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# Acting for Good, Being Good or Feeling Good? Exploring Factors Influencing Individual Investors’ Willingness to Invest in Green Funds

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## Highlights:

- We examine the motivations of willingness to do good in green investment
- Being good (altruism) is the most significant driver of green investment
- Feeling good (warm glow) does not influence investment in green funds
- Acting for good (impact) influence depends on individual characteristics

## Abstract:

This paper empirically investigates the determinants of willingness to do good of green investment within a real-world context. Using data from a questionnaire administered between December 2021 and January 2022 to French individual investors, we find that “being good” (altruism) and “acting for good” (perceived impact) exert a substantial influence on both the decision-making process and the amount invested in green funds, while positive emotions (warm glow) are not significantly linked. This research highlights the core importance of altruism in green investment decision.

**Keywords:** Green Investment, Individual Investors, Altruism, Impact Investing, Warm Glow, Sustainable Finance

**JEL Classification:** D14, G11, G41, G51, Q54

**Declaration of interest:** None

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## 1. Introduction

The 501 Eurobarometer survey on the attitudes of European citizens toward the environment (2020) shows that for 94 percent of them, protecting the environment is personally important. As investors, a way for citizens to act in favor of the environment is to invest in green equity funds. The literature on green equity investments is expanding rapidly. While green bonds (Flammer 2021) and institutional investors (Stroebel and Wurgler 2021; Sangiorgi and Schopohl 2021; Krueger et al. 2020) have received most of the attention, investments in green stocks by individual investors have been less studied so far (Brunen and Laubach 2022).

The literature on green and sustainable investment determinants among individual investors has extensively documented the role of financial motivations (Riedl and Smeets, 2017; Gutsche et al., 2019, Anderson and Robinson, 2021, Gutsche and Ziegler, 2019, Gutsche et al., 2023, Brodback et al., 2019, Guenster et al., 2022; Døskeland & Pedersen, 2016), social and environmental factors (Riedl and Smeets, 2017; Anderson and Robinson, 2021; Gutsche and Ziegler, 2019, Gutsche et al., 2023) and financial literacy (Anderson and Robinson, 2021). Individual investors may also be driven by intrinsic motivation, the willingness to do good through their choice to invest in green funds, which can take three different channels. First, individuals may demonstrate a proactive commitment to “acting for good”, focusing on their desire to have a positive impact and contribute to positive change for the environment and society (Riedl and Smeets, 2017; Heeb et al., 2023; Brodback et al., 2019; 2021). Second, “being good” is an altruistic individual orientation, and can be seen as a genuine concern for the well-being of others and the environment, in line with their personal values (Gutsche et al., 2023; Brodback et al., 2019; 2021; Guenster et al., 2022). Third, the “feeling good” or warm glow effect is related to the positive emotions that individuals feel when participating in charitable activities (Gutsche et al., 2019; Heeb et al., 2023; Gutsche and Ziegler, 2019; Gutsche et al., 2023). From a theoretical point of view, Andreoni (1990) proposes a formal decision model and distinguishes between altruism and warm glow. As pointed out by Heeb et al. (2023), this model is useful in the context of green investment and can explain why investors derive their utility from the well-being of others (altruism) or from a positive emotion resulting from their good deed (warm glow). Moreover, according to standard decision theory, investors are supposed to act as consequentialists, which means that the utility they gain from a sustainable investment is directly linked to its impact (Heeb et al., 2023).

The literature that addresses the role of willingness to do good in environmental and responsible investment decisions is still inconclusive. For example, while Riedl and Smeets (2017) or Heeb

et al. (2023) find a positive link between perceived impact (acting for good) and willingness to invest, this does not necessarily translate into higher SRI (Socially Responsible Investment) investment amounts (Riedl and Smeets, 2017), nor into a willingness to pay more for a greater impact on the environment (Heeb et al., 2023). The results concerning the effect of altruism (being good) on sustainable investment are also mixed. Brodback et al. (2019) or Guenster et al. (2022) find a positive relationship, while Gutsche et al. (2023) or Brodback et al. (2021) do not find any statistically significant effect. This mixed evidence may be due to three main limitations. First, a large part of the literature is based on experiments that do not always reflect actual investment decisions (Heeb et al., 2023, Brodback et al., 2019, Gutsche and Ziegler, 2019, Brodback et al., 2021, Guenster et al., 2022, Gutsche et al., 2023) while Bauer et al. (2021) document that hypothetical bias may significantly affect experimental choices. Second, the boundaries between these different concepts are sometimes blurred. For example, Heeb et al. (2023) explain the limited effect of impact on the willingness to pay for sustainable investment by relying on the warm glow effect, even though these two motivations can be different. Some investors may rationally want to act for the environment without expecting positive emotions, nor just because of pure altruism. Third, existing research does not simultaneously control for impact, altruism, and warm glow altogether in a comprehensive model, leading to a specification problem in understanding their distinct roles in the decision. This implies omitted variable bias (Li, 2021) and biased coefficient estimates (Coles and Li, 2023).

Our article aims to fill these gaps by simultaneously studying the effect of the three dimensions of willingness to do good – “acting for good”, “being good” and “feeling good” - on the real decision to invest in green funds. Based on an original survey of 2,228 French investors, we find that altruism (“being good”) and perceived impact (“acting for good”) are significant drivers of the decision to invest in green equity funds. These determinants also exert an influence on the amount invested.

We contribute to the literature by disentangling for the first time the effect of dimensions of willingness to do good on the decision to invest in green funds and on the amount invested in a real-world context. Interestingly, the most important and robust driver of green investment is altruism (“being good”) while the influence of perceived impact (“acting for good”) depends on individual characteristics. We expect that differentiating between these motivations is key for developing effective initiatives to encourage green investment.

The rest of the paper is as follows: Section 2 describes the sample and the methodology. Section 3 presents the results, and section 4 concludes.

## 2. Sample and model

### 2.1 Sample

The survey was conducted anonymously by Panelabs between December 2021 and January 2022 among French investors. Panelabs is a questionnaire-based data provider for research purposes in France. This study recruited investors who had a minimum amount invested in equity funds (€500). A total of 2,288 completed questionnaires were obtained. This method of data collection enabled us to obtain data linked to real financial decisions, not based on a hypothetical investment, or even on a mere investment intention. The investors recruited were decision-makers within their households. We also ensured that respondents did not fill in the questionnaire mechanically by using an attention question. Approximately 1/5<sup>th</sup> of our sample of investors has invested in green equity funds. The average investor is 47 years old, has a mean net income of €3,334 per month, and has a mean portfolio of €8,893 invested in equity. A large part, roughly two-thirds of our respondents, have children, and women represent 46.4 percent of the sample<sup>1</sup>.

### 2.2 Estimation model and variables

To assess the influence of the different factors on the decision to invest in green equity funds, we estimate the following Probit model with  $K$  factors and  $N$  controls.  $i$  corresponds to the respondent ( $i = 1$  to 2,288).  $\Phi(\cdot)$  is the cumulative standard normal distribution function.

$$\begin{aligned} P(\text{Green Investment}_i = 1 \mid \sum_{k=1}^K \beta_k^i \text{Factor}_k^i + \sum_{k=1}^N \beta_k^i \text{Control}_k^i) \\ = \Phi(\beta_0 + \sum_{k=1}^K \beta_k^i \text{Factor}_k^i + \sum_{k=1}^N \beta_k^i \text{Control}_k^i) \end{aligned}$$

*Green Investment* is equal to 1 if an investor has invested at least €500 in a “dark green” equity fund in the sense of the SFDR (European Union Sustainable Finance Disclosure Regulation (2019/2088)). Such a fund is known as an article 9 fund and pursues an environmentally sustainable investment objective<sup>2</sup> (Becker et al., 2022). When looking at the effect of the factors on the invested amount, in line with Gutsche et al. (2019), we perform Ordered Probit regressions with the same specification, the dependent variables taking 3 or 5 classes of

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<sup>1</sup> Appendix A.2 provides some summary statistics concerning the sample, and Appendix A.6 presents the correlation matrix.

<sup>2</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019R2088&from=EN#d1e1311-1-1>

amounts or percentage of the portfolio invested<sup>3</sup>. *Factors* correspond to the willingness to do good drivers of green investment, i.e., “Acting for Good” measured by the variable *Impact*<sup>4</sup>, “Being Good” measured by the variable *Altruism* and “Feeling Good” measured by the variable *Warm Glow* (Anderson and Robinson, 2021; Brodback et al., 2019; Brodback et al., 2021; Guenster et al., 2022; Gutsche et al., 2019; Gutsche et al., 2023; Gutsche and Ziegler, 2019; Heeb et al., 2023; Riedl and Smeets, 2017). Specifically, *Impact* is measured as the average of the responses to the following three questions on 7 Likert-Scales: “An investment in a green fund has a significant impact on the environment” (Significant Impact), “An investment in a green fund will affect the environment in the near future” (Near Future Impact), “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO<sub>2</sub> footprint)” (Precise Impact). *Altruism* corresponds to the natural log of the amount in charity donations<sup>5</sup> and *Warm Glow* is the mean of the answers to the two questions “In your opinion, investing in a green fund is pleasant/unpleasant” and “joyful/joyless” (7-point Likert scales).

We also control for Environmental Preferences, financial preferences (Perceived Return, Higher Cost and Perceived Risk), and image concerns (Expectation Social Environment, Signaling) (Bauer et al., 2021; Anderson and Robinson, 2021; Brodback et al., 2019; Brodback et al., 2021; Guenster et al., 2022; Gutsche et al., 2019; Gutsche et al., 2023; Gutsche and Ziegler, 2019; Heeb et al., 2023; Riedl and Smeets, 2017). Other control variables reflect individual characteristics<sup>6</sup>.

### 3. Results

Table 1 presents the average marginal effects of our Probit models. In columns (1) to (4), we find that both *Impact* and *Altruism* exert a significant impact on the decision to invest, while

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<sup>3</sup> Green Amount 3 Classes: No Green, Green Amount  $\in$  [€500; €2,000[, and Green Amount  $\geq$  €2,000. Green Percent 3 Classes: No Green, Green Percent  $\in$  [0; 25%[, and Green Percent  $\geq$  25%. Green Amount 5 Classes: No Green, Green Amount  $\in$  [€500; €1,000[, Green Amount  $\in$  [€1,000; €2,000[, Green Amount  $\in$  [€2,000; €5,000[, and Green Amount  $\geq$  €5,000. Green Percent 5 Classes: No Green, Green Percent,  $\leq$  12,5%, Green Percent  $\in$  ] 12,5%; 25%], Green Percent  $\in$  ] 25%; 50%], and Green Percent  $>$  50 %.

<sup>4</sup> The Cronbach’s  $\alpha$  of Impact and Warm Glow scales are respectively of 0.835 and 0.864, confirming the internal consistency of our measure (For more details, see Appendix A.3)

<sup>5</sup> This proxy for altruism is in line with both theoretical (Echazu and Nocetti, 2015) and empirical studies (Ottoni-Wilhelm et al., 2017).

<sup>6</sup> Our variables are described in Appendix A.1 and follow the literature.

*Warm Glow* is not significant, all else being equal<sup>7,8</sup>. Interestingly, while the results on altruism are mixed in previous research (Gutsche et al., 2023; Brodback et al., 2019, 2021; Guenster et al., 2022), we find this personal value to be significantly related to investment in a green fund. We complement and confirm, all else being equal, the results of Riedl and Smeets (2017) and Brodback et al. (2021). These results are consistent with the desire to help improve the environment. Contrary to previous literature (Gutsche et al., 2019 or Heeb et al., 2023), the warm glow effect is not significant. This can be explained by the inclusion of a broad set of preferences and variables that avoid omitted variable bias and by the fact that we are using a survey based on real decisions rather than an experiment based on hypothetical choices. The absence of a warm glow effect is also probably related to a short-term emotional reaction to the experimental context of the decision itself. In order to determine the relative economic importance of the three potential factors for investment in green funds, we estimated standardized betas<sup>9</sup>. We find that a one standard deviation increase in *Altruism* and *Impact*, respectively, translates, on average, into an increase of 0.1455 and 0.0863 in the standard deviation of the probability of investing in green funds. In real-world investment decisions, *Altruism* is clearly the strongest intrinsic motivation and the most significant driver for people who invest in green funds. This observation is in line with previous research that highlights the influential role of altruistic tendencies within controlled experiments (Brodback et al., 2019; Guenster et al., 2022). However, in light of our empirical findings, the ongoing debate surrounding the precise impact of altruism deserves further investigation. Discrepancies in the existing literature may arise from methodological considerations, such as the hypothetical bias within experimental settings<sup>10</sup> or the robustness of the measure<sup>11</sup>. In addition to the real-world context, we consider the use of charitable giving (Riedl and Smeets, 2017) while controlling for individual wealth to be a more consistent measure than hypothetical psychometric questions (Echazu and Nocetti, 2015; Ottoni-Wilhelm et al., 2017).

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<sup>7</sup> As *Impact*, *Altruism*, and *Warm Glow* are all significantly correlated, it is possible that these three variables are correlated with a common latent factor. To verify this possibility, we performed a principal component analysis and a varimax rotation. We find that the factor loadings of these three variables correspond to different factors, suggesting that our variables are orthogonal. We are grateful to one reviewer for this suggestion.

<sup>8</sup> We do not find evidence of collinearity issues, all VIF being lower than 2 (See Appendix A.4). Moreover, these results are robust to each subset of impact and warm glow considered, as well as an alternative measure of Altruism (See Appendix A.5). We also checked that using binary or continuous variables did not affect the results (See Appendix A.6)

<sup>9</sup> Unstandardized and Standardized Estimates of our variables on interest of Table 1 Model (4) are reported in Appendix A.7

<sup>10</sup> Cf. Brodback et al. (2021), in which participants are asked to imagine winning a €5,000 prize.

<sup>11</sup> Gutsche et al. (2023) rely on a binary assessment derived from a single question to gauge altruistic tendencies.

Some of the results<sup>12</sup> in Table 1 suggest that investors who are more future-oriented and others-oriented are also more likely to invest in a green fund. In this vein, to refine the results, we perform a sub-sample analysis in Table 2. We examine the influence of orientations towards the future and other people by splitting the sample according to investment horizon, children, and gender. We find that investors with a longer investment horizon and children consider *Impact* (acting for good) to be important in their decision to invest in green funds. This is consistent with an effect of future orientation as a mediating variable of *Impact* on the decision. *Altruism* (being good) is always significant, while *Warm Glow* (feeling good) is barely significant. Overall, this suggests that the most important and robust driver is *Altruism*.

Beyond the decision itself and the likelihood to invest in green funds, we also study the effect of these drivers on the invested amount, since the effect on the decision and the amount may differ (Riedl and Smeets, 2017). The results of the Ordered Probit regressions with classes of either the invested amount or the green percentage of the equity portfolio as dependent variable are presented in Table 3. These results are close to those obtained for the decision, confirming the robustness and consistency of our results. The more altruistic investors are and the more they believe that their decision will have an impact, the greater the amount and percentage of the portfolio invested in green funds. Regarding altruism, the result echoes the findings of Riedl and Smeets (2017), who show that donations and SRI are not substitutes for each other, but correlates. Regarding impact, our findings challenge the conclusions of Heeb et al. (2023) that show that investors are not ready to pay more for more impact. The context, however, is not the same: while Heeb et al. (2023) are measuring the willingness to pay fees in an experimental setting, we use real green investment amounts.

#### 4. Conclusion

The drivers of green investment decisions by individual investors have been increasingly studied in recent research (Anderson and Robinson, 2021; Brodback et al., 2019; Brodback et al., 2021; Guenster et al., 2022; Gutsche et al., 2019; Gutsche et al., 2023; Gutsche and Ziegler, 2019; Heeb et al., 2023; Riedl and Smeets, 2017). However, the literature has provided mixed evidence regarding the drivers of willingness to do good in different settings, sometimes blurring these dimensions, and has tested these drivers without taking all others as controls. This study aims to overcome these limitations. Based on a sample of 2,288 investors, we show

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<sup>12</sup> Being a woman, having a long-term investment horizon, and having children are positively related to green investment.



that being altruistic (being good) and believing that green funds have an impact (acting for good) are significantly linked to the decision to invest and the amount invested in green funds. Our paper has broader implications. Identifying altruism and impact as significant drivers of green investment emphasizes the role of non-financial motives in shaping investment behavior. The lack of a significant impact of positive emotions (warm glow) on green investment decisions suggests that, unlike previous studies (Gutsche et al., 2019), rational considerations such as impact and altruistic motives appear to drive investment decisions more than emotional gratification. To foster sustainable finance development, legislators should not only address financial incentives, but also rely on investor values (Starks, 2023). This calls for the integration of an environmental dimension in the usual decision models in finance.

Our results have practical implications for green fund retailers who may be interested in the heterogeneity of investor perceptions. Altruistic bank customers, who already donate to charities, may be more prone to invest, and invest significant amounts in green equity funds. Moreover, communicating the positive impact of green funds could be a way to motivate households to invest in green equity funds, and have positive impacts for a transition towards a green economy. However, the asset management sector should use the green argument with caution, as greenwashing controversies undermine the perception of the impact of green funds. This article opens avenues for future research. Compared to previous studies (Gutsche et al, 2019; Heeb et al, 2023; Gutsche and Ziegler, 2019; Gutsche et al, 2023), warm glow has no significant effect. This deserves further investigation to better understand the role of context, such as cultural factors, and choice setting (real-world decision versus laboratory or field experiments) that mediate the influence of this factor.

Table 1 – Green Investment Determinants

	(1)	(2)	(3)	(4)
Impact	0.0234*** (0.008)			0.0225*** (0.008)
Altruism		0.0169*** (0.003)		0.0166*** (0.003)
Warm Glow			0.00579 (0.006)	0.000161 (0.006)
Environmental Preferences	0.0155* (0.009)	0.0168** (0.008)	0.0200** (0.009)	0.0108 (0.009)
Perceived Return	0.0561*** (0.016)	0.0588*** (0.016)	0.0566*** (0.016)	0.0581*** (0.015)
Higher Cost	0.0422** (0.017)	0.0308* (0.017)	0.0425** (0.017)	0.0298* (0.017)
Perceived Risk	-0.0479** (0.020)	-0.0475** (0.020)	-0.0486** (0.020)	-0.0463** (0.020)
Expectation Social Environment	0.0719*** (0.021)	0.0878*** (0.020)	0.0821*** (0.021)	0.0759*** (0.021)
Signaling	0.00224 (0.016)	0.000655 (0.016)	0.00447 (0.016)	-0.00183 (0.016)
Financial Knowledge	0.0138** (0.007)	0.0124* (0.006)	0.0138** (0.007)	0.0120* (0.006)
Green Fund Information	0.0895*** (0.005)	0.0878*** (0.005)	0.0898*** (0.006)	0.0874*** (0.005)
Ln (Net Income)	-0.0212 (0.018)	-0.0362** (0.018)	-0.0199 (0.018)	-0.0382** (0.018)
Ln (Equity Portfolio)	0.0257*** (0.006)	0.0265*** (0.006)	0.0261*** (0.006)	0.0261*** (0.006)
Investment Horizon	0.0228** (0.009)	0.0250*** (0.009)	0.0237*** (0.009)	0.0241*** (0.009)
Age	0.000193 (0.001)	-0.000138 (0.001)	0.000337 (0.001)	-0.000273 (0.001)
Female	0.0333** (0.016)	0.0322** (0.016)	0.0321** (0.016)	0.0324** (0.015)
Education	0.00488 (0.004)	0.00214 (0.004)	0.00465 (0.004)	0.00248 (0.004)
Children	0.0389** (0.016)	0.0457*** (0.016)	0.0421*** (0.016)	0.0424*** (0.016)
Pseudo R <sup>2</sup>	0.2325	0.2396	0.2286	0.2436
N	2,288	2,288	2,288	2,288

This table reports Probit regressions in which the dependent variable takes the value of 1 for the respondents who have invested at least €500 in a green equity fund. Impact is the average of the responses to the following questions on 7 Likert scales “An investment in a green fund has a significant impact on the environment” (Significant Impact), “An investment in a green fund will affect the environment in the near future” (Near Future Impact), “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO<sub>2</sub> footprint)” (Precise Impact). Altruism is the natural log of the amount in charity donations. Warm Glow is the mean of the answers of the two questions “In your opinion, investing in a green fund is pleasant/unpleasant, joyful/joyless” (7-point Likert scales). Environmental Preferences is the mean of the answers of the three questions “Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs” on a 7-point Likert scale (from the World Value Survey Q111.1), “The ecological lists in the elections reflect my opinions” on a 7-point Likert scale, and “I play an active role in recycling by sorting my waste” from “Not agree at all” to “Fully agree” on a 7-point Likert scale. Perceived Return is a dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less profitable’” on a 7-point Likert scale is higher or equal to the median, Higher Cost is a dummy variable equal to 1 if the answer to “I am willing to pay higher commissions to invest in a green fund” over a 7-point Likert scale agreement is higher than or equal to the median, Perceived Risk is a dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less risky’” on a 7-point Likert scale is higher than or equal to the median, Expectation Social Environment is a dummy variable equal to 1 if the answer to “People important to me think I should invest in a green fund” on a 7-point Likert scale agreement is higher than or equal to the median, Signaling is a dummy variable equal to 1 if the answer to “I often talk about my financial decisions around me” on a 7-point Likert scale agreement is higher than or equal to the median, Financial Knowledge is the answer to the question “I consider myself to have good knowledge of financial investments” on a 7-point Likert scale, Green Fund Information is the answer to the question “As far as green funds are concerned, I consider myself to be ‘not informed at all’ to ‘Fully informed’” on a 7-point Likert scale, Ln (Net Income) is natural log of the monthly net income, Ln (Equity Portfolio) is the natural log of the equity portfolio amount, Investment Horizon is the answer to the question “My equity/equity fund investment horizon is” less than 1 year / 2-4 years / 5-10 years / >10 years, Age is the age in years, Female is a dummy variable equal to 1 if the respondent is female and 0 otherwise, Education is the number of years of higher education, Children is a dummy variable equal to 1 if the respondent has a child, 0 otherwise. Data were collected from 2,288 French investors, in France, during the period November 2021 to February 2022. The table reports average marginal effects. Robust standard errors within parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level.

Table 2 – Green Investment Determinants – Additional Evidence from Sample Splits

	(1) Male	(2) Female	(3) No Children	(4) Children	(5) Investment Horizon < Median	(6) Investment Horizon ≥ Median
Impact	0.0305*** (0.010)	0.0120 (0.013)	0.0116 (0.013)	0.0256** (0.011)	0.0171 (0.011)	0.0259** (0.012)
Altruism	0.0188*** (0.004)	0.0146*** (0.005)	0.0108** (0.005)	0.0194*** (0.004)	0.0182*** (0.005)	0.0162*** (0.005)
Warm Glow	-0.00314 (0.008)	0.00295 (0.009)	0.0234** (0.010)	-0.0101 (0.008)	-0.00286 (0.008)	0.00273 (0.009)
Controls	YES	YES	YES	YES	YES	YES
Pseudo R <sup>2</sup>	0.2569	0.2487	0.2688	0.2389	0.2313	0.2548
N	1,226	1,062	782	1,506	1,104	1,184

This table reports Probit regressions in which the dependent variable takes the value of 1 for the respondents who have invested at least €500 in a green equity fund. Impact is the average of the responses to the following questions on 7 Likert scales “An investment in a green fund has a significant impact on the environment” (Significant Impact), “An investment in a green fund will affect the environment in the near future” (Near Future Impact), “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO<sub>2</sub> footprint)” (Precise Impact). Altruism is the natural log of the amount in charity donations. Warm Glow is the mean of the answers of the two questions “In your opinion, investing in a green fund is pleasant/unpleasant, joyful/joyless” (7-point Likert scales). Controls of the preceding table are included. The table reports average marginal effects. Robust standard errors within parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level.

Table 3 – Green Amount Determinants

	(1) Green Amount 3 Classes	(2) Green Amount 5 Classes	(3) Green Percent 3 Classes	(4) Green Percent 5 Classes
Impact	0.0823** (0.037)	0.0724** (0.036)	0.0827** (0.036)	0.0720** (0.036)
Altruism	0.0692*** (0.014)	0.0688*** (0.014)	0.0712*** (0.014)	0.0729*** (0.014)
Warm Glow	-0.000903 (0.028)	0.00263 (0.027)	0.00728 (0.027)	0.00895 (0.027)
Environmental Preferences	0.0510 (0.038)	0.0629 (0.039)	0.0562 (0.039)	0.0568 (0.038)
Perceived Return	0.248*** (0.070)	0.249*** (0.069)	0.260*** (0.067)	0.260*** (0.066)
Higher Cost	0.114 (0.075)	0.119 (0.074)	0.0851 (0.073)	0.0759 (0.072)
Perceived Risk	-0.181** (0.076)	-0.177** (0.074)	-0.165** (0.076)	-0.141* (0.073)
Expectation Social Environment	0.362*** (0.110)	0.395*** (0.108)	0.363*** (0.107)	0.386*** (0.104)
Signaling	0.0150 (0.068)	0.0289 (0.067)	0.0310 (0.068)	0.0358 (0.067)
Financial Knowledge	0.0278 (0.028)	0.0243 (0.028)	0.0462* (0.028)	0.0387 (0.027)
Green Fund Information	0.366*** (0.026)	0.365*** (0.025)	0.361*** (0.025)	0.356*** (0.025)
Ln (Net Income)	-0.118 (0.075)	-0.104 (0.074)	-0.121 (0.075)	-0.122* (0.074)
Ln (Equity Portfolio)	0.208*** (0.025)	0.230*** (0.025)	0.0403 (0.025)	0.0231 (0.025)
Investment Horizon	0.115*** (0.038)	0.118*** (0.038)	0.104*** (0.039)	0.0930** (0.037)
Age	-0.00104 (0.003)	0.0000231 (0.003)	-0.000957 (0.003)	-0.000178 (0.003)
Female	0.140** (0.066)	0.147** (0.065)	0.124* (0.065)	0.114* (0.064)
Education	0.000751 (0.015)	0.00691 (0.015)	-0.00207 (0.015)	-0.00692 (0.015)
Children	0.173** (0.070)	0.157** (0.069)	0.155** (0.069)	0.155** (0.067)
Pseudo R <sup>2</sup>	0.194	0.170	0.179	0.146
N	2,288	2,288	2,288	2,288

This table reports Ordered Probit regressions in which the dependent variable takes the following classes of green amount or green percentage. Green Amount 3 Classes: No Green, Green Amount ∈ [€500; €2,000[, and Green Amount ≥ €2,000. Green Percent 3 Classes: No Green, Green Percent ∈ [0; 25%[, and Green Percent ≥ 25%. Green Amount 5 Classes: No Green, Green Amount ∈ [€500; €1,000[, Green Amount ∈ [€1,000; €2,000[, Green Amount ∈ [€2,000; €5,000[, and Green Amount ≥ €5,000. Green Percent 5 Classes: No Green, Green Percent, ≤ 12.5%, Green Percent ∈ ] 12.5%; 25%], Green Percent ∈ ] 25%; 50%], and Green Percent > 50 %. Impact is the average of the responses to the following questions on 7 Likert scales “An investment in a green fund has a significant impact on the environment” (Significant Impact), “An investment in a green fund will affect the environment in the near future” (Near Future Impact), “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO<sub>2</sub> footprint)” (Precise Impact). Altruism is the natural log of the amount in charity donations. Warm Glow is the mean of the answers of the two questions “In your opinion, investing in a green fund is pleasant/unpleasant, joyful/joyless” (7-point Likert scales). Environmental Preferences is the mean of the answers of the three questions “Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs” on a 7-point Likert scale (from the World Value Survey Q111.1), “The ecological lists in the elections reflect my opinions” on a 7-point Likert scale, and “I play an active role in recycling by sorting my waste” from “Not agree at all” to “Fully agree” on a 7-point Likert scale. Perceived Return is a dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less profitable’” on a 7-point Likert scale is higher or equal to the median, Higher Cost is a dummy variable equal to 1 if the answer to “I am willing to pay higher commissions to invest in a green fund” over a 7-point Likert scale agreement is higher than or equal to the median, Perceived Risk is a dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less risky’” on a 7-point Likert scale is higher than or equal to the median, Expectation Social Environment is a dummy variable equal to 1 if the answer to “People important to me think I should invest in a green fund” on a 7-point Likert scale agreement is higher than or equal to the median, Signaling is a dummy variable equal to 1 if the answer to “I often talk about my financial decisions around me” on a 7-point Likert scale agreement is higher than or equal to the median, Financial Knowledge is the answer to the question “I consider myself to have good knowledge of financial investments” on a 7-point Likert scale, Green Fund Information is the answer to the question “As far as green funds are concerned, I consider myself to be ‘not informed at all’ to ‘Fully informed’” on a 7-point Likert scale, Ln (Net Income) is natural log of the monthly net income, Ln (Equity Portfolio) is the natural log of the equity portfolio amount, Investment Horizon is the answer to the question “My equity/equity fund investment horizon is” less than 1 year / 2-4 years / 5-10 years / >10 years, Age is the age in years, Female is a dummy variable equal to 1 if the respondent is female and 0 otherwise, Education is the number of years of higher education, Children is a dummy variable equal to 1 if the respondent has a child, 0 otherwise. Data were collected from 2,288 French investors, in France, during the period November 2021 to February 2022. The table reports average marginal effects. Robust standard errors within parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level.

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## Appendices

### Appendix A.1 – Definition of Variables

VARIABLES	
Green Investment	Dummy variable equal to 1 if the respondent invests in a green fund (at least €500 invested in an article 9 funds) and 0 otherwise
Ln (Green Amount)	Natural log of the amount invested in Green Funds
Green Percentage	Percentage of the portfolio invested in green funds
Impact	Average of the responses to the following questions on 7 Likert-Scales “An investment in a green fund has a significant impact on the environment” (Significant Impact), “An investment in a green fund will affect the environment in the near future” (Near Future Impact), “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO <sub>2</sub> footprint)” (Precise Impact)
Altruism	Natural log of the amount in charity donations
Warm Glow	Mean of the answers of the two questions “In your opinion, investing in a green fund is pleasant/unpleasant” and “joyful/joyless” (7-point Likert scales)
Environmental Preferences	Mean of the answers of the two questions “Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs” on a 7-point Likert scale (from the World Value Survey Q111.1), “The ecological lists in the elections reflect my opinions” on a 7-point Likert scale, and “I play an active role in recycling by sorting my waste” from “Not agree at all” to “Fully agree” on a 7-point Likert scale
Perceived Return	Dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less profitable’” on a 7-point Likert scale is higher or equal to the median
Higher Cost	Dummy variable equal to 1 if the answer to “I am willing to pay higher commissions to invest in a green fund” over a 7-point Likert scale agreement is higher than or equal to the median
Perceived Risk	Dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less risky’” on a 7-point Likert scale is higher than or equal to the median
Expectation Social Environment	Dummy variable equal to 1 if the answer to “People important to me think I should invest in a green fund” on a 7-point Likert scale agreement is higher than or equal to the median
Signaling	Dummy variable equal to 1 if the answer to “I often talk about my financial decisions around me” on a 7-point Likert scale agreement is higher than or equal to the median
Financial Knowledge	Answer to the question “I consider myself to have good knowledge of financial investments” on a 7-point Likert scale
Green Fund Information	Answer to the question “As far as green funds are concerned, I consider myself to be “not informed at all” to “Fully informed”” on a 7-point Likert scale
Ln (Net Income)	Natural log of the monthly net income
Ln (Equity Portfolio)	Natural log of the equity portfolio amount
Investment Horizon	Answer to the question “My equity/equity fund investment horizon is” less than 1 year / 2-4 years / 5-10 years / >10 years
Age	Age in years
Female	Dummy variable equal to 1 if the respondent is female and 0 otherwise
Education	Number of years of higher education
Children	Dummy variable equal to 1 if the respondent has a child, 0 otherwise

## Appendix A.2 – Descriptive Statistics

VARIABLES	(1) N	(2) Mean	(3) p50	(4) p25	(5) p75	(6) Max	(7) Min
Green Investment	2,288	0.218	0.000	0.000	0.000	1.000	0.000
Ln (Green Amount)	2,288	1.712	0.000	0.000	0.000	11.290	0.000
Green Percentage	2,288	0.067	0.000	0.000	0.001	1.000	0.000
Impact	2,288	5.055	5.000	4.333	5.667	7.000	1.000
Altruism	2,288	3.307	4.394	0.000	5.303	10.127	0.000
Warm Glow	2,288	5.404	5.500	4.500	6.500	7.000	1.000
Environmental Preferences	2,288	4.953	5.000	4.333	5.667	7.000	1.000
Perceived Return	2,288	0.565	1.000	0.000	1.000	1.000	0.000
Higher Cost	2,288	0.618	1.000	0.000	1.000	1.000	0.000
Perceived Risk	2,288	0.815	1.000	1.000	1.000	1.000	0.000
Expectation Social Environment	2,288	0.818	1.000	1.000	1.000	1.000	0.000
Signaling	2,288	0.594	1.000	0.000	1.000	1.000	0.000
Financial Knowledge	2,288	4.243	4.000	3.000	5.000	7.000	1.000
Green Fund Information	2,288	3.046	3.000	2.000	4.000	7.000	1.000
Ln (Net Income)	2,288	8.112	8.161	7.824	8.412	9.210	5.704
Ln (Equity Portfolio)	2,288	9.093	9.210	8.006	10.127	11.918	6.215
Investment Horizon	2,288	2.521	3.000	2.000	3.000	4.000	1.000
Age	2,288	47.069	46.000	37.000	56.000	79.000	25.000
Female	2,288	0.464	0.000	0.000	1.000	1.000	0.000
Education	2,288	2.174	2.000	0.000	4.000	8.000	-3.000
Children	2,288	0.658	1.000	0.000	1.000	1.000	0.000

## Appendix A.3 – Scales Reliability

Impact is the average of the responses to the three questions on 7 Likert scales (1) “An investment in a green fund has a significant impact on the environment” (Significant Impact), (2) “An investment in a green fund will affect the environment in the near future” (Near Future Impact), (3) “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO<sub>2</sub> footprint)” (Precise Impact)

Item	Obs	Sign	Item-test correlation	Item-rest correlation	Average interitem correlation	Alpha
Significant Impact	2,288	+	0.9111	0.7873	0.5119	0.6772
Near Future Impact	2,288	+	0.8460	0.6545	0.6810	0.8103
Precise Impact	2,288	+	0.8433	0.6492	0.6881	0.8152
Test Scale					0.6270	0.8345

Warm Glow is the mean of the answers of the two questions “In your opinion, investing in a green fund is (1) pleasant/unpleasant, (2) joyful/joyless” (7-point Likert scales)

Average interitem correlation	0.7608
Number of items in the scale	2
Scale reliability coefficient	0.8642

Appendix A.4 – Variance Inflation Factors of Model (4) Table 1

Variable	VIF	1/VIF
Impact	1.28	0.779265
Altruism	1.15	0.865865
Warm Glow	1.22	0.816597
Environmental Preferences	1.29	0.775021
Perceived Return	1.10	0.910410
Higher Cost	1.19	0.838545
Perceived Risk	1.02	0.980192
Expectation Social Environment	1.19	0.843675
Signaling	1.13	0.886854
Financial Knowledge	1.34	0.745406
Green Fund Information	1.30	0.771562
Ln (Net Income)	1.22	0.820671
Ln (Equity Portfolio)	1.21	0.829613
Investment Horizon	1.03	0.969326
Age	1.23	0.810656
Female	1.08	0.929674
Education	1.16	0.858614
Children	1.06	0.944176
Mean VIF	1.18	



Appendix A.5 – Green Investment Determinants – Robustness checks

	(1) Impact Subset 1	(2) Impact Subset 2	(3) Impact Subset 3	(4) Altruism alternative measure	(5) Warm Glow Subset 1	(6) Warm Glow Subset 2
Impact				0.0221*** (0.008)	0.0219*** (0.008)	0.0233*** (0.008)
Significant Impact	0.0225*** (0.007)					
Near Future Impact		0.0125** (0.006)				
Precise Impact			0.0141* (0.007)			
Altruism	0.0165*** (0.003)	0.0167*** (0.003)	0.0167*** (0.003)		0.0166*** (0.003)	0.0166*** (0.003)
Altruism 2				0.220*** (0.062)		
Warm Glow	-0.000206 (0.006)	0.00247 (0.006)	0.00195 (0.006)	0.00108 (0.006)		
Warm Glow Pleasant					0.00244 (0.006)	
Warm Glow Joyful						-0.00215 (0.006)
Environmental Preferences	0.0104 (0.009)	0.0132 (0.009)	0.0123 (0.009)	0.0141 (0.009)	0.0103 (0.009)	0.0112 (0.009)
Perceived Return	0.0583*** (0.015)	0.0588*** (0.016)	0.0575*** (0.016)	0.0567*** (0.016)	0.0580*** (0.015)	0.0582*** (0.015)
Higher Cost	0.0293* (0.017)	0.0301* (0.017)	0.0301* (0.017)	0.0377** (0.017)	0.0297* (0.017)	0.0303* (0.017)
Perceived Risk	-0.0475** (0.020)	-0.0465** (0.020)	-0.0460** (0.020)	-0.0453** (0.020)	-0.0461** (0.020)	-0.0464** (0.020)
Expectation Social Environment	0.0757*** (0.021)	0.0793*** (0.021)	0.0808*** (0.021)	0.0719*** (0.021)	0.0752*** (0.021)	0.0764*** (0.021)
Signaling	-0.00222 (0.016)	-0.000392 (0.016)	-0.00118 (0.016)	0.00119 (0.016)	-0.00179 (0.016)	-0.00176 (0.016)
Financial Knowledge	0.0117* (0.006)	0.0125* (0.006)	0.0115* (0.006)	0.0118* (0.006)	0.0118* (0.006)	0.0121* (0.006)
Green Fund Information	0.0875*** (0.005)	0.0873*** (0.005)	0.0876*** (0.005)	0.0889*** (0.005)	0.0872*** (0.005)	0.0874*** (0.005)
Ln (Net Income)	-0.0372** (0.018)	-0.0385** (0.018)	-0.0373** (0.018)	-0.0183 (0.017)	-0.0384** (0.018)	-0.0379** (0.018)
Ln (Equity Portfolio)	0.0262*** (0.006)	0.0260*** (0.006)	0.0265*** (0.006)	0.0248*** (0.006)	0.0261*** (0.006)	0.0261*** (0.006)
Investment Horizon	0.0244*** (0.009)	0.0243*** (0.009)	0.0245*** (0.009)	0.0240*** (0.009)	0.0241*** (0.009)	0.0240*** (0.009)
Age	-0.000289 (0.001)	-0.000122 (0.001)	-0.000306 (0.001)	0.000179 (0.001)	-0.000268 (0.001)	-0.000283 (0.001)
Female	0.0323** (0.015)	0.0328** (0.016)	0.0311** (0.016)	0.0352** (0.016)	0.0320** (0.015)	0.0327** (0.016)
Education	0.00266 (0.004)	0.00210 (0.004)	0.00257 (0.004)	0.00393 (0.004)	0.00252 (0.004)	0.00248 (0.004)
Children	0.0429*** (0.016)	0.0435*** (0.016)	0.0439*** (0.016)	0.0415*** (0.016)	0.0425*** (0.016)	0.0423*** (0.016)
Pseudo R <sup>2</sup>	0.2448	0.2418	0.2417	0.2372	0.2437	0.2437
N	2,288	2,288	2,288	2,288	2,288	2,288

This table reports Probit regressions in which the dependent variable takes the value of 1 for the respondents who have invested at least €500 in a green equity fund. Impact is the average of the responses to the following questions on 7 Likert scales “An investment in a green fund has a significant impact on the environment” (Significant Impact), “An investment in a green fund will affect the environment in the near future” (Near Future Impact), “An investment in a green fund has a very specific impact on the environment (e.g. more specifically on water quality, biodiversity or reducing the CO<sub>2</sub> footprint)” (Precise Impact). Altruism is the natural log of the amount in charity donations, Altruism 2 is the amount of charity donations divided by the net income. Warm Glow is the mean of the answers of the two questions “In your opinion, investing in a green fund is pleasant/unpleasant, joyful/joyless” (7-point Likert scales). Environmental Preferences is the mean of the answers of the three questions “Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs” on a 7-point Likert scale (from the World Value Survey Q11.1), “The ecological lists in the elections reflect my opinions” on a 7-point Likert scale, and “I play an active role in recycling by sorting my waste” from “Not agree at all” to “Fully agree” on a 7-point Likert scale. Perceived Return is a dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less profitable’” on a 7-point Likert scale is higher or equal to the median, Higher Cost is a dummy variable equal to 1 if the answer to “I am willing to pay higher commissions to invest in a green fund” over a 7-point Likert scale agreement is higher than or equal to the median, Perceived Risk is a dummy variable equal to 1 if the answer to the question “For me, a green fund, compared to a conventional fund, is ‘much more/much less risky’” on a 7-point Likert scale is higher than or equal to the median, Expectation Social Environment is a dummy variable equal to 1 if the answer to “People important to me think I should invest in a green fund” on a 7-point Likert scale agreement is higher than or equal to the median, Signaling is a dummy variable equal to 1 if the answer to “I often talk about my financial decisions around me” on a 7-point Likert scale agreement is higher than or equal to the median, Financial Knowledge is the answer to the question “I consider myself to have good knowledge of financial investments” on a 7-point Likert scale, Green Fund Information is the answer to the question “As far as green funds are concerned, I consider myself to be ‘not informed at all’ to ‘Fully informed’” on a 7-point Likert scale, Ln (Net Income) is natural log of the monthly net income, Ln (Equity Portfolio) is the natural log of the equity portfolio amount, Investment Horizon is the answer to the question “My equity/equity fund investment horizon is” less than 1 year / 2-4 years / 5-10 years / >10 years, Age is the age in years, Female is a dummy variable equal to 1 if the respondent is female and 0 otherwise, Education is the number of years of higher education, Children is a dummy variable equal to 1 if the respondent has a child, 0 otherwise. Data were collected from 2,288 French investors, in France, during the period November 2021 to February 2022. The table reports average marginal effects. Robust standard errors within parenthesis. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level.

Appendix A.6 – Robustness Checks for Binary or Continuous Variables Estimates of Table 1 Model (4)

	(1) Financial Knowledge & Green Fund Information Dummies	(2) Impact, Altruism and Warm Glow Dummies	(3) All Continuous variables
Impact	0.0258*** (0.009)	0.0476*** (0.018)	0.0166** (0.008)
Altruism	0.0193*** (0.003)	0.0923*** (0.016)	0.0147*** (0.003)
Warm Glow	0.00373 (0.007)	0.0186 (0.018)	-0.00309 (0.006)
Environmental Preferences	0.0191** (0.009)	0.0215** (0.009)	0.00226 (0.009)
Perceived Return	0.0844*** (0.016)	0.0839*** (0.016)	0.0369*** (0.008)
Higher Cost	0.0397** (0.017)	0.0433** (0.017)	0.0110* (0.006)
Perceived Risk	-0.0659*** (0.020)	-0.0667*** (0.021)	-0.0203** (0.009)
Expectation Social Environment	0.0698*** (0.022)	0.0757*** (0.022)	0.0322*** (0.007)
Signaling	0.0132 (0.017)	0.0143 (0.017)	-0.00264 (0.005)
Financial Knowledge	0.0447** (0.020)	0.0462** (0.020)	0.0106* (0.006)
Green Fund Information	0.242*** (0.021)	0.242*** (0.021)	0.0783*** (0.006)
Ln (Net Income)	-0.0411** (0.019)	-0.0390** (0.019)	-0.0334* (0.018)
Ln (Equity Portfolio)	0.0290*** (0.006)	0.0282*** (0.006)	0.0251*** (0.006)
Investment Horizon	0.0266*** (0.009)	0.0284*** (0.009)	0.0252*** (0.009)
Age	-0.000808 (0.001)	-0.000703 (0.001)	-0.000304 (0.001)
Female	0.0254 (0.016)	0.0254 (0.016)	0.0343** (0.015)
Education	0.00478 (0.004)	0.00426 (0.004)	0.00224 (0.003)
Children	0.0412** (0.017)	0.0400** (0.017)	0.0363** (0.015)
Pseudo R <sup>2</sup>	0.1992	0.1974	0.2539
N	2,288	2,288	2,288

This table shows the results reestimate our main regression (Table 1, Column (4)) using in Column (1) binary variables for Financial Knowledge and Green Fund Information; in Column (2) measuring Impact, Altruism and Warm Glow as dummies equal to one when the variable is greater than the median; in Column (3) continuous measure for all our variables. Average marginal coefficients displayed, robust standard errors in parentheses, \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Appendix A.7 – Unstandardized and Standardized Estimates of Table 1 Model (4)

Green Investment	b	z	P>z	bStdX	bStdY	bStdXY	SDofX
Impact	0.10167	2.707	0.007	0.1123	0.0781	0.0863	1.1048
Altruism	0.07500	5.102	0.000	0.1895	0.0576	0.1455	2.5261
Warm Glow	0.00073	0.026	0.979	0.0009	0.0006	0.0007	1.2926

b = raw coefficient, z = z-score for test of b=0, P>|z| = p-value for z-test, bStdX = x-standardized coefficient, bStdY = y-standardized coefficient, bStdXY = fully standardized coefficient, SDofX = standard deviation of X

Appendix A.8 – Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Green Investment	1.000									
(2) Ln (Green Amount)	0.987***	1.000								
(3) Green Percentage	0.749***	0.763***	1.000							
(4) Impact	0.164***	0.166***	0.134***	1.000						
(5) Altruism	0.182***	0.187***	0.155***	0.107***	1.000					
(6) Warm Glow	0.125***	0.126***	0.122***	0.350***	0.108***	1.000				
(7) Environmental Preferences	0.185***	0.190***	0.180***	0.307***	0.172***	0.294***	1.000			
(8) Perceived Return	0.165***	0.161***	0.160***	0.102***	0.023	0.089***	0.179***	1.000		
(9) Higher Cost	0.159***	0.156***	0.132***	0.155***	0.163***	0.173***	0.283***	0.162***	1.000	
(10) Perceived Risk	-0.091***	-0.092***	-0.060***	-0.051**	-0.026	-0.060***	-0.077***	0.024	-0.028	1.000
(11) Expectation Social Environment	0.145***	0.146***	0.128***	0.292***	0.083***	0.209***	0.228***	0.155***	0.226***	-0.024
(12) Signaling	0.109***	0.111***	0.110***	0.107***	0.085***	0.106***	0.100***	0.045**	0.123***	-0.034
(13) Financial Knowledge	0.219***	0.222***	0.164***	0.089***	0.148***	0.112***	0.083***	0.022	0.076***	-0.071***
(14) Green Fund Information	0.423***	0.426***	0.353***	0.098***	0.147***	0.121***	0.183***	0.189***	0.201***	-0.083***
(15) Ln (Net Income)	0.034*	0.049**	0.005	0.055***	0.214***	0.072***	-0.013	-0.008	-0.011	0.007
(16) Ln (Equity Portfolio)	0.111***	0.159***	-0.040*	0.055***	0.090***	0.011	0.005	-0.044**	-0.052**	0.027
(17) Investment Horizon	0.069***	0.079**	0.031	0.026	-0.020	0.013	-0.002	-0.042**	-0.048**	-0.014
(18) Age	-0.009	0.006	-0.023	0.072***	0.098***	-0.040*	-0.043**	-0.012	-0.087***	0.037*
(19) Female	-0.001	-0.002	-0.007	0.012	-0.028	0.038*	0.080***	0.018	-0.018	0.042**
(20) Education	0.044**	0.046**	-0.023	-0.009	0.147***	0.027	0.019	-0.051**	0.003	-0.018
(21) Children	0.059***	0.056***	0.043**	0.079***	-0.003	0.038*	0.042**	0.062***	0.051**	0.005
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(12) Signaling	0.155***	1.000								
(13) Financial Knowledge	0.095***	0.251***	1.000							
(14) Green Fund Information	0.113***	0.189***	0.393***	1.000						
(15) Ln (Net Income)	0.018	0.059***	0.160***	0.051**	1.000					
(16) Ln (Equity Portfolio)	0.006	0.001	0.159***	0.057***	0.200***	1.000				
(17) Investment Horizon	-0.021	-0.022	0.085***	0.022	0.019	0.103***	1.000			
(18) Age	0.007	-0.135***	-0.061***	-0.046**	0.010	0.298***	-0.054***	1.000		
(19) Female	-0.009	-0.083***	-0.195***	-0.112***	-0.100***	-0.034	-0.026	-0.025	1.000	
(20) Education	0.045**	0.054***	0.124***	0.031	0.248***	0.070***	0.022	-0.192***	0.041**	1.000
(21) Children	0.002	-0.004	0.018	0.010	0.170***	-0.006	0.008	0.005	0.026	-0.059***

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$