



Environmental values, climate awareness and willingness to pay for green savings: The direct and moderating effect of perceived greenwashing[☆]

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ABSTRACT

The transition to a low-carbon economy depends critically on mobilizing household savings toward green financial products. Using a survey experiment on a representative sample of 1061 French adults, we examine how perceived greenwashing shapes willingness to pay for a green savings account and whether environmental impact disclosures influence it. We find that individuals are, on average, unwilling to pay a premium to green their savings, and that willingness to pay does not increase when the stated environmental impact is scaled up. Perceived greenwashing plays a dual role: it directly reduces willingness to pay and moderates the relationship between pro-environmental attitudes and financial behavior. Green consumption values raise willingness to pay only when sustainability claims are perceived as credible; climate awareness follows the same pattern. When perceived greenwashing is high, these relationships become statistically insignificant, even among environmentally motivated individuals. At the individual level, willingness to pay declines with subjective financial literacy, whereas climate-related emotions play no robust role. These results suggest that impact disclosure alone is insufficient to shift household financial behavior, and that the perceived credibility of environmental claims is a necessary condition for translating pro-environmental values into green financial choices.

1. Introduction

Greenwashing has become a central obstacle to the credibility and effectiveness of sustainable finance, ranking among the primary concerns of EU regulatory authorities (ESMA, 2024). Evidence highlights a pronounced attitude versus behavior gap: although 74% of EU retail investors report sustainability-related objectives, only 19% hold sustainable products, reflecting persistent barriers including limited investor expertise, high information and evaluation costs, and a lack of trust in the credibility of sustainability claims (Koch et al., 2025). This gap is particularly problematic as the transition depends critically on the mobilization of household savings.¹

Recent years have seen a growing literature examining investors' preferences and their willingness to pay (WTP hereafter) for responsible investments, as well as the underlying drivers of these preferences (Baker et al., 2024; Brodback et al., 2025; Giglio et al., 2025; Gutsche

and Ziegler, 2019; Gutsche et al., 2023; Hartzmark and Sussman, 2019; Heeb et al., 2023; Riedl and Smeets, 2017; Rossi et al., 2019). Yet relatively little is known about how individual investors perceive potential greenwashing or assess the credibility of sustainability claims embedded in the financial products they are offered.² Even less is understood about how these perceptions ultimately influence investors' willingness to pay for responsible investments.

While perceived greenwashing has been examined in several contexts, including misleading advertising, misleading financial disclosures, and firms' overcommitment to promised socially responsible actions (Chen and Chang, 2013; Ioannou et al., 2023; Szabo and Webster, 2021; Wagner et al., 2020), we focus on its impact on individual investors' preferences for green investments. Using a survey experiment on a representative sample of the French adult population, we show that perceived greenwashing significantly shapes preferences for basic green savings products. Moreover, the effect of pro-environmental

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¹ The European Green Deal, which aims for a climate-neutral economy by 2050, requires approximately €1.2 trillion in annual financing.

² For recent empirical or theoretical studies dealing with greenwashing, see Cartellier et al. (2025), Gourier and Mathurin (2025), Leippold et al. (2025) and Duchin et al. (2025).

attitudes on willingness to pay depends strongly on perceived greenwashing, underscoring the central role of credibility in mobilizing household savings toward the climate transition.

Rather than focusing exclusively on experienced investors, we deliberately design the sample to reflect the broader population, allowing us to examine attitudes toward perceived greenwashing among both sophisticated and, more importantly, less experienced individuals.³ Much of the existing research on socially responsible investment relies on samples composed of respondents who already possess substantial financial knowledge and familiarity with diversified investment products (whether type of funds, risk, performance or ESG labels).⁴ Focusing on France allows us to study a population with relatively modest levels of financial and ESG literacy, as well as lower participation in financial markets compared to several other OECD countries.⁵ For example, Demertzis et al. (2024) report that French citizens score below the European average on four out of five questions measuring basic financial knowledge in the general population. In a context where cash and bank deposits amounted to 13.944 trillion euros in 2022 in Europe, the design of our experiment allows us to assess whether simple banking products, such as green savings accounts, can serve as a vehicle for financing the transition.

Beyond the question of sample composition, WTP for sustainability is often elicited in the context of investment funds, where respondents are asked to state the level of fees they are willing to pay (Heeb et al., 2023; Engler et al., 2024). Existing evidence suggests that investors are indeed willing to pay for impact, yet the magnitude of fees does not vary with the level of impact (Heeb et al., 2023). This result is surprising given that a majority of individual investors report setting sustainability goals (Koch et al., 2025). The explanation lies in the complex relationship between fees and sustainable investment. From a theoretical perspective, higher fees for sustainable funds may be justified by the costs associated with ESG data collection, screening, and shareholder engagement. However, empirical evidence suggests the opposite: sustainable funds often charge fees that are equal to or even lower than those of conventional peers (Black and Kölbl, 2025). On the investor side, a large body of work highlights investors' limited understanding of how fees affect investment outcomes (Barber et al., 2005; Choi et al., 2010). Recently, Engler et al. (2024) propose a financial literacy explanation: investors with low financial literacy are most prone to paying high fees for ESG funds, suggesting that high fees on sustainable investments may reflect a failure to understand their negative consequences for financial returns.

To capture preferences in a broad population and to avoid having them confounded by the complexity of fund fee structures, we conduct a survey experiment in which individuals choose between two simple savings accounts: a conventional savings account and a green savings account. Following Heeb et al. (2023), the green account generates a reduction in carbon dioxide (CO₂) emissions per euro invested. The experimental design allows us to vary the carbon impact of the green account and to offer different interest rates across the two accounts. Participants are randomly assigned to either a low-impact or a high-impact green account, and willingness to pay is measured as the difference between the interest rate on the conventional savings account and the rate selected by participants using a Becker–DeGroot–Marschak (BDM) mechanism (Becker et al., 1964).

We report three main findings. First, we find that individuals are, on average, unwilling to pay a premium for green investments. While

willingness to pay is heterogeneous across respondents, the average premium for the green savings account is close to zero, and approximately 45% of participants report being indifferent between the green and the conventional account. Second, consistent with Heeb et al. (2023), willingness to pay does not increase with the environmental impact of the green savings account, which supports the view that green preferences are not driven by pure altruism. Third, heterogeneity in willingness to pay is largely explained by environmental attitudes, including green consumption values and climate awareness, as well as by self-assessed financial knowledge, which is negatively associated with WTP. Emotional dimensions, namely climate anxiety, climate hope, and warm glow, are also tested but do not robustly predict WTP. More importantly, perceived greenwashing plays a dual role: it directly affects willingness to pay and shapes the relationship between pro-environmental values, green consumption values in particular, and financial behavior. Stronger green consumption values are associated with higher willingness to pay when sustainability claims are perceived as credible, but this effect is substantially attenuated when perceived greenwashing is high; climate awareness follows the same pattern.

This article makes three contributions. First, it contributes to the literature on investors' preferences and willingness to pay for sustainable investments (Baker et al., 2024; Brodback et al., 2025; Giglio et al., 2025; Gutsche and Ziegler, 2019; Gutsche et al., 2023; Hartzmark and Sussman, 2019; Heeb et al., 2023; Riedl and Smeets, 2017; Rossi et al., 2019). We show that, in an environment characterized by very low information barriers and minimal financial knowledge requirements, individuals are, on average, unwilling to pay to green their savings, irrespective of the environmental impact of the green account. We also document the central role of perceived greenwashing in shaping willingness to pay, particularly among individuals with strong green consumption values and high climate awareness.

Second, this article contributes to the growing literature on how pro-environmental values and environmentally responsible consumption patterns affect sustainable investment decisions (Anderson and Robinson, 2022; Brunen and Laubach, 2022; Gutsche, 2019; Sauzet and Zerbib, 2022). Existing evidence is mixed. For instance, Brunen and Laubach (2022) find that sustainable consumption translates into a higher likelihood of choosing a portfolio following a sustainable investment strategy. By contrast, Anderson and Robinson (2022) show that environmentally oriented households are not more likely to hold greener portfolios, which they attribute to informational barriers or financial disengagement. Our results indicate that perceived greenwashing reduces willingness to pay even among individuals with strong green consumption values or high climate awareness, highlighting perceived greenwashing as an important and previously underexplored determinant of sustainable investment choices.

Third, this article contributes to the recent literature on the role of financial intermediaries in transition financing. Intermediaries act as a bridge between investor preferences and financial products, and through their financing decisions, they influence the allocation of capital toward the transition. Recent studies cast doubt on both dimensions: Laudi et al. (2026) show that financial advisors charge sustainable investors a premium without exerting greater effort, while other research documents a gap between climate or ESG commitments and actual credit allocation (Basu et al., 2022; Sastry et al., 2024; Giannetti et al., 2026). Our findings suggest that, beyond these mechanisms, the credibility of sustainability claims plays a key role in intermediaries' ability to mobilize savings from the general public. Overall, these findings suggest that policies and communications enhancing the credibility of sustainability claims could meaningfully amplify the effect of individual preferences on sustainable financial behavior.

2. Literature review and hypothesis development

Based on this literature on investors' preferences and willingness to pay for responsible investments, and on their underlying drivers (Baker

³ Recent work shows that sustainable finance literacy remains limited even within financially literate groups (Filippini et al., 2024).

⁴ See, for instance, Riedl and Smeets (2017), Gutsche et al. (2023), Heeb et al. (2023) and Engler et al. (2024).

⁵ See Fernandez et al. (2023) for a comparison of financial and ESG literacy across countries, and Kaustia et al. (2023) for evidence on participation in financial markets.

et al., 2024; Brodback et al., 2025; Giglio et al., 2025; Gutsche and Ziegler, 2019; Gutsche et al., 2023; Hartzmark and Sussman, 2019; Heeb et al., 2023; Riedl and Smeets, 2017; Rossi et al., 2019), we consider six main dimensions. Green consumption values capture the extent to which individuals integrate environmental concerns into their purchasing and consumption decisions (Haws et al., 2014). Climate awareness reflects the degree to which respondents perceive climate change as a serious and urgent problem (Heeb et al., 2023). Financial literacy refers to individuals' ability to process economic information and make informed financial decisions (Lusardi and Mitchell, 2014). Climate emotions encompass two distinct affective dimensions, anxiety and hope, related to climate change (Sangervo et al., 2022). Warm glow captures the emotional satisfaction derived from making sustainable investment choices (Gutsche and Ziegler, 2019). Social environment reflects the perceived expectations of one's immediate social circle regarding sustainable investment choices (Gutsche and Ziegler, 2019).

As a new dimension, we examine perceived greenwashing, captured through the *Green trust* scale adapted to the financial context from Chen and Chang (2013). By construction, lower values on this scale correspond to higher perceived greenwashing. We consider this credibility (or trust) dimension both as a direct determinant of willingness to pay and as a moderator of the relationship between pro-environmental attitudes and financial behavior. Prior evidence shows that greenwashing practices erode trust in environmental claims, both directly and indirectly through consumer confusion and heightened perceived risk (Chen and Chang, 2013; Szabo and Webster, 2021; Wagner et al., 2020). Perceived greenwashing also reduces customer satisfaction by triggering perceptions of corporate hypocrisy (Ioannou et al., 2023). In this study, we therefore expect *Green trust* to be positively associated with willingness to pay for green savings, reflecting the negative effect of perceived greenwashing. Two arguments support this hypothesis. First, greenwashing in finance has attracted increasing attention from regulators, investors, and the media. Gourier and Mathurin (2025) document a sharp rise in its salience from 2018 to a peak in 2021, accompanied by greater confusion in media coverage of ESG issues and stronger anti-ESG sentiment. They further show that retail investors responded by reallocating funds toward low-rated products with strong past returns. Second, numerous NGOs criticize banks for insufficient climate commitments, which may fuel mistrust about the environmental performance of banking products.⁶ Since *Green trust* measures the inverse of perceived greenwashing, we posit:

Hypothesis 1 (H1). Perceived greenwashing is negatively associated with the willingness to pay for green savings.

Aligning sustainable values with sustainable investment is not straightforward. Anderson and Robinson (2022) show that environmentally oriented households are not necessarily more likely to hold greener portfolios, a finding echoed by Brunen and Laubach (2022), who show that self-reported green values predict sustainable investment choices only when backed by actual behavior. Anderson and Robinson (2022) attribute this failure to translate green preferences into green investing to informational barriers or financial disengagement. Because the product is simple and requires no specialized financial knowledge, these informational barriers are less likely to prevent green values from translating into financial choices. We expect individuals with strong green consumption values to translate their environmental preferences into financial behavior more readily. We therefore posit:

Hypothesis 2 (H2). Green consumption values are positively related to the willingness to pay for green savings.

⁶ For instance, Oxfam France reports that in 2021 the carbon footprint of French banks increased by about 2% per euro invested over the period 2017 to 2020.

Beyond values, the perceived urgency of climate change may independently motivate sustainable financial choices. Heeb et al. (2023) and Gutsche and Ziegler (2019) argue that climate awareness affects socially responsible investment decisions. More precisely, Gutsche and Ziegler (2019) show that stronger climate awareness increases willingness to pay for sustainable financial products. We therefore posit:

Hypothesis 3 (H3). Climate awareness is positively related to the willingness to pay for green savings.

Beyond its direct effect on willingness to pay, perceived greenwashing may also condition the impact of environmental attitudes. Even when these attitudes are deeply ingrained, translating them into financial behavior may depend on the credibility of the claims made by financial institutions. When perceived greenwashing is widespread, environmentally conscious individuals lack a reliable basis for acting in accordance with their convictions. In a context where informational barriers are limited, greenwashing perceptions may emerge as a more salient constraint for environmentally motivated individuals.⁷ We therefore posit:

Hypothesis 4 (H4). The positive effect of pro-environmental attitudes (green consumption values and climate awareness) on willingness to pay for green savings is weaker when perceived greenwashing is high.

Several studies point to the importance of financial literacy in shaping responsible investment decisions (Anderson and Robinson, 2022; Filippini et al., 2024; Engler et al., 2024). Financial literacy refers to individuals' ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions (Lusardi and Mitchell, 2014). Two distinct measures are commonly used in the literature. Objective financial literacy is assessed through questions addressing fundamental concepts underlying saving and investment decisions. Subjective financial literacy instead relies on self-assessed financial knowledge and expertise. A self-reported measure of financial literacy may partly reflect financial confidence in addition to financial knowledge (Gaudecker, 2015). While subjective measures cannot fully disentangle the two dimensions, prior research finds that subjective and objective financial literacy are positively correlated (van Rooij et al., 2011; Bianchi, 2018). This suggests that investors tend to have a relatively reliable perception of their own expertise. Moreover, subjective financial literacy predicts a range of financial behaviors consistent with actual knowledge (Allgood and Walstad, 2016; Bellofatto et al., 2018).

Regarding ESG investing, Filippini et al. (2024) show that once sustainable finance literacy is accounted for, general financial literacy loses its statistical significance as a determinant of sustainable investment behavior. In a context more close to ours, Rossi et al. (2019) find that subjective financial literacy is negatively associated with individuals' stated preferences for depositing funds with a sustainable bank. We therefore posit:

Hypothesis 5 (H5). Subjective financial literacy is negatively related to the willingness to pay for green savings.

Research in psychology shows that emotions such as anger, fear, and guilt can motivate climate-related action (Bissing-Olsen et al., 2016; Lu and Schuldt, 2016; Wang et al., 2018). Using a large sample of Finnish citizens, Sangervo et al. (2022) show that climate anxiety,

⁷ Consistent with this argument, Bladt et al. (2024) show that greenwashing perceptions shape consumer attitudes independently of actual environmental performance, with the strength of the effect contingent on the deceptive claim. Ha et al. (2022) further document that the negative effect of greenwashing on green brand equity is amplified among consumers with higher environmental knowledge, providing indirect support for the moderating role of greenwashing perceptions on environmentally motivated responses.

which includes worry and more intense forms of anxiety, and climate hope, which includes efficacy beliefs, are positively correlated with one another and with climate-related behaviors. These findings are consistent with Anderson and Robinson (2019), who show that environmental fears, expressed through extreme beliefs about future climate disasters, are associated with individual portfolio rebalancing toward green investments. They are also in line with Ceccarelli and Ramelli (2024), who document substantial heterogeneity in climate transition beliefs, both optimistic and pessimistic, which shapes expectations of green returns and investment decisions. In addition, warm glow refers to the satisfaction that arises from doing good, regardless of the actual environmental impact of the action (Andreoni, 1989, 1990). Consistent with earlier evidence (Gutsche and Ziegler, 2019; Gutsche et al., 2023; Brunen and Laubach, 2022), Heeb et al. (2023), by combining survey and portfolio data, show that investors do not respond to pure altruism, a pattern which would be consistent with a warm-glow interpretation. Although the three constructs, climate anxiety, climate hope, and warm glow, differ in their underlying mechanisms, each is expected to increase the attractiveness of the green savings account relative to its conventional counterpart, yielding a common directional prediction. We therefore posit:

Hypothesis 6 (H6). Climate anxiety, climate hope, and warm glow are each positively associated with the willingness to pay for green savings.

3. Survey design, main variables and descriptive statistics

3.1. Sample and survey design

In 2024, we conducted a survey experiment using a nationwide online panel of French adults who are responsible for making financial decisions within their households. France provides a particularly relevant setting for studying household preferences between conventional and green savings products. French households exhibit a comparatively high propensity to save relative to their European peers,⁸ and a large share of these savings is held in simple, regulated accounts rather than in risky financial assets. Stock market participation is limited, with only about 13% of French adults holding equity savings plans.⁹

Recruitment and data collection were conducted by Qualtrics Inc., which implemented quotas to ensure that the sample matched the French population in terms of age, gender, and regional distribution. Respondents accessed the survey through Qualtrics' proprietary web interface.

The questionnaire was structured into several sections and began with a description of the study objectives, followed by a confidentiality statement. Participants were informed that participation was voluntary and anonymous, and informed consent was obtained prior to proceeding. All questions were closed-ended and included Likert scales, categorical responses, and numerical entries. To ensure data quality, the survey incorporated multiple attention checks and predefined screening criteria aimed at excluding inattentive or inconsistent responses. The full questionnaire was administered in French.

After applying these quality control criteria, we retained a final dataset of 1203 completed questionnaires. Because Qualtrics does not disclose the number of invitations sent to panel members and because we specified only a minimum target sample size, a conventional response rate as defined by Callegaro and DiSogra (2008) cannot be

computed. Instead, following Polonsky et al. (2012), we report the proportion of usable responses (75.80%), defined as the ratio of questionnaires meeting our inclusion criteria (1203) to the total number of completed submissions (1587).

3.2. Measuring willingness to pay

In the experimental task, respondents were asked to choose between a conventional savings account ("Livret" in French) and a green savings account. In France, "Livret" and other simple savings accounts are widely used. At the end of 2024, regulated savings amounted to 956 billion euros, representing 15% of household financial assets (Banque de France, *Report on Regulated Savings*, 2024). French households are therefore very familiar with this type of savings product, and the "Livret A" is often described as the favorite investment of French households.¹⁰

The hypothetical green account was introduced as follows: "Your bank offers you the opportunity to deposit part of your money in a savings account. You can choose between two savings accounts that are subject to the same tax treatment. The first is a *Conventional* savings account, and the second is a *Green* savings account. Your bank informs you that the *Green* savings account finances exclusively environmentally friendly activities (e.g., building insulation initiatives or renewable energy projects)".

Following Heeb et al. (2023), respondents were randomly assigned to one of two treatment conditions, *High Impact* and *Low Impact*. In the *High Impact* treatment, the green savings account is described as generating a reduction of 5 tons of CO₂, whereas in the *Low Impact* treatment it is described as reducing 0.5 tons of CO₂, corresponding to a tenfold difference in stated environmental impact. For example, in the *Low Impact* condition, the account is described as follows: "Your bank informs you that investing 1000 euros in the *Green* savings account leads to a reduction of 500 kg of CO₂ emissions, equivalent to 1500 km of air travel or approximately 25 days of CO₂ emissions from an average European citizen, relative to an equivalent investment in the *Conventional* savings account".

To assess respondents' willingness to pay (WTP), we implement the Becker–DeGroot–Marschak (BDM) mechanism (Becker et al., 1964), which is widely used to elicit true willingness to pay. Participants are first informed that both the conventional and the green savings account yield a 3% interest rate and are asked to choose between the two. If the participant selects the conventional (respectively, green) savings account, the interest rate on the green account is increased (respectively, decreased) by 0.5 percentage points, and the participant is asked to choose again. Note that the interest rate on the conventional savings account always remains equal to 3%, which corresponded to the interest rate on the most popular savings account, the "Livret A", at the time of the survey. As long as the participant confirms the initial choice, the interest rate on the green account continues to be adjusted in steps of 0.5 percentage points in the same direction.

As soon as the participant switches the choice, the interest rate on the green account is adjusted in the opposite direction by half the previous step size, that is, 0.25 percentage points. In subsequent iterations, we follow a dichotomous adjustment procedure, progressively reducing the step size in order to identify the interest rate differential at which the participant is indifferent between the two savings accounts. Examples of choice sequences can be found in Table 1. The process stops once four-decimal precision is achieved. The number of choices participants have to make ranges from four to six.¹¹

In our design, the BDM mechanism is implemented without monetary incentives. This choice is motivated by two considerations. First,

⁸ See INSEE, "Household consumption and investment", available at <https://www.insee.fr/en/statistiques/8595738>, and Eurostat, "Household Saving Rate in the Euro Area", available at <https://ec.europa.eu/eurostat/web/products-euro-indicators/w/2-13012025-ap>.

⁹ See "Households long-term savings and stock market participation in Europe", Etude AFG OEE 2025, available at <https://www.afg.asso.fr/app/uploads/2025/02/Etude-AFG-OEE-2025.pdf>.

¹⁰ In an OpinionWay survey (Les Echos–Le Parisien group) conducted in July 2025 among more than one thousand representative respondents, 93% reported holding a "Livret A" savings account.

¹¹ The adjustment rule and the termination criterion were not disclosed to participants.

Qualtrics applies strict panel management procedures that help ensure respondent quality even in non-incentivized settings. Second, existing experimental evidence suggests that financial incentives do not substantially alter responses (Charness et al., 2021; Baillon et al., 2022; Burdea and Woon, 2022). For instance, Engler et al. (2025), using data from a representative sample of more than 2100 individual investors in Germany and France, show that willingness to pay for sustainable investment products does not differ significantly between incentivized and non-incentivized conditions.

We exclude individuals from the sample whose choices never changed over the course of the elicitation. While such behavior may reflect extremely strong preferences for green or conventional savings accounts, it is also consistent with inattentive responding, such as straight-lining. To mitigate concerns about data quality and ensure that observed choices reflect meaningful trade-offs, we restrict the analysis to respondents who exhibited at least one switch during the choice process. After excluding these individuals, the final sample consists of 1061 respondents.

3.3. Main variable and scales

In this study, we examine how individual characteristics shape preferences and willingness to pay (WTP) for green savings products. Prior research on socially responsible investment (SRI) highlights the role of financial literacy, personal values, climate awareness, and warm glow motivations in driving sustainable investment decisions (Riedl and Smeets, 2017; Hartzmark and Sussman, 2019; Gutsche, 2019; Rossi et al., 2019; Heeb et al., 2023).

We introduce two additional dimensions. First, our main variable, *Green trust* (see Table 2), captures the counterpart of perceived greenwashing and is defined as “a willingness to rely on a product, service, or brand based on the belief or expectation that it is credible, benevolent, and capable with respect to its environmental performance” (Chen, 2010). This construct is adapted from the five-item scale proposed by Chen and Chang (2013).¹² Participants respond to items such as “Do you feel that this product’s environmental claims are trustworthy?” and “Will this product keep its promises and commitments to environmental protection?” (variable *Green trust* in Table 2), reflecting confidence in the bank’s environmental statements. Details about the different variables can be found in Table 2.

Second, we include an emotional dimension capturing climate anxiety and hope. Following Sangervo et al. (2022), we construct two indices (Hope Index and Anxiety Index) based on two items each (variables *Climate hope* and *Climate anxiety* in Table 2), which are positively correlated with each other and with climate-related behavior.

We also include other established determinants of sustainable investment. To measure green consumption values, we adopt the six-item scale developed by Haws et al. (2014) (variable *Green values* in Table 2). This scale assesses the extent to which individuals express environmental concern through their purchasing behavior. We compute the average of the six items, yielding a measure ranging from 1 (strongly disagree with all items) to 5 (strongly agree with all items). Climate awareness is measured by agreement with the statement “Climate change is a serious problem that needs to be solved” on a seven-point Likert scale (Heeb et al., 2023). Warm glow motivations are captured using a two-item Likert scale, by agreement with the statements “It makes me feel good to make sustainable investments” and “I feel responsible for sustainable development and want to contribute by making sustainable

investments” (Gutsche and Ziegler, 2019).¹³ Warm glow, or impure altruism, reflects the emotional satisfaction derived from prosocial behavior rather than the well-being of others per se (Andreoni, 1989, 1990). We focus on impure altruism in line with Heeb et al. (2023), who show that prosocial investors do not increase WTP in response to higher CO₂ impacts.¹⁴ Extending warm glow considerations to the social sphere, we include the variable *Social environment*, capturing agreement with the statement: “My social environment (e.g., family, friends, colleagues) expects me to make sustainable investments”.

Finally, subjective financial literacy is measured by asking respondents: “How knowledgeable do you consider yourself with respect to financial matters?” Responses are recorded on an eleven-point scale from 0 (not knowledgeable) to 10 (very knowledgeable).¹⁵

In addition to these main variables, we include a set of control variables to account for demographic characteristics, household composition, prior financial experience, professional status, and geographic heterogeneity. Demographic and socio-political characteristics comprise gender (female dummy), age (in years), education (university degree dummy), political opinion measured on a standard eleven-point left–right scale, household income, and the number of children in the household. Financial experience is captured through dummies indicating ownership of savings accounts only, of savings accounts combined with life insurance, or of more complex products (equities, mutual funds, or bonds), with respondents holding no financial products as the baseline category. We additionally include a dummy for prior investment in sustainable financial products. Professional status is classified as active worker (baseline), retired, or inactive (e.g., students or unemployed). Finally, region fixed effects are included to account for unobserved differences in financial behavior or climate attitudes across regions.

3.4. Summary statistics

Table 3 reports the characteristics of the 1061 respondents in the final sample.¹⁶ The demographic composition closely mirrors that of the French adult population (see Appendix A for details). Slightly more than half (52.3%) report owning at least one sustainable financial product. Investment profiles (Panel B) reveal substantial heterogeneity in financial engagement, ranging from individuals holding no financial products (6.1%) to those with complex instruments (26.2%), with the remainder distributed between basic savings accounts and life-insurance products.

Professional status (Panel C) is dominated by active workers (54.3%), followed by retirees (30.3%) and inactive or student respondents (15.4%). Political preferences (Panel F) are broadly centered on the left–right spectrum, whereas income levels (Panel G) are concentrated in the low-to-middle categories, with fewer than 3% in the

¹³ Note that warm glow is not measured uniformly across this literature. The construct has shifted from an investment-specific feeling (Gutsche and Ziegler, 2019) to a general feeling of behaving sustainably (Gutsche et al., 2023). Scale length also varies, from five-point Likert items (Gutsche and Ziegler, 2019; Engler et al., 2024) to seven-point items (Brunen and Laubach, 2022). Our results are unchanged when only the first item (“It makes me feel good to make sustainable investments”) is used, matching the refined positive-feeling measure of Engler et al. (2024).

¹⁴ Even a tenfold increase in CO₂ impact does not lead to a significant rise in willingness to pay.

¹⁵ A self-reported measure of financial literacy may partly reflect financial confidence in addition to financial knowledge (see the development of Hypothesis 5 in Section 2). In our sample, self-reported financial literacy is positively associated with education, income, and portfolio sophistication (see Table B.2 in Appendix B), suggesting that it primarily captures financial knowledge, although a confidence component cannot be ruled out.

¹⁶ Our sample is broadly consistent with prior studies. For example, Gutsche (2019) analyzes 1001 German households, while Rossi et al. (2019) examine 1807 individuals.

¹² See also Ioannou et al. (2023), Szabo and Webster (2021) and Wagner et al. (2020) for recent studies.

Table 1
Process to elicit willingness to pay (WTP) — examples.

Step	Choice	Interest rate (green account)
<i>Example 1</i>		
1	Green	2.5
2	Green	2
3	Green	1.5
4	Conventional	1.75
5	Green	1.625
6	Green	1.6875
<i>Example 2</i>		
1	Green	2.5
2	Green	2
3	Conventional	2.25
4	Green	2.125
5	Conventional	2.1875
<i>Example 3</i>		
1	Conventional	3.5
2	Green	3.25
3	Conventional	3.125
4	Conventional	3.0625

The table illustrates the Becker–DeGroot–Marschak (BDM) mechanism used to elicit respondents' willingness to pay for the green savings account. Participants repeatedly choose between a conventional savings account with a fixed interest rate of 3% and a green savings account. Following the initial choice, the interest rate on the green account is first adjusted in steps of 0.5 percentage points: it is decreased if the participant initially chooses the green account and increased if the participant initially chooses the conventional account. Once the participant switches their choice, the adjustment procedure enters a second phase based on a dichotomous search, in which the interest rate on the green account is adjusted in the opposite direction with progressively smaller step sizes. The process continues until four-decimal precision is reached, identifying the interest rate differential at which the participant is indifferent between the two accounts and thus their willingness to pay.

highest brackets. Overall, the sample is socio-demographically diverse and exhibits wide variation in financial experience and environmental attitudes.

To assess the psychometric quality of the constructs, we use a set of complementary reliability and validity measures adapted to the number of items in each scale. For the multi-item constructs, *Green values* and *Green trust*, internal consistency is assessed using Cronbach's alpha. For the two-item constructs (*Warm glow*, *Climate anxiety*, and *Climate hope*), we report the inter-item correlation and the Spearman–Brown coefficient, which is recommended for scales composed of only two items (Eisinga et al., 2013). To further assess construct reliability and convergent validity, we estimate a confirmatory factor analysis using maximum likelihood and compute composite reliability (CR) and average variance extracted (AVE) for each latent construct. Following established guidelines, AVE values above 0.50 indicate adequate convergent validity (Fornell and Larcker, 1981), while CR values above 0.70 are generally considered indicative of satisfactory construct reliability (Bagozzi and Yi, 1988; Hair et al., 2019).

Table 4 presents the resulting reliability and validity statistics. Overall, the measures exhibit satisfactory psychometric properties. The multi-item constructs show high internal consistency, with Cronbach's alpha values of 0.876 for *Green values* and 0.883 for *Green trust*. Among the two-item constructs, *Climate anxiety* and *Warm glow* display acceptable reliability, whereas *Climate hope* performs less well. This pattern is also reflected in the composite reliability estimates, which exceed the recommended threshold for all constructs except *Climate hope* (CR = 0.650). Similarly, AVE values are above the conventional 0.50 benchmark for all constructs except *Climate hope* (AVE = 0.488). The comparatively weaker performance of *Climate hope* likely stems from the moderate association between its two indicators, which capture related but distinct dimensions of hope: beliefs about the collective capacity to mitigate climate change and beliefs about the effectiveness of individual action (Sangervo et al., 2022). Despite this limitation, the overall results provide support for the reliability and convergent validity of the measurement framework used in the analysis.

Table 2
Variables and measures.

Variable	Measures
Green values (Haws et al., 2014)	1. It is important to me that the products I use do not harm the environment. 2. I consider the potential environmental impact of my actions when making many of my decisions. 3. My purchase habits are affected by my concern for the environment. 4. I am concerned about wasting the resources of our planet. 5. I would describe myself as environmentally responsible. 6. I am willing to be inconvenienced to take actions that are more environmentally friendly. On a scale from 1 = Strongly disagree to 5 = Strongly agree.
Climate awareness (Heeb et al., 2023)	Climate change is a serious problem that needs to be solved. On a scale from 1 = Strongly disagree to 7 = Strongly agree
Green trust (Adapted from, Chen and Chang, 2013)	1. You feel that the green savings environmental impact is trustworthy; 2. You feel that the green savings environmental performance is reliable. 3. You feel that the green savings will meet expectations. 4. You feel that the green savings will keep promises and commitments for environmental protection. 5. You feel that the favorable reputation of environmentally friendly financial products is generally deserved. On a scale from 1 = Strongly disagree to 5 = Strongly agree
Subjective financial literacy (Lusardi and Mitchell, 2014)	How knowledgeable do you consider yourself with respect to financial matters? On a scale from 0 = not knowledgeable to 10 = very knowledgeable
Warm glow (Gutsche and Ziegler, 2019)	1. It makes me feel good to make sustainable investments. 2. I feel responsible for sustainable development and want to contribute by making sustainable investments. On a scale from 1 = Strongly disagree to 5 = Strongly agree.
Social environment (Gutsche and Ziegler, 2019)	My social environment (e.g. family, friends, colleagues) expects me to make sustainable investments. On a scale from 1 = Strongly disagree to 5 = Strongly agree.
Climate anxiety (Sangervo et al., 2022)	1. How well does the word <i>anxiety</i> describe your feelings about climate change? 2. How worried are you about climate change? On a scale from 1 = Not at all; 5 = Very worried
Climate hope (Sangervo et al., 2022)	1. I believe that the effects of climate change can be significantly mitigated. 2. The actions of individuals have a role to play in mitigating climate change On a scale from 1 = Strongly disagree to 5 = Strongly agree

4. Empirical strategy and main results

4.1. Empirical strategy

Our empirical analysis proceeds in three parts. First, we examine willingness to pay at the aggregate level and test whether the stated environmental impact of the green savings account affects respondents' valuations. Willingness to pay is defined as the difference between the 3% interest rate offered by the conventional savings account and the indifference rate elicited through the BDM procedure described in Section 3.2. Positive values therefore indicate a willingness to accept a lower return on the green account. Because respondents are randomly assigned to either the *Low Impact* or *High Impact* condition, differences in willingness to pay across treatments identify the effect of a tenfold

Table 3
Descriptive statistics.

Panel A: Gender, age and level of education											
Proportion of male				Average age			University degree		Hold sustainable financial products		
46.7%				49.0			40.0%		52.3%		
Panel B: Type of investment											
No financial products				Savings account only			Savings account and life insurance		Other financial products (equity, funds or bonds...)		
6.13%				36.66%			31.01%		26.2%		
Panel C: Professional status											
Inactive/student						Active			Retired		
15.4%						54.3%			30.3%		
Panel D: 5-item Likert variables											
				Strongly disagree		Disagree		Neutral		Agree	
										Strongly agree	
Green values											
Q1				2.5%		4.1%		26.4%		48.5%	
Q2				3.2%		7.3%		32.0%		44.9%	
Q3				5.1%		12.6%		36.9%		35.5%	
Q4				1.8%		3.1%		13.7%		49.3%	
Q5				3.0%		7.4%		33.4%		46.8%	
Q6				5.7%		12.3%		39.1%		35.7%	
Green trust											
Q1				5.6%		9.4%		35.8%		39.4%	
Q2				4.8%		9.3%		44.8%		33.3%	
Q3				4.5%		9.6%		33.9%		40.3%	
Q4				5.1%		9.8%		44.3%		32.3%	
Q5				5.4%		11.2%		44.0%		31.9%	
Warm glow											
Q1				3.3%		6.8%		42.4%		27.8%	
Q2				3.9%		8.9%		39.5%		26.7%	
Climate anxiety											
Q1				3.4%		8.3%		21.4%		45.3%	
Q2				3.0%		6.3%		16.8%		49.0%	
Climate hope											
Q1				2.4%		7.9%		34.2%		44.9%	
Q2				2.9%		6.6%		23.3%		49.1%	
Social environment											
Q1				11.9%		14.5%		42.4%		18.6%	
Panel E: Climate awareness											
Strongly disagree		Disagree		Rather disagree		Neutral		Rather agree		Agree	
										Strongly agree	
2.1%		1.8%		1.8%		7.2%		14.5%		30.5%	
Panel F: Political opinion											
Far left (0)		1	2	3	4	5	6	7	8	9	Far right (10)
1.7%		2.1%	5.6%	9.8%	8.9%	25.7%	11.1%	11.1%	9.9%	5.0%	9.0%
Panel G: Income											
Lowest income (1)		2	3	4	5	6	7	8	Highest income (9)		
11.4%		19.0%	24.7%	23.5%	12.2%	4.8%	2.2%	1.0%	1.3%		
Panel H: Subjective financial literacy											
Lowest literacy (0)		1	2	3	4	5	6	7	8	9	Highest literacy (10)
3.7%		4.1%	9.7%	10.3%	11.9%	20.7%	14.5%	14.5%	6.3%	2.6%	1.6%

The table reports descriptive statistics for the final sample of 1061 respondents. Unless otherwise stated, all figures are percentages of the sample. Panel A reports the share of male respondents, the average age (in years), the share holding a university degree, and the share holding at least one sustainable financial product. Panel B reports the distribution of respondents across types of financial product held (no financial products; savings account only; savings account and life insurance; or other products such as equity, funds, or bonds), and Panel C the distribution across professional status (inactive/student, active, or retired). Panel D reports, for each item of the five-point Likert constructs (*Green values*, *Green trust*, *Warm glow*, *Climate anxiety*, *Climate hope*, and *Social environment*), the percentage of respondents selecting each response category, from “Strongly disagree” to “Strongly agree”; rows sum to 100% (up to rounding). Panel E reports the distribution of *Climate awareness*, measured on a seven-point scale from “Strongly disagree” to “Strongly agree”. Panel F reports the distribution of political opinion on an eleven-point left–right scale (0 = far left, 10 = far right), Panel G the distribution of household income across nine brackets, and Panel H the distribution of subjective financial literacy on an eleven-point scale (0 = lowest, 10 = highest). The income categories are: (1) Less than 15,000€; (2) 15,000–24,999€; (3) 25,000–34,999€; (4) 35,000–49,999€; (5) 50,000–64,999€; (6) 65,000–84,999€; (7) 85,000–104,999€; (8) 105,000–149,999€; and (9) 150,000€ or more.

increase in the stated CO₂ reduction. We compare valuations across conditions using both two-sample *t*-tests and Wilcoxon rank-sum tests.

Second, we examine the determinants of willingness to pay (Hypotheses 1, 2, 3, 5, and 6). Respondents are classified into three ordered categories: negative willingness to pay, when they require a return premium to hold the green account; zero willingness to pay, when they are indifferent between the two accounts; and positive willingness to pay, when they accept a lower return on the green account. We estimate ordered logit models using this three-category measure as the dependent variable. This specification is appropriate because the elicited interest-rate differential is discrete, highly non-normal, and concentrated at a limited number of values. Moreover, the three categories correspond to the economically meaningful distinction between respondents who penalize, are indifferent to, or reward the green attribute. The explanatory variables include *Green trust*, *Green values*, *Climate awareness*, *subjective financial literacy*, the emotional variables (*Warm glow*, *Climate anxiety*, and *Climate hope*), and expected *Social environment*, together with the controls described in Section 3.3. All specifications include region fixed effects and heteroskedasticity-robust standard errors. Because some respondents did not report income or political orientation, the baseline estimation sample contains 895 observations. Results are virtually unchanged when these variables are excluded and the full sample of 1061 respondents is retained. To facilitate interpretation, we report marginal effects evaluated at sample means. We assess robustness in several ways. Appendix E reports OLS estimates using the continuous interest-rate differential as the dependent variable. Appendix D reports marginal effects associated with a one-standard-deviation change in each explanatory variable, allowing direct comparisons of economic magnitudes across predictors. Appendix C examines the satiation hypothesis, namely whether respondents who already hold sustainable financial products, and the LDDS in particular, exhibit a lower willingness to pay for an additional green savings product.

Third, we investigate how perceived greenwashing interacts with pro-environmental attitudes. We augment the baseline ordered logit specification with interaction terms between *Green trust* and the relevant attitudinal variables. All Likert-scale variables entering interactions are mean-centered to reduce multicollinearity and facilitate interpretation. We summarize the results using conditional marginal effects.

The first analysis asks whether perceived greenwashing reduces willingness to pay independently of environmental motivation, which further documents the direct effect posited in Hypothesis 1. We interact *Green trust* and *Green values* and estimate the marginal effect of trust at successive levels of environmental values. This approach allows us to determine whether low *Green trust* merely shifts respondents toward indifference or instead generates a negative willingness to pay, implying a required return premium to hold the green account.

The second analysis tests the moderating role of perceived greenwashing (Hypothesis 4). We interact *Green trust* with both *Green values* and *Climate awareness* and estimate the marginal effects of these attitudes across the support of *Green trust*. These estimates indicate whether pro-environmental attitudes become more strongly associated with willingness to pay as sustainability claims are perceived to be more credible.

4.2. Willingness to pay for green savings: Does impact matter?

Our first result is that, when willingness to pay for green attributes is assessed through savings accounts rather than funds, we do not find any significant difference between green and non-green assets. Panel A of Table 5 shows that 44.58% of individuals in the sample simply choose the account with the highest interest rate, regardless of its characteristics. Looking at the remainder of the sample, about one third of respondents exhibit a clear preference for the green savings account and are potentially willing to pay a substantial premium for it, or more

precisely, to accept a lower interest rate. However, there is also a large proportion of respondents who display a willingness to pay for the conventional savings account.

Our findings stand in contrast to survey evidence based on fund fees. For example, Heeb et al. (2023), using a sample of financially experienced investors, report that participants are willing to pay higher fees for green funds than for conventional funds. Two key differences distinguish their setting from ours. First, their sample consists of financially sophisticated investors, whereas our study focuses on a broad population that includes relatively unsophisticated individuals. Second, the funds are presented in a relatively abstract and impersonal manner, which may limit respondents' identification with the decision context. By contrast, we embed the choice in a retail banking framework in which willingness to pay is elicited as a difference in interest rates on a savings product offered by a bank, a setting that is more concrete, more familiar to relatively unsophisticated households, and closer to everyday financial decisions. Moreover, we study a general population that does not uniformly view climate change as a major problem that needs to be addressed. In our sample, only 87.1% report agreeing to some degree with this statement.¹⁷

When we examine whether the magnitude of impact matters (Table 5), we find that the stated environmental impact of the green savings account has no measurable effect on individuals' willingness to pay. Mean willingness to pay is almost identical across the *Low Impact* (0.0280%) and *High Impact* (0.0253%) treatments. The median value is the same in both treatments (0.0625%), corresponding to respondents who initially select the green savings account when rates are equal and then always choose the account offering the higher interest rate. The distributions are statistically indistinguishable, as indicated by both the *t*-test (*t* = −0.0598) and the Wilcoxon rank-sum test (*z* = −0.0680). These results indicate that respondents do not update their valuation in response to a tenfold increase in stated CO₂ reduction. This finding is consistent with the evidence reported by Heeb et al. (2023) in the context of choices between conventional and ESG mutual funds. After verifying that investors intuitively understand the meaning of a ton of CO₂, they argue that ESG investing may be driven primarily by the emotional experience associated with selecting the sustainable option rather than by a calculative appraisal of its impact. Overall, Table 5 reveals a marked insensitivity to impact salience and suggests that impact-related disclosures alone may be insufficient to shift preferences toward greener savings products.

4.3. Determinants of the willingness to pay

Table 6 reports estimates from an ordered logistic regression in which the dependent variable measures respondents' willingness to pay (WTP) for the green savings account.¹⁸ The outcome takes three ordered values: negative WTP, when a respondent requires a higher interest rate to choose the green account; zero WTP, when a respondent is indifferent between the green and conventional accounts; and positive WTP, when a respondent accepts a lower interest rate to choose the green account.

We model WTP as an ordered categorical variable rather than as the continuous interest rate differential elicited through the BDM procedure. Because respondents must choose one of the two accounts at the start of the elicitation, the differential never equals zero; its smallest increments are ±0.0625 percentage points, where a large share of

¹⁷ This figure is consistent with recent survey evidence; see, for example, Pew Research Center (August 2022), "Climate Change Remains Top Global Threat Across 19 Country Survey".

¹⁸ The number of observations is slightly lower in the regression because some respondents did not provide information on political preference and/or income. Results are similar when these variables are omitted and the full sample is used.

responses is concentrated. The continuous measure is thus discrete and non-Gaussian. The categorical outcome also keeps a direct behavioral interpretation, distinguishing respondents who require compensation to hold the green account, those willing to forgo return for it, and those in between. For completeness, Appendix E reports the distribution of the continuous differential and the corresponding OLS estimates, which leave the substantive conclusions unchanged.

Marginal effects are computed at the sample means and indicate how each predictor modifies the probability of belonging to each WTP category. Fig. 1 plots the corresponding predicted probabilities for the variables that are statistically significant in Table 6, providing a graphical summary of how changes in key explanatory variables shift the distribution of WTP outcomes. The discussion below therefore focuses on the main significant predictors: *Green values*, *Green trust*, *Climate awareness*, *Subjective financial literacy*, and *Age*.

We find that our main variable of interest, *Green trust*, defined as the inverse of perceived greenwashing, is a strong predictor of WTP. The estimated coefficient (column 1 of Table 6) is positive and highly significant (0.3393, $p < 0.01$). This result is further supported by the marginal effects reported in columns 2 to 4. Evaluated at the mean, a one-category increase in *Green trust* raises the probability of a positive WTP by 0.0722, corresponding to a 7.22 percentage point increase in the likelihood that respondents accept a lower interest rate to select the green savings account. Simultaneously, it reduces the probability of a negative WTP by 0.0509, implying a substantially lower likelihood that respondents require compensation in the form of higher returns. Fig. 1 (top-right panel) confirms this pattern and reveals a clear monotonic relationship. Individuals with low levels of *Green trust* exhibit a high probability of negative WTP, whereas those with high levels of trust display a substantially higher probability of positive WTP. As shown in Fig. 1, the predicted probability of positive WTP increases markedly across the scale of the *Green trust* variable (from 0.1664 to 0.4369), while the probability of negative WTP declines symmetrically (from 0.3329 to 0.1138). In sum, the fear of greenwashing must be offset through higher returns, whereas trusting individuals may be willing to pay a premium for impact.

Green values emerge as the strongest predictor of WTP. The estimated coefficient is positive and statistically significant (0.4020, $p < 0.01$). Respondents with stronger environmental values are therefore substantially more likely to accept a financial sacrifice in order to support green savings. The marginal effects confirm this interpretation. A one-category increase in *Green values* is associated with a 6.03 percentage point decline in the probability of negative WTP and an 8.55 percentage point increase in the probability of positive WTP. Fig. 1 (top-left panel) mirrors these results and shows a clear monotonic relationship. Individuals with weak environmental values are predominantly associated with negative WTP, whereas those with strong values exhibit a steadily increasing, and sharply rising, probability of positive WTP across the scale. Fig. 1 shows that the predicted probability of positive WTP ranges from 0.1351 (when the variable *Green values* is equal to one) to 0.4381 (when *Green values* is equal to 5). From an economic perspective, these results highlight that personal environmental preferences exert a direct and quantitatively meaningful influence on green financial behavior. Even in the context of a simple savings choice that requires no specialized financial expertise, individuals motivated by environmental values are willing to accept lower financial returns.

Climate awareness is also a statistically significant predictor of WTP (coefficient 0.2483, $p < 0.01$). Individuals with greater awareness of climate risks are more willing to accept lower financial returns. The marginal effects, evaluated at the mean, indicate that a one-category increase in *Climate awareness* reduces the probability of negative WTP by 3.72 percentage points and increases the probability of positive WTP by 5.28 percentage points. Fig. 1 (middle-left panel) illustrates these findings. Individuals with low *Climate awareness* exhibit a higher likelihood of negative WTP, whereas those with higher awareness are increasingly likely to display zero or positive WTP. While the marginal

effects associated with *Climate awareness* are smaller in magnitude than those for *Green values* and *Green trust*, direct comparison is not appropriate because *Climate awareness* is measured on a seven-point scale, whereas the other constructs use five-point scales. Meaningful comparison therefore requires evaluating changes over the full range of each variable, from minimum to maximum.

When evaluated over its full range, from minimum to maximum, *Climate awareness* exhibits effects that are comparable in magnitude to those of the other attitudinal measures. As shown in Fig. 1, the predicted probability of positive WTP increases by 25.18 percentage points, compared with 30.30 points for *Green values* and 27.04 points for *Green trust*. Symmetrically, the maximum reduction in the probability of negative WTP reaches 28.55 percentage points, versus 27.62 for *Green values* and 21.91 for *Green trust*. These results indicate that, once differences in scale length are taken into account, *Climate awareness* is at least as economically relevant as *Green values* and *Green trust*.

Subjective financial literacy, measured on an 11-point scale (from 0 to 10), is negatively and statistically significantly associated with WTP, with an estimated coefficient of -0.1034 ($p < 0.01$). Individuals who perceive themselves as more financially knowledgeable are less willing to pay for the green savings account. The marginal effects indicate that a one-category increase in *Subjective financial literacy* raises the probability of negative WTP by 1.55 percentage points and reduces the probability of positive WTP by 2.20 percentage points (see Fig. 1, bottom-left panel).

Among demographic controls, *Age* is the only variable that enters significantly, with a positive coefficient of 0.0177 ($p < 0.01$). The marginal effects suggest that a ten-year increase in age is associated with a 3.8 percentage point increase in the probability of positive WTP (see Fig. 1, middle-right panel). Taken together, the effects of *Age* and *Subjective financial literacy* are consistent with the evidence reported by Rossi et al. (2019). Ownership of sustainable financial products is insignificant, providing no support for a satiation or moral-licensing mechanism; we examine this further in Appendix C.

Evaluated at sample means, zero WTP is the modal outcome, with a predicted probability of 51%, compared with 18% for negative WTP and 31% for positive WTP. A one-point increase in *Green values*, *Green trust*, and *Climate awareness* reduces the probability of zero WTP by 2.52, 2.13, and 1.56 percentage points, respectively (all $p < 0.01$), whereas a one-point increase in *Subjective financial literacy* increases it by 0.65 percentage points ($p < 0.01$). Because the variables are measured on different scales, these marginal effects are not directly comparable in magnitude. Notably, the marginal effect on zero WTP is systematically smaller than the corresponding effects on negative and positive WTP. Although indifference is the most common outcome, it is also the least responsive to observable characteristics, suggesting that the main variation in willingness to pay occurs at the negative and positive margins rather than through shifts into or out of indifference.

The results reported in Table 6 and illustrated in Fig. 1 present a coherent picture.¹⁹ Based on a general population sample and simple, widely understandable questions, environmental convictions, captured by *Green values* and *Climate awareness*, together with perceived credibility, captured by *Green trust*, emerge as the primary determinants of willingness to pay. By contrast, higher financial knowledge reduces WTP, suggesting that the decisions of more sophisticated investors are influenced by factors other than environmental preferences. Emotional factors such as *Climate anxiety*, *Climate hope*, and *Warm glow* are not statistically significant predictors of WTP in this specification (though they are imprecisely estimated, especially *Climate hope*). This result is consistent with experimental evidence showing that induced emotional states do not affect stated willingness to pay for environmental

¹⁹ We report in Table D.5 of Appendix D the marginal effects that result from a one standard deviation change of the different variables, rather than a one category change as in Table 6.

Table 4
Reliability and validity of the measurement scales.

Construct	Items	Cronbach's α	Inter-item ρ_s	Spearman–Brown	AVE	CR
Green values	6	0.876			0.539	0.875
Green trust	5	0.883			0.607	0.885
Warm glow	2		0.614	0.774	0.633	0.775
Climate anxiety	2		0.823	0.906	0.830	0.907
Climate hope	2		0.446	0.635	0.488	0.650

The table reports reliability and validity statistics for the measurement scales, computed on the final sample of 1061 respondents. For multi-item constructs (*Green values*, *Green trust*), internal consistency is assessed using Cronbach's α . For two-item constructs (*Warm glow*, *Climate anxiety*, *Climate hope*), Cronbach's α is not informative and is therefore omitted; reliability is instead evaluated using the inter-item Spearman correlation (ρ_s) and the Spearman–Brown coefficient (Eisinga et al., 2013). Spearman–Brown coefficients are based on the corresponding product-moment inter-item correlations (0.631, 0.828, and 0.465 for *Warm glow*, *Climate anxiety*, and *Climate hope*, respectively). AVE and CR are obtained from a maximum-likelihood confirmatory factor analysis estimated on the complete-case subsample ($N = 1015$). AVE denotes average variance extracted and CR composite reliability. Conventional benchmarks are AVE > 0.50 and CR > 0.70.

Table 5
Role of environmental impact on willingness to pay (WTP).

Panel A: Willingness to pay			
	Number of observations	Proportion	
No preference	473	44.58%	
Preference for green savings account	347	32.70%	
Preference for conventional savings account	241	22.71%	
Panel B: The role of impact on willingness to pay			
	Number of observations	Median	Mean
Low impact	529	0.0625%	0.0280%
High impact	532	0.0625%	0.0253%
Difference		0.0000%	−0.0027%
T-test (t-statistic)			−0.0598
Rank sum (z-statistic)		−0.0680	

Panel A reports the distribution of respondents' stated preferences between the conventional savings account and the green savings account. The category "No preference" includes respondents who initially selected either account but immediately switched during the BDM elicitation procedure, indicating that they did not have a strong, persistent preference for one account over the other. Panel B presents the role of the stated environmental impact (Low vs. High) on WTP. Values in Panel B correspond to the interest rate differential at which respondents are indifferent between the green and conventional accounts, as elicited by the BDM procedure. Differences, t-tests, and rank-sum statistics assess whether WTP varies across impact conditions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

goods (Hanley et al., 2017; Xu et al., 2025), although these studies manipulate emotions unrelated to the decision at hand, whereas we measure emotions directly connected to climate and environmental issues. Overall, willingness to pay for green savings accounts is primarily shaped by environmental beliefs, values and the credibility of green claims, rather than by income, social norms, emotional reactions, or most demographic characteristics.

Taken together, the empirical results provide clear support for several of our hypotheses. **Hypothesis 1** (H1) is strongly supported: perceived greenwashing, captured by low levels of *Green trust*, is negatively associated with willingness to pay for green savings. **Hypothesis 2** (H2) is also supported, as *Green values* are positively and economically significantly related to willingness to pay, and **Hypothesis 3** (H3) is likewise supported, as *Climate awareness* is positively and significantly associated with willingness to pay. In line with **Hypothesis 5** (H5), *Subjective financial literacy* is negatively associated with willingness to pay. By contrast, **Hypothesis 6** (H6) is not supported, as emotional factors such as *Climate anxiety*, *Climate hope*, and *Warm glow* are not statistically significant predictors of WTP in our baseline specification. The moderating role posited in **Hypothesis 4** (H4) is examined in Section 4.5 below.

4.4. Penalty for untrustworthy sustainability claims

The negative association between perceived greenwashing and WTP reported in Table 6 raises the question of whether low *Green trust* merely reduces demand for the green account or induces respondents to require compensation to hold it. This distinction is economically relevant because a WTP of zero reflects indifference, whereas negative WTP implies a required return premium to select the green account over the conventional alternative.

Fig. 2 reports WTP across the five levels of *Green trust*, and Fig. 3 shows the corresponding distributions of the elicited interest-rate differential. At the lowest level of *Green trust*, 50.0% of respondents exhibit negative WTP, compared with 14.7% exhibiting positive WTP. At the highest level, the corresponding proportions are 13.8% and 48.3%, respectively. The relationship extends across the full range of the *Green trust* measure: the share of positive WTP increases quasi-monotonically with *Green trust*, while the share of negative WTP declines. Low *Green trust* therefore does not only shift WTP toward zero but generates a nontrivial mass of respondents who require compensation to hold the green account, consistent with an active penalty for perceived lack of credibility.

Given the positive correlation between *Green trust* and *Green values* (Spearman $\rho = 0.448$, $p < 0.01$), the baseline association may reflect environmental preferences. Table 7 reports marginal effects from an ordered logit model including an interaction between *Green trust* and *Green values*. Higher *Green trust* reduces the probability of negative WTP and increases the probability of positive WTP at all levels of *Green values*, including the lowest. Even respondents with weak environmental values are significantly less likely to choose the green account when perceived greenwashing is high. Perceived greenwashing thus depresses demand independently of environmental motivation.

4.5. The moderating role of perceived greenwashing

Table 8 reports marginal effects from the same ordered logit specification as in Table 6, with the addition of interaction terms between *Green trust* and *Green values*, and between *Green trust* and *Climate awareness*. The table shows how perceived greenwashing moderates the relationship between these environmental attitudes and willingness to pay (WTP) for green savings accounts. Marginal effects are expressed as percentage-point changes in the probability of negative, zero, or positive WTP.

When *Green trust* is at its lowest level, neither *Green values* nor *Climate awareness* has a statistically significant effect on WTP. A one-point increase in *Green values* reduces the probability of negative WTP by 3.7 percentage points and increases the probability of positive WTP by 2.6 percentage points, but both effects are statistically insignificant. *Climate awareness* exhibits similarly small and insignificant marginal effects. At low levels of trust, pro-environmental attitudes therefore do not translate into meaningful differences in savings choices.

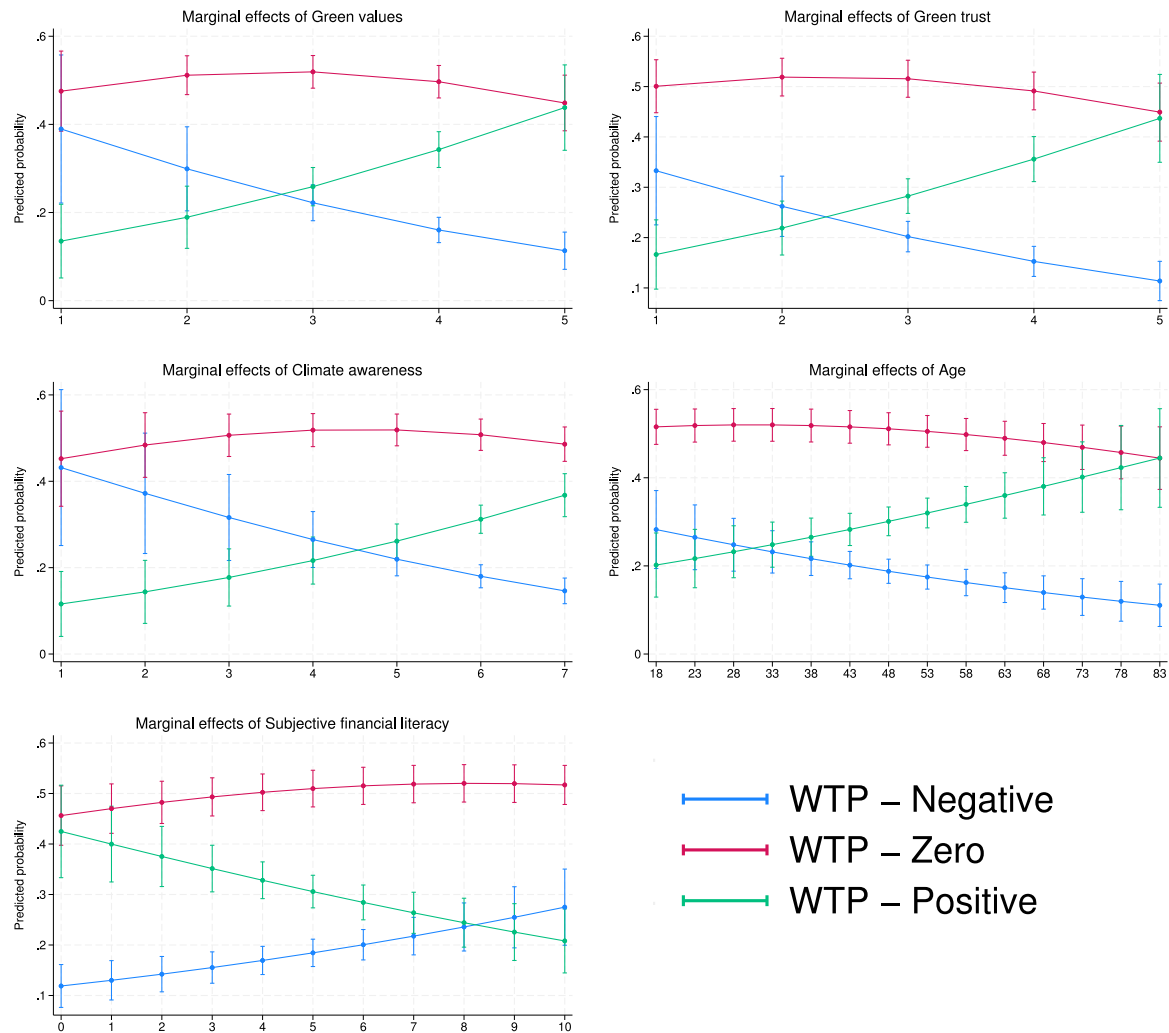


Fig. 1. Predicted probability for the WTP.

This graph presents the predicted probabilities, with respect to different explanatory variables, of (1) having a negative WTP, (2) being indifferent between the two savings accounts, and, (3) having a positive WTP. The selected variables are the ones that appear significant in Table 6.

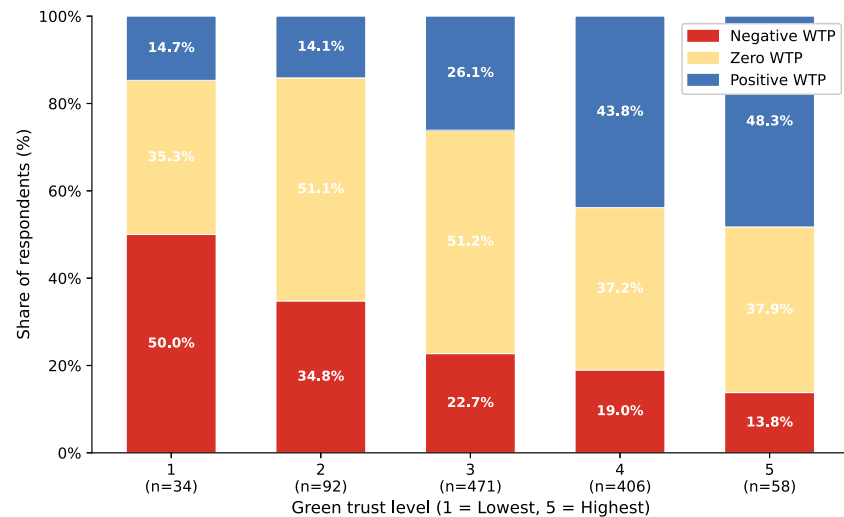


Fig. 2. Distribution of WTP by level of Green trust.

The figure reports the proportion of respondents with negative, zero, and positive WTP at each level of Green trust (1 = lowest, 5 = highest). The number of respondents in each group is reported in parentheses below the horizontal axis.

Table 6
Determinants of WTP — ordinal logistic regression.

	Willingness to pay for green savings account			
	Coefficients	Marginal effects		
		Negative WTP	Zero WTP	Positive WTP
Predicted probability		0.1837	0.5094	0.3068
Green values	0.4020*** (0.1356)	−0.0603*** (0.0205)	−0.0252*** (0.0097)	0.0855*** (0.0288)
Green trust	0.3393*** (0.1011)	−0.0509*** (0.0152)	−0.0213*** (0.0077)	0.0722*** (0.0215)
Climate awareness	0.2483*** (0.0739)	−0.0372*** (0.0113)	−0.0156*** (0.0054)	0.0528*** (0.0157)
Warm glow	0.0763 (0.1118)	−0.0114 (0.0167)	−0.0048 (0.0071)	0.0162 (0.0238)
Social environment	−0.1081 (0.0845)	0.0162 (0.0127)	0.0068 (0.0053)	−0.0230 (0.0179)
Subjective financial literacy	−0.1034*** (0.0355)	0.0155*** (0.0053)	0.0065*** (0.0026)	−0.0220*** (0.0076)
Climate anxiety	0.0805 (0.0879)	−0.0121 (0.0132)	−0.0050 (0.0056)	0.0171 (0.0187)
Climate hope	0.1296 (0.1144)	−0.0194 (0.0171)	−0.0081 (0.0074)	0.0276 (0.0243)
Political opinion	−0.0128 (0.0283)	0.0019 (0.0043)	0.0008 (0.0018)	−0.0027 (0.0060)
Gender (female dummy)	−0.1492 (0.1488)	0.0224 (0.0223)	0.0094 (0.0097)	−0.0317 (0.0318)
Age	0.0177*** (0.0067)	−0.0027*** (0.0010)	−0.0011*** (0.0005)	0.0038*** (0.0014)
Income	0.0566 (0.0485)	−0.0085 (0.0073)	−0.0036 (0.0031)	0.0120 (0.0103)
Number of children in household	0.0266 (0.0725)	−0.0040 (0.0109)	−0.0017 (0.0045)	0.0057 (0.0154)
University degree (dummy)	0.1299 (0.1501)	−0.0193 (0.0222)	−0.0084 (0.0101)	0.0277 (0.0322)
Sustainable financial products	0.0916 (0.1832)	−0.0137 (0.0274)	−0.0057 (0.0117)	0.0195 (0.0390)
<i>Type of investment dummies — Base level: no financial products</i>				
Savings account only	0.2054 (0.3131)	−0.0348 (0.0554)	−0.0051 (0.0055)	0.0400 (0.0587)
Savings account and life insurance	0.3560 (0.3151)	−0.0578 (0.0552)	−0.0138 (0.0088)	0.0717 (0.0597)
Complex financial products (equity, funds, or bonds)	0.4526 (0.3521)	−0.0715 (0.0598)	−0.0215 (0.0137)	0.0929 (0.0686)
<i>Professional status — Base level: Active worker</i>				
Inactive/student	0.0261 (0.2484)	−0.0039 (0.0373)	−0.0016 (0.0155)	0.0055 (0.0528)
Retired	0.0646 (0.2359)	−0.0096 (0.0350)	−0.0042 (0.0156)	0.0138 (0.0505)
Region FE		Yes		
Number of observations		895		

Column 1 provides the coefficients and the standard errors (in parentheses) of the ordinal logistic regression. Columns 2 to 4 report the marginal effects, for each level of the dependent variable. Marginal effects are evaluated at the mean values of each independent variable. The first line corresponds to the predicted probabilities obtained when all explanatory variables are evaluated at their respective means. ***, **, and * indicate statistical significance at the 1%, 5%, and 10%, respectively. Standard errors are robust.

As *Green trust* increases, the marginal effects of environmental attitudes become larger and statistically significant. At a medium level of trust, a one-point increase in *Green values* reduces the probability of negative WTP by 6.2 percentage points and increases the probability of positive WTP by 7.5 percentage points, with both effects significant at the 1% level. At this trust level, *Climate awareness* also becomes statistically significant, reducing negative WTP by 3.8 percentage points and increasing positive WTP by 4.6 percentage points ($p < 0.01$). These results indicate that credibility is a prerequisite for environmental preferences to exert a quantitatively meaningful influence on willingness to pay.

At high levels of *Green trust*, and especially at the highest level, the moderating effect of trust becomes even stronger. For *Green values*, a one-point increase raises the probability of positive WTP by 10.1 percentage points at high trust ($p < 0.01$) and by 12.5 percentage points at the highest trust level ($p < 0.05$), while reducing the probability of negative WTP by approximately 6.6 to 6.7 percentage points. *Climate awareness* follows the same monotonic pattern. Although the marginal

effects are smaller, this partly reflects the fact that *Climate awareness* is measured on a 1–7 scale, whereas *Green values* is measured on a 1–5 scale. At the highest trust level, a one-point increase in *Climate awareness* raises the probability of positive WTP by 6.7 percentage points ($p < 0.05$).

Changes in the probability of zero WTP reinforce this interpretation. At high trust, a one-point increase in *Green values* reduces the probability of zero WTP by 3.5 percentage points ($p < 0.01$), and by 5.7 percentage points at the highest trust level ($p < 0.05$). *Climate awareness* reduces the probability of zero WTP by 2.0 percentage points at high trust and by 3.1 percentage points at the highest trust level (both $p < 0.05$), indicating a shift away from neutrality toward positive WTP.

Overall, Table 8 shows that when perceived greenwashing is high, marginal effects are small and statistically insignificant, whereas when perceived greenwashing is low, identical changes in environmental attitudes generate large and statistically significant shifts in willingness to pay. These results suggest that Hypothesis 4 (H4) is confirmed:

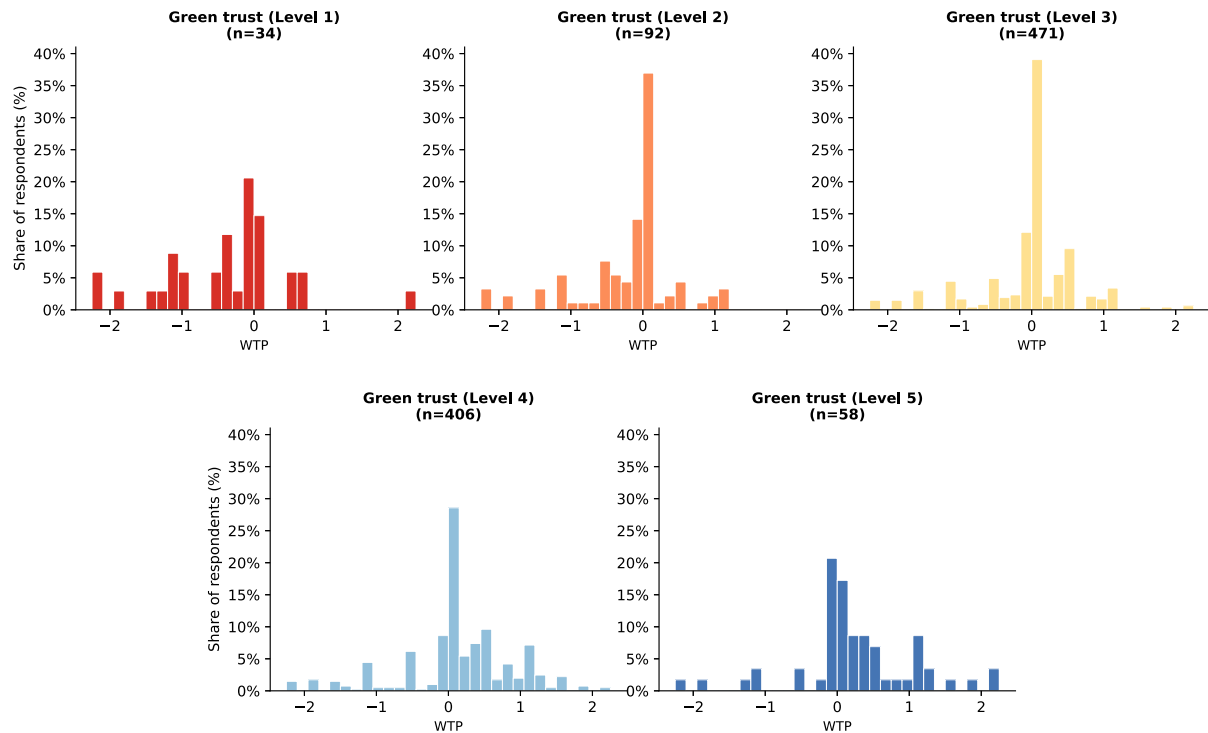


Fig. 3. Distribution of the elicited WTP by level of *Green trust*.

Each panel shows the histogram of the elicited WTP (interest-rate differential, in percentage points) for each level of *Green trust* (1 = lowest, 5 = highest). The number of respondents in each group is reported in parentheses.

Table 7
Marginal effects of *Green trust* on WTP by *Green values*.

	Green values level				
	Lowest (1)	Low (2)	Medium (3)	High (4)	Highest (5)
Panel A: Probability of negative WTP					
Green trust	−0.0710*** (0.0250)	−0.0620*** (0.0220)	−0.0520*** (0.0170)	−0.0420*** (0.0120)	−0.0330*** (0.0080)
Panel B: Probability of zero WTP					
Green trust	0.0190 (0.0190)	−0.0000 (0.0100)	−0.0180*** (0.0060)	−0.0320*** (0.0110)	−0.0410*** (0.0140)
Panel C: Probability of positive WTP					
Green trust	0.0520*** (0.0070)	0.0620*** (0.0130)	0.0700*** (0.0180)	0.0740*** (0.0210)	0.0750*** (0.0210)

This table reports marginal effects from the same ordered logit specification as in Table 6, with the addition of interaction terms between *Green trust* and *Green values*. Marginal effects correspond to a one-point increase in *Green trust* (1–5), evaluated at five levels of *Green values* (1–5). Standard errors (in parentheses) are robust. ***, **, and * denote significance at the 1%, 5%, and 10% levels. *Green values* and *Green trust* variables were centered to avoid multicollinearity in the interaction terms.

credibility and trust are a necessary condition for translating pro-environmental attitudes into financial preferences for green savings products.

Comparing Table 8 with Table 7 reveals an asymmetry. The effect of environmental attitudes on WTP is contingent on *Green trust*: *Green values* and *Climate awareness* translate into higher WTP only when trust is sufficiently high. The effect of *Green trust*, by contrast, is significant across all levels of *Green values*, including the lowest. Credibility therefore acts as a necessary condition for pro-environmental attitudes to shape financial choices, whereas perceived greenwashing depresses WTP regardless of how strong those attitudes are.

5. Discussion, implications, and limitations

5.1. Discussion of the results

On average, respondents exhibit no willingness to pay a premium for the green account, and roughly 45% are indifferent between the two options. These indifferent respondents do not attach a positive monetary value to the green label and appear to base their decisions primarily on financial returns (Panel A of Table 5). Because they represent nearly half of the sample, the absence of an average willingness to pay for green savings is driven more by widespread indifference than by active rejection of the green product.

Table 8
Marginal effects of *Green values* and *Climate awareness* on WTP by *Green trust*.

	Green trust level				
	Lowest (1)	Low (2)	Medium (3)	High (4)	Highest (5)
Panel A: Probability of negative WTP					
Green values	−0.0370 (0.0510)	−0.0530* (0.0300)	−0.0620*** (0.0210)	−0.0660*** (0.0240)	−0.0670** (0.0310)
Climate awareness	−0.0330 (0.0300)	−0.0370* (0.0170)	−0.0380*** (0.0110)	−0.0380*** (0.0130)	−0.0360* (0.0170)
Panel B: Probability of zero WTP					
Green values	0.0120 (0.0160)	0.0040 (0.0060)	−0.0130* (0.0060)	−0.0350*** (0.0130)	−0.0570** (0.0240)
Climate awareness	0.0100 (0.0100)	0.0030 (0.0050)	−0.0080* (0.0040)	−0.0200** (0.0070)	−0.0310** (0.0140)
Panel C: Probability of positive WTP					
Green values	0.0260 (0.0360)	0.0480* (0.0280)	0.0750*** (0.0250)	0.1010*** (0.0350)	0.1250** (0.0520)
Climate awareness	0.0230 (0.0210)	0.0340* (0.0170)	0.0460*** (0.0140)	0.0580*** (0.0190)	0.0670** (0.0290)

This table reports marginal effects from the same ordered logit specification as in Table 6, with the addition of interaction terms between *Green trust* and *Green values*, and between *Green trust* and *Climate awareness*. Marginal effects correspond to a one-point increase in *Green values* (1–5) or *Climate awareness* (1–7), evaluated at five levels of *Green trust* (1–5). Standard errors (in parentheses) are robust. ***, **, and * denote significance at the 1%, 5%, and 10% levels. *Green values* and *Green trust* variables were centered to avoid multicollinearity in the interaction terms.

This average unwillingness to pay contrasts with findings based on more financially sophisticated investor populations (Heeb et al., 2023; Gutsche and Ziegler, 2019). The difference is informative, as our design relies on a representative sample of the French adult population, unlike the investor-based samples that dominate the literature (e.g., Giglio et al., 2025). In this setting, the absence of a premium cannot be attributed to product complexity. The product is simple and familiar, which points instead to credibility as the binding constraint. Willingness to pay is also insensitive to the stated level of environmental impact. Mean WTP is statistically indistinguishable across low and high impact treatments, despite a tenfold difference in stated CO₂ reduction. Because impact is the only randomized component, this provides clean causal evidence that respondents do not incorporate marginal impact information into valuation. The result replicates evidence from mutual fund settings (Heeb et al., 2023) and extends it to retail savings products. It is difficult to reconcile with models in which valuation is driven primarily by altruistic concern for environmental outcomes. A direct implication is that increasing reported impact alone is unlikely to affect demand.

Cross-sectional variation is primarily explained by environmental preferences and perceived credibility. *Green values* are the strongest predictor of positive WTP. Relative to a baseline probability of approximately 0.31, a one-category increase raises this probability by about nine percentage points. *Green trust*, defined as the inverse of perceived greenwashing, is the second key determinant. Its effect is strongly asymmetric around indifference, as low trust is associated not only with lower WTP but also with a higher probability of negative WTP, indicating that respondents penalize green products when they do not perceive them as credible. *Climate awareness* also predicts WTP; when expressed over its full range, its marginal effect is comparable in magnitude to those of *Green values* and *Green trust*. These findings support Hypotheses 1, 2, and 3, and extend to retail financial products prior evidence on greenwashing and consumer response (Chen and Chang, 2013; Ioannou et al., 2023).

Subjective financial literacy enters with a negative and statistically significant coefficient. Respondents who report higher financial knowledge are less willing to pay for the green account, a pattern consistent with emphasis on pecuniary returns (Giglio et al., 2025). Holding *Green trust* constant, *Subjective financial literacy* captures greater sensitivity to the interest-rate differential, which reduces acceptance of a lower-yielding product even when environmental attributes are present. This

interpretation supports Hypothesis 5 while maintaining a clear separation between credibility perceptions and return sensitivity. Climate emotions, namely *Climate anxiety*, *Climate hope*, and *Warm glow*, do not predict willingness to pay, so Hypothesis 6 is not supported. Of the three emotional constructs, the absence of a significant association for *Warm glow* is the least likely to reflect measurement problems: *Warm glow* clears conventional reliability thresholds (Spearman–Brown = 0.774; AVE = 0.633; CR = 0.775) and is more evenly dispersed, yet a savings account may be too passive a gesture to engage the warm-glow mechanism, unlike donations (Andreoni, 1990) or impact investments (Riedl and Smeets, 2017; Bauer et al., 2021). The null for *Climate anxiety* is difficult to interpret given ceiling effects, and the null for *Climate hope* is uninformative given weak measurement (AVE = 0.488; CR = 0.650). Overall, the limited role of emotional factors is consistent with evidence that emotional states do not systematically shift stated willingness to pay for environmental goods (Hanley et al., 2017; Xu et al., 2025).

The moderating role of *Green trust* is the central result of the paper. When trust is low, neither *Green values* nor *Climate awareness* significantly predicts WTP. As trust increases, both effects strengthen monotonically and become statistically significant, reaching economically meaningful magnitudes at high trust levels. At the upper end of the trust distribution, *Green values* are associated with an increase of approximately twelve percentage points in the probability of positive WTP. The pattern is stable across specifications and provides an explanation for the documented gap between environmental attitudes and green financial portfolios (Anderson and Robinson, 2022; Brunen and Laubach, 2022).

5.2. Implications, limitations, and directions for future research

Perceived greenwashing plays a dual role: it directly reduces willingness to pay and moderates the link between pro-environmental values and financial behavior. This qualifies accounts that treat environmental values as direct, unconditional drivers of sustainable investment (Gutsche and Ziegler, 2019). Stronger pro-environmental attitudes raise willingness to pay only when sustainability claims are perceived as credible; the effect weakens substantially when perceived greenwashing is high. The insensitivity of willingness to pay to stated environmental impact further weighs against purely altruistic accounts of green investment (Heeb et al., 2023). Subjective financial literacy

is negatively associated with willingness to pay: respondents who consider themselves more financially knowledgeable are less willing to pay a premium for the green account, in line with Rossi et al. (2019).

For financial institutions and intermediaries, increasing reported environmental impact is insufficient to shift retail demand. A tenfold increase in disclosed CO₂ reduction has no measurable effect on willingness to pay. Demand responses are more plausibly driven by perceived credibility than by marginal improvements in reported impact, which shifts attention toward verification, standardization, and third-party certification as central instruments for demand activation. Intermediaries transmit product information and simultaneously influence credibility perceptions, a function that complements evidence on the misalignment between climate commitments and actual lending behavior (Sastry et al., 2024; Giannetti et al., 2026) and on pricing frictions in sustainable advisory services (Laudi et al., 2026).

A further implication is distributional. The interaction results indicate that environmentally motivated individuals are not uniformly constrained by income or financial capacity, but by perceived credibility. Among respondents with strong green values, higher trust unlocks substantial willingness to pay. Reducing perceived greenwashing may therefore activate latent demand rather than create new preferences. From a policy perspective, the findings are consistent with regulatory initiatives aimed at reducing greenwashing risk (ESMA, 2024). Mandatory standardized and independently verified impact disclosure may be more effective than information campaigns alone, given the absence of behavioral response to raw impact variation. In the French context, the coexistence of widely held savings products with limited or indirect environmental impact may contribute to generalized skepticism (e.g., the Livret de Développement Durable et Solidaire, LDDS). Greater transparency on the environmental scope of regulated savings products, alongside clearer product differentiation, may reduce these credibility concerns.

Several limitations qualify our conclusions. First, like most of the literature on sustainable investment, we elicit stated rather than revealed preferences, raising the possibility of cheap talk (Brunen and Laubach, 2022). Existing evidence indicates that incentivization does not materially alter willingness to pay for sustainable investments (Charness et al., 2021; Baillon et al., 2022; Engler et al., 2025), and social-desirability pressure would inflate stated willingness to pay. Yet we observe a near-zero average premium and approximately 45% of respondents indifferent between the two accounts, suggesting our estimates provide a conservative assessment. Second, the Becker–DeGroot–Marschak mechanism, though incentive-compatible in principle, may be imperfectly understood by some respondents and introduce noise (Brodback et al., 2025); we mitigate this concern by excluding respondents who never switch during the elicitation, embedding multiple attention checks, and using a dichotomous narrowing procedure. Third, an alternative interpretation of the impact-insensitivity result is that respondents are insensitive to an abstract unit of CO₂ rather than to impact per se (Heeb et al., 2023); our design addresses this, as stated impact is expressed in concrete equivalents (e.g., 1500 km of air travel, or roughly 25 days of an average European citizen's emissions), making a comprehension problem unlikely. Fourth, the analysis is conducted in a single country, and trust is measured at a single point in time, limiting generalizability to settings that differ in financial literacy, ESG literacy, or familiarity with sustainable finance.

Our findings suggest three avenues for future work. First, the cross-sectional measurement of trust invites a dynamic perspective. Future research could examine how greenwashing controversies, regulatory interventions, or disclosure reforms affect perceived credibility over time. Second, the role of intermediaries deserves further attention, as they jointly shape credibility perceptions, elicit sustainability preferences, and influence portfolio choices. Third, extending the analysis to other national and cultural contexts (Engler et al., 2024) would help establish whether the role of perceived greenwashing generalizes beyond France.

6. Conclusion

This paper examines how perceived greenwashing shapes willingness to pay for a green savings account among a representative sample of 1061 French adults, and whether environmental impact disclosure influences that valuation. Three results stand out. First, average WTP is near zero and unresponsive to a tenfold increase in stated CO₂ reduction, providing clean causal evidence that impact disclosure alone does not shift retail demand. Second, perceived greenwashing reduces WTP directly and moderates the relationship between pro-environmental attitudes and financial behavior: green consumption values and climate awareness raise WTP only when sustainability claims are perceived as credible. When perceived greenwashing is high, both effects become statistically insignificant. Third, subjective financial literacy is negatively associated with WTP, while climate emotions play no robust role. Taken together, the findings indicate that the perceived credibility of environmental claims is a necessary condition for translating pro-environmental attitudes into green financial choices. The policy implication is that mandatory standardized and independently verified disclosure is more likely to activate retail demand than raw impact communication.

CRediT authorship contribution statement

Maxime Merli: Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Tristan Roger:** Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix. Supplementary data

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.ecolecon.2026.109195>.

Data availability

Data will be made available on request.

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