimes irritated by people who ask favors of me." Participants' answers to these questions were already available in the LISS panel and were not collected through our survey.

of non-sustainable investors (specifically, it was selected by 43.5% of non-investors and 30% of traditional investors – see Figure 4). This result is consistent with Merkoulova and Veld (2022)'s findings that stock return ignorance is a major factor leading to stock market non-participation. Only 5.4% of non-sustainable investors indicate as a reason that sustainable investments are only a marketing strategy, 3.5% would prefer (in case they have to invest) to buy traditional investments, and 3.8% believe that sustainable assets have low returns. The rest of the households surveyed provide general arguments (e.g., I don't have enough money or enough time, or I have never thought about it).

In Table 4, Panel B, we further analyze what drives the selection of "I don't have enough information" as a reason of not investing sustainably. We find that sustainable finance literacy is a primary driver of not investing sustainably due to information barriers. Hence, being unable to distinguish a sustainable investment from a non-sustainable one is a significant factor that keeps a fraction of the population away from investing sustainably. Moreover, higher financial literacy and age are also negatively associated with reporting a lack of information as a reason for not investing sustainably.

Since our results in this section and in the previous one point out the important role that sustainable finance literacy plays in the space of sustainable investing, the policy implication they suggest is that making information on sustainable investments more transparent and accessible could incentivize individuals and investors to invest sustainably to the extent that this is one of the policy goals.

4.3 Knowledge is key: sustainable finance literacy

Given that *sustainable finance literacy* is what mostly drives the information barriers to investing sustainably, we analyze its determinants in Table 5. Moreover, unreported results indicate that only one-tenth of the entire sample, and one-fifth of the investors subgroup, report high *sustainable finance literacy*, despite half of respondents reporting high *financial*

literacy. 13 These results suggest that lack of sustainable finance knowledge is widespread.

We find that having a higher level of social preferences, financial hype, financial literacy, having a university degree, being younger, and using financial magazines as a source of information of financial decisions are positively associated with sustainable finance literacy.

We further find a negative relationship between being female and sustainable finance literacy. This relationship holds even when a measure of general self-esteem and personality traits are included in the empirical model (Column 3). The gender gap for financial literacy (e.g., Bucher-Koenen et al., 2024) is already known and well-studied, thus our findings suggest that the same underlying factors may drive the gender gap for sustainable finance literacy as it is even more sophisticated than the financial one (Filippini et al., 2024). Unreported results (available upon request) are qualitatively similar if we exclude sustainable investors from the sample in the first three columns.

Overall, based on the results in this section, we infer that, in general, social preferences, financial hype, financial literacy, and university degree are positively related to sustainable finance literacy, while being a woman and older is negatively associated with it. Financial magazines are the source of financial information that always (positively) correlates with sustainable financial knowledge.

5 Additional analysis

5.1 Potential sustainable investors

We employ a survey experiment question and study individuals who are not currently investing in sustainable assets but who could potentially invest in the future. There are several reasons as to why it is important to analyze those potential investors. First, as mentioned above, investors that do not invest in sustainable financial products represent about 89.40% of our sample. Thus, studying these "potential" sustainable investors is essential in increasing

¹³High sustainable finance literacy and financial literacy refer to individuals who self-assessed their knowledge as at least 5 on a scale from 1 to 7.

our understanding of sustainable investments at large.

Second, given the relevance of the stock market participation puzzle—associated with a welfare loss estimated in terms of lifetime consumption for those not participating in the stock market (Guiso and Jappelli, 2005; Cocco et al., 2005)—and the potential role that sustainable investments could play in addressing it (Briere and Ramelli, 2021), it is important to investigate the preferences of individuals who do not currently invest sustainably but may choose to do so in the future.

Third, in examining potential sustainable investors, our study targets financially disengaged individuals with limited financial knowledge or interest (Anderson and Robinson, 2022). The scenario we use is analogous to some pension systems that allow individuals to choose their investments. To ensure that participants can make informed decisions, we designed the question and options to be as clear and comprehensible as possible. As a result, given the considerable stock return ignorance present among non-investors (Merkoulova and Veld, 2022), the options that respondents can choose are *intentionally* generic, hence not incentivized: "Investment fund with a return (profit) linked to all the companies in the Netherlands" versus "A selection of sustainable companies in the Netherlands."

Rossi et al. (2019) and Ceccarelli and Ramelli (2024) also employed "hypothetical investment questions" to investigate the choice between a sustainable and a conventional fund, while Weber et al. (2013) and Egan et al. (2014) used hypothetical questions for research questions in relevant settings yet not specifically related to sustainable investing.

We find that 57.5% of these people would choose sustainable investments (hypothetical sustainable investment) instead of conventional assets (Table 1). Similarly, in a recent study, Ceccarelli and Ramelli (2024) use a representative sample of US investors and find that 61% of respondents expressed a preference for hypothetically investing in a green fund rather than in a conventional fund.

Our findings reported in Table 6 indicate that several variables are associated with in-

dividuals' hypothetical choices to invest sustainably. Specifically, choosing the sustainable investment option (versus the traditional one) in the hypothetical question (Columns 1-2) is associated with having higher social preferences, being female, being an environmentalist and donating to environment, and having left-wing political views. Conversely, those individuals with high financial hype, risk-loving, and greenwashing beliefs are less likely to opt for sustainable investing.

The same variables are also associated in the same way with the hypothetical volume (Columns 3-4), expressed as a percentage, allocated to sustainable investment compared to the traditional one.

In particular, we find that the group of people who are usually more likely to be financially disengaged (Kaustia and Torstila, 2011; Anderson and Robinson, 2022), including women (Bucher-Koenen et al., 2024), would prefer to invest sustainably. Similarly, Rossi et al. (2019) use a representative sample of the population similar to ours and find that women choose sustainable investments more frequently than men in their hypothetical choice.

It is worth noting that sustainable finance literacy never plays a role in hypothetical sustainable investment choices (Table 6), while it did for reported sustainable investments (Table 3). This result can be explained in the following way. In a hypothetical choice, individuals are provided with information about which investment is sustainable, and which one is not, making literacy in sustainable finance quite irrelevant. While making real investment decisions, however, the literacy on sustainable finance becomes relevant to distinguish between a sustainable investment and a non-sustainable one. This is probably why we find that sustainable finance literacy has no impact in a hypothetical setting but does influence real investment decisions.

5.2 Most important ESG dimension

In our survey, we asked current and potential sustainable investors which ESG dimension is most important to them. Environmental issues are the most crucial dimension for 67.8% of respondents, while 21.1% prioritize social and 11.1% governance (Figure 5).

This aligns with Siemroth and Hornuf (2023), which show that sustainable investments are primarily driven by valuing environmental impact more than social impact. We focus only on the drivers for environment and social since most people chose them.¹⁴

Table 7, Columns 1-2 show that selecting *environment* is positively associated with having a university *degree*, and *left-wing political views* (both significant at the 10% level), while it is negatively related to *greenwashing* beliefs and *risk loving*.

Table 7, Columns 3-4 report that being a female is positively related to choosing social as the most important sustainable dimension. Social includes gender equality, thus perhaps it could be seen as the most pertinent issue for women. Moreover, having a university degree is negatively associated with choosing social (significant at the 10% level), while beliefs in greenwashing have a positive association with selecting social. Furthermore, being an environmentalist (significant at the 10% level) and donating to environment are negatively associated with choosing social as the most important dimension of ESG.

6 Conclusion

Using the LISS panel, we surveyed a representative sample of the Dutch population to extensively analyze what drives individuals to invest sustainably, particularly whether individuals' motives for sustainable investing play a role in this, and which barriers there are to sustainable investing.

We first uncover two broad groups: investors who invest sustainably *primarily* for social reasons (*social* sustainable investors) and those who do so *primarily* for financial reasons

¹⁴Only 12 sustainable investors picked the governance dimension.

(financial sustainable investors). We further find that both groups are important players in the retail market for sustainable investments. Financial sustainable investors outnumber social sustainable investors, while social sustainable investors have a higher percentage of their portfolio invested sustainably.

Our main findings show that unpacking sustainable investors into social and financial ones proves to be essential in depicting a complete description of the sustainable retail investors market, as the drivers of sustainable investing are very different based on sustainable investors' different motivations. We find that having higher social preferences, left-wing political views, more trust towards other people and a university degree, and being risk averse are positively associated with social sustainable investors' investments. In contrast, recommendations through (social) media and word of mouth and having a lower level of social preferences are positively related to sustainable investments of financial sustainable investors. The perceived ability to distinguish which investments are sustainable and which are not (i.e. the level of sustainable finance literacy) seems to be a crucial driver of investing sustainably for both investor groups.

Moreover, we show that information barriers are the primary reason why households do not invest sustainably. Sustainable finance literacy is a critical driver of this information barrier, and financial magazines are a source of information consulted for making investment decisions that enhances this perceived ability.

Finally, we find that women who do currently not invest sustainably would be more likely to choose a sustainable fund over a general stock market index. Women also consider *social* (among ESG) to be the most crucial sustainability dimension.

Our work opens avenues for future research. In our paper, we focus on two broad groups of sustainable investors: those who invest primarily for financial reasons and those who do so for social reasons. We acknowledge that both financial and social reasons encompass various sub-reasons that future research can investigate and enrich the analysis by allowing different

degrees of trade-offs between financial and social reasons.

References

- Aldy, J. E., Kotchen, M. J., and Leiserowitz, A. A. (2012). Willingness to pay and political support for a us national clean energy standard. *Nature Climate Change*, 2(8):596–599.
- An, J., Briley, D., Danziger, S., and Levi, S. (2023). The impact of social investing on charitable donations. *Management Science*, 69(2):1264–1274.
- Andersen, S., Chebotarev, D., Filali Adib, F. Z., and Nielsen, K. M. (2023). Rich and responsible: Is esg a luxury good? *Available at SSRN 4615424*.
- Anderson, A. and Robinson, D. T. (2022). Financial literacy in the age of green investment.

 Review of Finance, 26(6):1551–1584.
- Andre, P., Boneva, T., Chopra, F., and Falk, A. (2024). Misperceived social norms and willingness to act against climate change. *Review of Economics and Statistics*, pages 1–46.
- Bakaki, Z. and Bernauer, T. (2017). Citizens show strong support for climate policy, but are they also willing to pay? *Climatic Change*, 145:15–26.
- Balakina, O., Bäckman, C., Hackethal, A., Hanspal, T., and Lammer, D. (2023). Personal recommendations and portfolio quality. *Available at SSRN 4150243*.
- Barber, B. M. and Odean, T. (2008). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *The review of financial studies*, 21(2):785–818.
- Bartov, E., Faurel, L., and Mohanram, P. S. (2018). Can twitter help predict firm-level earnings and stock returns? *The Accounting Review*, 93(3):25–57.
- Bauer, R., Ruof, T., and Smeets, P. (2021). Get real! individuals prefer more sustainable investments. *The Review of Financial Studies*, 34(8):3976–4043.

- Bauer, R. and Smeets, P. (2015). Social identification and investment decisions. *Journal of Economic Behavior & Organization*, 117:121–134.
- Berg, F., Fabisik, K., and Sautner, Z. (2021). Is history repeating itself? the (un) predictable past of esg ratings. SSRN Electronic Journal, pages 1–59.
- Berg, F., Kölbel, J. F., and Rigobon, R. (2022). Aggregate confusion: The divergence of esg ratings. *Review of Finance*, 26(6):1315–1344.
- Bernard, R., Tzamourani, P., and Weber, M. (2025). Climate change and individual behavior.

 Chicago Booth Research Paper, (22-13):2022–66.
- Block, J., Jang, Y. S., Kaplan, S. N., and Schulze, A. (2024). A survey of private debt funds.

 The Review of Corporate Finance Studies, 13(2):335–383.
- Briere, M. and Ramelli, S. (2021). Responsible investing and stock allocation. *Available at SSRN 3853256*.
- Broccardo, E., Hart, O., and Zingales, L. (2022). Exit versus voice. *Journal of Political Economy*, 130(12):3101–3145.
- Brodback, D., Guenster, N., and Mezger, D. (2019). Altruism and egoism in investment decisions. *Review of Financial Economics*, 37(1):118–148.
- Brunen, A.-C. and Laubach, O. (2022). Do sustainable consumers prefer socially responsible investments? a study among the users of robo advisors. *Journal of Banking & Finance*, 136:106314.
- Bucher-Koenen, T., Alessie, R., Lusardi, A., and van Rooij, M. (2024). Fearless woman: Financial literacy, confidence, and stock market participation. *Management Science*.

- Bursztyn, L., Ederer, F., Ferman, B., and Yuchtman, N. (2014). Understanding mechanisms underlying peer effects: Evidence from a field experiment on financial decisions. *Econometrica*, 82(4):1273–1301.
- Calvet, L. E., Celerier, C., Sodini, P., and Vallee, B. (2023). Can security design foster household risk-taking? *The Journal of Finance*, 78(4):1917–1966.
- Ceccarelli, M. and Ramelli, S. (2024). Climate transition beliefs. Available at SSRN 4747402.
- Chen, H., De, P., Hu, Y., and Hwang, B.-H. (2014). Wisdom of crowds: The value of stock opinions transmitted through social media. *The Review of Financial Studies*, 27(5):1367–1403.
- Cocco, J. F., Gomes, F. J., and Maenhout, P. J. (2005). Consumption and portfolio choice over the life cycle. *The Review of Financial Studies*, 18(2):491–533.
- Crowne, D. P. and Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4):349.
- Derrien, F., Krueger, P., Landier, A., and Yao, T. (2022). Esg news, future cash flows, and firm value. Swiss finance institute research paper, (21-84).
- Dimmock, S. G., Kouwenberg, R., Mitchell, O. S., and Peijnenburg, K. (2015). Estimating ambiguity preferences and perceptions in multiple prior models: Evidence from the field.

 Journal of Risk and Uncertainty, 51:219–244.
- Dimmock, S. G., Kouwenberg, R., and Wakker, P. P. (2016). Ambiguity attitudes in a large representative sample. *Management Science*, 62(5):1363–1380.
- Dumitrescu, A., Gil-Bazo, J., and Zhou, F. (2022). Defining greenwashing. *Available at SSRN 4098411*.

- Edmans, A., Gosling, T., and Jenter, D. (2024). Sustainable investing: Evidence from the field. *Available at SSRN 4963062*.
- Egan, D., Merkle, C., and Weber, M. (2014). Second-order beliefs and the individual investor.

 Journal of Economic Behavior & Organization, 107:652–666.
- Engelberg, J. E. and Parsons, C. A. (2011). The causal impact of media in financial markets.

 The Journal of Finance, 66(1):67–97.
- Engler, D., Gutsche, G., and Smeets, P. (2023). Why do investors pay higher fees for sustainable investments? an experiment in five european countries. *Available at SSRN 4379189*.
- Falk, A., Becker, A., Dohmen, T., Enke, B., Huffman, D., and Sunde, U. (2018). Global evidence on economic preferences. *The Quarterly Journal of Economics*, 133(4):1645–1692.
- Falk, A., Becker, A., Dohmen, T., Huffman, D., and Sunde, U. (2023). The preference survey module: A validated instrument for measuring risk, time, and social preferences.

 Management Science, 69(4):1935–1950.
- Famulok, J., Kormanyos, E., and Worring, D. (2023). Do investors use sustainable assets as carbon offsets? *Available at SSRN 4349209*.
- Farroukh, A. E. K., Harford, J., and Shin, D. D. (2024). What does esg investing mean and does it matter yet? *Available at SSRN 4484626*.
- Filippini, M., Leippold, M., and Wekhof, T. (2024). Sustainable finance literacy and the determinants of sustainable investing. *Journal of Banking & Finance*, 163:107167.
- Gantchev, N., Giannetti, M., and Li, R. (2024). Sustainability or performance? ratings and fund managers' incentives. *Journal of Financial Economics*, 155:103831.
- Georgarakos, D. and Pasini, G. (2011). Trust, sociability, and stock market participation.

 Review of Finance, 15(4):693–725.

- Gibson Brandon, R., Glossner, S., Krueger, P., Matos, P., and Steffen, T. (2022). Do responsible investors invest responsibly? *Review of Finance*, 26(6):1389–1432.
- Giglio, S., Maggiori, M., Stroebel, J., Tan, Z., Utkus, S., and Xu, X. (2025). Four facts about esg beliefs and investor portfolios. *Journal of Financial Economics*, 164:103984.
- Gollier, C. and Pouget, S. (2022). Investment strategies and corporate behaviour with socially responsible investors: A theory of active ownership. *Economica*, 89(356):997–1023.
- Gomes, F., Haliassos, M., and Ramadorai, T. (2021). Household finance. *Journal of Economic Literature*, 59(3):919–1000.
- Gu, C. and Kurov, A. (2020). Informational role of social media: Evidence from twitter sentiment. *Journal of Banking & Finance*, 121:105969.
- Guiso, L. and Jappelli, T. (2005). Awareness and stock market participation. *Review of Finance*, 9(4):537–567.
- Guiso, L., Sapienza, P., and Zingales, L. (2008). Trusting the stock market. the Journal of Finance, 63(6):2557–2600.
- Gutsche, G. and Ziegler, A. (2019). Which private investors are willing to pay for sustainable investments? empirical evidence from stated choice experiments. *Journal of Banking & Finance*, 102:193–214.
- Gutsche, G. and Zwergel, B. (2020). Investment barriers and labeling schemes for socially responsible investments. *Schmalenbach Business Review*, 72:111–157.
- Hartzmark, S. M. and Sussman, A. B. (2019). Do investors value sustainability? a natural experiment examining ranking and fund flows. *The Journal of Finance*, 74(6):2789–2837.
- Heath, D., Macciocchi, D., Michaely, R., and C. Ringgenberg, M. (2023). Does socially responsible investing change firm behavior? *Review of Finance*, 27(6):2057–2083.

- Heeb, F., Kölbel, J. F., Paetzold, F., and Zeisberger, S. (2023). Do investors care about impact? The Review of Financial Studies, 36(5):1737–1787.
- Kaustia, M. and Knüpfer, S. (2012). Peer performance and stock market entry. *Journal of Financial Economics*, 104(2):321–338.
- Kaustia, M. and Torstila, S. (2011). Stock market aversion? political preferences and stock market participation. *Journal of Financial Economics*, 100(1):98–112.
- Krueger, P., Sautner, Z., and Starks, L. T. (2020). The importance of climate risks for institutional investors. *The Review of financial studies*, 33(3):1067–1111.
- Löfgren, Å. and Nordblom, K. (2024). Reconciling sustainability preferences and behavior—the case of mutual fund investments. *Journal of Behavioral and Experimental Finance*, 41:100880.
- Merkoulova, Y. and Veld, C. (2022). Stock return ignorance. *Journal of Financial Economics*, 144(3):864–884.
- Meyer, A. (2015). Does education increase pro-environmental behavior? evidence from europe. *Ecological economics*, 116:108–121.
- Noussair, C. N., Trautmann, S. T., and Van de Kuilen, G. (2014). Higher order risk attitudes, demographics, and financial decisions. *Review of Economic Studies*, 81(1):325–355.
- Ouimet, P. and Tate, G. (2020). Learning from coworkers: Peer effects on individual investment decisions. *The Journal of Finance*, 75(1):133–172.
- Parise, G. and Peijnenburg, K. (2019). Noncognitive abilities and financial distress: evidence from a representative household panel. *The Review of Financial Studies*, 32(10):3884–3919.
- Pástor, L., Stambaugh, R. F., and Taylor, L. A. (2021). Sustainable investing in equilibrium.

 Journal of financial economics, 142(2):550–571.

- Pedersen, L. H., Fitzgibbons, S., and Pomorski, L. (2021). Responsible investing: The esg-efficient frontier. *Journal of financial economics*, 142(2):572–597.
- Putnam, R. D. (1995). Tuning in, tuning out: The strange disappearance of social capital in america. *Political Science & Politics*.
- Riedl, A. and Smeets, P. (2017). Why do investors hold socially responsible mutual funds? the Journal of Finance, 72(6):2505–2550.
- Rossi, M., Sansone, D., Van Soest, A., and Torricelli, C. (2019). Household preferences for socially responsible investments. *Journal of Banking & Finance*, 105:107–120.
- Shiller, R. J. (2020). Narrative economics: How stories go viral and drive major economic events.
- Siemroth, C. and Hornuf, L. (2023). Why do retail investors pick green investments? a labin-the-field experiment with crowdfunders. *Journal of Economic Behavior & Organization*, 209:74–90.
- Starks, L. T. (2023). Presidential address: Sustainable finance and esg issues—value versus values. *The Journal of Finance*, 78(4):1837–1872.
- Von Gaudecker, H.-M. (2015). How does household portfolio diversification vary with financial literacy and financial advice? *The Journal of Finance*, pages 489–507.
- Weber, M., Weber, E. U., and Nosić, A. (2013). Who takes risks when and why: Determinants of changes in investor risk taking. *Review of Finance*, 17(3):847–883.
- Yang, R. (2022). What do we learn from ratings about corporate social responsibility? new evidence of uninformative ratings. *Journal of Financial Intermediation*, 52:100994.

Figures

Assets in which sustainable investors have invested

40

39.2%

25

20

15

10

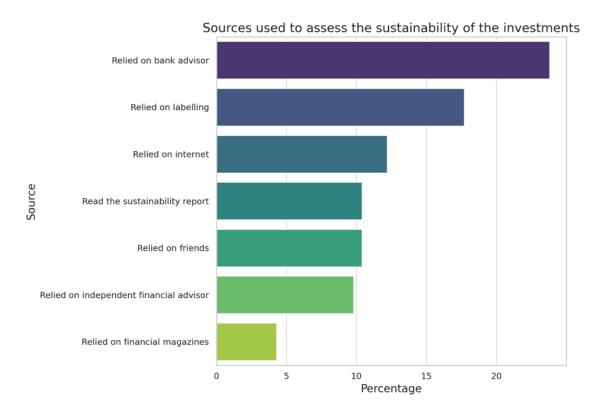
5

(Sustainable) stocks
(Sustainable) mutual funds
(Sustainable) ETF
(Sustainable) bonds

Figure 1: Assets in which sustainable investors have invested.

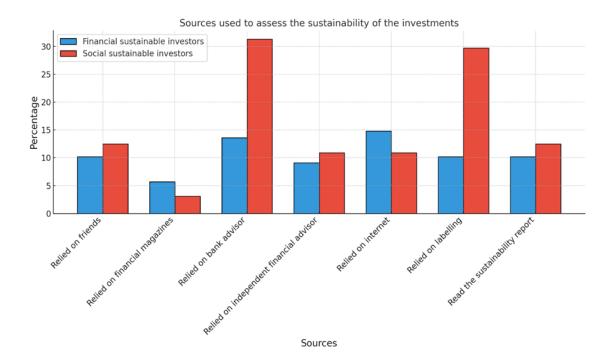
This graph illustrates the responses to the question "Which sustainable investments do you have?", which was asked to sustainable investors.

Figure 2: Sources used to assess the sustainability of the investments.



This graph shows the percentage of respondents who, on a 7-point scale, strongly agree (indicating a score of at least 6) that they used a specific source to evaluate the sustainability of an investment. The question posed, "How did you primarily determine that the investment was sustainable?", was directed solely at sustainable investors.

Figure 3: Sources used to assess the sustainability of the investments – financial and social sustainable investors



This graph displays the percentage of respondents who strongly agree, with a score of 6 or higher on a 7-point scale, that they used a specific source to evaluate the sustainability of an investment. Respondents were asked: "How did you primarily determine that the investment was sustainable?". This question was directed exclusively at sustainable investors. The graph contrasts the responses of *financial* sustainable investors (investors that bought sustainable assets primarily for financial reasons), and *social* sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return).

Reasons for not investing sustainably

Non-investors
Traditional investors

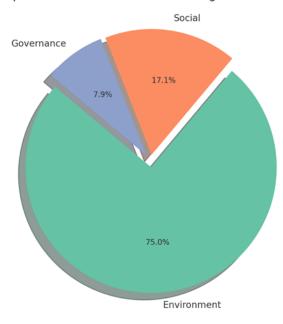
Traditional inv

Figure 4: Reasons for not investing sustainably.

This graph presents the reasons individuals provided for not investing sustainably. In the graph, the blue bars represent *non-investors* (individuals without any financial investments), while the orange bars represent *traditional investors* (who have investments other than sustainable ones).

Figure 5: Most important sustainability dimension.

The most important ESG dimension according to sustainable investors



This graph illustrates the responses to the question "If you had to choose, which sustainability topic do you think is the most important?", which was asked to (current and potential) sustainable investors.

Tables

Table 1: Summary statistics

Variables	N	Mean	St. Dev.	Min	Max
$Sustainable\ investments$					
Sustainable investors	1550	0.106	0.308	0	1
Financial sustainable investors	1550	0.057	0.231	0	1
Social sustainable investors	1550	0.041	0.199	0	1
Other sustainable investors	1550	0.008	0.088	0	1
Other groups					
Traditional investors	1550	0.090	0.287	0	1
Non-investors	1550	0.804	0.397	0	1
Preferences and traits					
Social preferences	1550	4.254	1.687	1	7
Greenwashing	1550	4.080	1.204	1	7
Financial hype	1550	2.370	1.447	1	7
Financial literacy	1550	4.486	1.351	1	7
Sustainable finance literacy	1550	2.754	1.392	1	7
Preferences and traits (from LISS panel	!)				
Left-wing views	1222	0.299	0.458	0	1
Trust	1483	6.039	2.276	0	10
Risk loving	1168	3.773	2.506	0	10
Environment donation	1224	0.176	0.381	0	1
Environment member	1224	0.074	0.261	0	1
Demographics (from LISS panel)					
Female	1550	0.489	0.500	0	1
Age	1550	55.557	17.497	18	95
Non-urban	1550	2.755	1.342	1	5
Income (net)	1550	2092.472	3746.803	0	142025
Degree	1550	0.154	0.361	0	1
Married	1550	0.535	0.499	0	1
Reasons for NOT investing in sustainab	ole finan	cial produ	acts		
Information	1386	0.421	0.494	0	1
Marketing trick	1386	0.054	0.226	0	1
Prefer traditional investment	1386	0.035	0.183	0	1
Low returns	1386	0.038	0.190	0	1
Hypothetical sustainable investment					
Hypothetical sustainable investment	1386	0.575	0.495	0	1
Hypothetical sustainable volume	1386	52.814	31.013	0	100
Environment	961	0.677	0.468	0	1
Social	961	0.211	0.408	0	1
Governance	961	0.111	0.314	0	1

 ${\it Note:}$ This table reports summary statistics for the main variables we use in our analysis.

Table 2: Group averages

	(1)	(2)	(3)
Variables	Sustainable	Non-sustainable	(1) (0)
variables	investors	investors	(1) - (2)
Preferences and traits			
Social preferences	4.621	4.210	0.411***
Greenwashing	3.890	4.102	-0.212**
Financial hype	3.134	2.279	0.854***
Financial literacy	4.871	4.440	0.431***
Sustainable finance literacy	3.731	2.637	1.094***
Preferences and traits (from LISS p	panel)	
Left-wing views	0.411	0.286	0.125***
Trust	6.869	5.943	0.926***
Risk loving	4.348	3.712	0.636**
Environment donation	0.294	0.163	0.130***
Environment member	0.101	0.070	0.030
Demographics (from LIS	SS panel)		
Female	0.390	0.500	-0.110***
Age	52.109	55.964	-3.855**
Non-urban	2.567	2.777	-0.210*
Income	2555.064	2037.736	517.3***
Degree	0.365	0.129	0.237***
Married	0.481	0.541	-0.060
N	164	1386	

Note: Panel A: Mean difference 1. This table reports the average values for each variable based on the groups. Column 1 considers *sustainable investors* (investors that have sustainable investments), Column 2 considers *non-sustainable investors* (individuals that do not have any sustainable investments). The mean difference between the groups is displayed in Column 3. The symbols ***, **, and * denote the significance of the differences at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Financial Sustainable investors	Social Sustainable investors	Non- Sustainable investors	(1) - (3)	(2) - (3)	(1) - (2)
Preferences and traits						
Social preferences	3.955	5.516	4.210	-0.256	1.305***	-1.561***
Greenwashing	4.227	3.516	4.102	0.125	-0.587***	0.712***
Financial hype	3.386	2.953	2.279	1.106***	0.673***	0.433*
Financial literacy	4.989	4.719	4.441	0.548***	0.278*	0.270
Sustainable finance literacy	3.864	3.688	2.637	1.226***	1.050***	0.176
Preferences and traits (from LISS 1	oanel)				
Left-wing views	0.222	0.723	0.286	-0.064	0.437***	-0.501***
Trust	6.375	7.623	5.943	0.431*	1.679***	-1.248***
Risk loving	5.034	3.356	3.712	1.322***	-0.357	1.679***
Environment donation	0.190	0.404	0.163	0.027	0.240***	-0.214**
Environment member	0.063	0.149	0.071	-0.008	0.078	-0.085
Demographics (from LIS	SS panel)					
Female	0.330	0.469	0.501	-0.171***	-0.032	-0.139*
Age	48.091	56.234	55.964	-7.874***	0.270	-8.143***
Non-urban	2.545	2.531	2.777	-0.232	-0.246	0.014
Income	2463.345	2646.172	2037.736	425.6**	608.4***	-0.228
Degree	0.284	0.516	0.129	0.155***	0.386***	-0.232***
Married	0.466	0.469	0.541	-0.075	-0.073	-0.003
Volume invested sustain	ably					
Absolute volume	11245.890	36361.250				-25115.4**
Percentage volume	35.943	59.043				-23.1***
N	88	64	1,386			

Note: Panel B: Mean difference 2. This table reports the average values for each variable based on the investor groups. Column 1 considers *financial* sustainable investors (investors that bought sustainable assets primarily for financial reasons), Column 2 social sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return), Column 3 considers non-sustainable investors (individuals that do not have any sustainable investments). The mean differences between the groups are displayed in Columns 4-6. The symbols ***, **, and * denote the significance of the differences at the 1%, 5%, and 10% levels, respectively.

Table 3: Sustainable investments

	(1)	(2)	(3)	(4)	(5)	(6)
	Sustainable investors +		Financial		Social	
Sample		nable investors		e investors +		e investors +
	Non-sustan	nable investors		able investors		nable investors
Variables	Suctaina	ble investors		ancial		ocial
Variables	Sustama	DIE IIIVESTOIS		ole investors		ole investors
Social preferences	-0.001	-0.004	-0.011***	-0.009**	0.011***	0.006**
	(0.004)	(0.005)	(0.003)	(0.004)	(0.003)	(0.003)
Greenwashing	-0.010	-0.006	0.001	0.002	-0.011**	-0.007
	(0.006)	(0.008)	(0.005)	(0.005)	(0.005)	(0.006)
Financial hype	0.022***	0.022***	0.018***	0.018***	0.008	0.006
	(0.007)	(0.008)	(0.006)	(0.007)	(0.005)	(0.006)
Financial literacy	0.002	-0.001	0.004	-0.002	-0.003	0.001
	(0.006)	(0.007)	(0.005)	(0.005)	(0.004)	(0.005)
Sustainable finance literacy	0.036***	0.035***	0.023***	0.020***	0.017***	0.018***
	(0.006)	(0.008)	(0.005)	(0.006)	(0.005)	(0.006)
Female	-0.001	0.019	-0.005	-0.000	0.008	0.020
	(0.015)	(0.019)	(0.011)	(0.015)	(0.011)	(0.014)
Age	0.001	0.000	-0.000	-0.000	0.001***	0.000
	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Income	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Degree	0.118***	0.090***	0.038	0.026	0.108***	0.090***
	(0.029)	(0.033)	(0.024)	(0.026)	(0.025)	(0.028)
Left-wing views		0.040**		-0.004		0.059***
		(0.020)		(0.015)		(0.016)
Trust		0.009**		0.004		0.005**
		(0.004)		(0.003)		(0.002)
Risk loving		-0.002		0.003		-0.007***
		(0.004)		(0.003)		(0.002)
Constant	-0.089	-0.119*	-0.023	-0.023	-0.086**	-0.105**
	(0.060)	(0.071)	(0.050)	(0.057)	(0.041)	(0.051)
Other variables	YES	YES	YES	YES	YES	YES
Sources as control	YES	YES	YES	YES	YES	YES
N	1550	1140	1474	1086	1450	1075
adj. R-sq	0.092	0.097	0.069	0.058	0.082	0.105

Note: This table reports OLS estimates. Columns 1-2 samples consider sustainable investors (investors that have sustainable investments) and non-sustainable investors (individuals that do not have sustainable investments). Columns 3-4 samples include financial sustainable investors (investors that bought sustainable assets primarily for financial reasons) and non-sustainable investors. Columns 5-6 samples include social sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return) and non-sustainable investors. The dependent variable in Columns 1-2, sustainable investors, is a dummy variable equal to one if the individual has sustainable investments, and zero otherwise. The dependent variable in Columns 3-4 is a dummy variable equal to one if the individual is a non-sustainable investor. The dependent variable in Columns 5-6 is a dummy variable equal to one if the individual is a social sustainable investor, and zero if the individual is a non-sustainable investor. The independent variables are detailed in Appendix A. Other variables include Non-urban and Married in all columns, and Environment donation and Environment member in Columns 2, 4, and 6. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

Table 4: Why do people NOT invest in sustainable investments?

Reason	Percentage
I don't have enough <i>information</i> to consider such investments.	42.1%
I believe sustainable financial products are only a marketing strategy.	5.4%
I prefer traditional investments.	3.5%
I believe sustainable assets have low returns.	3.8%
I don't have enough money for it.	27.5%
I don't have enough time for it.	8.4%
I never thought about it.	23.3%

Note: Panel A. This table and the respective graph (Figure 4) present the reasons individuals have indicated for not investing sustainably. In the table, only *non-sustainable investors* (individuals who do not have sustainable investments) are considered.

	(1)	(2)	
Sample	Non-sustainable investor		
Variables	Infor	mation	
Social preferences	0.005	0.009	
	(0.008)	(0.010)	
Greenwashing	-0.001	0.005	
	(0.011)	(0.013)	
Financial hype	0.012	0.011	
	(0.011)	(0.013)	
Financial literacy	-0.036***	-0.033***	
	(0.011)	(0.013)	
Sustainable finance literacy	-0.079***	-0.082***	
	(0.011)	(0.012)	
Female	0.004	-0.010	
	(0.027)	(0.032)	
Age	-0.003***	-0.003***	
	(0.001)	(0.001)	
Income	-0.000***	-0.000	
	(0.000)	(0.000)	
Degree	-0.028	-0.016	
	(0.038)	(0.046)	
Left-wing views		0.011	
		(0.034)	
Trust		-0.006	
		(0.007)	
Risk loving		0.003	
		(0.006)	
	0.500***	0.050***	
Constant	0.792***	0.870***	
	(0.102)	(0.124)	
Other variables	YES	YES	
N	1386	1030	
adj. R-sq	0.095	0.094	

Note: Panel B. This table reports OLS estimates. In the table, only *non-sustainable investors* (individuals who do not have sustainable investments) are considered. The dependent variable is a dummy, *Information*, and it is equal to one if the individual selected "I don't have enough information" as a reason not to have sustainable investments, and zero otherwise. The independent variables are detailed in Appendix A. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

Table 5: Knowledge is key: sustainable finance literacy

	(1)	(2)	(3)		
Commis	Sustainable investors +				
Sample	Non-sustainable investors				
Variables	Sustain	able finance	literacy		
Social preferences	0.096***	0.104***	0.106***		
	(0.020)	(0.026)	(0.028)		
Greenwashing	-0.022	0.030	0.016		
	(0.030)	(0.036)	(0.037)		
Financial hype	0.168***	0.180***	0.190***		
	(0.026)	(0.031)	(0.033)		
Financial literacy	0.234***	0.217***	0.223***		
	(0.025)	(0.029)	(0.031)		
Female	-0.491***	-0.485***	-0.442***		
	(0.063)	(0.078)	(0.086)		
Age	-0.009***	-0.008***	-0.006**		
	(0.002)	(0.003)	(0.003)		
Income	-0.000***	0.000	0.000		
	(0.000)	(0.000)	(0.000)		
Degree	0.328***	0.281***	0.267**		
	(0.090)	(0.109)	(0.115)		
Source - financial magazines	0.162***	0.131***	0.133***		
	(0.031)	(0.036)	(0.038)		
Left-wing views		0.011	-0.024		
		(0.079)	(0.082)		
Trust		0.018	0.027		
		(0.018)	(0.019)		
Risk loving		0.034**	0.029		
		(0.017)	(0.017)		
Constant	1.349***	0.888***	0.730		
Constant	(0.251)	(0.310)	(0.528)		
	(0.231)	(0.310)	(0.528)		
Other Sources	YES	YES	YES		
Other variables	YES	YES	YES		
Personality traits	NO	NO	YES		
N	1550	1140	1076		
adj. R-sq	0.279	0.282	0.287		

Note: This table reports OLS estimates. The table considers both *sustainable investors* (investors that have sustainable investments) and *non-sustainable investors* (individuals that do not have sustainable investments). The dependent variable, *Sustainable finance literacy*, indicates the self-assessed ability to understand if an investment is sustainable. The independent variables are detailed in Appendix A. Other variables include *Non-urban* and *Married* in Columns 1, 2 and 3, and *Left-wing views*, *Trust*, *Risk loving*, *Environment donation*, and *Environment member* in Columns 2 and 3. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

Table 6: Potential sustainable investors

	(1)	(2)	(3)	(4)		
Sample	(1)	\ /	\ /			
Sample	Non-sustainable investors Hypothetical. Hypothetical					
Variables	v -	investment		tainable volume		
Social preferences	0.061***	0.047***	4.224***	3.008***		
Social preferences						
Greenwashing	(0.008) -0.090***	(0.010) -0.070***	(0.504) -5.744***	(0.582) $-4.465***$		
Greenwashing	(0.010)	(0.012)	(0.669)	(0.745)		
Financial hype	-0.032***	-0.025*	-2.043***	-1.599**		
r manerar ny pe	(0.011)	(0.013)	(0.644)	(0.746)		
Financial literacy	-0.021**	0.013) 0.007	-1.748***	-0.107		
r manerar meracy	(0.010)	(0.012)	(0.626)	(0.721)		
Sust. finance literacy	0.010)	0.012) 0.004	0.746	0.721) 0.552		
Sust. Illiance interacy	(0.010)	(0.012)	(0.685)	(0.765)		
Female	0.090***	0.012)	4.485***	3.377*		
remaie	(0.026)	(0.031)	(1.604)	(1.850)		
Age	0.020)	-0.000	0.084	0.052		
ngc	(0.001)	(0.001)	(0.054)	(0.063)		
Income	0.000	-0.000	0.000	-0.001		
meome	(0.000)	(0.000)	(0.000)	(0.001)		
Degree	0.080**	0.012	5.714**	1.205		
Degree	(0.036)	(0.042)	(2.402)	(2.738)		
Left-wing views	(0.000)	0.159***	(2.402)	13.195***		
Lore wing views		(0.032)		(2.007)		
Trust		0.002		0.725*		
11 450		(0.006)		(0.393)		
Risk loving		-0.020***		-1.158***		
Tuon loving		(0.006)		(0.375)		
Environment donation		0.147***		9.495***		
		(0.037)		(2.277)		
Environment member		0.179***		10.795***		
		(0.047)		(3.326)		
		(0.0 -1)		(0.0_0)		
Constant	0.791***	0.632***	63.230***	52.140***		
	(0.102)	(0.122)	(6.424)	(7.328)		
		` /	, ,	` /		
Other variables	YES	YES	YES	YES		
Sources	YES	YES	YES	YES		
N	1386	1030	1386	1030		
adj. R-sq	0.134	0.172	0.151	0.209		

Note: This table reports OLS estimates. The table considers non-sustainable investors (individuals that do not have sustainable investments). The dependent variables are Hypothetical sustainable investment and Hypothetical sustainable volume. Hypothetical sustainable investment is a dummy which is equal to 1 if the individual chooses sustainable investment over conventional investment in an experimental question, and 0 otherwise. Hypothetical sustainable volume is the percentage volume hypothetically invested sustainably. The independent variables are detailed in Appendix A. Other variables include Non-urban and Married. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

Table 7: E vs S investing

	(1)	(2)	(3)	(4)		
C 1 -	Sustainable investors +					
Sample	Hypothetical sustainable investors					
Variables	Enviro	onment	Soc	Social		
Social preferences	0.021**	0.014	0.004	0.008		
	(0.010)	(0.013)	(0.009)	(0.012)		
Greenwashing	-0.053***	-0.050***	0.030***	0.040***		
	(0.013)	(0.015)	(0.011)	(0.012)		
Financial hype	0.002	0.006	-0.007	-0.003		
	(0.012)	(0.014)	(0.011)	(0.012)		
Financial literacy	0.006	-0.005	-0.003	-0.006		
	(0.013)	(0.014)	(0.011)	(0.013)		
Sust. finance literacy	0.004	0.011	-0.016	-0.014		
	(0.013)	(0.014)	(0.011)	(0.012)		
Female	-0.049	-0.050	0.083***	0.078**		
	(0.032)	(0.038)	(0.028)	(0.032)		
Age	0.001	-0.000	-0.001	-0.000		
	(0.001)	(0.001)	(0.001)	(0.001)		
Income	-0.000**	0.000	-0.000***	-0.000		
	(0.000)	(0.000)	(0.000)	(0.000)		
Degree	0.142***	0.083*	-0.115***	-0.065*		
	(0.035)	(0.044)	(0.029)	(0.035)		
Left-wing views		0.067*		-0.018		
		(0.037)		(0.032)		
Trust		0.012		-0.004		
		(0.009)		(0.008)		
Risk loving		-0.016**		0.012*		
		(0.008)		(0.007)		
Env. donation		0.049		-0.056*		
		(0.040)		(0.034)		
Env. member		0.066		-0.092**		
		(0.050)		(0.040)		
Constant	0.677***	0.743***	0.204*	0.133		
Compositio	(0.126)	(0.151)	(0.110)	(0.139)		
	(0.120)	(0.101)	(0.110)	(0.100)		
Other variables	YES	YES	YES	YES		
Sources as control	YES	YES	YES	YES		
N	961	697	961	697		
adj. R-sq	0.048	0.061	0.042	0.055		
J1	0.020	0.00=	U.U ==	0.000		

Note: This table reports OLS estimates. The sample considers *sustainable investors* (investors that have sustainable investments) and *hypothetical sustainable investors* (individuals that choose sustainable investment over conventional investment in an experimental question). The dependent variables are *Environment* and *Social*, which indicate if the individual chooses Environment or Social as the most crucial sustainability dimension, respectively, and zero otherwise. The independent variables are detailed in Appendix A. *Other variables* include *Non-urban* and *Married*. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, ***, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

Appendix

A Variable definitions

Definition
Age of the individual (in years)
The individual has a degree - Binary variable
Environment is the most important sustainability dimension - Binary variable
Donate to an environmental association - Binary variable
Member of an environmental association - Binary variable
The gender of the individual is female - Binary variable
Would you consider investing in financial products because they are recommended by (social) media or by your friends, acquaintances or family? (1-7)
Self-assessed financial knowledge (1-7)
How much do you think sustainable investments are greenwashing (1-7)?
The individual would invest hypothetically in sustainable assets - Binary variable
Hypothetical % sustainable volume (0-100)
Logarithm of the individual income after taxes
The reason not to invest sustainably is: "Information" - Binary variable
The individual has left-wing political views - Binary variable
The reason not to invest sustainably is: "Low returns" - Binary variable
The reason not to invest sustainably is: "Marketing trick" - Binary variable
The individual is married - Binary variable
•
Individual's score in openness to experience (1-5) in the Big Five personality test
Individual's score in extraversion (1-5) in the Big Five personality test
Individual's score in agreeableness (1-5) in the Big Five personality test
Individual's score in emotional stability (1-5) in the Big Five personality test
Individual's score in conscientiousness (1-5) in the Big Five personality test
The reason not to invest sustainably is: "Prefer traditional investments" - Binary variable
Generally speaking, are you the kind of person who is willing to take risks or who prefers to avoid risks? (0-10)
Measure of self-esteem (1-7) obtained using the Rosenberg's Self-Esteem Scale
Social is the most important sustainability dimension - Binary variable
How much are you willing to give to good causes without expecting anything in return? (1-7)
Self-assessed ability to understand if an investment is sustainable (1-7)
How often do you use the following sources of information when making important financial decisions? (1-7)
Bank advisors
Financial magazines
Other financial advisors
Social media
Internet
Friends
The individual has sustainable investments - Binary variable
The individual invests in sustainable assets primarily for financial reasons - Binary variable
The individual invests in sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return - Binary variable
The individual invests in sustainable assets primarily for non-financial reasons, but is unwilling to do so at the cost of a lower risk-adjusted return - Binary variable
Generally speaking, would you say that most people can be trusted, or that you cannot be too careful in dealing with people? (0-10)
Degree of non-urbanization of the area where the individual lives (1-5) - 1 (Extremely urban), 5 (Not Urban)
25-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
The logarithm of the amount invested sustainably plus one
The percentage of the financial portfolio invested sustainably
Individual's susceptibility to social desirability bias in survey responses (Crowne Marlowe, 1960)

B Survey questions (translated from Dutch)

1.1. Subjective Financial Literacy

How would you rate your financial knowledge?
a. 1 (Very poor)
b. 2
c. 3
d. 4
e. 5

1.2. Financial Information Source

How often do you use the following sources of information when making important financial decisions?

- a. Parents, friends, or acquaintances
- b. Newspapers

g. 7 (Very good)

f. 6

- c. Financial magazines, guides, books
- d. Bank or mortgage adviser
- e. Other financial advisers
- f. TV or radio
- g. Social media (Facebook, Twitter, Reddit, etc.)
- h. Financial information on the Internet

Categories:

1. 1 Never 2. 2 3. 3 Sometimes 4. 4 5. 5 Often 6. 6 7. 7 Always 1.3. Financial Hype Would you consider investing in financial products because they are recommended by (social) media or by your friends, acquaintances or family? a. 1 (Absolutely not) b. 2 c. 3 d. 4 (Maybe) e. 5 f. 6 g. 7 (Absolutely yes) 1.4. Social Preferences

How much are you willing to give to good causes without expecting anything in return (on a scale of 1 to 7, where 1 means 'completely unwilling', and 7 means 'very willing')?

- a. 1 (Not at all willing)
- b. 2

c. 3 d. 4 e. 5 f. 6 g. 7 (Very willing) 1.5. Subjective Sustainability Literacy How well can you estimate which financial investments are sustainable and which are not? a. 1 (Not good at all) b. 2 c. 3 d. 4 (Fairly good) e. 5 f. 6 g. 7 (Very very good) 1.6. Investments Do you have investments (e.g. stocks, bonds or ETFs)? a. Yes b. No

Question 1.6.1. below is asked only to people who answered a. to q.1.6.

1.6.1. Sustainable Investments

1.6.1. Do you have investments in sustainable assets (for example, green assets or financial

assets that consider environmental, social, and governance factors)?

- a. Yes
- b. No

Questions from $\underline{1.6.2.}$ to $\underline{1.6.6.}$ below are asked only to people who answered $\underline{a.}$ to $\underline{q.1.6.1.}$

1.6.2a. What is the **most important** reason for you to invest sustainably?

a. Mainly a financial reason

(For example, you expected that sustainable investments would yield a higher return (profit) than non-sustainable investments)

b. **Mainly** a non-financial reason

(For example, you have opted for sustainable investments because of the positive impact on society)

Question 1.6.2a.2. below is asked only to people who answered b. to q.1.6.2a.

- <u>1.6.2a_2</u>. Would you also have been willing to accept a **lower return (profit) when** investing sustainably (instead of a higher return when investing non-sustainable)?
 - a. Yes
 - b. No
- <u>1.6.2b.</u> If you had to choose, which sustainability topic do you think is the **most important**?
- a. Environment and climate (e.g. lower CO2 emissions, less energy and water consumption, etc.)

- b. Social (e.g. gender equality, ethnic diversity, working conditions, human rights, safety, etc.)
- c. Governance (e.g. no corruption and bribery, independence of the board of directors, protection of stakeholders, etc.)
- <u>1.6.3a.</u> How much did you approximately invest in sustainable assets? Please give your answer in euros.

. . . .

- 1.6.3b. What percentage of your total financial portfolio is invested in sustainable assets?
- a. (... %)
- b. I don't know
- c. I don't want to say
- 1.6.4. Which sustainable investments do you have? (more than one answer is possible)
- a. Sustainable stocks
- b. Sustainable bonds
- c. Sustainable mutual funds
- d. Sustainable ETFs
- e. Sustainable saving accounts
- f. Sustainable pension funds
- g. Other sustainable investments, namely...
- 1.6.5. What is the type of sustainable criteria applied in your sustainable investments? (more than one answer is possible)
 - a. Positive screening: seeking out companies with high sustainability scores (can even

include tobacco, weapons, and oil companies, as long as they are more sustainable than their peers)

- b. **Negative** screening: screening out controversial companies or sectors (e.g., tobacco, gambling, weapons, and fossil fuels) that do not meet my sustainability criteria
- c. Through **impact** investing (investing in companies that pursue a particular social or environmental objective)
 - d. Other, namely...
 - e. I don't know
 - 1.6.6. How did you mainly assess that the investment was sustainable?
 - a. I relied on the advice of my family, friends or acquaintances.
 - b. I relied on the advice of newspapers.
 - c. I relied on the advice of financial magazines, guides, books.
 - d. I relied on the advice of the bank or mortgage adviser.
 - e. I relied on the advice of other financial advisers.
 - f. I relied on the advice on TV or radio.
 - g. I relied on advice on social media (Facebook, Twitter, Reddit, etc.).
 - h. I trusted the information I found on the Internet.
- i. I was looking for a labelled environmentally sustainable investment, and I trusted that it was really sustainable.
 - j. I have read the sustainability report of the companies in which I invest.

Questions from $\underline{1.6.7.}$ to $\underline{1.6.10.}$ below are asked only to people who answered $\underline{b.}$ to $\underline{q.1.6.}$ or $\underline{b.}$ to $\underline{q.1.6.1}$.

- 1.6.7. Why don't you have sustainable investments?
- a. I don't have enough information to consider such investments.
- b. I believe sustainable financial products are only a marketing strategy (greenwashing).
- c. I prefer to invest in traditional investments that only look at expected return and risk.
- d. I believe sustainable assets have low returns.
- e. I don't have enough money for it.
- f. I don't have enough time for it.
- g. I never thought about it.
- f. Other, namely...
- <u>1.6.8.</u> Suppose that you have €10,000 to invest over a long-term horizon. What would you choose if you had only the following possibilities $(v1_6_8)$?
 - a. Invest the money traditionally (conventionally)

(Put the money in an investment fund with a return (profit) linked to all companies in the Netherlands)

b. Invest the money sustainably

(Place the money in an investment fund with a return (profit) linked to a selection of environmentally and socially responsible companies in the Netherlands)

Questions 1.6.9. and 1.6.9b. are asked only to people who answered b. to q.1.6.8.

- 1.6.9. Why did you choose the sustainable investment (v1_6_9)?_
- a. Mainly a financial reason

(For example, you expected that sustainable investments would yield a higher return (profit) than non-sustainable investments)

b. Mainly a non-financial reason

(For example, you have opted for sustainable investments because of the positive impact on society)

Questions 1.6.9a. is asked only to people who answered b. to q.1.6.9.

- 1.6.9a. Would you also have been willing to accept a **lower return (profit) when** investing sustainably (instead of a higher return when investing non-sustainable) (v1_6_9a)?
 - a. Yes
 - b. No
- <u>1.6.9b.</u> If you had to choose, which sustainability topic do you think is the **most important** $(v1_6_9b)$?
- a. Environment and climate (e.g. lower CO2 emissions, less energy and water consumption, etc.)
- b. Social (e.g. gender equality, ethnic diversity, working conditions, human rights, safety, etc.)
- c. Governance (e.g. no corruption and bribery, independence of the board of directors, protection of stakeholders, etc.)
 - 1.6.10. What would you do if you could split the amount between the two?
- a. 0 ... 100% in the traditional investment (mutual fund with a return linked to the stocks of all publicly listed companies in the Netherlands).
 - b. $0 \dots 100\%$ in the socially responsible investment.
- 1.6.11. How much do you think sustainable investments are related to greenwashing (a marketing ploy to make companies seem more sustainable than they really are)?
 - a. 1 (Not at all)

- b. 2
- c. 3
- d. 4 (Don't disagree, don't agree)
- e. 5
- f. 6
- g. 7 (A lot)

C Descriptive statistics: sustainable, traditional, and non-investors compared

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Sustainable	Traditional	Non-	(1) - (3)	(1) - (2)	(2) - (3)
variables	investors	investors	investors	(1) - (3)	(1) - (2)	(2) - (3)
Preferences and traits						
Social preferences	4.622	4.250	4.206	0.416***	0.372**	0.044
Greenwashing	3.890	4.221	4.089	-0.199*	-0.331**	0.132
Financial hype	3.134	3.136	2.184	0.950***	-0.002	0.952***
Financial literacy	4.872	5.000	4.378	0.494***	-0.128	0.622***
Sustainable finance literacy	3.732	3.221	2.572	1.159***	0.510***	0.649***
Preferences and traits (from LISS p	oanel)				
Left-wing views	0.412	0.277	0.288	0.124***	0.135**	-0.011
Trust	6.869	6.243	5.910	0.960***	0.627**	0.333
Risk loving	4.348	4.748	3.595	0.753***	-0.399	1.152***
Environment donation	0.294	0.124	0.168	0.126***	0.170***	-0.0445
Environment member	0.101	0.080	0.070	0.031	0.021	0.010
Demographics (from LI	SS panel)					
Female	0.390	0.343	0.518	-0.128***	0.047	-0.176***
Age	52.110	53.643	56.226	-4.116***	-1.533	-2.583*
Non-urban	2.567	2.550	2.803	-0.235**	0.017	-0.253**
Income (net)	2555.064	2521.421	1983.389	571.7***	33.64	538.0***
Degree	0.366	0.257	0.115	0.251***	0.109**	0.142***
Married	0.482	0.479	0.549	-0.067	0.003	-0.070
N	164	140	1246			

Note: Panel A: Mean difference 1. This table reports the average values for each variable based on the groups. Column 1 considers *sustainable investors* (investors that have sustainable investments), Column 2 considers *non-investors* (individuals that do not have any financial investments), and Column 3 considers *traditional investors* (who have investments other than sustainable ones). The mean differences between the groups are displayed in Columns 4-6. The symbols ***, **, and * denote the significance of the differences at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	Financial Sustainable investors	Social Sustainable investors	Traditional investors	Non- investors	(1) - (4)	(1) - (3)	(2) - (4)	(2) - (3)	(1) - (2)
Preferences and tra	its								
Social preferences	3.955	5.516	4.250	4.206	-0.252	-0.295	1.309***	1.266***	-1.561***
Greenwashing	4.227	3.516	4.221	4.089	0.138	0.006	-0.573***	-0.706***	0.712***
Financial hype	3.386	2.953	3.136	2.184	1.203***	0.251	0.769***	-0.183	0.433*
Financial literacy	4.989	4.719	5.000	4.378	0.611***	-0.011	0.341**	-0.281	0.270
Sust. finance literacy	3.864	3.688	3.221	2.572	1.291***	0.642***	1.115***	0.466**	0.176
Preferences and tra	its (from L1	$(SS \ panel)$							
Left-wing views	0.222	0.723	0.277	0.288	-0.065	-0.055	0.436***	0.447***	-0.501***
Trust	6.375	7.623	6.243	5.91	0.465*	0.132	1.713***	1.380***	-1.248***
Risk loving	5.034	3.356	4.748	3.595	1.439***	0.287	-0.240	-1.392***	1.679***
Environment donation	0.190	0.404	0.124	0.168	0.022	0.067	0.236***	0.280***	-0.214**
Environment member	0.063	0.149	0.080	0.070	-0.006	-0.016	0.079	0.069	-0.085
Demographics (from	n LISS pane	l)							
Female	0.33	0.469	0.343	0.518	-0.189***	-0.013	-0.050	0.126*	-0.139*
Age	48.091	56.234	53.643	56.226	-8.135***	-5.552**	0.009	2.592	-8.143***
Non-urban	2.545	2.531	2.550	2.803	-0.257*	-0.005	-0.271	-0.019	0.014
Income (net)	2463.345	2646.172	2521.421	1983.389	479.96**	-58.08	662.8***	124.8	-182.8
Degree	0.284	0.516	0.257	0.115	0.169***	0.027	0.401***	0.258***	-0.232***
Married	0.466	0.469	0.479	0.549	-0.083	-0.013	-0.080	-0.010	-0.003
Volume invested sus	stainably								
Absolute volume	11245.890	36361.250							-25115.4**
Percentage volume	35.943	59.043							-23.100***
N	88	64	140	1246					

Note: Panel B: Mean difference 2. This table reports the average values for each variable based on the investor groups. Column 1 considers *financial* sustainable investors (investors that bought sustainable assets primarily for financial reasons), Column 2 *social* sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return), Column 3 considers *non-investors* (individuals that do not have any financial investments), and Column 4 *traditional investors* (who have investments other than sustainable ones). The mean differences between the groups are displayed in Columns 5-9. The symbols ***, **, and * denote the significance of the differences at the 1%, 5%, and 10% levels, respectively.

D Main results across individual subsamples

	(1)	(2)	(3)	(4)	(5)	(6)	
	Sustainable investors + Non-investors		Financial		Social		
Sample			sustainable investors +		sustainable investors +		
			Non-ii	nvestors	Non-investors		
Variables	Suctainal	ole investors	Fina	ancial		ocial	
	Sustamai			sustainable investors		sustainable investors	
Social preferences	-0.001	-0.005	-0.013***	-0.011***	0.011***	0.006**	
	(0.005)	(0.005)	(0.004)	(0.004)	(0.003)	(0.003)	
Greenwashing	-0.009	-0.003	0.002	0.003	-0.010*	-0.006	
	(0.007)	(0.008)	(0.005)	(0.006)	(0.005)	(0.007)	
Financial hype	0.031***	0.029***	0.024***	0.023***	0.012**	0.010	
	(0.008)	(0.009)	(0.007)	(0.008)	(0.005)	(0.007)	
Financial literacy	0.004	-0.001	0.005	-0.002	-0.002	0.002	
	(0.006)	(0.007)	(0.005)	(0.006)	(0.004)	(0.005)	
Sustainable finance literacy	0.037***	0.038***	0.024***	0.023***	0.017***	0.019***	
	(0.007)	(0.008)	(0.006)	(0.007)	(0.005)	(0.006)	
Female	-0.004	0.023	-0.007	0.002	0.008	0.024	
	(0.016)	(0.020)	(0.012)	(0.016)	(0.012)	(0.015)	
Age	0.001*	0.000	-0.000	-0.000	0.001***	0.001	
	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	
Income	0.000	0.000**	0.000	0.000	0.000	0.000*	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Degree	0.146***	0.112***	0.053*	0.035	0.134***	0.113***	
	(0.033)	(0.038)	(0.028)	(0.031)	(0.029)	(0.033)	
Left-wing views		0.040*		-0.006		0.063***	
		(0.022)		(0.016)		(0.017)	
Trust		0.010**		0.004		0.006**	
		(0.004)		(0.003)		(0.003)	
Risk loving		-0.002		0.003		-0.007***	
_		(0.004)		(0.003)		(0.003)	
Constant	-0.124*	-0.158**	-0.044	-0.044	-0.110**	-0.136**	
	(0.064)	(0.077)	(0.054)	(0.063)	(0.045)	(0.057)	
Other variables	YES	YES	YES	YES	YES	YES	
Sources as control	YES	YES	YES	YES	YES	YES	
N	1410	1037	1334	983	1310	972	
adj. R-sq	0.122	0.126	0.094	0.082	0.102	0.127	

Note: Panel A. This table reports OLS estimates. Columns 1-2 samples consider sustainable investors (investors that have sustainable investments) and non-investors (individuals who do not have any financial investments). Columns 3-4 samples include financial sustainable investors (investors that bought sustainable assets primarily for financial reasons) and non-investors (individuals that do not have any financial investments). Columns 5-6 samples include social sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return) and non-investors. The dependent variable in Columns 1-2, sustainable investors, is a dummy variable equal to one if the individual has sustainable investments, and zero if the individual is a non-investor. The dependent variable in Columns 3-4 is a dummy variable equal to one if the individual is a non-investor. The dependent variable in Columns 5-6 is a dummy variable equal to one if the individual is a non-investor. The independent variables are detailed in Appendix A. Other variables include Non-urban and Married in all columns, and Environment donation and Environment member in Columns 2, 4, and 6. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, ***, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Sustainable investors + Traditional investors		Financial		Social	
Sample			sustainable investors $+$		sustainable investors +	
			Tradition	al investors	Traditional investors	
Variables	Sustainable investors			ancial	Social sustainable investors	
variables	Sustamai	ne mvestors	sustainable investors			
Social preferences	0.016	0.002	-0.048**	-0.026	0.077***	0.027
	(0.020)	(0.028)	(0.023)	(0.029)	(0.019)	(0.025)
Greenwashing	-0.041*	-0.031	-0.008	0.003	-0.072***	-0.053*
	(0.023)	(0.026)	(0.026)	(0.031)	(0.025)	(0.027)
Financial hype	-0.022	0.001	-0.001	0.021	-0.040	-0.033
	(0.024)	(0.029)	(0.027)	(0.034)	(0.025)	(0.029)
Financial literacy	-0.030	-0.012	-0.007	0.000	-0.064***	-0.040
	(0.025)	(0.033)	(0.031)	(0.041)	(0.024)	(0.033)
Sustainable finance literacy	0.100***	0.101***	0.119***	0.112***	0.056**	0.055*
	(0.024)	(0.030)	(0.026)	(0.036)	(0.025)	(0.029)
Female	0.033	0.040	0.050	0.011	0.063	0.050
	(0.062)	(0.078)	(0.074)	(0.093)	(0.063)	(0.079)
Age	0.000	-0.002	-0.002	-0.005*	0.004*	0.001
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)
Income	-0.000	-0.000	-0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Degree	0.095	0.052	0.036	0.027	0.182**	0.143
	(0.064)	(0.085)	(0.074)	(0.096)	(0.072)	(0.087)
Left-wing views		0.115		0.011		0.224**
		(0.083)		(0.099)		(0.094)
Trust		0.018		0.017		0.022
		(0.018)		(0.019)		(0.015)
Risk loving		-0.015		0.003		-0.044***
		(0.015)		(0.017)		(0.014)
Constant	0.323	0.127	0.151	0.080	0.060	0.112
	(0.250)	(0.293)	(0.277)	(0.341)	(0.238)	(0.263)
		,	` ′	` /	` ′	` /
Other variables	YES	YES	YES	YES	YES	YES
Sources as control	YES	YES	YES	YES	YES	YES
N	304	213	228	159	204	148
adj. R-sq	0.057	0.079	0.062	0.048	0.242	0.291

Note: Panel B. This table reports OLS estimates. Columns 1-2 samples consider sustainable investors (investors that have sustainable investments) and traditional investors (who have investments other than sustainable ones). Columns 3-4 samples include financial sustainable investors (investors that bought sustainable assets primarily for financial reasons) and traditional investors. Columns 5-6 samples include social sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return) and traditional investors. The dependent variable in Columns 1-2, sustainable investors, is a dummy variable equal to one if the individual has sustainable investments, and zero if the individual is a traditional investor. The dependent variable in Columns 3-4 is a dummy variable equal to one if the individual is a financial sustainable investor, and zero if the individual is a social sustainable investor, and zero if the individual is a traditional investor. The independent variables are detailed in Appendix A. Other variables include Non-urban and Married in all columns, and Environment donation and Environment member in Columns 2, 4, and 6. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)			
	Social				
Sample	sustainable investors +				
Sample	Fina	ancial			
		le investors			
Variables		ancial			
,		le investors			
Social preferences	-0.138***	-0.085*			
	(0.024)	(0.043)			
Greenwashing	0.074**	0.052			
	(0.031)	(0.036)			
Financial hype	0.025	0.050			
	(0.027)	(0.033)			
Financial literacy	0.004	-0.021			
	(0.036)	(0.045)			
Sustainable finance literacy	0.051*	0.067			
	(0.031)	(0.042)			
Female	0.017	-0.042			
	(0.072)	(0.084)			
Age	-0.005*	-0.003			
	(0.003)	(0.004)			
Income	0.000	0.000			
	(0.000)	(0.000)			
Degree	-0.245***	-0.268**			
	(0.084)	(0.126)			
Left-wing views	,	-0.239**			
		(0.114)			
Trust		0.006			
		(0.023)			
Risk loving		0.045**			
Ü		(0.021)			
		,			
Constant	0.854***	0.611			
	(0.296)	(0.391)			
		` '			
Other variables	YES	YES			
Sources as control	YES	YES			
N	152	101			
adj. R-sq	0.326	0.335			

Note: Panel C. This table reports OLS estimates. Columns 1-2 samples consider *financial* sustainable investors (investors that bought sustainable assets primarily for financial reasons) and *social* sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return). The dependent variable is a dummy variable equal to one if the individual is a *financial* sustainable investor, zero if the individual is a *social* sustainable investor. The independent variables are detailed in Appendix A. *Other variables* include *Non-urban* and *Married* in Columns 1 and 2, and *Environment donation* and *Environment member* in Column 2. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

E Sustainable investments – volume

	(1)	(2)	(3)	(4)	(5)	(6)
	D 11	1	A 11	Sustainable	A 11 .	Sustainable
Sample	Full sample		All investors	investors	All investors	investors
Variables	Abso		lute Volume		Percentage Volume	
Social preferences	0.011	-0.025	0.233	-0.242*	1.814	-1.588
	(0.032)	(0.034)	(0.192)	(0.125)	(1.445)	(3.444)
Greenwashing	-0.136**	-0.091	-0.559**	-0.169	-1.164	3.705
	(0.056)	(0.068)	(0.227)	(0.128)	(1.757)	(2.459)
Financial hype	0.152***	0.146**	-0.190	-0.145	-0.533	0.820
	(0.053)	(0.064)	(0.235)	(0.118)	(1.710)	(2.838)
Financial literacy	0.049	0.056	-0.106	0.083	-0.282	2.156
	(0.040)	(0.047)	(0.252)	(0.146)	(2.033)	(3.492)
Sustainable finance literacy	0.264***	0.255***	1.061***	0.394***	6.885***	5.163
	(0.054)	(0.064)	(0.246)	(0.134)	(1.783)	(3.233)
Female	0.019	0.162	0.373	0.260	3.056	1.208
	(0.114)	(0.145)	(0.600)	(0.323)	(4.294)	(7.208)
Age	0.005	0.001	0.009	0.037***	0.254*	0.315
	(0.004)	(0.005)	(0.020)	(0.010)	(0.149)	(0.246)
Income	0.000	0.000	-0.000	0.000	-0.002	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.003)
Degree	0.774***	0.538**	0.825	-0.548	6.789	-0.279
	(0.234)	(0.265)	(0.630)	(0.341)	(5.073)	(8.315)
Left-wing views	, ,	0.538***	, , , , , , , , , , , , , , , , , , ,	, ,	, ,	. ,
		(0.166)				
Trust		0.068***				
		(0.026)				
Risk loving		-0.019				
		(0.026)				
Financial sustainable investors				-0.663*		-25.778***
				(0.373)		(8.947)
Other variables	YES	YES	YES	YES	YES	YES
Sources as control	YES	YES	YES	YES	YES	YES
N	1494	1104	248	108	244	104
adj. R-sq	0.086	0.102	0.086	0.357	0.060	0.067

Note: This table reports OLS estimates. Columns 1-2 consider the full sample, while Columns 3 and 5 only consider investors in the financial markets. Columns 4 and 6 consider only *sustainable investors*. The dependent variable in Columns 1-4 is *Absolute Volume*, equal to the logarithm of 1 plus the amount invested sustainably. The dependent variable in Columns 5-6 is *Percentage Volume*, which indicates the percentage of the investment portfolio invested sustainably. The independent variables are detailed in Appendix A. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively.

F Are our results driven by social desirability bias?

	(1)	(2)	(3)	(4)	(5)	(6)	
	Sustainable investors +		Fin	Financial		Social	
Sample	Non-sustainable investors		sustainable investors +		sustainable investors +		
				able investors	Non-sustainable investors		
Variables	Suctaina	ble investors	Financial		Social		
,				sustainable investors		sustainable investors	
Social desirability	0.000	0.000	-0.004	-0.002	0.003	0.001	
	(0.003)	(0.004)	(0.002)	(0.003)	(0.002)	(0.003)	
Social preferences	-0.001	-0.004	-0.011***	-0.009**	0.010***	0.006**	
	(0.004)	(0.005)	(0.003)	(0.004)	(0.003)	(0.003)	
Greenwashing	-0.010	-0.006	0.001	0.002	-0.011**	-0.007	
	(0.006)	(0.008)	(0.005)	(0.005)	(0.005)	(0.006)	
Financial hype	0.022***	0.022***	0.017***	0.018**	0.008*	0.006	
	(0.007)	(0.008)	(0.006)	(0.007)	(0.005)	(0.006)	
Financial literacy	0.002	-0.001	0.005	-0.002	-0.003	0.001	
	(0.006)	(0.007)	(0.004)	(0.005)	(0.004)	(0.005)	
Sustainable finance literacy	0.036***	0.035***	0.023***	0.021***	0.017***	0.018***	
	(0.006)	(0.008)	(0.005)	(0.006)	(0.005)	(0.006)	
Female	-0.001	0.019	-0.004	0.000	0.007	0.020	
	(0.015)	(0.019)	(0.011)	(0.015)	(0.011)	(0.014)	
Age	0.001	0.000	-0.000	-0.000	0.001***	0.000	
	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	
Income	0.000	0.000	0.000	0.000	0.000	0.000	
-	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Degree	0.118***	0.090***	0.037	0.026	0.108***	0.090***	
T C: .	(0.029)	(0.033)	(0.024)	(0.026)	(0.025)	(0.028)	
Left-wing views		0.040**		-0.004		0.059***	
m .		(0.020)		(0.015)		(0.016)	
Trust		0.009**		0.004		0.005**	
D:11:		(0.004)		(0.003)		(0.002) -0.007***	
Risk loving		-0.002		0.002			
		(0.004)		(0.003)		(0.002)	
Constant	-0.089	-0.121	-0.010	-0.016	-0.096**	-0.109**	
Constant	(0.061)	(0.074)	(0.051)	(0.058)	(0.042)	(0.053)	
	(0.001)	(0.074)	(0.051)	(0.058)	(0.042)	(0.055)	
Other variables	YES	YES	YES	YES	YES	YES	
Sources as control	YES	YES	YES	YES	YES	YES	
N	1550	1140	1474	1086	1450	1075	
adj. R-sq	0.091	0.096	0.070	0.057	0.082	0.104	
ary. resq	0.001	0.050	0.010	0.001	0.002	0.104	

Note: This table reports OLS estimates. Columns 1-2 samples consider *sustainable investors* (investors that have sustainable investments) and non-sustainable investors (individuals that do not have sustainable investments). Columns 3-4 samples include financial sustainable investors (investors that bought sustainable assets primarily for financial reasons) and non-sustainable investors. Columns 5-6 samples include social sustainable investors (investors that bought sustainable assets primarily for non-financial reasons, even at the cost of a lower risk-adjusted return) and non-sustainable investors. The dependent variable in Columns 1-2, sustainable investors, is a dummy variable equal to one if the individual has sustainable investments, and zero otherwise. The dependent variable in Columns 3-4 is a dummy variable equal to one if the individual is a financial sustainable investor, and zero if the individual is a non-sustainable investor. The dependent variable in Columns 5-6 is a dummy variable equal to one if the individual is a social sustainable investor, and zero if the individual is a non-sustainable investor. The independent variables are detailed in Appendix A. Other variables include Non-urban and Married in all columns, and Environment donation and Environment member in Columns 2, 4, and 6. Standard errors are robust to heteroskedasticity and are reported below in parentheses. ***, **, and * refer to significance at the 1%, 5%, and 10% levels, respectively. Social desirability measures an individual's susceptibility to social desirability bias in survey responses (Crowne and Marlowe, 1960).

G Assessing the representativeness of our sample

	(1)	(2)	(3)
Variables	Our sample	LISS Panel	(1) - (2)
Female	0.489	0.513	-0.024*
Age	50.962	55.557	-4.595***
Income (absolute)	2092.472	1923.317	169.155*
Degree	0.154	0.140	0.014
N	1,550	9,637	

Note: This table reports the average values for gender, age, net income, and having a university degree to assess the representativeness of our sample. Column 1 considers $Our\ sample$, that is, the respondents to our survey. Column 2 considers the $LISS\ Panel$, that is, all the individuals in the LISS Panel. The mean differences between the groups are displayed in Columns 3. The symbols ***, **, and * denote the significance of the differences at the 1%, 5%, and 10% levels, respectively.