



Research Papers



ISSN 2610-931X

CEIS Tor Vergata

RESEARCH PAPER SERIES

Vol. 23, Issue 8, No. 612 – October 2025

**From Knowledge to Allocation
of Sustainable Assets:
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Survey In Italy**

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From knowledge to allocation of sustainable assets: results from an in-field survey in Italy

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This version: October 2025

Abstract

This paper investigates three underexplored aspects of sustainable household finance: (1) whether the determinants of knowledge, interest, and allocation in sustainable assets overlap; (2) what drives interest in specific dimensions among Environmental, Social, and/or Governance; and (3) the factors influencing the preference for direct versus delegated sustainable investments. Using original data from an in-field survey carried out in Italy, we find that knowledge, interest and allocation are shaped by distinct factors, with gender emerging as a common but divergent determinant. whereby men are more likely to know about sustainable assets, yet less likely to be interested in and to invest significant resources in these assets. Interest in specific ESG dimensions is also heterogeneous: younger, more educated, and climate-concerned individuals are more inclined toward multidimensional sustainable assets, whereas male respondents are consistently less interested in the Social factor. Finally, preferences for delegation are unrelated to sociodemographic traits while strongly related to longer investment horizon and interest in ESG mix, suggesting that the multidimensionality of sustainable assets might increase the perceived complexity of these assets, fostering reliance on professional management.

Keywords: Sustainable finance; household financial choices; in-field survey; gender; direct vs delegated investment

JEL: D14; G11; Q59

ACKNOWLEDGEMENTS: The present paper reports results of project “How to foster the role of households in financing the energy transition and the move towards a sustainable economy” financed by the Observatoire de l’Epargne Européenne (OEE). We thank OEE for the financial support, the Italian bank that kindly hosted the experiment, participants to the 3rd Italian conference on Economic Statistics on Sustainability, Innovation and Digitalization (Naples, February 2025), the OEE conference « Attirer les particuliers vers l’Investissement Socialement Responsable et financer ainsi la transition verte? » (Paris, April 2025), the 21st International Conference on Pensions, Insurance, and Savings (Lisbon, May 2025), European Financial Management Association Annual Meeting (Athens, June 2025) for comments and suggestions. Usual caveat applies.

1. Introduction

Since the 2015 Paris Agreement and the adoption of the United Nations' 2030 Agenda for Sustainable Development, sustainability has emerged as a central objective across public and private sectors. These landmark frameworks have emphasized the interconnected dimensions of sustainability (economic growth, social inclusion, and environmental protection) and have underscored the necessity of a more comprehensive approach that goes beyond environmental considerations alone. In response, financial markets have increasingly embraced sustainable finance as a means to channel capital toward long-term, responsible growth. This evolution has been supported by initiatives such as the United Nations Principles for Responsible Investment (PRI, 2017), which promote the integration of Environmental, Social, and Governance (ESG) criteria into investment decisions (Widyawati, 2020).

The growing demand for sustainability-oriented financial solutions has pushed financial markets to develop an increasingly wider offer of sustainable assets, including fixed-income securities such as Green Bonds, Social Bonds, and Sustainability-linked Bonds, as well as Net Zero and ESG-rated equity funds in the capital markets. The proliferation of such instruments has sparked extensive research on their pricing, performance, and relative attractiveness vis-à-vis conventional assets. Empirical studies have explored the existence of ESG premiums (i.e., the return differentials between sustainable investments and their conventional counterparts) with mixed and context-dependent findings across asset classes, geographies, and timeframes (Zerbib, 2019; Torricelli & Pellati, 2023; Alessi et al., 2021).

While much of the academic focus has concentrated on institutional investors—such as banks, pension funds, and insurance companies—given their systemic role in financing the green transition (De Angelis et al., 2023; Landi et al., 2024), the behaviors and preferences of retail investors, and particularly households, remain comparatively underexplored and significant gaps in the literature persist concerning how household investors engage with sustainable finance.

Specifically, the relationship between sustainable finance literacy, defined as the ability to identify and assess financial products based on ESG criteria (Filippini et al., 2024), and actual investment behavior remains inconclusive. While some studies find a positive association between knowledge and ownership of ESG assets, others suggest that increased awareness may also foster skepticism due to concerns such as greenwashing, thereby limiting engagement (Strauß et al., 2023; Carlsson, 2022; Jia et al., 2025).

Next, although several studies have documented the role of socio-demographic factors in shaping ESG preferences (see, among others, Rossi et al., 2019; Hood et al., 2014, and more

recently, D'Ecclesia et al., 2024), very few have disentangled preferences across the distinct environmental, social, and governance dimensions of ESG. Most existing analyses treat ESG investment as a homogenous category, thereby overlooking potential heterogeneity in investor motivations and priorities, especially along gender lines or political affiliation.

Last, while the broader financial literature has examined the determinants of households' choices between direct and delegated (e.g., fund-based) investment strategies, often emphasizing time and information constraints (Zhu, 2005; Kim et al., 2016; Brown et al., 2023), this issue has not been addressed explicitly in the context of sustainable finance.

The present paper thus contributes to the existing literature on household sustainable finance by filling the above gaps. Specifically, we empirically answer the following three research questions based on original survey data on Italian households:

1. Are the determinants of knowledge, interest, and allocation in sustainable assets identical, or do they differ?
2. What factors shape the interest in the different dimensions of ESG (Environmental, Social, Governance)? Is it a matter of gender?
3. What are the drivers of household preferences for delegated (i.e., indirect) over direct investment in sustainable assets?

Our empirical evidence shows that knowledge, interest, and allocation in sustainable assets correlate with distinct factors. They all share gender as a common determinant, albeit in opposite directions: men are more likely to know about sustainable assets, yet less likely to be interested in and to invest significant resources in these assets. Education matters only for knowledge, and attitudes such as investment horizon and climate concern affect interest and allocation, but not knowledge. With reference to the second research question, we find that the interest in the different dimensions of ESG is also shaped by different factors, with young age, higher education and climate concern favoring the interest in the multidimensional assets, in most cases at the expense of the Social factor. Moreover, gender is again a key determinant, particularly for socially focused ESG assets, with males being less interested in this dimension. Last, we find that preferences for delegating sustainable asset selection to professionals are not significantly associated with sociodemographic characteristics. Instead, a longer investment horizon and being interested in the mix of ESG dimensions are key predictors, leading to the suggestive conclusion that sustainability's complexity and multidimensionality motivate reliance on professional management.

The remainder of this paper is organized as follows. Section 2 grounds the research questions in the existing relevant literature. Section 3 describes the dataset and provides some

descriptive statistics of the data collected. Section 4 presents the results of the econometric analysis, and Section 5 proves their robustness to a variety of checks. Finally, Section 6 concludes.

2. Conceptual background

The paper rests on three main strands of the academic literature, encompassing the following topics: the discrepancy between theoretical knowledge of sustainable assets and actual investment decisions; the household features mostly correlated to the demand for sustainable assets; the household preference of the selection mode, i.e., direct vs. delegated (through funds) asset selection.

As for the first strand, theoretical knowledge of sustainable finance assets refers to the concept of sustainable finance literacy, which is an extension of the classical financial literacy and is defined by Filippini et al. (2024) as “knowledge and skill of identifying and assessing financial products according to their reported sustainability-related characteristics”. Previous studies, mainly based on surveys on single countries, have considered different measures of sustainable finance literacy and have empirically investigated their relation with interest or actual ownership of sustainable finance assets, without reaching a consensus. Filippini et al. (2024) take the case of Swiss investors to measure their sustainable finance literacy (via a set of multiple-choice questions), their awareness of sustainable finance products (via an open-ended question), and their knowledge of broader sustainability issues (via a set of multiple-choice questions unrelated to financial aspects). Results show a positive association between stated ownership of sustainable assets and both sustainable finance literacy and sustainable finance awareness, while no statistically significant association is found for sustainability literacy unrelated to financial aspects. Strauß et al. (2023) also study the Swiss population and find a positive yet weak association between an objective measure of sustainable finance literacy, based on different questions with respect to Filippini et al. (2024), and the likelihood to invest in sustainable assets. In fact, such a relationship is not statistically significant when the model accounts also for other sustainability-related controls (e.g., paying attention to sustainable finance news, greenwashing perceptions). Even if the relationship between sustainable finance literacy and the likelihood to invest in sustainable assets is not found to be mediated by greenwashing perceptions, the authors argue that, in principle, greater sustainable finance literacy may expose investors to its drawbacks and criticisms, potentially fostering scepticism and reducing their likelihood of investing. By analysing the stated knowledge on

sustainable finance in survey data on Italian households, Lanciano et al. (2025) find that a higher sustainable finance literacy increases multiple aspects of sustainable investing: the ownership of sustainable assets, the relevance given to sustainability profile in the investment choices, and both the households' current interest and future intention to hold sustainable assets. The magnitude of the effect is highest for sustainability relevance and lowest for asset ownership, hinting at a gap between perceived knowledge and interest and actual behaviour. Even more, Anderson and Robinson (2022) and Jia et al. (2025), by analysing a sample of Swedish households and Japanese retail investors respectively, find that objective environmental literacy, based on questions about climate change not covering financial aspects, does not necessarily have a positive association with ESG engagement and actual holding of environmental stocks. The level of sustainable financial knowledge has also been shown to be relevant in differentiating the impact of sustainable labels on individuals' willingness to invest. By looking at Swedish consumers, Carlsson (2022) finds that objective labels, i.e., labels which provide quantitative information on the sustainability aspects of a product, cause a higher willingness to invest than evaluative labels (labels that provide only a synthetic overall evaluation of the product sustainability, for instance through a symbolic image), but only among highly knowledgeable individuals.¹

As for the second strand, there is a substantial body of literature principally based on household national surveys that investigates other determinants, besides financial/sustainable finance literacy, influencing the demand for socially responsible and sustainable assets. Both Bauer and Smeets (2015) and Junkus and Berry (2010) find that socially responsible investors are more likely to be female, younger and less wealthy based on bank clients in the Netherlands and US investors respectively. In contrast, Assaf et al. (2025) find no overall gender effect on the share of ESG fund and stock holdings among French investors, a result stemming from two opposing indirect effects: women are more inclined to invest in ESG due to stronger social concerns, while men's engagement is driven by greater support for environmental causes. Hood et al. (2014) investigate individual investors' actual holdings by using U.S. data and find that socially responsible investment preferences vary widely based on gender, age, income, political

¹ Other studies investigate the relation between classical financial literacy and sustainable investing with divergent results. On the one hand, individuals with a higher stated financial literacy are either less interested in socially responsible products, or hold a lower share of socially responsible assets, or have portfolio with lower ESG scores (Riedl and Smeets, 2017; Rossi et al., 2019; D'Hondt et al., 2022). On the other hand, Meunier and Ohadi (2022) show that low financial literacy is associated with misconceptions about socially responsible investments, which in turn are linked to a lower propensity to invest in such assets and Gutsche et al. (2021) find that financial literacy has a negative association with the intention to avoid sustainable investments but a negative one with the self-reported share of sustainable investments in individuals' portfolios.

orientation, and religious affiliation. Notably, higher-income investors show stronger preferences for firms with progressive social and environmental practices. Rossi et al. (2019), based on a survey on the Dutch population, show the relevance of education and prior experience with socially responsible investments and the willingness to pay a price rather than needing a little nudge. Bauer et al. (2021) show that among members of a Dutch pension fund, the choice to invest more sustainably is driven by social preferences in line with Riedl and Smeets (2017), who use Dutch individual-level data. Riedl and Smeets (2017) further find that socially responsible investors expect lower returns, have a longer investment horizon, and hold socially responsible funds for diversification benefits. On the other hand, according to Nilsson (2008), the decision to invest in socially responsible funds is influenced not only by ethical or altruistic values, but also by the perception that these funds can deliver competitive, if not superior, financial returns. Based on a survey on Japanese households, Gutsche et al. (2021) find that non-financial aspects are less important for sustainable investments with respect to Western countries, even if individual environmental values and ecological political identification are still important drivers. On the contrary, Anderson and Robinson (2022) show that pro-environment Sweden households do not necessarily hold pro-environment portfolios due to disengagement from financial investments and informational constraints.

It is worth noting that, as far as we know, the literature on sustainable household finance has either investigated generic socially responsible investments or relied on aggregated ESG scores (or at most limited to the environmental dimension), without disentangling the individual components of ESG. As for the third strand, the existing literature on the decision between personal asset selection (i.e., direct) vs. delegating the asset choice (i.e., indirect) resting, e.g., on mutual funds, has not investigated this issue with specific reference to sustainable assets. However, there is a comparable, albeit not very extensive, literature on the same choice over conventional assets showing that time and information constraints significantly influence the selection of risky assets.² For instance, by using the US Survey of Consumer Finance, Zhu (2005) proves that households with higher professional engagement and personal responsibilities tend to invest more in mutual funds due to their higher opportunity cost of time, which makes delegated investment more appealing than managing individual stocks directly. Inertia in investment management can be explained by a life-cycle model that considers the trade-off between acquiring job-specific skills and managing finances (Kim et al., 2016). Kaur

² There is extensive literature, related but not central to our research, on overall market participation, irrespective of whether investments are made directly or via funds (see, e.g., van Rooij et al., 2011; Almenberg and Dreber, 2015; Sivaramakrishnan et al., 2017; Christelis et al., 2010; Agarwal et al., 2022).

et al. (2013), by using survey data from an Indian sample, find that investors tend to prefer mutual funds over direct stock market investments, viewing mutual funds as a more flexible way to invest and perceiving stock market investments as complex and risky. Further, Brown et al. (2023) examine the asset allocation behaviour of European households from 2004 to 2017, by using SHARE, the Survey on Health, Ageing and Retirement, data. They show that in response to the low interest rates following the global financial and sovereign debt crises, households shifted towards mutual fund investing rather than increasing direct investments in risky assets such as stocks or bonds, with this “flight to delegation” being particularly pronounced among financially literate individuals.

To sum up, the existing literature highlights three major questions that have not been specifically investigated, and which this paper is intended to address. First, the relationship between sustainable finance literacy, interest, and allocation in sustainable assets remains unclear, particularly regarding whether they share common determinants. Second, there is still room for investigating the household’s features associated with a precise interest for a specific domain of the ESG assets (E, S, or G) rather than a mix of them. Third, to the best of our knowledge, no existing study has investigated households’ preferences between direct and delegated (through funds) sustainable investments.

In the present paper, we thus exploit data retrieved from an in-field survey (see Section 3) to answer the following three research questions:

Research Question 1: “Are the determinants of knowledge, interest, and allocation in sustainable assets identical, or do they differ?”

Research Question 2: “What factors shape the interest in the different dimensions of ESG (Environmental, Social, Governance)? Is this interest a matter of gender?”

Research Question 3: “What are the drivers of household preferences for delegated (i.e., indirect) over direct investment in sustainable assets?”

3. Data

In order to empirically answer the three Research Questions above, we rely on survey data retrieved while running an incentivized lab-in-the-field experiment. The data collection took place in late 2024 in three different branches of a well-known large commercial bank that

operates extensively across all regions of Italy.³ The branches, located in two different regions of Italy, were selected by the banks' managers to achieve the highest heterogeneity possible across the clientele.

All customers entering the bank were asked to participate in a survey and their answers were provided to the researchers, who registered them on a tablet computer.⁴ Participation in the survey was incentivized by informing subjects that at the end of the interview, they would receive a gift whose value depended on the answers given to the questions of a specific experimental task, and a random selection mechanism. The experimental task consisted of asking participants to declare their willingness to invest in ESG vs conventional assets under three different experimental conditions.⁵ This task, placed in the survey after the questions relevant to this paper, is not related to the aims of the present contribution. However, since the experimental conditions could have affected participants' answers to the survey, we control for them in the subsequent empirical analyses.

Returning to the questionnaire, the first set of questions aimed at eliciting the participant's knowledge and interest in ESG assets, and, if so, which specific factor, among E, S, G, or the mix of them, was the preferred one. The respondent could also declare not to be interested in investing in ESG financial products whatsoever. The second set of questions, administered only to those declaring an interest in sustainable assets, aimed to elicit the ideal share of ESG assets in their financial portfolio and the preference to delegate the choice of the mix between risk, return, and sustainability aspects to specialized operators. The third set of questions represented the experimental task part and aimed to elicit participants' willingness to pay (WTP) for sustainable assets via a short "multiple price list" investment task. Finally, the last set of questions aimed to gather information about the demographic and pro-social characteristics of the participants: the former include gender, education, birth cohort, region of birth, and region of residence, while the latter include the degree of concern for climate change and pollution problems (both with a 4-level Likert scale: Not at all, a little, quite a lot, a lot) and individual

³ The data collection took place between 21 and 25 October in the Modena branch, between 25 and 29 November in the first Rome branch, and between 2 and 6 December 2024 in the second Rome branch.

⁴ The researchers conducted interviews separately for each participant and in different places of the bank to reduce the risk of spillover effects across participants. Notice also that throughout the paper we will use the word customer and not client to mean that the person entering the bank were not necessarily linked to the bank by a formal relationship as normally the term client implies. In fact, we did not know the reason – and we did not mean to ask – why the person was there.

⁵ Specifically, once accepting to participate, subjects were randomly assigned to one of three groups: one group received a card picturing a landscape after a flood, suggestive of the negative consequences of a natural disaster group ("Negative visual nudge"), the second received a card displaying a picture of a nice green countryside ("Positive visual nudge"), and the third group received nothing, thus acting as a control group. For a detailed description of the experiment design and results, the interested reader can refer to Bertelli et al. (2025).

engagement in volunteering. The overall interview lasted about 5 minutes, a time compatible with the average waiting time of customers entering a bank for their own work or personal tasks.

Table 1 reports the main descriptive statistics on the final dataset, counting 397 observations, while variables definition is reported in the Appendix.

Table 1: Descriptive Statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Knowledge					
No	397	0.562	0.497	0	1
Yes	397	0.438	0.497	0	1
Factor of Interest					
E Factor	397	0.159	0.366	0	1
S Factor	397	0.118	0.323	0	1
G Factor	397	0.028	0.164	0	1
ESG Mix	397	0.539	0.499	0	1
Not interested	397	0.156	0.363	0	1
Ideal allocation					
Less than 25%	397	0.348	0.473	0	1
Between 25% and 50%	397	0.375	0.485	0	1
Between 50% and 75%	397	0.081	0.273	0	1
More than 75%	397	0.035	0.185	0	1
Not interested	397	0.161	0.368	0	1
Selection					
Personally	397	0.295	0.456	0	1
Delegated (via funds)	397	0.544	0.499	0	1
Not interested	397	0.161	0.368	0	1
WTP					
0%	395	0.324	0.469	0	1
1%	395	0.271	0.445	0	1
2%	395	0.405	0.492	0	1
Gender					
Female	396	0.475	0.500	0	1
Male	396	0.525	0.500	0	1
Birth cohort					
≤ 1940	391	0.136	0.343	0	1
1950	391	0.184	0.388	0	1
1960	391	0.297	0.457	0	1
1970	391	0.192	0.394	0	1
≥ 1980	391	0.192	0.394	0	1
Birth Area					
North	395	0.433	0.496	0	1
Centre	395	0.339	0.474	0	1
South and Islands	395	0.127	0.333	0	1

Abroad	395	0.101	0.302	0	1
Education					
Primary School	392	0.005	0.071	0	1
Middle School	392	0.077	0.266	0	1
High School	392	0.421	0.494	0	1
Graduate	392	0.439	0.497	0	1
Post-graduate	392	0.059	0.235	0	1
Investment horizon					
Short	385	0.213	0.410	0	1
Medium	385	0.623	0.485	0	1
Long	385	0.164	0.370	0	1
Worried for climate crisis					
Not at all/Little	392	0.145	0.353	0	1
Quite a lot	392	0.441	0.497	0	1
A lot	392	0.413	0.493	0	1
Worried for pollution					
Not at all/Little	394	0.058	0.235	0	1
Quite a lot	394	0.388	0.488	0	1
A lot	394	0.553	0.498	0	1
Volunteering					
Yes	393	0.282	0.451	0	1
No	393	0.718	0.451	0	1
Treatment					
Positive Visual	397	0.348	0.477	0	1
Negative Visual	397	0.317	0.466	0	1
Control	397	0.335	0.473	0	1
City					
Modena	397	0.514	0.500	0	1
Rome	397	0.486	0.500	0	1

While the knowledge of ESG assets is quite limited, as 56.2% of the participants were not aware of the existence of sustainable or ESG investments before the interview, the potential is quite remarkable, as only 15.6% of the respondents declared not to be interested in sustainable or ESG investment products. Among those interested, the vast majority (53.9%) are interested in assets targeting all three dimensions of sustainability, if they had a sum of money to invest. Among those interested in one dimension only, most would target the environmental one (E Factor chosen by 15.9% of the respondents), while the social and the government ones are confirmed to be still less of interest (11.8% for the social one and only 2.8% for the governance one).

Most of the respondents interested in ESG investments declare that in their ideal portfolio allocation ESG assets would represent a relevant portion, ranging from less than a quarter (34.8%) to up to a half (37.5%). Remarkably, 8.1% and 3.5% would invest most of their

financial assets in ESG products. In doing so, more than half of the sample (54.4%) would prefer an indirect investment, via, e.g., funds, in which the selection is made by specialized operators on the topic, delegating the optimal mix of all the involved dimensions (risk, return, and sustainability), while only 29.5% would personally make their selection.

Finally, in terms of demographics, the sample is almost evenly split between "Female" and "Male," with a slight majority for males, confirming the well-known result that males are more typically in charge of the financial decisions of the households (see e.g., Bertocchi et al., 2014 for the case of Italy). Despite all birth cohorts being represented, almost two-thirds of respondents were born in the 1950s (18.4%), 1960s (29.7%), and 1970s (19.2%). The sample shows a good heterogeneity also in terms of birth area, with most of the respondents being born in the North and Center of Italy (where the interviews took place), but with sufficient portions of people born also in the South of Italy (12.7%) and abroad (10.1%). Most of the respondents hold either a high school diploma or a university degree, representing 42.1% and 43.9% of the total sample, respectively, and have a medium investment horizon (62, 3% indicated between 1 and 5 years), while the rest is almost evenly split between a shorter (less than one year, 21.3%) and longer (more than 5 years, 16.4%) horizon. Climate and pollution concerns are widespread, with 85.4% of respondents either a lot (41.3%) or quite a lot (44.1%) concerned about the climate crisis. The concerns about pollution are even more marked, with 94.1% of respondents declaring some degree of concern. Last, 28.2% of the respondents engage in a volunteering activity.

4. Empirical analysis

In this Section, we present the empirical strategy and discuss the results for each research question, recalling that the evidence provided is only suggestive of associations and has no claim to be causal.

4.1 Knowledge, interest and allocation in sustainable assets

In order to empirically investigate the determinants of knowledge about sustainable assets, we rely on a logit model, as the dependent variable is a dummy for having previously heard about sustainable or ESG investment products. It is worth noting that the variable knowledge does not capture an in-depth or objectively assessed understanding of sustainable finance, as

done in other studies (e.g., Filippini et al., 2024). Due to the specific nature of the survey, it was not feasible to include multiple or detailed questions on this topic during the interview.

To investigate the determinants of interest in and allocation to sustainable assets, we rely instead on an ordered logit model, as the dependent variable is represented by an ordinal variable reflecting the percentage of financial portfolio that respondents would ideally allocate to ESG investments, ranging from 0 (no interest) to more than 50%.

In both models, independent variables are divided into sociodemographic (a dummy for being male, a dummy for belonging to the youngest generation, i.e., being born after 1980, a dummy for being at least graduated), attitudes for financial and non-financial aspects (a dummy for having an investment horizon of 1 year or more, a dummy for being engaged in volunteer activity, a dummy for being, either quite a lot or a lot, concerned for climate change) and other controls, namely dummies for the birth area, the treatment received during the experiment and the city in which the experiment was conducted.

The first column of Table 2 reports the marginal effects for knowledge and shows that male respondents are, on average, 8.57 percentage points more likely than female respondents to report that they have already heard of sustainable or ESG investment products, controlling for other covariates. This gender gap may reflect women's lower financial literacy (e.g., Lusardi and Mitchell, 2014; Potrich et al., 2018) and may be enlarged due to women's lower confidence in financial matters that brings them to underestimate their real knowledge (Bucher-Koenen et al., 2024). Moreover, this result is consistent with the evidence found using measures of sustainable finance literacy, either subjective (Lanciano et al, 2025) or objective (Filippini et al., 2024). Further, graduated respondents are on average 8.92 percentage points more likely to have a basic familiarity with ESG assets than low-educated respondents with the same other characteristics. Then, a higher marginal effect of 14.18 percentage points is associated with having an investment horizon of at least 1 year. The other columns of Table 2 report instead the results for (non) interest and for the ideal allocation. Interestingly, we find that men show a lower probability of allocating a higher proportion of wealth in ESG assets. Specifically, being male is associated with a 5-percentage point increase in the probability of expressing no interest in ESG investments (i.e., allocating 0%), and a 4.16 percentage point decrease in the probability of allocating more than 50% of the portfolio to ESG assets.

Other variables that are significantly associated with a greater interest in allocating a higher proportion of the portfolio to ESG assets include having an investment horizon longer than one year, consistently with sustainability being a long-term concept (Klauer et al, 2016), and being

concerned about climate change. The latter result is in line with the empirical findings by Filippini et al. (2024), Strauß et al. (2023), and Jia et al. (2025) regarding the motivational role of climate awareness in sustainable investing. Thus, households who are more worried about climate change are also those more willing to commit financial resources to sustainability-oriented assets, translating non-financial attitudes into concrete portfolio decisions. More broadly, these findings are consistent with a literature showing that individual preferences are not immutable but can evolve over time in response to salient experiences and external shocks such as natural disaster (e.g., Jia et al., 2025; Cassar et al., 2017).

Table 2: Determinants of knowledge, interest and allocation in sustainable assets.

	(1)	(2)	(3)	(4)	(5)
	Knowledge	Ideal allocation			
		0% (Not interested)	< 25%	25% - 50%	> 50%
<i>Sociodemographic</i>					
Male	0.0857* (0.050)	0.0500** (0.024)	0.0448** (0.021)	-0.0532** (0.025)	-0.0416** (0.020)
Young	-0.0391 (0.064)	-0.0250 (0.027)	-0.0234 (0.027)	0.0261 (0.028)	0.0224 (0.026)
Graduate	0.0892* (0.050)	-0.0232 (0.024)	-0.0201 (0.021)	0.0242 (0.025)	0.0191 (0.020)
<i>Attitudes</i>					
Longer horizon	0.1418** (0.061)	-0.0853** (0.039)	-0.0585*** (0.022)	0.0896** (0.042)	0.0543*** (0.020)
Volunteer	0.0379 (0.057)	-0.0292 (0.024)	-0.0270 (0.024)	0.0306 (0.026)	0.0257 (0.023)
Climate	-0.0662 (0.073)	-0.1104** (0.051)	-0.0642*** (0.018)	0.1122** (0.047)	0.0624*** (0.021)
Other controls	YES	YES	YES	YES	YES
Observations	376	376	376	376	376
R-squared	0.0739	0.0481	0.0481	0.0481	0.0481

Notes: In column (1) the table reports marginal effects from logit model and in columns (2)-(5) marginal effects from ordered logit model. Robust standard errors are reported in parentheses. ***, ** and * represent significance at 1, 5, 10% levels, respectively. Other variables, not reported, are Birth area, Treatment and City.

Summing up, knowledge and interest have gender as a common sociodemographic determinant, but in opposite directions: men are more likely to know, but less likely to be interested and less likely to allocate more. Age does not matter either for knowledge or for interest and allocation, while education matters only for knowledge. As for respondents' attitudes, we find that having a longer investment horizon is positively associated with both

knowledge, interest and ideal allocation in ESG investments. In contrast, engagement in volunteering activities does not appear to be significantly related to any outcome. Finally, concern about climate change is positively associated only with interest in ESG investing and a higher ideal allocation, but not with knowledge.

The answer to the first Research Question is thus that knowledge, interest, and allocation in sustainable assets correlate with distinct factors.

4.2 Interest in the different dimensions of ESG

We now turn to the empirical investigation of the factors correlating with the interest in either a specific factor among Environment (E), Social (S), or Governance (G), or in the mix. In order to do so, we employ a multinomial logit, as the dependent variable is a non-ordered categorical variable. Also in this case, the set of independent variables includes the same sociodemographic controls included above (i.e., gender, cohort of birth, and education), attitudes for financial and non-financial aspects (i.e., investment horizon, engage in volunteer activity, and concern for climate change) and other controls. Moreover, in this model specification, we also include a dummy for (previous) knowledge of ESG or sustainable assets.

Results, reported in Table 3, show that concerns for climate significantly correlate with being interested in the Environment dimension, either alone or within the mix ESG, contrasting the evidence of Anderson and Robinson, 2022, who show an absent relation between green beliefs and green investments. On the other hand, respondents concerned about climate have a lower chance of being interested in assets with a specific Social goal. Education also matters, as it is negatively correlated with interest in Social assets and positively so with assets characterized by an ESG mix. This evidence resonates with the role of education found by Bauer and Smeets (2015), Nilsson (2008), and Rossi et al. (2019). In particular, education may enhance the ability to process the multidimensionality of sustainable assets, thereby reinforcing the willingness to allocate resources to them.

Prior knowledge of sustainable assets also matters and correlates negatively with being interested in the S factor only, while positively with being interested in the G factor only. This suggests that the complexity of the governance dimension may require proper knowledge to be suitably evaluated, whereas social factors may be more accessible to investors regardless of their technical knowledge (D'Hondt et al., 2022). Interestingly, investment horizon does not matter, while younger investors tend to favour the mix of ESG dimensions, indicating a stronger understanding of the multidimensional nature of sustainability. Finally, gender matters again,

as men, who are overall less interested in ESG assets, are also less interested in assets with a specific Social connotation. This result aligns with social psychological literature according to which women are typically associated with a communal nature that makes them caring about others, empathetic, attentive to social relationships and collective well-being, whereas men are typically associated to an agentic nature oriented toward action, self-status and the achievement of individual goals (Eagly, 1987 and 2009; Abele, 2003; Madera et al., 2009; Assaf et al., 2025).

Hence, the answer to the second Research Question is that the interest in the different dimensions of ESG (Environmental, Social, Governance) is shaped by distinct factors, with climate concern, young age and higher education favoring the interest in the multidimensional assets, in most cases at the expenses of the Social factor, while gender is a key determinant particularly for Socially focused sustainable assets, with male being the less interested in this dimension.

Table 3: Marginal effects for interest in the different dimensions of ESG

	(1)	(2)	(3)	(4)
	E factor	S factor	G factor	ESG MIX factor
<i>Sociodemographics</i>				
Male	-0.0129 (0.038)	-0.1194*** (0.031)	0.0204 (0.021)	0.0395 (0.051)
Young	-0.0423 (0.048)	-0.0337 (0.037)	0.0213 (0.032)	0.1183* (0.063)
Graduate	-0.0182 (0.037)	-0.0657** (0.033)	-0.0154 (0.017)	0.1103** (0.051)
<i>Attitudes</i>				
Longer horizon	-0.0386 (0.047)	0.0500 (0.032)	0.0202 (0.017)	0.0340 (0.065)
Volunteer	-0.0585 (0.039)	0.0481 (0.039)	0.0193 (0.022)	0.0142 (0.055)
Climate	0.1409*** (0.035)	-0.1107** (0.056)	-0.0193 (0.031)	0.1263* (0.071)
<i>Knowledge</i>				
Knowledge	-0.0533 (0.040)	-0.0789*** (0.030)	0.0357** (0.017)	0.0764 (0.053)
Other controls	YES	YES	YES	YES
Observations	376	376	376	376
Wald Chi	137	137	137	137
pvalue Chi2	1.41e-09	1.41e-09	1.41e-09	1.41e-09
LogLikelihood	-423.2	-423.2	-423.2	-423.2

Notes: The table reports marginal effects from multinomial logit model, estimated with robust standard errors that are reported in parentheses. ***, ** and * represent significance at 1, 5, 10% levels, respectively. Other variables, not reported, include Birth area, Treatment and City.

4.3 Delegated over direct investment in sustainable assets

Last, we focus on the factors correlating with the likelihood of choosing personally or delegating the choice to a fund when it comes to sustainable financial investments. In order to do so, we rely on a logit model, as the dependent variable is a dummy taking value 1 whenever the respondent prefers to delegate the selection of ESG investments, e.g., to mutual funds, and 0 whenever the respondent indicates a preference for personally selecting the ESG assets. Also in this case, the set of independent variables includes the same sociodemographic controls included above (i.e., gender, cohort of birth, and education), attitudes for financial and non-financial aspects (i.e., investment horizon, engage in volunteer activity, and concern for climate change), and the other controls. We also augment the model specification with a dummy for (previous) knowledge of ESG or sustainable assets and a dummy for a significant presence of sustainable assets (either more than a quarter or more than a half) in the ideal financial portfolio.

The results, reported in Table 4, indicate that sociodemographic characteristics such as being male, young, or a graduate are not significantly associated with the preference for direct vs delegated selection of assets. Among attitudinal variables, only investment horizon matters, whereby having a longer investment horizon is positively and significantly associated with preferring to delegate to mutual funds. The estimated effect is large in magnitude, suggesting that an investment horizon longer than a year is associated with an increase of as much as 16 percentage points in the likelihood of preferring delegation to personal selection of sustainable assets.

Moreover, if neither (prior) knowledge nor a significant weight in the ideal portfolio of ESG assets seems to shape the preferences for delegated asset selection, being interested in the mix of ESG dimensions seems crucial. Specifically, it is positively and significantly associated with the likelihood of investors delegating the selection of sustainable assets to professionals

A precise comparison with the existing literature about delegated over direct investment in sustainable assets is limited since the latter does not address the issue with specific consideration of sustainable assets. We interpret the positive association between the interest in multiple ESG dimensions and the preference for delegated investment through funds as the result of the fact that investors recognize the multidimensional nature of sustainability and perceive it as more complex, thus preferring to delegate investment decisions to specialized

professionals rather than personally select assets. This interpretation aligns with broader portfolio management literature demonstrating that investment selection may be influenced by time and information constraints (e.g. Zhu, 2005; Kim et al., 2016; Kaur et al., 2013), with the latter possibly amplified by the multidimensional nature of ESG evaluation.

Table 4: Marginal effects for delegated selection of sustainable assets

	(1)	(2)
<i>Sociodemographics</i>		
Male	-0.0617 (0.053)	-0.0661 (0.053)
Young	-0.0741 (0.067)	-0.0732 (0.066)
Graduate	-0.0435 (0.053)	-0.0429 (0.054)
<i>Attitude</i>		
Longer horizon	0.1611** (0.071)	0.1587** (0.072)
Volunteer	-0.0940 (0.059)	-0.0939 (0.059)
Climate	0.0968 (0.083)	0.0992 (0.084)
<i>ESG assets</i>		
Knowledge	-0.0387 (0.054)	-0.0413 (0.055)
Interest for Mix ESG	0.1417** (0.056)	0.1425** (0.056)
ESG allocation 50%	0.0608 (0.078)	
ESG allocation 25%		0.0138 (0.056)
Other controls	YES	YES
Observations	321	321
R-squared	0.0559	0.0546

Notes: The table reports marginal effects from a logit model, estimated with robust standard errors that are reported in parentheses. ***, ** and * represent significance at 1, 5, 10% levels, respectively. Other variables, not reported, include Birth area, Treatment and City.

5. Robustness

In this Section, we perform robustness checks along three main lines.

First, given that previous studies (e.g., Filippini et al., 2024; Strauß et al., 2023; Anderson and Robinson, 2022) suggest an association, even if not univocal, between forms of sustainable finance

literacy and ownership of sustainable assets, we include (previous) knowledge of ESG or sustainable assets as an additional regressor when investigating determinants of the ideal allocation. Results presented in Table 5 show that the variable knowledge is not significantly associated with the ideal allocation, providing further support that knowledge, interest and allocation in sustainable assets do not correlate with the same factors as emerge from Table 2. Being aware of sustainable assets is not necessarily associated with a preference for allocating resources to them, highlighting the role of other determinants such as attitudes and sociodemographic characteristics.

Second, among non-financial attitude regressors, we consider concern for pollution instead of concern for climate change. They both pertain to environmental issues and are highly correlated (51.28%), thus they are not included as regressors in the same specification. Nevertheless, they capture slightly distinct dimensions of environmental concern that may exhibit different associations with sustainable assets. For instance, concerns about climate change may be perceived as more distant by individuals living in areas not directly exposed to physical climate risks, whereas concerns about pollution, given its effects on health, may be more salient for individuals in industrialized areas, even if they do not necessarily perceive a direct connection with physical climate risk. Regressions including pollution concern are reported in Table 6. Comparing Table 6 with Tables 2, 3 and 4, we can conclude that results discussed in Section 4 are substantially confirmed. Some minor differences emerge, such as a no significant association between pollution concern and interest in ESG investing (but a significant one with a higher ideal allocation), a marginal positive association between having a longer investment horizon and being interested in the Social factor, and a marginal negative association between engagement in volunteering activities and the probability of preferring a delegated selection of sustainable assets. Overall, the differences between pollution and climate change concerns appear not to be strongly relevant when examining their relationship with households' knowledge, interest, and behaviour regarding sustainable investing.

Third, among the sociodemographic controls, we treat age as a categorical variable represented by three birth cohorts (up to 1949 – the reference category –, between 1950 and 1979, equal or after 1980) rather than a binary one for being born after 1980, in order to account for potential heterogeneity in responses across birth cohorts. A comparison of Table 7 with Tables 2, 3 and 4 indicates that the results discussed in Section 4 are largely robust. It is worth noting that when considering more birth cohort categories, individuals born between 1950 and 1979 are more likely, even if marginally, to know sustainable assets with respect to older ones (see Table 7 – Panel A). By contrast, age does not show a significant association with interest or allocation to sustainable assets, providing further evidence that knowledge, interest and allocation are driven by different determinants.

Table 5: Determinants of interest and allocation in sustainable assets with knowledge regressor

	(1)	(2)	(3)	(4)
	Ideal allocation			
	0% (Not interested)	< 25%	25% - 50%	> 50%
<i>Sociodemographic</i>				
Male	0.0529** (0.024)	0.0475** (0.021)	-0.0563** (0.025)	-0.0441** (0.020)
Young	-0.0264 (0.027)	-0.0250 (0.027)	0.0276 (0.027)	0.0238 (0.026)
Graduate	-0.0185 (0.025)	-0.0161 (0.021)	0.0193 (0.026)	0.0152 (0.020)
<i>Attitudes</i>				
Longer horizon	-0.0789** (0.039)	-0.0554** (0.023)	0.0832** (0.041)	0.0511** (0.020)
Volunteer	-0.0276 (0.024)	-0.0255 (0.024)	0.0289 (0.026)	0.0242 (0.023)
Climate	-0.1140** (0.051)	-0.0654*** (0.018)	0.1156** (0.047)	0.0638*** (0.021)
<i>Knowledge</i>				
Knowledge	-0.0374 (0.026)	-0.0342 (0.026)	0.0401 (0.029)	0.0315 (0.022)
Other controls	YES	YES	YES	YES
Observations	376	376	376	376
R-squared	0.0505	0.0505	0.0505	0.0505

Notes: The table reports marginal effects from ordered logit model. Robust standard errors are reported in parentheses. ***, ** and * represent significance at 1, 5, 10% levels, respectively. Other variables, not reported, are Birth area, Treatment and City.

Table 6: Results with concern for pollution instead of climate change

Panel A. Determinants of knowledge, interest, and allocation in sustainable assets.

	(1)	(2)	(3)	(4)	(5)
	Knowledge	Ideal allocation			
		0% (Not interested)	< 25%	25% - 50%	> 50%
<i>Sociodemographic</i>					
Male	0.0910* (0.050)	0.0584** (0.024)	0.0529** (0.021)	-0.0626** (0.025)	-0.0487** (0.021)
Young	-0.0447 (0.064)	-0.0271 (0.027)	-0.0259 (0.028)	0.0285 (0.028)	0.0245 (0.027)
Graduate	0.0975** (0.049)	-0.0182 (0.024)	-0.0160 (0.021)	0.0192 (0.025)	0.0150 (0.020)
<i>Attitudes</i>					
Longer horizon	0.1389** (0.061)	-0.0913** (0.041)	-0.0619*** (0.022)	0.0963** (0.043)	0.0570*** (0.020)

Volunteer	0.0452 (0.057)	-0.0235 (0.025)	-0.0217 (0.024)	0.0248 (0.027)	0.0203 (0.023)
Pollution	-0.1405 (0.112)	-0.1430 (0.098)	-0.0616*** (0.014)	0.1368* (0.079)	0.0678** (0.028)
Other controls	YES	YES	YES	YES	YES
Observations	377	377	377	377	377
R-squared	0.0751	0.0462	0.0462	0.0462	0.0462

Panel B. Marginal effects for interest in the different dimensions of ESG.

	(1)	(2)	(3)	(4)
	E factor	S factor	G factor	ESG MIX factor
<i>Sociodemographics</i>				
Male	-0.0253 (0.038)	-0.1196*** (0.030)	0.0232 (0.019)	0.0409 (0.050)
Young	-0.0418 (0.049)	-0.0327 (0.036)	0.0232 (0.031)	0.1196* (0.063)
Graduate	-0.0245 (0.037)	-0.0558* (0.032)	-0.0148 (0.018)	0.0975* (0.051)
<i>Attitudes</i>				
Longer horizon	-0.0363 (0.047)	0.0560* (0.031)	0.0197 (0.017)	0.0380 (0.065)
Volunteer	-0.0608 (0.039)	0.0443 (0.039)	0.0219 (0.023)	0.0082 (0.055)
Pollution	0.1162** (0.054)	-0.1271* (0.077)	-0.0008 (0.025)	0.2273** (0.099)
<i>Knowledge</i>				
Knowledge	-0.0562 (0.040)	-0.0740** (0.030)	0.0365** (0.016)	0.0788 (0.052)
Other controls	YES	YES	YES	YES
Observations	377	377	377	377
Wald Chi	119.2	119.2	119.2	119.2
pvalue Chi2	3.46e-07	3.46e-07	3.46e-07	3.46e-07
LogLikelihood	-425.8	-425.8	-425.8	-425.8

Panel C: Marginal effects for delegated selection of sustainable assets

	(1)	(2)
<i>Sociodemographics</i>		
Male	-0.0720 (0.052)	-0.0761 (0.052)
Young	-0.0658 (0.067)	-0.0648 (0.066)
Graduate	-0.0489 (0.053)	-0.0487 (0.053)
<i>Attitude</i>		
Longer horizon	0.1660** (0.071)	0.1626** (0.072)
Volunteer	-0.1073*	-0.1077*

	(0.058)	(0.058)
Pollution	0.2150	0.2231
	(0.139)	(0.138)
<i>ESG assets</i>		
Knowledge	-0.0435	-0.0468
	(0.054)	(0.055)
Interest for Mix ESG	0.1444***	0.1448***
	(0.055)	(0.056)
ESG allocation 50%	0.0614	
	(0.077)	
ESG allocation 25%		0.0184
		(0.056)
Other controls	YES	YES
Observations	322	322
R-squared	0.0622	0.0610

Notes: Panel A in column (1) reports marginal effects from logit model and in columns (2)-(5) marginal effects from ordered logit model. Panel B reports marginal effects from multinomial logit model, and Panel C reports marginal effects from a logit model. All models are estimated with robust standard errors, reported in parentheses. ***, ** and * represent significance at 1, 5, 10% levels, respectively. Other variables, not reported, include Birth area, Treatment and City.

Table 7: Results treating age as a categorical variable

Panel A. Determinants of knowledge, interest and allocation in sustainable assets.

	(1)	(2)	(3)	(4)	(5)
	Knowledge	Ideal allocation			
		0% (Not interested)	< 25%	25% - 50%	> 50%
<i>Sociodemographic</i>					
Male	0.0937* (0.050)	0.0477** (0.024)	0.0423** (0.021)	-0.0506** (0.025)	-0.0394* (0.020)
Birth cohort: 1950-1979	0.1347* (0.076)	-0.0544 (0.056)	-0.0364 (0.029)	0.0558 (0.056)	0.0349 (0.029)
Birth cohort: ≥ 1980	0.0746 (0.090)	-0.0724 (0.059)	-0.0540 (0.036)	0.0747 (0.059)	0.0517 (0.036)
Graduate	0.0925* (0.049)	-0.0239 (0.024)	-0.0205 (0.021)	0.0249 (0.025)	0.0196 (0.020)
<i>Attitudes</i>					
Longer horizon	0.1381** (0.061)	-0.0856** (0.040)	-0.0581*** (0.022)	0.0896** (0.042)	0.0541*** (0.020)
Volunteer	0.0395 (0.057)	-0.0304 (0.024)	-0.0279 (0.024)	0.0317 (0.026)	0.0266 (0.023)
Climate	-0.0538 (0.073)	-0.1145** (0.051)	-0.0648*** (0.018)	0.1155** (0.046)	0.0638*** (0.020)
Other controls	YES	YES	YES	YES	YES
Observations	376	376	376	376	376
R-squared	0.0801	0.0498	0.0498	0.0498	0.0498

Panel B. Marginal effects for interest in the different dimensions of ESG.

	(1)	(2)	(3)	(4)
	E factor	S factor	G factor	ESG MIX factor
<i>Sociodemographics</i>				
Male	-0.0094 (0.039)	-0.1235*** (0.031)	0.0200 (0.021)	0.0469 (0.051)
Birth cohort: 1950-1979	0.0396 (0.055)	-0.0661 (0.057)	0.0020 (0.021)	0.1285 (0.080)
Birth cohort: ≥ 1980	-0.0096 (0.066)	-0.0898 (0.064)	0.0232 (0.033)	0.2278** (0.092)
Graduate	-0.0170 (0.037)	-0.0667** (0.033)	-0.0155 (0.017)	0.1129** (0.051)
<i>Attitudes</i>				
Longer horizon	-0.0393 (0.047)	0.0511 (0.032)	0.0202 (0.017)	0.0320 (0.064)
Volunteer	-0.0576 (0.039)	0.0472 (0.039)	0.0192 (0.022)	0.0151 (0.055)
Climate	0.1422*** (0.035)	-0.1144** (0.057)	-0.0190 (0.031)	0.1389* (0.071)
<i>Knowledge</i>				
Knowledge	-0.0555 (0.040)	-0.0760*** (0.029)	0.0357** (0.017)	0.0675 (0.053)
Other controls	YES	YES	YES	YES
Observations	376	376	376	376
Wald Chi	157.8	157.8	157.8	157.8
pvalue Chi2	0	0	0	0
LogLikelihood	-420.3	-420.3	-420.3	-420.3

Panel C: Marginal effects for delegated selection of sustainable assets

	(1)	(2)
<i>Sociodemographics</i>		
Male	-0.0625 (0.053)	-0.0670 (0.053)
Birth cohort: 1950-1979	-0.0108 (0.087)	-0.0130 (0.087)
Birth cohort: ≥ 1980	-0.0833 (0.100)	-0.0843 (0.101)
Graduate	-0.0440 (0.054)	-0.0436 (0.054)
<i>Attitude</i>		
Longer horizon	0.1610** (0.071)	0.1585** (0.072)
Volunteer	-0.0942 (0.059)	-0.0941 (0.059)
Climate	0.0959 (0.083)	0.0981 (0.084)

<i>ESG assets</i>		
Knowledge	-0.0378 (0.054)	-0.0402 (0.055)
Interest for Mix ESG	0.1421** (0.056)	0.1429** (0.056)
ESG allocation 50%	0.0605 (0.078)	
ESG allocation 25%		0.0138 (0.056)
Other controls	YES	YES
Observations	321	321
R-squared	0.0559	0.0546

Notes: Panel A in column (1) reports marginal effects from logit model and in columns (2)-(5) marginal effects from ordered logit model. Panel B reports marginal effects from multinomial logit model, and Panel C reports marginal effects from a logit model. All models are estimated with robust standard errors, reported in parentheses. ***, ** and * represent significance at 1, 5, 10% levels, respectively. Other variables, not reported, include Birth area, Treatment and City.

6. Conclusion

This paper contributes to the growing literature on household sustainable finance and the potential determinants of individual choices for sustainable assets by providing novel evidence from an in-field survey of Italian households. Our empirical analysis reveals that knowledge, interest, and allocation toward sustainable assets correlate with distinct factors, with gender playing a relevant, even though divergent, role across them. In particular, our survey reveals that men are more likely than women to report prior knowledge of sustainable investment products, yet they exhibit a higher probability of expressing no interest in ESG investments and a lower probability of devoting a significant share of their portfolio to them. This gender gap in knowledge may reflect women's lower financial literacy (e.g., Lusardi and Mitchell, 2014; Potrich et al., 2018) and may be enlarged due to women's lower confidence in financial matters that brings them to underestimate their real knowledge (Bucher-Koenen et al., 2024). Moreover, this result is consistent with the evidence found using both a subjective measure of sustainable finance literacy, like e.g., Lanciano et al. (2025), and an objective one, as in e.g., Filippini et al. (2024). Despite women are less likely to know sustainable finance products, we find that they are more likely to be interested in sustainable assets and willing to allocate a higher percentage in them, confirming the socially responsible profile delineated by Bauer and Smeets (2015) and Junkus and Berry (2010).

Further, significant heterogeneity emerges in the interest for specific ESG dimensions. Quite interestingly, male respondents consistently display lower interest in the Social dimension

among the three ESG features of sustainable assets, consistently with the more altruistic attitude of women typically found in the social psychological literature (Eagly, 1987 and 2009; Abele, 2003; Madera et al., 2009; Assaf et al., 2025). Moreover, our results suggest that prior knowledge of sustainable assets correlates negatively with the interest in the S dimension and positively with the G dimension, reflecting the argument according to which complexity of the governance dimension requires proper knowledge to be suitably evaluated (D'Hondt et al., 2022). Next, younger, more educated, and climate-concerned individuals tend to prefer assets combining all the sustainability dimensions. The result about the role of education is consistent with other contributions in the literature (e.g., Bauer and Smeets, 2015; Nilsson, 2008; and Rossi et al., 2019) and suggests that education might foster the ability to process the complexity entailed by the multidimensionality of sustainability assets.

Finally, the preference for delegating sustainable investment choices, an issue still largely under-investigated, is significantly related to the investment horizon, suggesting that the perceived complexity of ESG assets may induce people to prefer delegation to professional advisors.

Overall, our findings provide substantial confirmation of prevalent results in the literature, but also highlight issues that complement and extend prior findings, suggesting that households' choices for sustainable assets are significantly related to socio-demographic characteristics, (non) financial attitudes, the level of financial knowledge, and perceptions of complexity. From a policy perspective, our results highlight the need for tailored interventions aimed at increasing both individual knowledge and accessibility of ESG investments. Specific attention should also be devoted to addressing potential gender disparities in households' portfolio management and informational barriers, especially considering that women tend to be more willing to invest in sustainable products, as our survey reveals.

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Appendix – Description of the variables

Variable	Description
Rome	Binary variable taking value 1 if the respondent is interviewed in Rome, and 0 otherwise
Knowledge	Binary variable assuming value 1 if the respondent has already heard about sustainable or ESG investment products, 0 otherwise
Factor of interest	Categorical variable indicating which direction, if any, would the investor care the most in ESG products, i.e.: 1 = for Factor E; 2 = for Factor S; 3 = for Factor G; 4 = for the mix of the three above, i.e., ESG Factors; 5 = not interested in ESG financial products
Ideal allocation	Ordinal variable indicating the ideal amount of ESG in financial portfolio, and taking the following values: 1 = 0% 2 = less than 25% 3 = between 25% and 50% 4 = more than 50%
ESG Allocation 25%	Binary variable taking value 1 if the respondent's ideal amount of ESG in financial portfolio is equal or more than 25%, 0 otherwise
ESG Allocation 50%	Binary variable taking value 1 if the respondent's ideal amount of ESG in financial portfolio is equal or more than 50%, 0 otherwise
Delegated selection	Binary variable taking value 1 if the respondent prefers delegated ESG investments (assets selected by a fund), 0 if the respondent prefers direct ESG investments (assets personally selected)
Male	Binary variable taking value 1 if the respondent is Male, 0 otherwise
Young	Binary variable taking value 1 if the respondent is born in 1980 or after, 0 otherwise
Birth cohort	Ordinal variable indicating the birth cohort, and taking the following values: 1 = birth year up to 1949; 2 = birth year between 1950 and 1979; 3 = birth year equal or after 1980
Birth area	Categorical variable taking the following values (correspond to the regional divisions defined by the Italian National Institute of Statistics, ISTAT): 1 = North 2 = Centre 3 = South and Islands 4 = Abroad
Graduate	Binary variable taking value 1 if the respondent is graduated, 0 otherwise
Longer horizon	Binary variable taking value 1 if the respondent's preferred investment horizon is longer than 1 year, and 0 otherwise
Climate	Binary variable taking value 1 if the respondent declared to be “Quite a lot” or “A lot” concerned about the climate crisis, and 0 otherwise
Pollution	Binary variable taking value 1 if the respondent declared to be “Quite a lot” or “A lot” concerned about pollution, and 0 otherwise
Volunteering	Binary variable assuming value 1 if the respondent is engaged in volunteering, and 0 otherwise

Treatment	Categorical variable representing the treatment received upon survey participation acceptance, and taking values: 1 = "Positive Visual" 2 = "Negative Visual" 3 = "Control"
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