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## Social Preferences and Socially Responsible Investing: A Survey of U.S. Investors

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**Social preferences and socially responsible investing:  
A survey of US investors**

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**Abstract**

We undertook a survey of US investors to examine whether social preferences can explain three measures of engagement in socially responsible investment (SRI): interest in SRI; history of SRI investment; and the proportion currently invested in SRI. We find that investors with stronger social preferences are more interested in SRI than are those with weaker social preferences. Further, investors with stronger social preferences are more likely to have invested in SRI. We do not, however, obtain any association between social preferences and the share of total portfolio invested in SRI. These results are consistent with a ‘warm glow’ interpretation of investor motivations to hold SRI.

Keywords: Investor motivations, social preferences, socially responsible investing

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**Highlights:**

- We investigate investment motivations in a large sample of US-based individual investors.
- Higher social preferences are associated with greater interest in ‘socially responsible investing’.
- Investors with higher social preferences are more likely to have invested ‘responsibly’.
- Our results are consistent with a ‘warm glow’ interpretation of motivations to invest responsibly.

**Abbreviations:**

AAII: American Association of Individual Investors

ESG: Environmental, Social, and Governance

SRI: Socially Responsible Investment

## **Introduction**

A central question in the literature on individual investor behavior is whether non-financial criteria matter for investment decisions (e.g., Renneboog et al. 2008). Although conventional capital asset pricing models assume that investors exclusively pursue wealth maximization, a number of authors have recently challenged this perspective. Statman (2004), for example, argues that investors seek ‘expressive’ and not just utilitarian benefits. Beal et al. (2005) and Bollen (2007) argue that investors derive non-financial utility from investing in ‘socially responsible investing’ (SRI). In fact, some authors argue that wealth maximization is not the primary motivation of the majority of investors who invest in SRI (e.g., Beal and Goyen 1998), and Williams (2007) finds that financial returns of SRI only weakly account for the decision to invest in SRI. In contrast, investor attitudes towards the social aim of firms in which they consider investing appear strongly related to their investment decisions (Williams 2007). Moreover, a number of studies suggest that SRI investors are motivated by both financial and non-financial characteristics of their investments (Pérez-Gladish et al. 2012; McLachlan and Gardner 2004; Dorfleitner and Utz 2014). We address this debate by investigating the extent to which pro-social motivations, also known as ‘social preferences’, can explain individual investors’ interest in socially responsible investment.

Our paper reports results from a survey carried out in 2015 on a large sample of US-based individual investors. The survey included the ‘social value orientation’ (SVO) task, a common procedure in social psychology for eliciting social preferences (Murphy and Ackermann 2011), and it also asked investors to report investment behavior and preferences. The survey allows us to examine the association between social preferences and three distinct measures of engagement in socially responsible investing: (1) ‘general interest’ in responsible investment, (2) likelihood of ever having held such investment, and (3) the proportion of such

investment in the total investment portfolio currently held. We find robust evidence for a positive association between social preferences and the first two measures of engagement in responsible investing, but no association between social preferences and the proportion of responsible investments in the portfolio currently held. Taken together, these results are consistent with a ‘warm glow’ interpretation (Andreoni 1989; 1990) of investor motivations to hold SRI.

Our study contributes to an emerging literature on the motives of socially responsible investment. McLachlan and Gardner (2004) suggest that SRI investors rate ethical issues as being more important than do their conventional counterparts, and that SRI investors have a higher appreciation of ‘moral intensity’. Similarly, Dorfleitner and Utz (2014) find for a sample of German investors that investors with more investments have a higher propensity to invest in firms that are perceived to be in line with their moral values. Nilsson (2009) sent a survey to clients of a Sweden-based mutual fund provider of SRI, and he clusters investors according to self-reported importance of financial returns and social responsibility. He finds that investors in the cluster ‘primarily concerned about profit’ report giving less to charity annually than do investors who are ‘socially responsible and return driven’ and who are ‘primarily concerned about social responsibility’. Thus, while shedding light on the relationship between self-expressed motives for responsible investment and social preferences, the study does not directly address the relationship between social preferences, per se, and the decision to invest in SRI. Closer to our endeavor, Heimann (2013) implemented an experimental investment game with French investors, using both NGO donations and the A3 Altruism scale from the International Personality Item Pool (Goldberg et al. 2006) as measures of social preferences, but he finds no association between either measure of social preferences and the proportion of the portfolio dedicated to SRI in the

investment game. The first clear evidence of a relationship between social preferences and engagement in SRI emerges from a study by Riedl and Smeets (2014), who combine a trust-game experiment on individual investors with administrative data from the investors' Dutch mutual fund provider. The authors find that the amount returned, in the second stage of the trust game, is associated positively both with the likelihood of owning an SRI fund and with the percentage of the portfolio invested in the SRI fund. Moreover, social preferences correlate positively with the likelihood of investors owning an SRI fund without tax benefits, but not with the likelihood of owning SRI funds with tax benefits (Riedl and Smeets 2014). However, given that the authors use as a measure of social preferences the amount returned from the second mover, there is a possibility that their measure captures reciprocal behavior—in response to the initial amount sent by the first mover. Our study would thus complement theirs, by using a relatively clean measure of unconditional social preferences—the social value orientation—in a survey administered on a distinct, but highly relevant sample—US-based individual investors.

The remainder of our paper is structured as follows: we present our methodology and describe our sample; the subsequent section presents our results, and the last concludes.

## Methodology

We administered an online survey to a targeted group of individual investors, all members of the American Association of Individual Investors (AAII).<sup>1</sup> An invitation to participate in our survey was distributed to 116,265 members through the association's mailing list; 5,515 members started our survey, yielding a response rate of 4.74%, comparable to similar studies (Junkus and Berry 2010; Berry and Junkus 2013).

The survey consisted of four main sections. The first asked all respondents about their financial characteristics; our dependent variables are derived from measures in this section. The second contained the SVO measure of social preferences (Murphy et al. 2011), our independent variable, in addition to one of four different personality scales, to which participants were randomly assigned.<sup>2</sup> We further randomly assigned the order in which respondents received the SVO measure and their assigned personality scale.

In the third section, respondents undertook a risk preference elicitation test (Dohmen et al. 2010; Riedl and Smeets 2014) and, subsequently, a numeracy test (Cokely et al. 2012). The final section contained socioeconomic and demographic measures. We did not offer the investors any monetary incentive to participate in this study, nor did we offer an incentive for any of the measures employed.

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<sup>1</sup> The AAII is a non-profit association, with a mission to assist “individuals in becoming effective managers of their own assets through programs of education, information and research” (AAII.com, 2016).

<sup>2</sup> Participants were randomly assigned to one of the following four personality measures: the ‘Big Five’, BFI-S (Gerlitz and Schupp 2005); the Rosenbaum Self-Control Schedule (Rosenbaum 1980); the Interpersonal Reactivity Index (Davis 1983); and the Short Dark Triad measure (Jones & Paulhus 2014). These are explored further in a separate paper (in progress).

*Financial measures*

The survey first asked respondents to indicate how much they had invested, by assigning their total portfolio size to one of ten categories.<sup>3</sup> The purpose was to help funnel respondents' thoughts towards the next two questions, the first asking for a specific estimate of their total investment portfolio and the second for the amount invested in each of eleven asset classes listed on the screen.<sup>4</sup>

The subsequent section in the survey featured all questions regarding SRI. Here, the respondents were first presented with a definition of SRI. We used the following definition, from the Financial Times, as it corresponds to the general public perception of the SRI concept:

*“[SRI] is an investment strategy which seeks to generate both financial and sustainable value. It consists of a set of investment approaches that integrate environmental, social and governance (ESG) and ethical issues into financial analysis and decision-making [...] Value in this context refers not only to economic value, but to the broader values of fairness, justice, and environmental sustainability” (ft.com 2015).*

Next, respondents were asked whether they had ever invested in SRI assets. Only those who answered, ‘Yes’, were also asked if they currently had funds invested in SRI assets. If the respondent indicated this to be the case, she was asked to provide an estimate of the percentage of each asset class that she had invested in SRI. All respondents—except those who reported that they currently held SRI assets—were presented with a measure that elicited

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<sup>3</sup> The ten categories were as follows: less than \$ 10,000; \$ 10,001 - \$ 25,000; \$ 25,001 - \$ 50,000; \$ 50,001 - \$ 100,000; \$ 100,001 - \$ 150,000; \$ 150,001 - \$ 200,000; \$ 200,001 - \$ 250,000; \$ 250,001 - \$ 500,000; \$ 500,001 - \$ 1 million; more than \$ 1 million.

<sup>4</sup> The asset class categories were as follows: mutual funds, stock (equity shares), bonds, commodities, currencies (foreign exchange), derivative instruments, hedge funds, real estate, savings account, cash, and ‘other’.

their interest in investing in SRI: "To what degree would you say you are interested in investing in SRI?" The measure was scored on a 5-point Likert scale, ranging from 1 ('not at all interested') to 5 ('very interested').

To capture investors' perception of return and risk associated with SRI, respondents were asked to indicate how SRI assets compare to conventional investments. The item measuring return expectations was:

*"In the long-term, compared to ordinary investments, do you think that SRI assets offer: A much lower rate of financial return, a slightly lower rate of financial return, a similar rate of financial return, a slightly higher rate of financial return, a much higher rate of financial return."*

The item measuring risk expectation was:

*"In your view, compared to ordinary investments, are SRI assets: much riskier than ordinary investments, a little riskier than ordinary investments, about the same, a little less risky than ordinary investments, a lot less risky than ordinary investments."*

These two items closely follow Lewis and Mackenzie (2000); similar questions were also used by Bauer and Smeets (2014), Riedl and Smeets (2014), and Wins and Zwergel (2016).

### *Social preferences*

We rely on a measure designed specifically to elicit unconditional social preferences: the 'SVO slider measure' (Murphy et al. 2011). The SVO slider measure is a decomposed one-

shot dictator game; the decision maker makes a unilateral choice to allocate resources between herself and an anonymous other person (Messick & McClintock, 1968). The respondent is presented with six different resource allocation scenarios, and for each she has to choose one out of nine payoff combinations to distribute an endowment between herself and the anonymous other. In every scenario, each of the payoff combinations corresponds to different degrees of social preferences.<sup>5</sup> For example, in one of the scenarios, the decision maker is tasked with choosing among allocations that range from ‘USD 100 to herself and 50 to the other’ to ‘USD 50 to herself and 100 to the other’. Importantly, in accordance with the decomposed nature of the game, the decision maker and the other person remain mutually anonymous throughout, during the resource allocations and afterwards (Murphy and Ackermann 2014).

This type of measurement eliminates strategic and reciprocal dynamics, resulting in a ‘pure’ measure of unconditional social preferences (Balliet et al. 2009). The SVO slider measure has been designed to work both for pen-and-paper and online survey-based procedures (Murphy et al. 2011), and it has been used research settings, ranging from psychopharmacology (Schmid et al. 2014) and social neuroscience (Hysek et al. 2013) to environmental psychology (Zelenski et al. 2015).

The principal advantage of the slider measure, over alternative methods to capture the SVO, is that it yields a social preference score of higher resolution. The alternative measures, the most common of which are the ‘ring’- and the ‘triple-dominance’ measures (for an overview, see Murphy and Ackermann 2014), categorize individuals into one of three types of social

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<sup>5</sup> See Appendix A for the complete measure, adapted from Murphy et al. (2011).

preferences.<sup>6</sup> The slider measure, in contrast, provides for each individual a continuous score on the ratio level, with higher scores indicating greater concern for the welfare of others (Murphy and Ackermann 2014).

### *Control variables*

After completing the SVO measure, respondents were given a risk-elicitation task, developed by Dohmen et al. (2011), based on Holt and Laury (2002), and also adopted by Riedl and Smeets (2014), among others. In the risk elicitation task, investors had to make a decision across 20 different choice-scenarios, between a certain amount of money and a risky lottery choice, with a 50% chance of winning \$300 and 50% of winning nothing. In the first scenario, the certain amount was \$0, and the amount increased in increments of \$10 as the respondent progressed through the scenarios, with a maximum sure amount of \$190, in the 20th scenario. The point at which the respondent switched from the lottery option to the certain amount was recorded as the respondent's risk-preference value. Thus, higher values mean greater preference for risk, with a scale ranging from 0 to 200.

As a measure of numeracy, we used the adaptive version of the 'Berlin numeracy test' (Cokely et al. 2012). The test consists of four math problems, of varying degrees of difficulty. In the adaptive version, respondents are presented with at least two math problems, and at most three, depending on whether or not the answer provided to the first problem is correct. Respondents are scored in categories ranging from 1 (lowest numerical ability) to 4 (highest numerical ability).

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<sup>6</sup> The three categories respondents are assigned to under the 'Triple Dominance measure' and the 'Ring measure' are: 'competitive' (i.e., very selfish), 'individualistic' (i.e., selfish), and 'prosocial'.

Lastly, we recorded the respondents' age, education-level, and gender. We also asked the respondents explicitly whether they had taken a formal university-level course in economics, to account for financial knowledge.

## Results

Table 1 provides an overview of the sample characteristics. The sample is predominantly male (94.2%), with a mean age of 55.6. It is rather well-educated—87.9% (1,704) have a university degree, and 68.7 % (1,333) have taken a formal economics course at university-level. From our sample of 3,022 investors, 525 (17.4%) have invested in SRI at some point in the past, and 324 (10.7%) are invested in SRI at the time of the survey. Investors in our sample believed that SRI yields lower returns ( $M= 2.29$ ,  $SD = 0.75$ ) relative to conventional investments,  $t(2,863) = -51.23$ ,  $p < 0.001$ . Investors also expected SRI to be slightly more risky ( $M= 2.70$ ,  $SD = 0.73$ ) than conventional investments,  $t(2,863) = -20.99$ ,  $p < 0.001$ . Furthermore, the sample appears wealthy; respondents' mean total portfolio value is \$ 2.35 million, corresponding closely to the mean portfolio value of members of the organization—\$ 2.43 million—as reported to us by the AAI.

## FIGURE 1 ABOUT HERE

Lastly, the investors in our sample have an average SVO score of 26.07. We do not here use the SVO for a categorical analysis of 'types', but an investor who behaves pro-socially would score between 22.45 and 57.15.<sup>7</sup> The mean SVO of our sample thus falls within the classification-range of a 'prosocial individual', consistent with findings in prior studies (Au and Kwong 2004; Balliet et al. 2009; Murphy et al. 2011; Murphy and Ackermann, 2014;).

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<sup>7</sup> The ranges for all four types of categories, listed from least pro-social to altruistic, are as follows: a 'competitor' receives a score from -16.26 to - 12.04; an 'individualist' a score between -12.04 and 22.45; a 'pro-social' a score from 22.45 to 57.15; and an 'altruist' a score greater than 57.15 (Murphy et al. 2011).

## TABLE 1 ABOUT HERE

We proceed to our analyses for the three dependent variables and discuss each analysis in turn. We examine first the relation between social preferences and ‘interest’ in SRI, next whether social preferences are related to investors ever having invested in SRI. And, finally, we test whether social preferences are related to the proportion of total portfolio invested in SRI.

*Social preferences and interest in SRI*

Table 2 presents the results for ordered logistic regressions of ‘interest in SRI investing’ on SVO-score. The dependent variable is an ordinal variable captured on a 5-point Likert scale, ranging from 1 (‘no interest at all’) to 5 (‘very interested’), We present three models: model 1 serves as our baseline, with social preferences as the only independent variable; model 2 also controls for investors’ SRI risk and return expectations; model 3 includes all control variables.<sup>8</sup>

## TABLE 2 ABOUT HERE

Each of the three models yields a positive and significant association between SVO-score and SRI interest. The association thus appears robust to SRI risk- and return-expectations, and to potentially relevant demographic characteristics, such as numeracy and level of education attained.

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<sup>8</sup> According to Brant tests, the parallel regression assumption is violated only in model 2,  $\chi^2(df = 9, n = 1770) = 19.46, p > 0.022$ ; it is not violated in our main specification of interest, namely model 3,  $\chi^2(df = 33, n = 1517) = 40.28, p > 0.179$ .

In model 3, an increase in social preferences of one standard deviation (15.72) is associated with an increase of 7.6% likelihood for the respondent to indicate a higher category of interest in SRI on the 5-point Likert-scale (e.g., from ‘indifferent’ to ‘somewhat interested’).

#### *Social preferences and SRI investments*

Table 3 presents logistic regressions of ‘ever having invested in SRI’ on SVO-score, showing three models, with additional control variables included incrementally. The dependent variable takes the value of ‘one’ if an investor has, or currently is, invested in SRI and ‘zero’, otherwise. For ease of interpretation, Table 3 presents marginal effects at the mean.

#### TABLE 3 ABOUT HERE

Each of the three models yields a positive and significant association between SVO-score and the answer ‘yes’ to the question of whether the investor has ever invested in SRI. As with the variable, ‘interest in SRI’, in table 2, the association thus appears robust to SRI risk- and return-expectations, and to potentially relevant demographic characteristics, such as numeracy and level of education attained. In model 6, an increase of one standard deviation of SVO-score is associated with a 2.2% increase in the likelihood that an investor has invested in SRI.

#### *Social preferences and proportion of assets invested in SRI*

Table 4 presents the results for Tobit regressions of ‘proportion of assets invested in SRI’—conditional on currently holding SRI assets—on SVO-score. The lower limit is zero, and the upper limit 100. Three models are shown, with additional control variables included incrementally.

## TABLE 4 ABOUT HERE

We fail to obtain evidence for a relationship between the SVO-score and the proportion of assets invested in SRI. Although positive in all three models, the coefficient on the SVO-score is non-significant in all cases. It is worth noting, however, that the result might be an artifact of a limited sample, as only a small minority of our surveyed individual investors (324 respondents; 10.7% of the full sample) indicated that they currently held socially responsible investments, and of these, only about half recollected the size of the assets in question.

**Discussion**

In a survey of more than 3,000 members of the American Individual Investors Association, conducted in 2015, we find evidence that investors' social preferences relate to their interest and engagement in socially responsible investment (SRI). Our measure of social preferences, the SVO (Murphy et al. 2011), is positively associated with respondents' stated 'interest' in SRI, conditional on not currently holding SRI. Moreover, respondents with higher SVO scores are more likely to have held—or to currently hold—SRI than are respondents with lower scores. These results are robust to an array of relevant controls, including expectations about SRI risk and return. We fail, however, to obtain evidence of a relationship between SVO and the proportion of assets currently held in SRI, although the number of observations for this latter analysis—about 140—was much smaller than those in the former two—between 1,500 and 1,900.

At face value, nevertheless, our pattern of results is consistent with a 'warm glow' interpretation of investor motivations to hold SRI. Warm-glow is a form of 'impure altruism', characterized by motivation to perform the 'act' of charity, per se, as opposed to maximizing the actual welfare of recipients (e.g., Andreoni 1989; Andreoni 1990). It appears that individual investors might be motivated out of pro-social concerns to hold 'some' SRI—but not necessarily to devote a larger share of their wealth to the cause.

Our study contributes to the literature by providing evidence consistent with the notion that individual investments, in part, are driven by non-financial motives, in the form of pro-social preferences. Our findings resonate with previous work, which has documented an association between self-expressed motives for investment and SRI holdings (Nilsson 2009), and with prior studies using other techniques for capturing social preferences and different samples of

individual investors (Riedl and Smeets 2014). The converging picture is clear: across samples and means of measurement, there appears to be an association between social preferences and engagement in SRI. What is less clear, however, is the strength of the relationship—and perhaps more importantly—the question of causality.

Our regression analyses yield evidence only of a relatively small ‘effect’ of social preferences on SRI interest. For example, an increase in social preferences of one standard deviation, in model 6, is associated with a mere 2% increase in the likelihood that an investor has invested in SRI. This might mean that social preferences, although related to SRI interest, are just not economically very important. However, the weak relationship could also arise from noisy measures—which are self-reported and non-incentivized. Future work might try to examine the relationship between incentivized measures of social preferences and archival data on individual investment behavior among broad samples of individual investors—following a strategy, for example, building on that of Riedl and Smeets (2014).

Furthermore, our survey study leaves open the question of causality. Although our results are consistent with a positive effect of social preferences on SRI interest and engagement—and inconsistent with a negative effect—reverse causality and omitted variables represent viable alternative explanations. Future work might try, through experimental treatments—or by exploiting other exogenous variation in social preferences—to test directly whether stronger social preferences lead to greater interest and engagement in SRI.

The pattern obtained among American individual investors—a positive relationship between social preferences and engagement in SRI—harmonizes with the wider literature on social preferences in economic decision making; across economic contexts, in both laboratory and

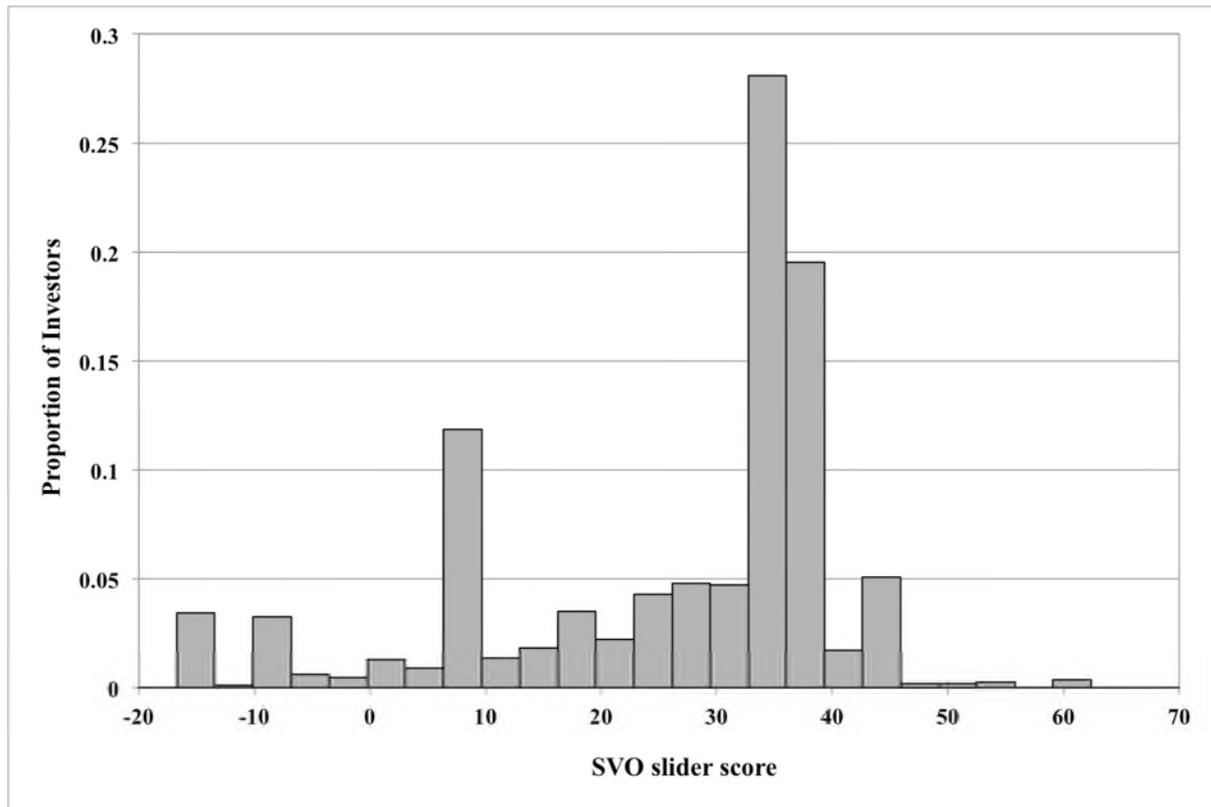
field settings, social preferences matter (e.g., Fehr and Fischbacher 2002; Fehr and Fischbacher 2003; Fehr and Schmidt 2006; Riedl and Smeets 2014).

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**Figure 1 - Distribution of SVO-scores for the full sample**



Note: Figure 1 gives the histogram of the SVO slider scores for the full sample. Higher scores indicate greater concern for the material well-being of an anonymous other. The y-axis represents the proportion of investors yielding scores within a given bin.

**Table 1 - Summary Statistics**

Variable	Description	N	Mean	Std. Dev.	Min	Max
SRI-Interest	Answer to the question: <i>To what extent would you say you are interested in investing in SRI?</i> Ranging from 1 (not at all) to 5 (very).	2,682	2.41	1.18	1	5
SRI-Ever-Invested	Binary variable, answer to question: <i>Have you ever invested in SRI?</i> 0 = No, 1 = Yes.	3,022	0.17	0.37	0	1
SRI-Proportion	The proportion of the total portfolio dedicated to SRI in percentage terms.	219	14.84	8.41	0	94
Social Preferences	SVO slider measure- a continuous measure of social preferences.	1,989	26.07	15.72	-16.26	61.38
SRI-Return	Return expectations of SRI, answer to the question: <i>In the long-term, compared to ordinary investments, do you think that SRI assets offer?</i> : 1 (Much lower) to 5 (Much higher).	2,864	2.28	0.75	1	5
SRI-Risk	Risk expectations of SRI, answer to the question: <i>In your view, compared to ordinary investments, are SRI assets</i> : 1 (Much riskier) to 5 (A lot less risky).	2,864	2.71	0.73	1	5
Risk-Preferences	Risk elicitation task adopted from Riedl & Smeets (2014) - the higher the value the more risk-loving the participant.	2,010	103.87	48.81	0	200
Age	Age of participant.	1,919	55.1	10.73	24	79
Female	Dummy variable = 1 if participant is female.	1,946	5.75%	0.23	0	1
University	Dummy variable = 1 if participant has a university degree.	1,941	0.87	0.32	0	1
Economics Course	Dummy variable = 1 if participant took an Economics course at University level	1,944	0.68	0.46	0	1
Numeracy	Score on the Berlin Numeracy Test ranging from 1 (lowest) to 4 (highest).	1,944	2.58	1.1	1	4
Total Portfolio	Self-reported estimate of total portfolio value in US \$.	3,046	\$ 2.35 mil.	\$ 3.17 mil.	0	\$ 21 mil.

Note: Age and Total Portfolio are winzorised at 1%. Total Portfolio derives from investors' estimate of their portfolio size. In fewer than two dozen cases, we adjusted raw estimates to bring them in line with investors' prior categorization of the size of their portfolio. For example, when an investor selected category 10 (more than \$ 1 million invested), but subsequently reported the estimate of total portfolio value to be \$ 2.5, this was changed to \$ 2.5 million. Our results are preserved, throughout, when Total Portfolio instead takes investor portfolio estimates at face value. Raw data are available upon request.

**Table 2 - Ordered logit regression of SRI-Interest**

Variables	Model 1	Model 2	Model 3
Social Preferences	0.0203*** (0.0029)	0.0173*** (0.0029)	0.0194*** (0.0033)
SRI-Return		0.7288*** (0.0708)	0.7768*** (0.0792)
SRI-Risk		0.3335*** (0.0685)	0.3152*** (0.0758)
Risk-Preferences			-0.0020* (0.0011)
Numeracy			0.0299 (0.0454)
Total Portfolio			-3.74e-08** (1.59e-08)
University			0.0637 (0.1478)
Economics Course			0.0304 (0.1096)
Age			-0.0092** (0.0042)
Female			0.4633** (0.2060)
After Personality			-0.0451 (0.0963)
Intercept 1	-0.2255*** (0.0869)	2.1281*** (0.2008)	1.5800*** (0.3951)
Intercept 2	0.2779*** (0.0870)	2.6781*** (0.2051)	2.1380*** (0.3966)
Intercept 3	1.7817*** (0.0949)	4.3207*** (0.2194)	3.8165*** (0.4064)
Intercept 4	4.4673*** (0.1868)	7.1072*** (0.2739)	6.5448*** (0.4512)
Observations	1,770	1,770	1,517
Pseudo R-squared	0.0108	0.0543	0.0644

Table 2 presents ordered logit regressions with White heteroskedasticity-consistent standard errors and covariance. The dependent variable is a measure of interest in investing in SRI: "To what degree would you say you are interested in investing in SRI?" The measure was scored on a 5-point Likert scale, ranging from 1 ('not at all interested') to 5 ('very interested'). 'After Personality' is a dummy taking 1 if a respondent is presented first with the personality scale, followed by the SVO slider measure, and 0 otherwise. Robust standard errors are in parentheses. \* denotes significance at the 10%-level, \*\* at the 5%-level, and \*\*\* at the 1%-level.

**Table 3 - Binary logit regressions of SRI-Ever-Invested**

Variables	Model 4	Model 5	Model 6
Social Preferences	0.0022***	0.0015**	0.0014**
	-0.0006	(0.0006)	(0.0006)
SRI-Return		0.0932***	0.0925***
		(0.0117)	(0.0128)
SRI-Risk		0.0523***	0.0452***
		(0.0144)	(0.0154)
Risk-Preferences			0.0001
			(0.0002)
Numeracy			0.0091
			(0.0082)
Total Portfolio			-3.72e-09
			(3.75e-09)
University			0.0628**
			(0.0316)
Economics Course			-0.0232
			(0.0196)
Age			0.0018**
			(0.0008)
Female			0.0430
			(0.0347)
After Personality			-0.0095
			(0.0179)
Constant	-1.9131***	-4.5808***	-5.5414***
	(0.1352)	(0.3776)	(0.6395)
Observations	1,989	1,989	1,713
Pseudo R-squared	0.00790	0.0682	0.0696

Table 3 presents binary logit regressions. Coefficients are marginal effects at the mean. The dependent variable is a binary variable that takes the value of 1 if an investor has invested in SRI in the past (this includes investors that are currently invested in SRI) and 0 otherwise. 'After Personality' is a dummy taking 1 if a respondent is presented first with the personality scale, followed by the SVO slider measure, and 0 otherwise. Robust standard errors are in parentheses. \* denotes significance at the 10%-level, \*\* at the 5%-level, and \*\*\* at the 1%-level.

**Table 4 - Tobit regressions of SRI-Proportion**

Variables	Model 7	Model 8	Model 9
Social Preferences	0.0411 (0.1402)	0.0141 (0.1384)	0.1333 (0.1080)
SRI-Return		7.7412*** (2.7178)	6.9692*** (2.5868)
SRI-Risk		3.6824 (2.3905)	3.2455 (2.3772)
Risk-Preferences			0.0185 (0.0389)
Numeracy			-1.0499 (1.6629)
Total Portfolio			4.97e-07 (6.82e-07)
University			6.9595 (6.7581)
Economics Course			-4.7587 (4.3390)
Age			0.1325 (0.1527)
Female			-7.8566 (5.0500)
After Personality			-0.3213 (3.2602)
Constant	15.5703*** (4.7604)	-16.7647* (9.4057)	-27.6803* (15.1924)
Sigma	21.7678*** (2.0691)	20.8357*** (1.9924)	18.9437*** (1.8305)
Observations	149	149	133
Pseudo R-squared	7.80e-05	0.0100	0.0137

Table 4 presents Tobit regressions. The dependent variable is the proportion of the investor's total portfolio allocated to SRI. The lower limit is set at 0, and the upper limit at 100. 'After Personality' is a dummy taking 1 if a respondent is presented first with the personality scale, followed by the SVO slider measure, and 0 otherwise. Robust standard errors are in parentheses. \* denotes significance at the 10%-level, \*\* at the 5%-level, and \*\*\* at the 1%-level.

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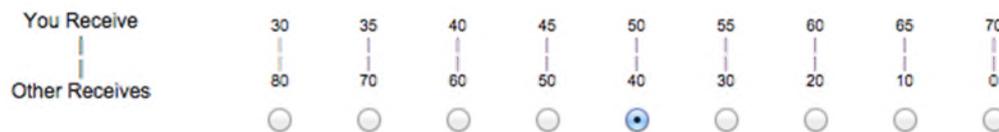
## Appendix

### A1 - The instructions for the SVO slider measure as seen by participants.

**Instructions:** In this task you have been randomly paired with another person, whom we will refer to as the other. This other person is someone you do not know and will remain mutually anonymous. All of your choices are completely confidential. You will be making a series of decisions about allocating resources between you and this other person. For each of the following questions, please indicate the distribution you prefer most by marking the respective position along the mid-line. You can only make one mark for each question. Your decisions will yield hypothetical money for both yourself and the other person.

In the example below, a person has chosen to distribute money so that he/she receives 50 dollars, while the anonymous other person receives 40 dollars.

#### EXAMPLE





**Appendix B**

**Table B1 - Pearson correlations for all variables**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) SRI-Ever	1												
(2) SRI-Interest	0.22***	1											
(3) SRI-Proportion	-	-	1										
(4) Social preferences	0.08**	0.18***	0.03	1									
(5) SRI-return	0.20***	0.31***	0.08	0.13***	1								
(6) SRI-risk	0.15***	0.21***	-0.01	0.08**	0.39***	1							
(7) Risk-preferences	0.2	-0.03	0.01	0.01	0.02	0.03	1						
(8) Numeracy	0.04	0.02	-0.05	0.06	0.01	0.02	0.19***	1					
(9) Total Portfolio	-0.02	-0.07**	0.01	-0.05	-0.04	-0.01	0.09***	0.05	1				
(10) University	0.04	-0.00	-0.00	0.04	0.01	0.03	0.15***	0.16***	0.12***	1			
(11) Economics Course	-0.02	-0.01	-0.06	0.03	0.00	-0.04	0.11***	0.07	0.02	0.27***	1		
(12) Age	0.03	-0.08	0.09	-0.06	-0.06	-0.03	-0.07	-0.15***	0.11***	-0.02	-0.09**	1	
(13) Female	0.04	0.08**	-0.04	0.06	0.06	0.05	-0.05	-0.06	-0.01	-0.01	-0.06	-0.01	1

Note: Table A1 presents the results for Pearson's correlation coefficients for all variables. \* denotes 10%, \*\* 5 %, and \*\*\* 1% significance.



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