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PREFERENCES FOR SUSTAINABLE INVESTING: THE ROLE OF FINANCIAL LITERACY

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Preferences for Sustainable Investing: The Role of Financial Literacy

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Abstract

This paper investigates the role of financial literacy in shaping the intention to make Socially Responsible Investments (SRI) using survey data on a representative sample of Italian adults. We study to what extent the social/environmental component of a financial product is considered when making investment decisions and the financial conditions under which an individual would invest in a SRI product. Our results show that financially literate individuals are not only more aware of sustainable investing, but also display a greater intention to invest in SRI products. Moreover, they are willing to bear lower financial returns compared to traditional products, meaning that sustainable investing is an informed choice. However, we observe a negative association between financial literacy and investment opportunities aiming exclusively at financing social or environmental projects instead of yielding a monetary return.

Keywords: Sustainable investing, Socially responsible investments, Financial literacy, Investor behaviour, ESG

JEL codes: D14, G11, G53

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1. Introduction

Ongoing climate change and environmental degradation have become one of the most complex and frightening challenges for humankind. The main causes of these global threats have been identified as being related to the process of industrialisation, urbanisation and population growth that took place in the last century, regardless of environmental concerns. To mitigate climate change and promote sustainable development, countries all over the world have made global efforts – such as the Montreal Protocol (1987), the Kyoto Protocol (1992), the Paris Agreement (2015), the annual UNFCCC Conference of the Parties[1] – and national efforts – such as the United States' commitment to achieve carbon-free electricity by 2035 and the European Union's intention to achieve carbon neutrality by 2050. However, the process of change is slow and important international targets, such as greenhouse gas reductions and financing the energy transition, have yet to be met. In this context, the 2021 Conference of the Parties (the COP-26 conference) has set clear goals for lower emissions by 2030 and has defined specific principles which are not open to interpretation by countries.

As outlined by Metawa et al. (2022) and Zakari et al. (2023), among others, the shift to a more sustainable and environmentally friendly economy requires substantial investment, making financing the key driver of this transition. In response to this need, a new investment approach known as sustainable investing has emerged. This strategy involves considering additional factors beyond financial returns and risk when deciding where to invest in the financial markets. These additional dimensions are typically related to environmental, social and governance (ESG) aspects. The last decades have seen a steady growth in the use of the concepts of corporate social responsibility (CSR) and socially responsible investment (SRI), both from the perspective of companies and from the perspective of financial market participants. Indeed, the former are committing to promote these values when engaging with stakeholders, while the latter are increasingly incorporating ESG considerations into their investment decisions (Anderson and Robinson, 2022). From a policy point of view, the European Union is promoting sustainable investments to achieve the objective of the Paris Agreement on climate change and the Sustainable Development Goals set by the 2030 Agenda of the United Nations.[2]

In this paper, we investigate whether individuals express their social and environmental

[1] The UNFCCC is the United Nations Framework Convention on Climate Change, whose objective is to stabilize greenhouse gas concentrations.

[2] The UN 2030 Agenda for Sustainable Development, adopted by United Nations Member States in 2015, is an action program to be achieved in the environmental, economic, social and institutional areas.

preferences through their investment decisions and we examine the role of financial literacy in shaping such decisions. Financial literacy has been extensively linked to individual financial behaviour and has been found to have a significant and positive effect on several economic outcomes (see, e.g., Hastings et al., 2013; Lusardi and Mitchell, 2023). Despite a clear link between financial literacy and investment behaviour, the relationship between financial knowledge and sustainable investing remains largely unexplored. In this paper, we investigate whether greater financial knowledge might encourage socially responsible investing by enabling individuals to make the more complex financial decisions associated with these products – which entail both financial and non-financial considerations – thereby helping them align their investments with their values.

In our analysis, we first assess whether financial literacy increases the likelihood of having at least heard of sustainable investing and to what extent it influences individuals' willingness to invest in socially responsible financial products. Second, going beyond these relationships, we add to the existing literature by identifying the financial conditions under which individuals would be willing to invest in SRI products. Specifically, we analyse whether individuals that are interested in investing in SRI would do so only if they expected higher financial returns compared to traditional investments, or are instead willing to bear slightly lower or much lower returns. Finally, we examine the extent to which individuals are willing to forgo financial returns in order to invest in products that, instead of providing financial returns, directly fund projects that benefit the local community or the environment.

For our empirical analysis, we need information on both individuals' financial literacy and sustainable investing preferences. Therefore, we developed a questionnaire and surveyed a sample of Italian respondents aged between 25 and 74 who are representative of the Italian population. Unlike most of the previous studies that focus solely on investors, we are not restricting our analysis to this small and selected portion of the whole population. Moreover, we focus on Italy, as this is a country where the concept of sustainability has become increasingly important for companies and where the demand for socially responsible investment opportunities has grown significantly in recent years (Eurosif, 2021; Itasif, 2023).

Our results show that financial literacy is significantly and positively related with both the awareness of sustainable investing and the intention of investing in SRI products. More financially literate individuals are also willing to invest in such products if their expected financial return is lower than traditional ones, meaning that they are willing to bear a financial penalty to invest in a SRI product. However, we also find that a higher level of financial knowledge is associated with a lower interest in investing in a hypothetical product that

redirects all of its financial returns to fund social or environmental projects. Therefore, financial literacy affects people's sustainable investment choices and it is positively related to the selection of SRI assets, even if their expected returns are lower than traditional ones. However, it reduces the likelihood of investing in products that redirect all their financial returns to fund social or environmental projects, which may then be perceived as sub-optimal.

The rest of the paper is organised as follows. Section 2 summarises the existing literature. Section 3 presents some stylised facts about SRI in Italy. Section 4 provides the data description. Section 5 and section 6 outline the empirical strategy and present the estimation results, respectively. Section 7 discusses the conclusions.

2. Literature Review

By examining how financial literacy influences the choice of sustainable investments, our paper builds on and seeks to bridge two streams of empirical literature. On the one hand, it contributes to the literature assessing the effect of financial literacy on economic behaviour. On the other hand, it adds to the body of research investigating which are the characteristics and the motivations of socially responsible investors.

Financial literacy, as defined by the Organisation for Economic Co-operation and Development (OECD), is the ability to understand basic economic principles and use them effectively to make informed decisions about financial matters (OECD, 2019). The literature on the effect of financial literacy on individuals' financial well-being has been growing in the last couple of decades, with findings consistently showing a significant and positive relationship between financial literacy and desirable economic outcomes. Indeed, more financially literate individuals demonstrate an enhanced ability to make better financial decisions in various domains such as retirement planning (e.g., Bucher-Koenen and Lusardi, 2011; Lusardi and Mitchell, 2011a; van Rooij et al., 2011b), debt and household financial management (e.g., Hilgert et al., 2003; Stango and Zinman, 2009; Lusardi and Tufano, 2015; Lusardi et al., 2020) and stock market participation (e.g., van Rooij et al., 2011a; Yoong, 2011). Also, financial knowledge has a positive impact on portfolio diversification (Abreu and Mendes, 2010) and annual returns, as more literate households hold riskier positions when expected returns are higher (Bianchi, 2018). Indeed, when assessing the impact of financial literacy on investment returns in the Netherlands and France, both von Gaudecker (2015) and Bianchi (2018) find that households with higher levels of financial literacy are better able to purchase assets with higher expected returns and have a greater ability to maintain their risk exposure at a consistent level over time by actively rebalancing their portfolios.

A few studies have also highlighted how lower levels of financial sophistication are associated with lower use of professional financial advice. Calcagno and Monticone (2015), using customer survey data, show that households with lower levels of financial literacy are at higher risk of making sub-optimal financial decisions, as they are less likely to seek professional financial advice and more likely to delegate their portfolio decisions. Also, individuals with an advanced level of financial knowledge are more likely to be interested in robo-advisors (Isaia and Oggero, 2022). Overall, previous literature has shown that financial literacy positively affects wealth and savings over the life-cycle (Jappelli and Padula, 2013) and it can explain up to 30-40% of wealth inequality at retirement (Lusardi et al., 2017).[3]

Although the relationship between financial literacy and investment decisions has been extensively explored in the literature, the evidence on the link between financial knowledge and the decision to invest in socially responsible products is scant and ambiguous. Borgers and Pownall (2014) explore attitudes towards social investments proposed to a sample of Dutch individuals who are obliged to participate in a pension plan finding that the low level of financial sophistication of households partly explains their difficulties in making financial decisions, which require taking into account both financial and non-financial preferences.

The first studies to control for financial literacy when examining the determinants of SRI relied on subjective measures of financial knowledge, as previous studies have shown that self-assessed literacy is both a good predictor of investor behaviour and related to objective knowledge (Dorn and Huberman, 2005; van Rooij et al., 2011a). Linking administrative data on Dutch investors to survey responses and behaviour in incentivised experiments, Riedl and Smeets (2017) study the characteristics of investors who hold socially responsible mutual funds. As they control for self-assessed investment knowledge, they find that better knowledge has a negative effect on the share of SRI held. Similarly, Rossi et al. (2019), using Dutch survey data, show that stated interest in hypothetical SRI is negatively associated with self-assessed financial literacy, while actual ownership is not significantly related to the subjective measure of financial literacy. Along this line, using survey data from retail clients of two banks in the Netherlands, Bauer and Smeets (2015) find that investors with good self-rated investment knowledge have more conventional investment accounts (non-SRI).

In contrast to these previous studies (Bauer and Smeets, 2015; Riedl and Smeets, 2017; Rossi et al., 2019), Gutsche et al. (2023) find that objective financial literacy is positively correlated with the amount invested in sustainable funds in an incentivised field experiment

[3]For a detailed review of this literature see Lusardi and Mitchell (2014), Kaiser et al. (2022) and Lusardi and Mitchell (2023).

in Germany. In the same vein, Anderson and Robinson (2022) link survey responses from Swedish households to administrative data and show that green investment decisions are made when financial literacy is higher. Similarly, participants in an online experiment in Austria with higher financial literacy tended to invest more sustainably (Seifert et al., 2024). However, Gutsche et al. (2021) find a negative association between financial literacy and the likelihood of holding sustainable investments among Japanese households, although they document a positive correlation between financial literacy and awareness of this type of investment. Also, using survey data on Swiss investors, Filippini et al. (2024) find that financial literacy is not significantly associated with the likelihood of owning a sustainable financial product. Thus, the current evidence on the role of financial literacy in SRI decisions is mixed.

3. The Italian context

According to the report on the investment choices of Italian households by the Italian authority responsible for regulating financial markets (Consob), sustainable investments are still not widespread among investors, although the proportion of people holding these products is growing in recent years. Indeed, based on the 2024 Consob survey on a representative sample of Italian investors, 20% of financial decision-makers hold sustainable investments, and the percentage is up from 11% in 2022 (Consob, 2024).

As shown in Figure B1, the investors interviewed by the Consob identified several reasons for not investing in sustainable products. Lack of knowledge is the main deterrent, cited by 42% of respondents. The second disincentive to hold sustainable investments, chosen by 37% of respondents, is their perceived novelty, which translates into a lack of data to evaluate their performance (Consob, 2024). The third reason is the limited range of sustainable financial products, while the fourth is the preference for traditional financial products (Consob, 2024). The lack of trust in sustainable financial products and the lack of differences compared to other financial products prevent 13% and 12% of respondents respectively from investing in these products. Finally, 7% of respondents were unable to identify a deterrent to sustainable investment. However, even if the current share of holders of sustainable products is rather low, 50% of respondents to the Consob survey indicated that they were interested in sustainable financial products, and this percentage rises to 55% among investors seeking professional financial advice. In what follows, we explore the potential demand for SRI in our sample, which is representative of the Italian population.

4. Data

4.1. Dataset

To empirically investigate the relationship between financial literacy and both the awareness of the concept of sustainable investing and the likelihood of investing in SRI products, we designed a survey that was fielded in 2021 among Italian adults.[4] The sample consists of 2,003 individuals, a sample representative of the population aged 25-74 and residing in Italy. The first part of the survey aims to collect socio-demographic information, while the second part of the questionnaire gathers insights into the respondents' investment behaviour. In particular, it includes questions designed to understand whether individuals lean towards traditional investment opportunities or would be interested in exploring more innovative options such as SRI products. We also gather information on respondents' attitudes towards responsible investing under different financial conditions. Finally, the last part of the questionnaire assesses respondents' level of financial literacy.

4.2. Variable description

In our empirical analysis, we analyse four different dependent variables. The first one, *SRI_awareness*, measures whether investors are aware of SRI products. It is defined as a dummy variable that takes the value one if respondents report they have heard or know about socially responsible investing, such as ESG financial products. The variable *SRI_awareness* takes instead value zero for the respondents who report they have never heard of socially responsible investing.[5] The second dependent variable, *SRI_intention*, refers to the intention of investing in socially responsible products in the future and it is a dummy variable that equals one if the respondents say it is at least fairly likely that they will invest in SRI products in the future, and zero if they say it is unlikely that they will do so or they select the "Don't know" option.

The third outcome we are interested in is the categorical variable *SRI_expected_return* that takes on three values corresponding to the possible answers to the following question:

Which of the following statements do you agree the most with?

[4] The survey was fielded by CSA Research and was conducted using CAWI (computer-assisted web interviewing) interviews.

[5] Appendix A shows the exact wording of the survey questions.

- *I would be willing to invest in a socially responsible product only if its expected return was higher than the expected return of a traditional financial product*
- *I would be willing to invest in a socially responsible product even if its expected return was slightly lower than the expected return of a traditional financial product*
- *I would be willing to invest in a socially responsible product even if its expected return was much lower than the expected return of a traditional financial product.*

We label the three choices as "Higher returns on SRI," "Slightly lower returns on SRI" and "Much lower returns on SRI."

The fourth variable, *invest_SRI*, is a dummy variable that measures whether respondents would be willing to invest at least half of a predetermined amount of money in a hypothetical socially responsible product that uses the financial returns to fund community projects instead of paying interest. Specifically, individuals are asked to allocate a given amount of their financial wealth between a traditional investment that pays a return of 1% and an investment for which they would receive no monetary return, but the financial institution would donate the interest to fund a community project with either an environmental or a social impact. Respondents can choose to invest the entire amount in this SRI product, split the money equally between the SRI and the traditional product, or invest the entire amount in the traditional product. Respondents also have the option of answering "Don't know". Due to the limited number of respondents who chose to invest all or almost all of their money in the SRI product (3% or respondents), we combined this group with those who chose to split their investment equally between the SRI product and the traditional alternative, resulting in two categories of individuals: those who would invest in the SRI hypothetical product and those who would not. Half of the sample was randomly assigned to a group that was given an example of an environmental project - the extension of a pedestrian area with more trees - while the other half was given an example of a social project, i.e., a subsidy for poor people in the neighborhood. Therefore, in one case the funded community project has a positive environmental impact and in the other case the focus is on the positive social impact. More specifically, the question is:

Suppose you have to invest 10,000 euros of your financial wealth (i.e., excluding your real estate assets) in a saving account/deposit for a year. You have two possible investment options:

- *Product A: a traditional investment with a 1% return (i.e., a return of 100 euros after one year)*
- *Product B1 [50% of the sample]: an investment for which you will receive no monetary return but the financial institution will donate the interest, i.e., 100 euros, to finance a community project (e.g., a subsidy for poor people in the neighborhood)*
- *Product B2 [50% of the sample]: an investment for which you will receive no monetary return but the financial institution will donate the interest, i.e., 100 euros, to finance a community project (e.g., the extension of a pedestrian area with more trees)*

How much of the 10,000 euros would you invest in these two products?

- *I would invest all or almost all in product A*
- *I would invest half in product A and half in product B*
- *I would invest all or almost all in product B*
- *Don't know*

For what concerns our explanatory variable of interest, two measures of financial literacy (*fin_lit*) have been defined starting from the so-called Big Three questions that have been developed by Lusardi and Mitchell (2011b) to test the basic knowledge of interest rates, inflation and risk diversification. First, we use a dummy variable taking value one if all the Big Three questions are correctly answered and zero otherwise. Second, we rely on an index ranging from zero to three counting the number of correct answers given to this set of questions. The exact wording of the survey questions is reported in Appendix A.

Table 1 shows the summary statistics for the variables used in the empirical analysis. The awareness of the concept of sustainable investing is rather low in our sample, as 27% of respondents know or have at least heard of SRI products. Around one fifth (22%) of respondents report they will likely invest in such products in the future, and of these, the majority (53%) say they would be willing to invest in a socially responsible product only if its expected return was higher than the expected return of a traditional financial product. On the other hand, 45% of those interested in socially responsible products report they would be willing to invest in a SRI even if its expected return was slightly lower than the expected return of a traditional financial product. Looking at the product proposed to the respondents (i.e., an investment for which they will not receive a monetary return but the

Table 1: Summary statistics

	Obs.	Mean	Std. Dev.	Min	Max
SRI awareness	2,003	0.274	0.446	0	1
SRI intention	2,003	0.215	0.411	0	1
Higher returns on SRI	421	0.527	0.500	0	1
Slightly lower returns on SRI	421	0.450	0.498	0	1
Much lower returns on SRI	421	0.024	0.152	0	1
Invest 0% in SRI product	2,003	0.360	0.480	0	1
Invest $\geq$ 50% in SRI product	2,003	0.236	0.425	0	1
Invest in SRI product: don't know	2,003	0.403	0.491	0	1
Financial literacy	2,003	0.283	0.451	0	1
Financial literacy index	2,003	1.553	1.169	0	3
Female	2,003	0.502	0.500	0	1
Age	2,003	49.931	13.443	25	74
Primary education	2,003	0.195	0.396	0	1
Secondary education	2,003	0.532	0.499	0	1
Tertiary education	2,003	0.273	0.446	0	1
Self-employed	2,003	0.113	0.317	0	1
Employed	2,003	0.495	0.500	0	1
Unemployed	2,003	0.209	0.407	0	1
Retired	2,003	0.182	0.386	0	1
Having children	2,003	0.563	0.496	0	1
North	2,003	0.461	0.499	0	1
Center	2,003	0.199	0.399	0	1
South	2,003	0.340	0.474	0	1
City: <10k inhabitants	2,003	0.236	0.425	0	1
City: 10-30k inhabitants	2,003	0.277	0.448	0	1
City: 30-100k inhabitants	2,003	0.232	0.423	0	1
City: >100k inhabitants	2,003	0.255	0.436	0	1
Home owners	2,003	0.857	0.350	0	1
Saving	2,003	0.214	0.410	0	1

Source: authors' elaboration - weighted data.

financial institution will donate the interest to finance an environmental/social community project), almost one in four is willing to choose this option and let the financial institution use the financial return to fund a project that helps the community where they live, rather than cashing in the interest: 24% of the respondents would invest at least half of a given amount of money in this hypothetical SRI product.

Overall, we find that the level of financial literacy in our sample is quite low, with only 28% of our respondents being able to answer all three financial literacy questions correctly. This statistic is in line with the data collected by the Bank of Italy in 2020 through the Survey of Household Income and Wealth, which show that 30% of household heads in Italy can be defined financially literate, i.e., they correctly answered the same Big Three questions asked in our survey (Bank of Italy, 2022). Looking at the demographics, we notice that our sample is well balanced in terms of gender (50% are female) and the average age is 50 years old. The majority have secondary education (53%) and work either as employee (50%) or as self-employed (11%).

5. Empirical strategy

In our empirical analysis we first investigate the role of financial literacy in relation with the awareness of sustainable investments, the propensity to invest in such products and whether people are willing to sacrifice a portion of their return in order to invest in these products. Then, we focus on the willingness to invest in a socially responsible product that uses the return to fund community-based projects instead of paying interest, and again examine the role of financial literacy in determining this kind of investment.

Given the dichotomous nature of our first two outcome variables, namely the awareness of SRI products and the interest in investing in them, we first estimate the following probit model:

$$y_i^* = \alpha + X_i\beta + fin\_lit_i\gamma + \epsilon_i, \qquad y_i = \begin{cases} 1 & \text{if } y_i^* > 0 \\ 0 & \text{if } y_i^* \leq 0 \end{cases} \tag{1}$$

where y_i^* is an unobserved variable and y_i (which equals one if y_i^* is greater than zero, and zero otherwise) includes *SRI_awareness* and *SRI_intention* which are the observed variables measuring whether an individual knows what a SRI product is and whether he/she is interested in investing in such product, respectively. The vector X_i includes a set of individual socio-demographic characteristics, namely gender, age, education, employment

status, a dummy for the presence of children in the household, the geographical area of residence and the size of the city of residence. The variable fin_lit_i measures the level of financial literacy, first through a dummy variable equal to one if the respondent gave all correct answers to the Big Three questions, then through an index counting the number of correct answers, while ϵ_i is the error term, which is assumed to be independent from the vector X_i and to follow a standard normal distribution.

We then consider only the sub-sample of individuals who report that they are likely to invest in socially responsible products in the future, and we examine whether this choice is driven by higher expected financial returns from these products, or whether individuals are willing to accept slightly lower or much lower returns compared to traditional investments. Given the descending order of the financial return the choice is made on, we consider an ordered probit model as the appropriate framework for the statistical analysis, as follows:

$$\begin{aligned} y_i^* &= \alpha + X_i\beta + fin\_lit_i\gamma + \epsilon_i \\ y_i = j \quad &\text{if} \quad m_{j-1} \leq y_i^* < m_j \quad j = 1, ..., 3 \end{aligned} \tag{2}$$

where y_i^* is an unobserved variable and y_i is the respondent's declared financial condition for investing in a socially responsible product. The observed choice y_i made by the individual is modeled as the outcome of a utility maximisation problem. Therefore, each individual chooses the alternative j that maximises his/her utility. m_1 and m_2 are the cutoffs to be estimated by the model together with the coefficients on each independent variable. The error term follows a standard normal distribution.

Finally, we look at the stated preferences for a well-defined socially responsible product. We analyse how preferences for products that allow direct funding of social/environmental community projects are associated with respondents' characteristics and their level of financial literacy. Given that the possible answers included a "Don't know" option, which rules out the ordinal feature of the remaining answers, we want to isolate that answer from the others. We claim that respondents who know the choice they would make (non answering "Don't Know"), are likely to be a selection of the sample which could bias our coefficient estimation if not taken into account.

Investment intentions in the proposed socially responsible product are not observed if the answer to the related question is "Don't know" and preferences for SRI might contain an error term that is correlated with the choice of providing an answer. In order to control for the possible selection bias, we estimate a Heckman probit model, where the selection equation is knowing how to allocate the money between a traditional investment and a SRI

(i.e., not answering "Don't know"). Albeit the model is identified by its functional form, we also use, as an exclusion restriction, a variable capturing the ability to save, defined as a dummy variable that takes the value one if the household reports being able to save more than 20% of its income, which is the median value among those who report being able to save, and zero otherwise. The ability to save acts as an exclusion restriction as it is a pre-condition on which portfolio decisions are made. It affects knowing how to invest, but not the intensity of investments in the socially responsible product. The model estimated is the following:

$$\begin{aligned} y_i^* &= \alpha + X_i\beta + fin\_lit_i\gamma + \epsilon_i \\ y_i^{probit} &= (y_i^* > 0) \end{aligned} \tag{3}$$

$$y_i^{select} = (Z_i\lambda + u_i > 0) \tag{4}$$

where Equation 3 represents the outcome equation and Equation 4 represents the selection equation. In the outcome equation, y_i^* is the latent variable while y_i is the observed stated choice, indicating respondents' willingness to invest in a socially responsible product which is only observed if the respondent knows how to allocate a given amount of money and does not answer "Don't know". The vector X_i in the output equation contains the same set of control variables as described above, while the vector of control variables Z_i in the selection equation contains the full set of variables from the outcome equation along with an additional variable indicating whether or not the individual and his/her family are able to save more than 20% of their income at the end of the year. The error terms ϵ_i and u_i are assumed to be jointly normally distributed.

6. Results

6.1. SRI: awareness, intention to invest and expected returns

As observed from the descriptive statistics presented in Table 1, the share of people aware of socially responsible investing, such as ESG financial products, is quite low in our sample representative of the Italian population (27%), and around one fifth of individuals in our sample (22%) declare to be willing to invest in SRI products. In this section, we analyse how awareness and stated preferences for SRI are associated with financial literacy and other demographic characteristics of the respondents.

Table 2 presents the results from models for SRI awareness. In order to compare the aware versus the non-aware individuals, we combine two possible answers to the related question

Table 2: Awareness of socially responsible investing

	(1) SRI awareness	(2) SRI awareness	(3) SRI awareness
Financial literacy		0.116***	
		(0.020)	
Financial literacy index			0.061***
			(0.008)
Female	-0.101***	-0.087***	-0.084***
	(0.019)	(0.019)	(0.019)
Age	-0.004***	-0.005***	-0.005***
	(0.001)	(0.001)	(0.001)
Secondary education	0.108***	0.092***	0.083***
	(0.028)	(0.028)	(0.028)
Tertiary education	0.234***	0.209***	0.195***
	(0.031)	(0.031)	(0.031)
Employee	-0.029	-0.029	-0.025
	(0.029)	(0.029)	(0.029)
Unemployed	-0.087**	-0.083**	-0.076**
	(0.035)	(0.035)	(0.035)
Retired	-0.022	-0.017	-0.020
	(0.040)	(0.040)	(0.039)
Children in the hh.	0.005	0.009	0.007
	(0.019)	(0.019)	(0.019)
Center	-0.060**	-0.045*	-0.046*
	(0.025)	(0.025)	(0.024)
South	-0.152***	-0.134***	-0.123***
	(0.021)	(0.022)	(0.022)
City size	0.017**	0.016*	0.015*
	(0.009)	(0.009)	(0.009)
Home owner	-0.017	-0.025	-0.031
	(0.027)	(0.026)	(0.026)
Observations	2,003	2,003	2,003

Source: authors' elaboration. Probit estimation models. Marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

and classify respondents as aware if they reported having heard about sustainable finance or knowing what it is. Therefore, the dependent variable *SRI_awareness* has value one if the respondent is at least aware of the concept and zero otherwise, and we estimate a binary choice probit model. The first column of Table 2 only includes demographic variables while the second and the third ones also include a measure of financial literacy (a dummy variable that equals one if all the Big Three questions are correctly answered in the second column and an index variable in the third column).

In line with the findings of the Consob (2024) report, we observe that being female, older and less educated is significantly and negatively correlated with the probability of having at least heard of SRI products. In particular, we observe a monotonic pattern for education, with the related coefficients increasing in magnitude as the level of education increases. Unemployed respondents are less likely to be aware of SRI, while having children in the household is not significantly correlated with it. Respondents living in central and southern regions and in smaller municipalities are also less informed than their counterparts. As shown in columns 2 and 3 of Table 2, these patterns are persistent even after controlling for the level of financial knowledge. The last two columns of Table 2 show that financial literacy and awareness of SRI are positively correlated.[6] This result is in line with Anderson and Robinson (2022) who, focusing more specifically on environmental knowledge, found a positive but low correlation between these two types of knowledge, concluding that environmental and financial literacy do not overlap.

Table 3 shows the results of models assessing stated preferences for SRI products in terms of investment intention. The dependent variable *SRI_intention* takes the value one if respondents say it is very likely or fairly likely that they will continue or start investing in sustainable products in the future. As before, the first column includes only demographic control variables, while the other two columns also include the financial literacy measures.

Our results are similar to those found for SRI awareness. Indeed, we find that education is significantly and positively associated with the likelihood of being interested in investing in SRI products, while being older, unemployed and living in southern regions are negatively associated. We notice that, once we include a measure of financial literacy in the regression analysis, the gender difference disappears, meaning that it was driven by differences in finan-

[6]Similar results are found when the dependent variable takes value one only if the respondents state that they know what sustainable investing is and zero if they report having only heard about it or not even having heard about ESG financial products. In this case, the magnitude of the coefficients is slightly lower but both the significance and the sign remain unchanged. The estimation results are reported in Table B1 in Appendix B.

Table 3: Intention to invest in SRI products

	(1) SRI intention	(2) SRI intention	(3) SRI intention
Financial literacy		0.062***	
		(0.019)	
Financial literacy index			0.051***
			(0.008)
Female	-0.036**	-0.028	-0.021
	(0.018)	(0.018)	(0.018)
Age	-0.005***	-0.006***	-0.006***
	(0.001)	(0.001)	(0.001)
Secondary education	0.106***	0.097***	0.087***
	(0.027)	(0.027)	(0.027)
Tertiary education	0.163***	0.150***	0.132***
	(0.030)	(0.030)	(0.030)
Employee	-0.014	-0.014	-0.012
	(0.027)	(0.027)	(0.026)
Unemployed	-0.090***	-0.089***	-0.082**
	(0.033)	(0.033)	(0.033)
Retired	0.035	0.035	0.033
	(0.038)	(0.037)	(0.037)
Children in the hh.	-0.019	-0.017	-0.017
	(0.018)	(0.018)	(0.018)
Center	0.014	0.022	0.025
	(0.022)	(0.022)	(0.022)
South	-0.144***	-0.135***	-0.120***
	(0.021)	(0.021)	(0.021)
City size	0.008	0.007	0.006
	(0.008)	(0.008)	(0.008)
Home owner	0.022	0.018	0.010
	(0.025)	(0.025)	(0.025)
Observations	2,003	2,003	2,003

Source: authors' elaboration. Probit estimation models. Marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

cial knowledge. Hence, when the level of financial literacy is taken into account, women are not less willing to invest in SRI product (columns 2 and 3 of Table 3). In terms of financial literacy, our results go in the opposite direction to those of Gutsche et al. (2021). Indeed, we find a positive and significant association between financial literacy and the probability of choosing these products. This result could be explained by two possible mechanisms. First, financial literacy lowers information costs by reducing the economic and psychological barriers to acquiring information (van Rooij et al., 2012), thus lowering the cost of participating in financial markets (van Rooij et al., 2011a). Second, financial literacy enables individuals to process information at lower cost and effort (Haliassos and Bertaut, 1995; van Rooij et al., 2012), and information could be financial and non-financial. In other words, more financially literate individuals can more easily gather and process the relevant information and consider a wider range of dimensions when making investment decisions.

Next, we examine the financial conditions under which an individual would be willing to invest in a SRI product. The related question is therefore asked only to those who reported to be willing to invest in these products in the future. The dependent variable *SRI_expected_return* is a categorical variable measuring whether respondents would invest in sustainable financial products only if they expected to obtain higher returns compared to a traditional investment, or they would invest in SRI even if their expected return was slightly lower or much lower than traditional ones. Table 4 reports the estimates of the ordered probit model. For each category, we estimate two specifications according to the financial literacy measure used. In columns 1, 3 and 5, respondents' financial knowledge is measured through a dummy variable, while in columns 2, 4 and 6 it is measured using an index.

Our results show that demographic characteristics do not explain much variation in the dependent variable. Indeed, only education is significant. In particular, higher levels of education are correlated with a greater likelihood of investing in a SRI product even when the expected return is slightly or much lower than a traditional financial product, and a lower likelihood of choosing a SRI simply because it is expected to offer higher returns. This result means that, for more educated people, the social and environmental impact of their investment appears to have a higher value than the economic value alone. Financial literacy significantly increases the probability of choosing a SRI even if it is expected to perform slightly worse than a traditional one, while it is negatively associated with the willingness to invest in a SRI product just because it is expected to have higher returns. Also, financial literacy is positively associated – although at a lower significance level – with the willingness to accept much lower returns to invest in SRI products. Hence, more financially literate

Table 4: Financial condition for investing in a SRI product

	(1) Higher returns on SRI	(2) Higher returns on SRI	(3) Slightly lower returns on SRI	(4) Slightly lower returns on SRI	(5) Much lower returns on SRI	(6) Much lower returns on SRI
Financial literacy	-0.108**		0.092**		0.015*	
	(0.049)		(0.042)		(0.008)	
Financial literacy index		-0.045*		0.039*		0.007*
		(0.024)		(0.020)		(0.004)
Female	0.041	0.042	-0.035	-0.036	-0.006	-0.006
	(0.047)	(0.047)	(0.040)	(0.040)	(0.007)	(0.007)
Age	-0.000	-0.001	0.000	0.001	0.000	0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.000)	(0.000)
Secondary education	-0.309***	-0.319***	0.265***	0.273***	0.044**	0.046**
	(0.094)	(0.094)	(0.081)	(0.081)	(0.018)	(0.018)
Tertiary education	-0.233**	-0.241**	0.200**	0.207**	0.033*	0.035**
	(0.101)	(0.101)	(0.087)	(0.087)	(0.017)	(0.017)
Employee	0.028	0.023	-0.024	-0.019	-0.004	-0.003
	(0.067)	(0.067)	(0.058)	(0.058)	(0.010)	(0.010)
Unemployed	-0.024	-0.030	0.020	0.026	0.003	0.004
	(0.092)	(0.092)	(0.079)	(0.079)	(0.013)	(0.013)
Retired	-0.110	-0.118	0.094	0.101	0.016	0.017
	(0.100)	(0.100)	(0.086)	(0.086)	(0.015)	(0.015)
Children in the hh.	0.023	0.027	-0.020	-0.023	-0.003	-0.004
	(0.048)	(0.047)	(0.041)	(0.041)	(0.007)	(0.007)
Center	-0.035	-0.031	0.030	0.027	0.005	0.004
	(0.057)	(0.057)	(0.049)	(0.049)	(0.008)	(0.008)
South	-0.049	-0.054	0.042	0.047	0.007	0.008
	(0.064)	(0.064)	(0.055)	(0.055)	(0.009)	(0.009)
City size	-0.011	-0.010	0.009	0.009	0.002	0.001
	(0.022)	(0.022)	(0.019)	(0.019)	(0.003)	(0.003)
Home owner	0.042	0.046	-0.036	-0.040	-0.006	-0.007
	(0.068)	(0.068)	(0.058)	(0.058)	(0.010)	(0.010)
Observations	421	421	421	421	421	421

Source: authors' elaboration. Ordered probit model. Marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

individuals are willing to invest in a SRI product even if they expect to bear a financial penalty.[7]

6.2. Hypothetical socially responsible product

In the previous section, we showed that financially literate individuals are more willing to invest in a socially responsible product even if its expected return is lower than the expected return of a traditional financial product. But are they willing to forgo at least half of the financial return in order to invest in a SRI product? To better understand how much individuals are willing to sacrifice in order to invest in sustainable products, respondents were asked if they would be willing to use the investment channel as a means to donate money to an environmental or social project. We constructed the main dependent variable as a dummy variable taking value one for those who chose to invest at least 50% of a predetermined amount of money in a hypothetical socially responsible product whose interest is redirected by the financial institution to finance a community project, as opposed to a traditional product which yields monetary returns. Table 5 shows the results obtained from the estimation of the Heckman probit model to investigate what is the role played by financial literacy in shaping the demand for socially responsible investments. Columns 1 and 3 report the estimates of the output equation, while columns 2 and 4 show the results of the selection equation. The first two columns include a dummy variable taking value one if all the Big Three financial literacy questions are correctly answered, while the third and fourth columns measure financial knowledge through an index.

Columns 1 and 3 of Table 5 show that socio-demographic characteristics have a limited effect on the probability of preferring a SRI to a traditional one. Indeed, gender, education, the presence of children in the household, the size of the city of residence and home ownership are not significant. In terms of financial literacy, instead, we find that more knowledgeable respondents are significantly less likely to choose the hypothetical SRI product by allocating 50% or more of the given amount of money to it. This result suggests that more financially sophisticated investors are less inclined to sacrifice a significant portion of their returns solely to invest in socially responsible products. They therefore consider both financial and non-financial motives when making their investment choices, but they are not willing to forgo

[7]Similar results are obtained when Equation 2 is estimated using the generalised ordered probit model, which relaxes the constant threshold assumption and allows the effects of the explanatory variables to vary across different thresholds. The results are reported in Table B2 in Appendix B.

Table 5: Investment in a hypothetical socially responsible product

	(1) Investment in SRI	(2) Selection equation	(3) Investment in SRI	(4) Selection equation
Saving		0.169***		0.155***
		(0.024)		(0.022)
Financial literacy	-0.182***	0.312***		
	(0.028)	(0.022)		
Financial literacy index			-0.111***	0.176***
			(0.013)	(0.006)
Female	0.038	-0.055***	0.029	-0.036*
	(0.024)	(0.021)	(0.024)	(0.019)
Age	0.003**	-0.003***	0.003**	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Secondary education	-0.032	0.059**	-0.008	0.030
	(0.033)	(0.027)	(0.033)	(0.025)
Tertiary education	0.017	0.079**	0.055	0.026
	(0.041)	(0.032)	(0.039)	(0.030)
Employed	-0.077**	0.019	-0.084**	0.032
	(0.038)	(0.033)	(0.037)	(0.030)
Unemployed	-0.077*	0.001	-0.095**	0.033
	(0.046)	(0.038)	(0.045)	(0.035)
Retired	0.008	-0.006	0.012	-0.008
	(0.050)	(0.043)	(0.049)	(0.039)
Children in the hh.	-0.031	0.017	-0.030	0.009
	(0.024)	(0.021)	(0.024)	(0.019)
Center	0.095***	0.011	0.094***	0.015
	(0.033)	(0.028)	(0.032)	(0.026)
South	0.052*	-0.102***	0.025	-0.054**
	(0.029)	(0.023)	(0.028)	(0.021)
City size	0.003	0.004	0.005	-0.000
	(0.011)	(0.009)	(0.011)	(0.009)
Home owner	-0.038	0.009	-0.023	-0.020
	(0.034)	(0.029)	(0.034)	(0.027)
Atrho	-1.317***		-1.269***	
	(0.373)		(0.329)	
Observations	2,003	2,003	2,003	2,003

Source: authors' elaboration. Heckman probit model, marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

half of their returns in order to invest in more sustainable products.

Turning now to the dependence between the output and the selection equation errors, the transformed version of rho reported in Table 5 shows that there is a negative and significant correlation between the probability of answering the question on the hypothetical product, i.e., knowing how to allocate the given amount of money between traditional and sustainable products, and the likelihood of investing in the proposed product, showing that more decisive individuals also show less interest in the hypothetical SRI. The Wald test of independent equations (rho=0), indeed, has a p-value of 0 in both the specifications, namely the one that includes a dummy variable as a proxy for financial literacy and the one that includes the financial literacy index, hence we can reject the null hypothesis that the outcome and the selection equations are independent. The estimation results of the selection equation reported in columns 2 and 4 of Table 5 show that the exclusion restriction variable capturing the ability to save increases the probability that the respondents make a decision on the percentage they would allocate to the socially responsible product, instead of choosing the "Don't know" option. The estimates of the selection equation also show that financial literacy positively affects the likelihood of reporting the percentage that one would invest in a socially responsible product.

In Table B3 in Appendix B we test the exclusion restriction, i.e., we verify that the ability to save does not affect the investment in the socially responsible product, while it affects the probability of not answering "Don't know". The estimation results show that, if we include the exclusion restriction variable, i.e., the ability to save, in the outcome equation as well (columns 1 and 3 of Table B3), it does not affect the probability of choosing the hypothetical socially responsible product over the traditional one.

Also, the likelihood of investing in the hypothetical socially responsible product does not depend on the type of project funded through the SRI. Indeed, half of the sample randomly selected was given an example of a green product and the other half was offered a social product, and we obtain the same results irrespective of whether the project funded by the returns has a positive social or environmental impact, as reported in Table B4 in Appendix B.

7. Conclusions

In this paper, we examine the relation between financial literacy and preferences for sustainable investing and, in particular, for a hypothetical socially responsible product that channels accrued returns towards the direct funding of community-oriented projects. Our

study relies on a survey conducted in 2021 among a representative sample of the Italian population aged 25 to 74. Our objective is threefold. Firstly, we aim to determine whether individuals with higher financial literacy are more aware of socially responsible investing and if they are more interested in investing in SRI products. Secondly, we seek to assess the financial conditions under which an individual would be willing to invest in a SRI product. Lastly, we explore the willingness of individuals to forgo at least half of the financial returns in order to invest in a hypothetical SRI product that uses the accrued monetary returns to fund community projects.

Our results show that being financially literate positively correlates with the probability of having heard or knowing about socially responsible investing, such as ESG financial products. Also, we find that financially literate individuals are more interested in investing in a SRI product and they are willing to bear lower financial returns compared to traditional financial products. Hence, financially literate individuals take into consideration additional factors in the standard preference structure that looks at the risk-return trade-off only, and sustainable investing is an informed choice. However, even if they would be willing to buy a SRI product when its expected return is lower than a traditional one, they are not willing to forgo half of the monetary return to buy a sustainable product. Indeed, financial literacy is negatively associated with the allocation of at least 50% of a given amount of money to a hypothetical SRI for which the investor will not receive a monetary return and the financial institution will donate the accrued interest to finance a community project. Hence, we observe that financial literacy lowers individuals' willingness to invest in socially responsible products that prevent them to have a financial return.

Our findings have relevant policy implications. Given the positive relationship between financial literacy and sustainable investing, and the overall low level of financial knowledge and SRI awareness among the Italian population, if policymakers and practitioners want to increase socially responsible investments, it is important to design informational campaigns aimed at increasing both financial knowledge and SRI understanding. These campaigns can play a crucial role in empowering individuals to make informed and socially responsible investment decisions, ultimately contributing to the growth of sustainable finance. This is particularly important given the significant investments necessary to reach the Sustainable Development Goals set by the United Nations and signed by the governments of the 193 Member Countries. Indeed, equipping individuals with financial knowledge and understanding of SRI products can encourage a shift towards sustainable financial products, thereby accelerating the transition to a greener economy.

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Appendix A - Survey questions

SRI awareness: Have you ever heard of socially responsible investing, such as ESG (Environment, Social and Governance) products? [One answer only]

- Yes, I know what it is
- Yes, but only in name
- No

SRI intention: Do you think it is likely that you will invest or continue to invest in socially responsible products in the future? [One answer only]

- It is very likely
- It is quite likely
- It is not very likely
- It is very unlikely
- Don't know

SRI expected return: Which of the following statements do you agree the most with? [One answer only]

- I would be willing to invest in a socially responsible product **only if its expected return was higher than the expected return of a traditional financial product**
- I would be willing to invest in a socially responsible product **even if its expected return was slightly lower than the expected return of a traditional financial product**
- I would be willing to invest in a socially responsible product **even if its expected return was much lower than the expected return of a traditional financial product**

Hypothetical socially responsible product: Suppose you have to invest 10,000 euros of your financial wealth (i.e., excluding your real estate assets) in a saving account/deposit for a year. You have two possible investment options:

Product A: a traditional investment with a 1% return (i.e., a return of 100 euros after one year)

Product B1 [50% of the sample]: an investment for which you will receive no monetary return but the financial institution will donate the interest, i.e., 100 euros, to finance a community project (e.g., a subsidy for poor people in the neighborhood)

Product B2 [50% of the sample]: an investment for which you will receive no monetary return but the financial institution will donate the interest, i.e., 100 euros, to finance a community project (e.g., the extension of a pedestrian area with more trees)

How much of the 10,000 euros would you invest in these two products? [One answer only]

- I would invest all or almost all in product A
- I would invest half in product A and half in product B
- I would invest all or almost all in product B
- Don't know

Financial literacy, interest rate: Suppose you had 100 euros in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? [One answer only]

- More than 102 euros
- Exactly 102 euros
- Less than 102 euros
- Don't know

Financial literacy, inflation: Suppose you had 1,000 euros in a savings account that has no management fees. The interest rate on your savings account is 1% per year and inflation is 2% per year. When you withdraw the money after one year, will you be able to buy the same amount of goods that you could buy today by spending the 1,000 euros? [One answer only]

- Yes

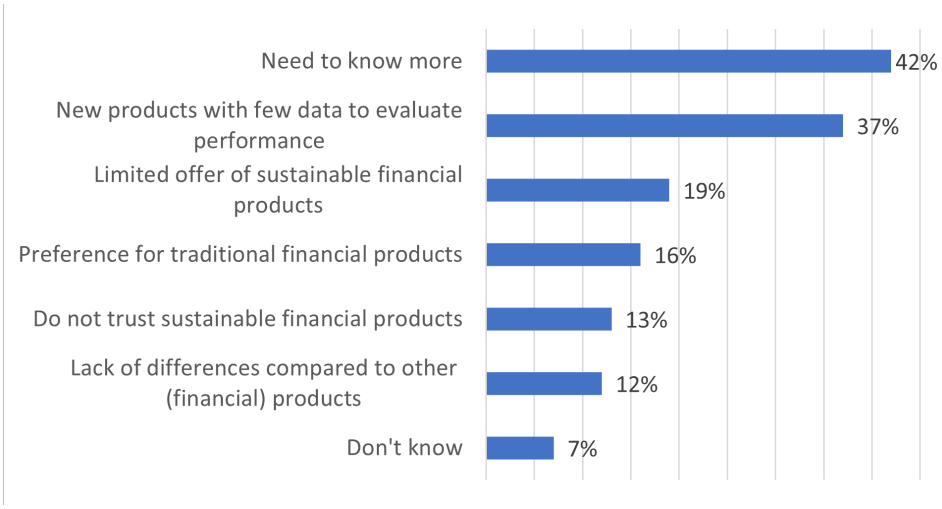
- No, I will be able to buy less
- No, I will be able to buy more
- Don't know

Financial literacy, risk diversification: In your opinion, does buying a single company's stock usually provide a safer return than buying stocks of more companies through a stock mutual fund? [One answer only]

- True
- False
- I don't know

Appendix B

Figure B1: Deterrents from holding sustainable investments



Source: Consob (2024)

Table B1: Reported knowledge of socially responsible investing

	(1) SRI knowledge	(2) SRI knowledge	(3) SRI knowledge
Financial literacy		0.040***	
		(0.014)	
Financial literacy index			0.020***
			(0.006)
Female	-0.040***	-0.035**	-0.034**
	(0.014)	(0.014)	(0.014)
Age	-0.002***	-0.002***	-0.002***
	(0.001)	(0.001)	(0.001)
Secondary education	0.036*	0.031	0.029
	(0.022)	(0.022)	(0.022)
Tertiary education	0.099***	0.091***	0.087***
	(0.023)	(0.023)	(0.023)
Employee	-0.024	-0.024	-0.023
	(0.019)	(0.019)	(0.019)
Unemployed	-0.086***	-0.085***	-0.082***
	(0.026)	(0.026)	(0.026)
Retired	-0.025	-0.023	-0.025
	(0.029)	(0.029)	(0.029)
Children in the hh.	0.004	0.006	0.006
	(0.014)	(0.014)	(0.014)
Center	-0.014	-0.009	-0.009
	(0.017)	(0.017)	(0.017)
South	-0.073***	-0.067***	-0.064***
	(0.017)	(0.017)	(0.017)
City size	0.014**	0.013**	0.013**
	(0.006)	(0.006)	(0.006)
Home owner	0.009	0.007	0.005
	(0.019)	(0.019)	(0.019)
Observations	2,003	2,003	2,003

Source: authors' elaboration. Probit estimation models. Marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B2: Financial condition for investing in a SRI product

	(1) Higher returns on SRI	(2) Higher returns on SRI	(3) Slightly lower returns on SRI	(4) Slightly lower returns on SRI	(5) Much lower returns on SRI	(6) Much lower returns on SRI
Fin. literacy	-0.130***		0.137***		-0.007	
	(0.050)		(0.051)		(0.018)	
Fin. literacy index		-0.064***		0.072***		-0.008
		(0.024)		(0.024)		(0.008)
Female	0.060	0.057	-0.080	-0.072	0.020	0.015
	(0.049)	(0.049)	(0.049)	(0.049)	(0.016)	(0.016)
Age	-0.001	-0.001	0.002	0.001	-0.001	-0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)
Secondary education	-0.300***	-0.311***	0.132	0.149	0.168	0.163
	(0.096)	(0.095)	(6.262)	(5.924)	(6.261)	(5.923)
Tertiary education	-0.243**	-0.249**	0.112	0.118	0.130	0.131
	(0.103)	(0.103)	(6.262)	(5.924)	(6.262)	(5.923)
Employed	-0.032	-0.041	0.090	0.096	-0.058**	-0.055**
	(0.070)	(0.070)	(0.068)	(0.068)	(0.024)	(0.024)
Unemployed	-0.073	-0.085	0.109	0.118	-0.036	-0.034
	(0.096)	(0.096)	(0.093)	(0.093)	(0.026)	(0.026)
Retired	-0.165	-0.176*	0.179*	0.187*	-0.014	-0.011
	(0.106)	(0.106)	(0.105)	(0.104)	(0.029)	(0.028)
Children in the hh.	0.018	0.018	-0.005	-0.006	-0.013	-0.013
	(0.050)	(0.049)	(0.050)	(0.049)	(0.016)	(0.016)
Center	-0.029	-0.025	0.024	0.023	0.005	0.003
	(0.059)	(0.059)	(0.059)	(0.059)	(0.019)	(0.018)
South	-0.045	-0.052	0.035	0.045	0.010	0.007
	(0.067)	(0.067)	(0.067)	(0.067)	(0.020)	(0.020)
City size	-0.016	-0.016	0.016	0.016	0.000	0.001
	(0.023)	(0.023)	(0.023)	(0.023)	(0.007)	(0.007)
Home owner	0.051	0.057	-0.069	-0.072	0.018	0.014
	(0.071)	(0.071)	(0.072)	(0.072)	(0.026)	(0.025)
Observations	421	421	421	421	421	421

Source: authors' elaboration. Generalised ordered probit model. Marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B3: Investment in a hypothetical socially responsible product

	(1) Investment in SRI	(2) Selection equation	(3) Investment in SRI	(4) Selection equation
Saving	0.029	0.165***	0.038	0.148***
	(0.045)	(0.026)	(0.040)	(0.024)
Financial literacy	-0.170***	0.313***		
	(0.040)	(0.022)		
Financial literacy index			-0.102***	0.176***
			(0.021)	(0.006)
Female	0.036	-0.056***	0.028	-0.037*
	(0.026)	(0.021)	(0.026)	(0.019)
Age	0.003**	-0.004***	0.003**	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Secondary education	-0.029	0.059**	-0.008	0.029
	(0.036)	(0.027)	(0.036)	(0.025)
Tertiary education	0.025	0.079**	0.058	0.026
	(0.046)	(0.032)	(0.043)	(0.030)
Employed	-0.083**	0.018	-0.090**	0.031
	(0.041)	(0.033)	(0.040)	(0.030)
Unemployed	-0.086*	0.000	-0.102**	0.031
	(0.051)	(0.038)	(0.049)	(0.035)
Retired	0.008	-0.004	0.012	-0.007
	(0.052)	(0.043)	(0.052)	(0.040)
Children in the hh.	-0.031	0.018	-0.030	0.009
	(0.025)	(0.021)	(0.025)	(0.019)
Center	0.104***	0.012	0.103***	0.016
	(0.038)	(0.028)	(0.037)	(0.026)
South	0.046	-0.103***	0.022	-0.055***
	(0.034)	(0.023)	(0.031)	(0.021)
City size	0.004	0.004	0.006	0.000
	(0.012)	(0.009)	(0.012)	(0.009)
Home owner	-0.042	0.009	-0.030	-0.020
	(0.037)	(0.029)	(0.037)	(0.027)
Atrho	-1.069**		-1.013**	
	(0.520)		(0.426)	
Observations	2,003	2,003	2,003	2,003

Source: authors' elaboration. Heckman probit model, marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B4: Investment in a hypothetical socially responsible product, including the green/social product option

	(1) Investment in SRI	(2) Selection equation	(3) Investment in SRI	(4) Selection equation
Saving		0.169***		0.154***
		(0.024)		(0.022)
Financial literacy	-0.182***	0.313***		
	(0.028)	(0.022)		
Financial literacy index			-0.111***	0.176***
			(0.013)	(0.006)
Green product	-0.015	0.016	-0.016	0.022
	(0.023)	(0.020)	(0.023)	(0.018)
Female	0.039	-0.055***	0.029	-0.036*
	(0.024)	(0.021)	(0.024)	(0.019)
Age	0.003**	-0.003***	0.003**	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Secondary education	-0.031	0.059**	-0.008	0.029
	(0.034)	(0.027)	(0.033)	(0.025)
Tertiary education	0.018	0.078**	0.056	0.024
	(0.041)	(0.032)	(0.039)	(0.030)
Employed	-0.077**	0.018	-0.084**	0.032
	(0.038)	(0.033)	(0.037)	(0.030)
Unemployed	-0.078*	0.001	-0.095**	0.033
	(0.046)	(0.038)	(0.045)	(0.035)
Retired	0.008	-0.006	0.013	-0.009
	(0.050)	(0.043)	(0.049)	(0.039)
Children in the hh.	-0.031	0.017	-0.030	0.009
	(0.024)	(0.021)	(0.024)	(0.019)
Center	0.096***	0.011	0.095***	0.015
	(0.033)	(0.028)	(0.032)	(0.026)
South	0.052*	-0.101***	0.025	-0.054**
	(0.029)	(0.023)	(0.028)	(0.021)
City size	0.003	0.004	0.005	0.000
	(0.011)	(0.009)	(0.011)	(0.009)
Home owner	-0.037	0.008	-0.023	-0.021
	(0.034)	(0.029)	(0.034)	(0.027)
Atrho	-1.315***		-1.263***	
	(0.376)		(0.333)	
Observations	2,003	2,003	2,003	2,003

Source: authors' elaboration. Heckman probit model, marginal effects reported. Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

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