

Beyond the Basket: Are Sustainable Investing and Sustainable Consumption Substitutes?

Markus Strucks,^{1,*} Felipe Trillos,² Marie Brière,³
Karen Huynh,³ Adrien Nguyen-Huu,² Sébastien Duchêne⁴

October 19, 2026

Abstract

We examine whether socially responsible investment (SRI) and socially responsible consumption (SRC) crowd out each other, complementing an online survey of more than 1,000 retail banking clients with three years (March 2022–February 2025) of administrative records on portfolio holdings and transaction-level consumption for more than 15,000 clients. In the administrative data, we identify sustainable investment and consumption from fund names and merchant labels through a transparent keyword-matching procedure. Across a wide range of specifications—survey and revealed behavior, alternative sustainability measures, the extensive and intensive margins, within-individual dynamics over time, and disaggregated consumption categories—we find no evidence that sustainable consumption and sustainable investment crowd out each other, and statistical equivalence tests allow us to reject an economically meaningful substitution relationship. In the survey, stated SRI and SRC preferences are positively aligned, and this alignment persists after controlling for a broad set of SRI beliefs, expectations, literacy, and individual characteristics. Taken together, the consistent absence of substitution suggests that policies strengthening sustainability in one domain are unlikely to be offset by reduced engagement in the other.

Keywords: sustainable finance, socially responsible investment, sustainable consumption, cross-domain behavior, survey and administrative data

JEL: D12, D14, G11, M14, Q56

¹ Department of Finance and Accounting, MBS School of Business, 2300 Av. des Moulins, 34080 Montpellier, France.

² CEE-M, Univ. Montpellier, CNRS, INRAe, Institut Agro, Montpellier, France

³ Amundi Investment Institute, Paris, France, Paris Dauphine University PSL, Université Libre de Bruxelles.

⁴ MBS School of Business, Montpellier, France and CEE-M, Univ. Montpellier, CNRS, INRAe, Institut Agro, France.

* Corresponding author: m.strucks@mbs-education.com

1 Introduction

Socially responsible investing (SRI) faces growing scrutiny over its real-world impact, with critics claiming that it may be not merely ineffective but counterproductive—if the reassurance of a sustainable investment portfolio is associated with less sustainable behavior in other domains. A former Blackrock chief investment officer for sustainable investing called SRI a “dangerous placebo” (Financial Times, 2021). We examine the behavioral premise behind this concern by asking whether individuals treat socially responsible consumption (SRC) and SRI as substitutes, expressing their values primarily in one sphere, or as complements, aligning their financial and consumption choices. The answer bears directly on whether sustainability-oriented policies reinforce one another across markets or merely reallocate moral effort across domains.

Theory offers opposing predictions. Sauzet and Zerbib (2024) predict substitution between SRI and SRC. In their equilibrium asset-pricing model, stronger demand for sustainable (“green”) goods raises their relative prices, making sustainable consumption more costly; households may hedge this exposure by holding non-responsible (“brown”) assets, producing a negative SRI–SRC relationship.¹ By contrast, Hakenes and Schliephake (2024) integrate sustainability preferences directly into individual utility, so households maximize overall societal impact: they boycott brown consumption and divest from brown assets simultaneously, predicting a positive SRI–SRC relationship. The two theories thus differ in one basic assumption: whether sustainability preferences generate a domain-specific financial hedging or an integrated drive to maximize impact. Which motive prevails is ultimately an empirical question.

In this study, we provide the first evidence on the SRI–SRC relationship that complements stated preferences with real, large-stakes behavior data. We draw on two separate samples from retail clients of a large French bank. First, an online survey of over 1,000 clients elicits SRI and SRC preferences alongside behavioral SRI determinants. Second, and in contrast to prior work based largely on hypothetical or small-stakes choices, we observe three years of actual behavior for more than 15,000 clients—linking transaction-level consumption to portfolio holdings within the same individuals.

The survey captures stated SRI and SRC preferences alongside behavioral SRI determinants: financial SRI expectations, impact beliefs, greenwashing perceptions, experience with ESG issues, and social and risk preferences. We find a positive association between stated SRI and SRC preferences: individuals willing to incur private costs for environmentally friendly products allocate larger shares of a hypothetical endowment to sustainable funds. This association remains robust to controlling for the full set of determinants above. Two further checks confirm it. First, using alternative SRI proxies from binary choice lists, individuals’ willingness to sacrifice return or to accept additional risk for environmental impact is itself positively related to SRC. Second—mirroring the SRC identification of Brunen and Laubach (2022)—an incentive-compatible proxy, a dummy for choosing a sustainable rather than conventional survey reward, aligns with larger SRI intentions. Beyond this core result, we also find that expecting higher long-term returns and lower long-term risk from SRI relative to conventional investments emerge as dominant correlates of sustainable investment allocations, while a perceived lack of SRI literacy is associated with lower investment. Greenwashing concerns, by contrast, show no significant association with SRI.

To assess whether the absence of crowding-out extends to real behavior, we examined three years of administrative data of retail investors. We identify sustainable consumption and (non-)sustainable consumption

We thank Florian Heeb, Emily Kormanyos, and participants at the Society for Experimental Finance Annual Meeting 2025, the Behavioral Economics and Management Science Colloquium, the International Meeting on Experimental and Behavioural Social Sciences (IMEBESS 2026), the Waseda Workshop in Economics in Tokyo, the Maastricht University Economics Seminar, and the Aix-Marseille University Economics and Management Seminar for helpful comments. The authors gratefully acknowledge a partner financial institution for granting access to anonymized client data under a confidentiality agreement. The institution is not named to protect commercial confidentiality. The study has been pre-registered on [As Predicted](#). All analysis code and scripts for generating a synthetic dataset are available on the [OSF repository](#). We declare that conversational AI has been used for coding of the analysis and rewriting of text.

¹ This hedging motive depends critically on the demand elasticity of green consumption goods. Chen et al. (2023) show that a green premium, and hence a reason to hedge, arises only when demand for green goods is sufficiently price-elastic; otherwise return differentials stay small and the offsetting investment response is weak.

categories from card-transaction merchant labels, and sustainable investment from sustainability keywords in asset names, using keyword-matching procedure. In addition, we use Sustainable Finance Disclosure Regulation (SFDR) Article 9 fund holdings and portfolio ESG risk scores for robustness.² Across all specifications, we do not find that SRI and SRC crowd out each other, and this absence of substitution holds under all three portfolio sustainability measures. Complementary statistical equivalence tests (two one-sided t -tests) showed that we can reject an economically meaningful negative relationship beyond a Cohen’s d of -0.1. When sustainable investment is proxied by the share of assets classified as SFDR Article 9 funds—i.e., products with explicit and regulated sustainability objectives—we find a positive association with sustainable consumption. We treat this positive Article 9 association as suggestive, given the limited prevalence of Article 9 holdings in our sample. By contrast, no relationship emerges when sustainability is measured using portfolio-level Morningstar Sustainalytics ESG Risk Scores.

Our findings contribute to several strands of the academic literature. First, we shed light on the debate surrounding consistent versus contrasting prosocial behaviors across decision domains. Prior studies largely suggested a negative SRI–SRC relationship driven by a moral compensation motive, akin to a substitution effect also referred to as moral self-licensing (Merritt et al., 2010): individuals offset less responsible behavior in one domain by “doing good” in another. For instance, when investors were offered a sustainable option, they subsequently reduced their charitable donations (An et al., 2023). Famulok et al. (2024) similarly found a higher propensity to invest sustainably among individuals with above-average consumption carbon footprints. However, these studies focus predominantly on environmental externalities in consumption, leaving aside the broader range of responsible behaviors that may reflect a positive social identity. By contrast, our administrative data analysis incorporates environmental and social dimensions in both consumption and investment. Moreover, we complement stated preferences with granular administrative data capturing actual portfolio holdings and spending behavior. This allowed us to examine whether sustainability-oriented actions are substituted or reinforced across domains using both stated preferences and realized behavior. Similarly, other studies did not find evidence supporting a crowding-out or moral self-licensing perspective. In another domain, Heeb et al. (2026) offered participants a sustainable investment option, which did not crowd out subsequent pro-environmental political choices. In Brunen and Laubach (2022), participants selecting sustainable investment products also chose sustainable consumption rewards, even when these were offered at a discount relative to direct financial rewards. Our results are consistent with these findings, but we extend this literature in two critical ways. First, we examine both preferences and high-stakes real investment and consumption behavior. Second, we observe these behaviors dynamically over three years for a broad sample of retail clients. Together, these results provide evidence against the crowding-out of sustainability behaviors across domains.

Second, our study contributes to the literature on asset sustainability signals. Our central finding of no crowding-out holds regardless of how portfolio sustainability is measured—through fund-name keywords, portfolio ESG risk scores, or SFDR Article 9 classifications. Where the measures differ is in whether any *positive* alignment with sustainable consumption appears. Names are the first salient signal available to retail investors, yet our keywords-based measure—which identifies SRI holdings from fund names—showed no robust association with sustainable consumption once we controlled for demographic and financial characteristics. This is consistent with names being a weak guide to underlying substance: trend-aligned fund names attract abnormal flows regardless of holdings (Cooper et al., 2001, 2005), and the resulting scope for greenwashing means retail investors struggle to separate genuine from cosmetic names (e.g., Abouarab et al., 2025). Similarly, we found no alignment between sustainable consumption and holdings of assets with favorable ESG risk scores. Interpretability may be an important barrier—ESG ratings are opaque and diverge sharply across providers (Berg et al., 2022), and the resulting rating uncertainty and non-standardized methodologies make them difficult to act on (Avramov et al., 2022). A positive alignment appears only for the stringent Article 9 classification. We interpret this cautiously, given

² Under SFDR, financial products are classified into three categories: Article 6 products, which do not promote environmental or social characteristics; Article 8 products, which promote such characteristics; and Article 9 products, which pursue an explicit sustainable investment objective (AMF, 2022).

how few clients in our sample hold Article 9 funds: it suggests that cross-domain alignment is easier to detect where sustainability is conveyed through a credible, standardized regulatory signal.

Third, our study contributes to research on the determinants of sustainable investing. Prior studies largely isolated single SRI determinants. Early research has demonstrated that retail SRI investors do not solely seek financial returns, but incorporate social values (Riedl & Smeets, 2017). Some investors explicitly pay attention to the societal impact of their investment (Barber et al., 2021). Yet, concerns about companies greenwashing their business activities undermines sustainable investment (Gacem et al., 2025). Other prominent SRI barriers include a lack of financial literacy, or sustainable finance literacy in particular (Anderson & Robinson, 2022; Filippini et al., 2024), and a perceived lack of information (Degryse et al., 2023). Despite numerous advances in the field, it remains unclear which are the primary drivers of retail SRI. A rich set of individual preferences, expectations and beliefs about SRI in our online survey allowed us to isolate single effects while controlling for others. In particular, we identified SRI long-term risk and return expectations to be important correlates of social investing, aligning with recent research on the importance of expectations in (sustainable) investing (see, e.g., Giglio et al., 2021, 2025; Greenwood & Shleifer, 2014). By contrast, perceptions of greenwashing did not inhibit SRI. Our results also suggest that a lack of perceived SRI literacy may hold back investment in sustainable assets. Moreover, pro-social choices and intentions predict sustainable investment preferences, reinforcing prior evidence on the relevance of extra-financial SRI motivations.

Overall, our central result is the robust absence of crowding-out between SRI and SRC: across survey and administrative data, alternative sustainability measures, extensive and intensive margins of SRI, within-individual dynamics, and disaggregated consumption categories, we find no evidence that engagement in one domain comes at the expense of the other. This pattern is more consistent with integrated preference or identity-based frameworks than with domain-specific hedging or moral licensing mechanisms. From a policy perspective, the absence of substitution implies that interventions in one domain are unlikely to undermine engagement in another. For financial institutions and digital platforms, this highlights the potential value of transaction-level consumption data in identifying clients with a propensity for sustainability and in reducing frictions to accessing responsible investment products. Increasing the visibility and accessibility of such products may therefore strengthen, rather than merely reallocate, sustainability engagement across economic domains.

2 Survey

2.1 Survey Design

We designed an online survey measuring retail clients’ SRI propensity in collaboration with a large French bank. Appendix B provides all survey items, translated from French. To incentivize participation and reduce selection effects, we offered 20 randomly drawn survey participants either a shopping voucher of 100 euros or a donation to a charitable organization made on their behalf. On the landing page, all participants selected a shopping voucher or one of three charity options: the *United Nations Sustainable Development Goals (SDG) Fund*, *Les Restos du Coeur de l’Herault* (a local social charity), or the *World Wildlife Fund* (an international environmental charity).

Our SRI preference measure asked respondents to allocate a hypothetical €10,000 windfall endowment between a traditional investment fund and a socially responsible fund over a ten-year horizon. The investment amount and horizon were chosen to mirror standard long-term savings decisions. Participants could allocate between 0% and 100% of the endowment to the SRI fund. The share invested in the SRI fund served as our principal indicator of sustainable investment intent (SRI PREFERENCE). This approach follows established practice using hypothetical portfolio allocations as proxies for sustainability preferences (e.g., Degryse et al., 2023; Gutsche & Ziegler, 2019). To further validate our measure of SRI preferences, we elicited two additional preference measures using a conjoint design inspired by Duchêne et al. (2025a, 2025b). Respondents repeatedly chose between a green asset with annual carbon emissions savings of 5,000 kg and a traditional asset without environmental benefits. In the return–impact

task, we progressively lowered the green asset’s return following each green asset choice, allowing us to quantify respondents’ willingness to trade off return for environmental impact (RETURN-IMPACT TRADEOFF). Subsequently, in the risk–impact task, we systematically varied asset price risk while holding expected returns constant to obtain an analogous measure for risk–impact trade-offs (RISK-IMPACT TRADEOFF).

Sustainable consumption preferences (SRC PREFERENCE) are operationalized as individuals’ willingness to pay a price premium for environmentally friendly products on a Likert scale. We interpret this willingness as capturing the marginal readiness to incur private consumption costs in order to generate environmental impact. Unlike purely attitudinal measures, willingness to pay requires respondents to evaluate a cost–impact trade-off, thereby approximating the economic sacrifice dimension central to responsible consumption. Although our measure focuses on the environmental sustainability dimension and does not explicitly capture social attributes, it provides conceptual precision and captures a pertinent dimension of sustainable consumption. Moreover, environmental product premiums constitute the dominant and most observable form of responsible consumption in retail markets. Nevertheless, we assessed its robustness and broader construct validity by employing a binary indicator capturing participants’ choice of the survey reward donation to social or environmental organizations with explicit sustainability goals, following Brunen and Laubach (2022). This incentive-compatible choice reflects individuals’ willingness to forego private monetary benefits in favor of sustainability-oriented outcomes. Our results remained consistent across both operationalizations.

The survey comprised three sections. After providing informed consent and selecting the reward option, respondents first completed general Likert-scale assessments of economic preferences and expectations, including risk tolerance (see Dohmen et al., 2011) and macroeconomic expectations regarding inflation and economic growth over the next twelve months. Presenting broad economic questions first helps limit experimenter-demand effects (see, e.g., List & Gallet, 2001; Stantcheva, 2023). The second survey section focused on SRI behavior, perceptions and preferences. Before eliciting these, we provided a concise definition of United Nations’ Principles for Responsible Investing to ensure a shared understanding. Respondents then reported whether they currently own SRI assets, allowing us to compute a SRI ownership dummy.³ Subsequently, we elicited our key dependent variable SRI PREFERENCE and our robustness measures RETURN-IMPACT TRADEOFF and RISK-IMPACT TRADEOFF. We also measured respondents’ perceptions about SRI impact, their relative return and risk expectations for SRI versus traditional investments, and their greenwashing concerns—key perceptual drivers of SRI highlighted in prior research (Degryse et al., 2023; Giglio et al., 2025). The final section collected individual characteristics. Altruism was elicited on a Likert scale. Participants also indicated which events related to ESG issues-like floods or unemployment-they have personally experienced. Along with SRC PREFERENCE, these items were placed in the last survey section to reduce the risk of socially desirable answer tilts early in the survey. Respondents also reported their self-assessed SRI literacy. Figure 1 summarizes the survey structure.

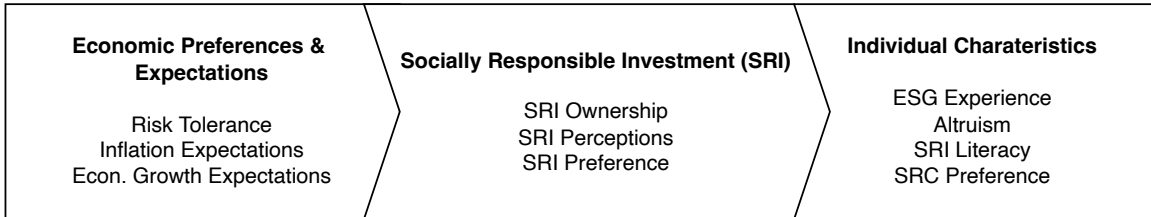


Figure 1: Survey Structure

2.2 Survey Sample

We invited 50,000 randomly selected retail banking clients by email to participate in the online survey in June 2024. To focus on individuals who are actively accumulating financial assets over the life cycle, survey invitations were

³ Although the bank provided administrative data, we could not observe SRI positions held on external platforms.

restricted to clients aged 18 to 65 (see, e.g., Cocco et al., 2005). A total of 1,080 clients (2.16%) completed the survey, with a median completion time of 12 minutes. Survey responses were linked to administrative data covering age, gender, and savings balances. An additional 574 clients (34.7%) started but did not complete the survey.

Despite this relatively high attrition rate, differences in demographics across the sample of invited clients, complete and incomplete responses were limited, as balance checks in Table 1 show. We considered absolute Standardized Mean Difference (SMD) scores below 0.1 to indicate balance across the different client pools. Regarding incomplete responses, only age and the proportion of investors slightly exceeded this threshold, suggesting that dropouts were marginally older and somewhat less likely to hold investment products than the full sample of invited clients. Importantly, none of the standardized mean differences in the sample of respondents exceeded 0.1, suggesting that these were observably similar to the underlying client population. Moreover, survey respondents broadly resembled the French population in terms of age and gender. The share of female respondents (53.8%) is slightly above the national proportion of women (51%), and respondents are somewhat younger than the national average age of 48 years (European Social Survey, 2024; INSEE, 2025b).

Table 1: Survey Balancing Checks. Columns (2)–(4) report variable means for completed responses, incomplete responses, and the invited clients sample. Female is a dummy variable indicating whether the client registered as female. Age is measured in years. Savings amount corresponds to the average value of client savings (including investments) over the last twelve months in thousands of euros. Investor denotes the share of clients with holding at least one equity or debt investment at the time of the survey. Column (5) reports the standardized mean differences (SMDs) of the sample of complete responses and invited clients. Column (6) reports the SMDs of the sample of incomplete responses and invited clients.

Variable	Completed	Incomplete	Invited Clients	Standardized Mean Difference	
				Comp. – Invited	Incomp. – Invited
FEMALE	0.54	0.52	0.53	0.02	−0.03
AGE	45.01	47.16	45.75	−0.06	0.11
SAVINGS AMOUNT	28.05	19.96	25.24	0.04	−0.09
INVESTOR	0.08	0.04	0.07	0.05	−0.10
N	1,080	574	50,000		

Prior to analysis, we applied preregistered respondent exclusions of the top and bottom 2.5% of respondents based on survey completion time, reducing the sample from 1,080 to 1,021 participants. Participants answering considerably slowly or quickly may have lacked sufficient attention to read and understand the questions, which typically generates noise in elicited preferences and perceptions. In absolute terms, these criteria led to the exclusion of respondents taking more than 43.5 minutes or fewer than 40 seconds to complete the survey. For respondents that answered “Do not know” on Likert scale measures, we imputed variable medians to preserve statistical power.⁴

Table A1 reports summary statistics for the final sample of 1,021 respondents. Except where noted, the survey measures are Likert items on a 1–10 scale. SRI PREFERENCE, the share of a hypothetical endowment allocated to sustainable funds (0–1), is centered near the middle of its range (mean 0.51, median 0.50) and roughly symmetric, implying an even split on average between traditional and sustainable funds. SRC PREFERENCE is moderate (median 6). Respondents broadly agreed that SRI generates positive environmental or societal impact (IMPACT BELIEF median 7), yet greenwashing concerns were also prevalent (median 6). Relative return and risk expectations for SRI sat close to neutral (SRI HIGHER RETURN EXPECT and SRI LOWER RISK EXPECT medians of 5), so respondents did not, as a group, expect SRI to outperform conventional investments. SRI LITERACY is low (median 3), pointing to limited perceived knowledge, while two-thirds of respondents reported having faced at least one environmental or

⁴ In our sample, 63.5% of respondents provided at least one “Do not know” response. Results are not sensitive to how these are handled: mean imputation leaves all survey results unchanged, and complete-case analysis preserves the main result and the return-impact and donation-choice checks (though not the risk-impact check, where SRC PREFERENCE loses statistical significance).

social issue (EXPERIENCED ESG ISSUE, a 0/1 indicator). ALTRUISM is dispersed (median 5) and respondents are moderately risk-averse (RISK AVERSION median 6). In conjoint tasks, respondents were more willing to trade off return than risk for environmental impact (RETURN-IMPACT TRADEOFF 3.2 vs. RISK-IMPACT TRADEOFF 2.7, both on a 1–5 scale). 54% of the sample identified as female and the median age of participants was 46.

2.3 Survey Results

We first present a descriptive mapping of the characteristics associated with stronger SRI preferences. We compared participants with above-median SRI preference (hypothetical SRI fund allocations >50%) to those allocating 50% or less, and computed standardized mean differences (Cohen’s d) across key survey measures and administrative characteristics. Figure 2 ranks these differences from strongest positive to strongest negative association with high SRI allocations.⁵

Two patterns stood out. First, financial expectations played a central role. Higher long-run SRI return expectations exhibited the largest association with SRI allocations ($d = 0.7$, $p < 0.001$), while lower perceived long-term SRI risk also displayed a sizeable, though smaller, association ($d = 0.5$, $p < 0.001$), suggesting that financial characteristics are key correlates of sustainable investment demand. Second, sustainability preferences and beliefs are strongly aligned across domains. SRC preference shows a sizable positive association with SRI allocation ($d = 0.52$, $p < 0.001$), closely followed by SRI impact beliefs ($d = 0.51$, $p < 0.001$). This descriptive pattern is consistent with positive cross-domain alignment: individuals willing to incur private costs in consumption for environmental objectives also tend to allocate more capital toward sustainable investments. In addition, altruism ($d = 0.41$, $p < 0.001$) and SRI literacy ($d = 0.4$, $p < 0.001$) are positively associated with higher SRI shares, indicating that both pro-social orientation and financial understanding matter. ESG experience shows a small but statistically significant association with high-SRI allocation ($d = 0.14$, $p < 0.05$). By contrast, demographic and macroeconomic variables display comparatively small differences. Differences in female gender ($d = 0.12$, $p = 0.068$), greenwashing beliefs ($d = 0.08$, $p = 0.233$), inflation expectations ($d = 0.02$, $p = 0.869$), age ($d = -0.05$, $p = 0.435$) and savings ($d = -0.07$, $p = 0.275$) are not statistically significant. Risk aversion is negatively associated with SRI preference ($d = -0.17$, $p < 0.05$). Overall, the descriptive evidence suggests that sustainable investment preferences are more strongly associated with return expectations and cross-domain sustainability preferences than with demographics or general macroeconomic beliefs.

The dominance of financial return expectations in the descriptive mapping raised a critical question: Is the observed SRC–SRI relationship mostly explained by SRI return and risk expectations, or does it indicate an independent cross-domain sustainability preference once these financial beliefs are accounted for? To isolate the relationship, we conducted fractional response logistic regression analyses of SRI preference, a fractional outcome bounded between 0 and 1, for which such models are more appropriate than linear OLS specifications.⁶ Table 2 reports the results with coefficients expressed as average marginal effects.⁷ Model 1 indicated a strong positive association between sustainable consumption and SRI preferences ($p < 0.001$). Model 2 added SRI and ESG measures—perceived impact, expected returns, risk expectations, greenwashing concerns, SRI literacy, and ESG experience. Although the marginal effect of SRC PREFERENCE decreased substantially, it remained statistically significant at 0.1%. Model 3 further controlled for social preferences, risk preferences, gender, age, and log total savings. Across all specifications, sustainable consumption preference consistently related to higher SRI allocation. These findings indicate a positive cross-domain association between stated sustainable consumption and sustainable investment preferences. In addition to SRC, beliefs about SRI impact as well as relative risk and return expectations emerged as significant drivers of sustainable investment. These findings highlight the role of both belief-based channels and preference heterogeneity in shaping SRI demand, consistent with recent evidence on multidimensional

⁵ Using an alternative cutoff, splitting at the sample mean rather than the median, produces same results.

⁶ Consistent results are reported using OLS in Table A2 in the Appendix.

⁷ The variance inflation factors (VIFs) of independent variables in all regression analyses in this paper were consistently below 3.

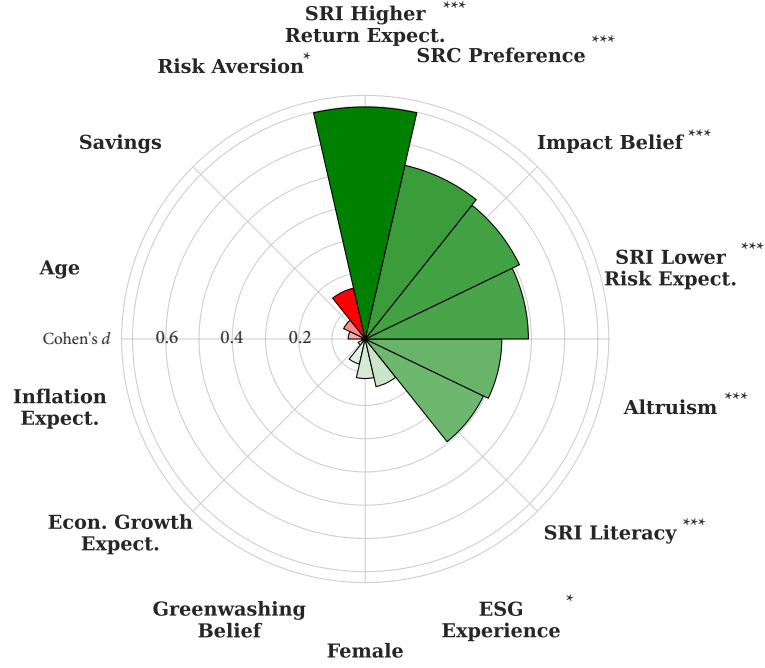


Figure 2: Standardized Mean Differences (Cohen's d) between low (0-0.5) and high (0.6-1) SRI preference (hypothetical SRI allocation proportions). Positive mean differences are indicated in green, negative differences are in red. Asterisks indicate statistical significance in independent-samples t -tests (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$).

SRI motives (e.g., Giglio et al., 2025). Finally, higher self-assessed sustainable finance literacy is associated with stronger SRI preferences, in line with prior work on the importance of financial knowledge for sustainability-oriented choices (e.g., Filippini et al., 2024).

Because our main survey relationship links two self-reported measures, it may be affected by common-method variance or social desirability bias. To address this, we re-estimated the relationship using alternative SRI and SRC proxies, including choice-based and incentive-compatible measures. First, we tested how SRC predicted individual willingness to trade off financial characteristics for environmental impact. These tasks held return and impact beliefs constant by design and therefore provided a cleaner test of preference-driven trade-offs. In ordinal logistic regressions reported in Table A3, SRC PREFERENCE significantly increased respondents' willingness to sacrifice return for impact (Model 1) and, to a lesser extent, their willingness to take on additional risk for impact (Model 2). Second, we employed respondents' donation-versus-voucher choice as an alternative and incentive-compatible proxy for sustainable consumption, following Brunen and Laubach (2022). Choosing a donation over a monetary voucher reveals a preference for social benefits over private consumption. Fractional response regression results in Table A4 show that donation choice was associated with a statistically significant increase in SRI allocation across all model specifications. In Model 3, including the complete set of control variables, choosing a donation corresponded to a 9.71 percentage-point higher SRI allocation. Taken together, stated preferences for sustainable consumption and investment are positively associated, not substitutes. This is inconsistent with a moral-compensation account, in which doing good in one domain licenses socially irresponsible behavior in another.

Table 2: Fractional response logistic regression results of SRI preference on SRC preference. SRI PREFERENCE is measured by the proportion of a hypothetical 10,000 euros endowment allocated to SRI. SRC PREFERENCE is a Likert-scale assessment of one’s own willingness to pay more for environmentally-friendly goods on a scale from 1 to 10. IMPACT BELIEF, GREENWASHING BELIEF, SRI HIGHER RETURN EXPECT, SRI LOWER RISK EXPECT are Likert-scale assessments on a scale from 1 to 10. SRI LITERACY is self-assessed on a scale from 1 to 10. EXPERIENCED ESG ISSUE is a dummy variable that equals 1 if the respondent has faced at least one environmental or social issue. Controls in Model 3 comprised self-reported altruism, self-reported risk aversion, female, age, and log total savings. Coefficients represent average marginal effects. Heteroskedasticity-robust (HC3) standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$.

	Dependent variable: SRI PREFERENCE		
	(1)	(2)	(3)
SRC PREFERENCE	0.0323*** (0.0035)	0.0203*** (0.0036)	0.0190*** (0.0039)
IMPACT BELIEF		0.0114** (0.0041)	0.0109** (0.0041)
SRI HIGHER RETURN EXPECT		0.0274*** (0.0045)	0.0265*** (0.0046)
SRI LOWER RISK EXPECT		0.0155*** (0.0045)	0.0152*** (0.0046)
GREENWASHING BELIEF		−0.0040 (0.0040)	−0.0045 (0.0040)
SRI LITERACY		0.0111*** (0.0038)	0.0113** (0.0041)
EXPERIENCED ESG ISSUE		0.0138 (0.0152)	0.0147 (0.0151)
Controls	No	No	Yes
N	1,021	1,021	1,021

3 Administrative Data

3.1 SRI and SRC Identification

We measured sustainability exposure using a transparent keyword-matching procedure applied to product names (investments) and merchant labels (consumption). This approach reflected the informational environment faced by retail clients, who primarily observe and react to salient labels rather than underlying sustainability scores. A substantial literature documented that name-based signals can materially influence economic behavior (Cooper et al., 2001). French regulation requires that sustainability-related terminology used in fund names corresponds to verifiable characteristics (AMF, 2023), limiting the scope for purely cosmetic labeling.

SRI. For investments, we classified each asset holding as sustainable if its name (as of March 2025) contained at least one keyword from a predefined list. The list included both generic sustainability terms (e.g., “Sustainable”, “Impact”) and domain-specific expressions (e.g., “Net Zero”, “Fair”), identified based on regulatory guidance and common marketing practices in sustainable finance. Potential “greenwashing” of fund names could raise concerns about false-positive SRI identification. Yet, the revised taxonomy for sustainable economic activities by the European Union severely limits regulatory leeway (European Commission, 2023). The full list of SRI keywords is provided in Subsection C.1. To reduce false positives—such as coincidental naming collisions—we manually reviewed the most frequently occurring keywords matches and reclassified any such cases as non-sustainable investments.⁸ For each individual, we define:

⁸ For instance, we did not classify Robeco—an asset manager without sustainability focus—as sustainable.

$$\text{SRI PROPORTION} = \frac{\text{Total Sustainable Investment Amount}}{\text{Total Investment Amount}} \quad (1)$$

Prior research has primarily relied on ESG ratings or SFDR classifications to identify sustainable investments. ESG ratings, however, exhibit substantial heterogeneity and often lack transparency and comprehensiveness (Berg et al., 2022). Importantly, evidence from French retail investors shows that a single aggregate ESG score is poorly aligned with individual sustainability preferences: investors display strong heterogeneity across environmental, social, and governance dimensions, implying that standard ESG ratings convey limited and potentially misleading information at the individual level (Assaf et al., 2024). SFDR classifications provide a more standardized framework, but underlie a complex set of criteria that may be difficult to understand for retail investors (ESMA, 2023). By contrast, sustainability-related terms included directly in fund or company names provide simple, salient and easily observable signals. Nevertheless, we conducted additional analyses using the proportion of SFDR Article 9 fund holdings as well as value-weighted portfolio ESG risk scores as alternative proxies for sustainable investment.

To assess the validity of the keywords-based SRI classification, Table A5 reports descriptive statistics and Table A6 reports pairwise Spearman correlations across the four portfolio sustainability measures at the client level. On average, only 0.7% of client fund portfolios are allocated to Article 9 funds, compared to 65.3% to Article 8 and 34.0% to Article 6 funds, reflecting the still-limited supply of products with explicit sustainability objectives. The keywords-based SRI proportion correlates positively with Article 9 proportion ($\rho = 0.131$), only weakly with Article 8 proportion ($\rho = 0.023$), and negatively with article 6 proportion ($\rho = -0.042$)—that is, the correlation is most positive for the strictest tier (Article 9) and turns negative for the least sustainable tier (Article 6), consistent with the regulatory ranking. As expected, it is also negatively correlated with portfolio ESG risk scores ($\rho = -0.205$) as higher risk scores denote lower sustainability.⁹

SRC. A merchant label is attached to each card payment in our data. This enabled us to apply the same keyword-matching approach to identify sustainable consumption. The list of SRC keywords partially overlaps with SRI keywords but additionally contains distinct elements, such as the names of public transport companies or foundations. Subsection C.2 reports the full list of SRC keywords. For aggregating expenditures on the client-month level, we computed:

$$\text{SRC PROPORTION} = \frac{\text{Total Sustainable Consumption Amount}}{\text{Total Consumption Amount}} \quad (2)$$

Prior consumption research relies predominantly on merchant classifier codes (MCCs) for examining spending patterns (e.g., Jørring, 2024). While these codes do exist in our database, we believe that the current merchant classification does not allow to distinguish sustainability dimensions accurately. For instance, organic supermarkets in our dataset were classified under a general supermarkets category, rendering these indistinguishable.

Our SRC PROPORTION measure captures meaningful variation in sustainability-oriented spending, as confirmed by linking the administrative data to survey respondents. Figure A2 shows that individuals with higher stated willingness to pay for environmentally friendly products spend a significantly larger share of their consumption on sustainable goods and services. An analogous validation for sustainable investment is not feasible: among the 1,080 survey respondents (see Table 1), only approximately 87 hold at least one equity or debt investment product at the bank (8.1% of the survey sample), leaving too few active investors for reliable inference.

⁹ We restrict the SFDR sustainable measure to Article 9 rather than pooling it with Article 8, because the two tiers embody markedly different commitments: Article 8 funds merely incorporate environmental or social characteristics—a bar met by most portfolios in our sample—whereas Article 9 funds must pursue sustainable investment as their objective and report progress against it. Pooling the two would dilute the stringent Article 9 signal. The near-zero keyword–Article 8 correlation reported above, against a positive keyword–Article 9 correlation, confirms that the two tiers behave differently and should not be treated as one.

3.2 Administrative Data Sample

We constructed a monthly panel of clients’ investment holdings and card transactions covering March 2022 to February 2025. Relative to cross-sectional survey data, this panel substantially mitigated the influence of transient market conditions that can bias stated preferences or reported behaviors. Moreover, this setup allowed to capture seasonal patterns in consumption, such as holiday-related spending cycles and short-term liquidity adjustments (see, e.g., INSEE, 2025a; Parker, 1999). The thirty-six-month horizon spans markedly different macro-financial environments: Gross annual returns on the French large-cap index CAC40 over this period were -6.88% in 2022, $+19.9\%$ in 2023, and $+0.68\%$ in 2024.

Prior to analyzing how individual sustainable investment and consumption co-evolved, we restricted our analysis to active clients with both consumption and investment records. From an initial sample of 313,009 retail investors aged between 18 and 65 years¹⁰, we excluded clients with monthly checkings account inflows below 1,400 euros—the mandatory French minimum wage in 2022—discarding 185,501 clients (59%). We also excluded clients with on average less than five card-based transactions per month, removing 111,848 clients (36%). The final sample comprised 15,660 clients and 407,052 observations.

Table 3: Administrative Data Summary Statistics. The table presents monthly distributions for key savings, investment and consumption variables and socio-demographic characteristics. SRI PROPORTION is the value-weighted proportion of individual investments classified as sustainable using a keywords identification method (0-1). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). SAVINGS AMOUNT is the total amount clients hold in savings products, including investments, in thousands of euros. INVESTMENT AMOUNT spans direct holdings of stocks, bonds, exchange-traded and mutual funds in thousands of euros. Consumption Expenditure (CONSUMPTION EXP.) is the sum of monthly card debits in thousands of euros. CASH WITHDRAWALS is the total amount of monthly cash withdrawals in thousands of euros, identified via keywords. FEMALE is coded 1 if the respondent registered as a female client (0 otherwise) and AGE is measured in years. All monetary variables are expressed in euros and were winsorized at the 99th percentile.

Variable	Mean	Std. Dev.	Min	p25	Median	p75	Max
SRI PROPORTION	0.082	0.202	0.000	0.000	0.000	0.039	1.000
SRC PROPORTION	0.024	0.063	0.000	0.000	0.000	0.018	1.000
SAVINGS AMOUNT	108.462	165.265	0.328	14.816	49.504	128.179	1028.189
INVESTMENT AMOUNT	16.392	36.058	0.009	0.473	4.093	14.425	239.341
CONSUMPTION EXP.	2.093	1.775	0.059	0.917	1.599	2.691	9.835
CASH WITHDRAWALS	0.195	0.458	0.000	0.000	0.040	0.200	27.800
FEMALE	0.388	0.487	0.000	0.000	0.000	1.000	1.000
AGE	50.666	11.011	18.000	44.000	53.000	60.000	65.000

Table 3 presents summary statistics of key panel sample variables. On average, clients’ sustainable investments made up 8.2% of their total portfolios, and at least half of all clients did not hold any SRI (median = 0). Likewise, less than 50% of all clients consumed identified sustainable products or services in our sample. Converting the table means to percentages, investments appeared on average relatively low compared to total savings, with 15.2%. Consumption from card transactions represented around 16.6% of total monthly checkings account inflows. Cash withdrawals were only 13% of monthly consumption, indicating that our SRC measure captures a vast majority of clients’ spending patterns. When it comes to demographics, clients in the administrative sample were somewhat older on average (51 years) and had a lower share of women (39%) than in the survey sample (45 years and 54% women, respectively).

¹⁰ We restricted our analysis to clients in the accumulation period of their portfolio life-cycle (Cocco et al., 2005).

3.3 Administrative Data Analyses

To examine how sustainability preferences span across domains in realized behavior, we begin by aggregating the panel data to the individual level. This approach captures persistent differences in sustainable consumption and investment, which are central to our research question. The time-series patterns in [Figure A1](#) indicate that both SRC and SRI proportions vary only modestly over the sample period, suggesting that individual behavior is relatively stable. Nevertheless, to assess whether short-run adjustments in consumption translate into portfolio reallocation, we complement our main cross-sectional analysis with panel regressions.

[Figure A3](#) plots the joint distribution of individual-level averages of SRC PROPORTION and SRI PROPORTION, capturing the *between*-individual relationship. In the full sample (Panel a), a pronounced horizontal density ridge reflects the large share of clients with persistently zero or very low exposure to sustainable investments. Beyond this mass at the extensive margin, the distribution is relatively diffuse. While the absence of clustering in the upper-left or lower-right quadrants provides no indication of systematic substitution, the overall upward sorting across domains appears moderate rather than pronounced. Restricting attention to the intensive margin (Panel b) removes the mass at zero, yet the remaining distribution remains broadly dispersed, suggesting that any cross-domain alignment among active investors is not visually strong.

The hexbin representation with logarithmic color scaling improves readability in the presence of large mass points and skewed densities. However, binning and the concentration of observations near zero may obscure weak cross-domain patterns that a regression framework can still detect and test for statistical significance. Hence, we turn to econometric analysis to quantify the relationship between sustainable consumption and investment more precisely.

We estimate fractional response regressions of average SRI PROPORTION on average SRC PROPORTION. [Table 4](#) reports the results. In Model (1), sustainable consumption is positively associated with sustainable investment: a 10 percentage-point increase in SRC PROPORTION corresponds to a 0.9 percentage-point increase in SRI PROPORTION. However, this relationship becomes statistically non-significant once we control for individual characteristics in Model (2), including age, gender, savings, and portfolio risk exposure.¹¹ The attenuation indicates that the association between SRC and SRI is largely driven by observable individual characteristics rather than by consumption behavior itself. In particular, individuals with stronger SRI orientation differ systematically in age and wealth: older investors hold less sustainable portfolios on average, while higher savings are associated with greater sustainable investment exposure.

While the preceding analysis focuses on cross-sectional differences across individuals, we also examine within-individual dynamics in dynamic fixed-effects panel regression analyses in [Table 5](#). The absence of a statistically significant within-individual relationship indicates that short-run changes in sustainable consumption do not coincide with changes in portfolio sustainability. Together, these findings suggest that individual sustainable investment does not crowd out sustainable consumption.

¹¹ These results are maintained in the full panel of investor-month combinations ([Table A7](#)). Similarly, [Table A8](#) shows that the absence of an association persists when restricting the sample to investors holding at least two or three assets on average over the sample period.

Table 4: Fractional response logistic regression results of the client's average SRI PROPORTION on average SRC PROPORTION. SRI PROPORTION is the mean value-weighted proportion of individual investments classified as sustainable using a keywords identification method (0-1). SRC PROPORTION is the mean value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Model (2) controls for AGE, FEMALE, LOG(SAVINGS) and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Heteroskedasticity-robust (HC3) standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)	
	(1)	(2)
SRC PROPORTION	0.0907** (0.0317)	0.0250 (0.0347)
FEMALE		0.0026 (0.0033)
AGE		-0.0014*** (0.0001)
LOG(SAVINGS)		0.0038*** (0.0009)
INVESTMENT PROPORTION		0.0056 (0.0030)
Equivalence test p -value SRC PROPORTION		0.000
N Investors	15,660	15,660

Table 5: Twoway fixed effects panel regression results of SRI PROPORTION on SRC PROPORTION. SRI PROPORTION is the value-weighted proportion of individual investments classified as sustainable using a keywords identification method (0-1). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Coefficients represent marginal effects. Standard errors, clustered at the individual level, in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)		
	(1)	(2)	(3)
SRC PROPORTION	0.0000 (0.0027)	0.0004 (0.0014)	0.0005 (0.0014)
SRI PROPORTION $t-1$		0.7058*** (0.0169)	0.7058*** (0.0169)
LOG(SAVINGS)			-0.0002 (0.0004)
INVESTMENT PROPORTION			0.0000 (0.0000)
Equivalence test p -value SRC PROPORTION	0.000	0.000	0.000
Month-Year FE	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes
Overall R^2	0.000	0.8890	0.8863
Observations	391,392	391,392	391,392
N Investors	15,367	15,367	15,367

We further examine whether the absence of a robust cross-sectional relationship can be attributed to structural constraints. One potential explanation is that sustainable investing is inhibited among sustainability-oriented individuals with limited financial capacity, who may face barriers to entering sustainable investment markets. However, interacting SRC PROPORTION with savings does not yield a statistically significant effect (Table A9 in the Appendix), suggesting that financial capacity does not systematically moderate the relationship.

A second concern is that opportunities for sustainable consumption vary geographically. Individuals in rural areas may face limited access to sustainable products, attenuating measured SRC. Yet, interacting SRC PROPORTION with an urban indicator yields no significant effect (Table A10), indicating that the SRC—SRI relationship does not differ between urban and non-urban clients.¹²

Given the substantial mass of zero observations, we next distinguish between the extensive and intensive margins of sustainable investment. At the extensive margin, we analyze the participation decision (SRI PROPORTION > 0), while at the intensive margin, we examine portfolio allocation conditional on participation. The results in Table A11 show that the positive unconditional association between SRC and SRI participation disappears once controls are included. Similarly, no significant relationship emerges at the intensive margin.

Interestingly, the determinants of participation and allocation differ markedly. Female investors are less likely to participate in SRI, but conditional on participation, they allocate a larger share of their portfolio to sustainable assets. Likewise, higher savings and greater exposure to risky assets increase the likelihood of SRI participation but are associated with lower conditional SRI shares. These patterns suggest that entry into sustainable investing and allocation within sustainable portfolios are governed by distinct mechanisms, reinforcing the importance of separating extensive and intensive margins when studying retail SRI behavior. At neither margin do we find evidence that sustainable consumption crowds out sustainable investment.

3.3.1 Alternative SRI Definitions

A potential concern with our baseline specification is that the keyword-based identification of sustainable investments may imperfectly capture the underlying sustainability of portfolio holdings. While this approach reflects the salient information set available to retail investors, it may be sensitive to labeling conventions and could misclassify assets that are marketed as sustainable without corresponding characteristics. To address this concern, we assess the robustness of our results using disclosure-based measures of investment sustainability that are independent of fund naming practices. First, we substituted the value-weighted share of individual portfolio holdings classified under Article 9 of the EU Sustainable Finance Disclosure Regulation (SFDR). Article 9 (“dark green”) funds pursue measurable sustainability objectives and are mandated to report progress toward these objectives periodically. This classification provides a regulatory benchmark that is conceptually stricter and less dependent on marketing terminology.¹³ Model (2) in Table A12 shows a positive and statistically significant between-individual association: a 10 percentage-point increase in sustainable consumption share is associated with a 0.393 percentage-point increase in Article 9 fund exposure. We interpret this cautiously. Table A5 shows that Article 9 holdings are rare in our sample (mean 0.7%, median 0), so the estimate is identified from the minority of clients with positive exposure.¹⁴ Second, we used Morningstar Sustainalytics ESG Risk Scores, a widely used metric in empirical finance research (e.g., Ceccarelli et al., 2024). Scores range from 0 to 100, with lower values indicating lower exposure to environmental, social, and governance risks. We computed each investor’s value-weighted average ESG Risk Score across portfolio holdings and normalized the variable to the unit interval to facilitate comparability with our main analyses. The results reported in Table A12 show no statistically significant associations between individual sustainable consumption and portfolio ESG risk exposure. This divergence is informative. Unlike Article

¹² We matched postal area codes in our data with urban unit data by the French research institute INSEE to define a dummy variable indicating whether an investor lives in a city of at least 100,000 inhabitants. See [Urban Unit Database](#) for details.

¹³ According to Morningstar, 1,031 funds (3.1%) are classified as Article 9 funds (Morningstar, 2025).

¹⁴ The result is not an artifact of the smaller sample of fund investors: rerunning our main specification on this sample yields results that closely mirror those of the main analysis (Table A14).

9 classifications, ESG risk scores represent composite and model-based assessments that are less directly observable and less salient to retail investors.¹⁵

Taken together, the robustness checks reinforce two conclusions. First, sustainable consumption does not crowd out sustainable investment under any of the alternative sustainability definitions. Second, the only positive cross-domain association we detect arises for Article 9 holdings; we regard it as suggestive rather than as an established finding.

3.3.2 Consumption Categories

The absence of a robust relationship between aggregate sustainable consumption and sustainable investment behavior may mask heterogeneous effects across consumption domains. Different categories of expenditures vary in their environmental and social salience, as well as in the degree to which they reflect discretionary versus constraint-driven behavior. Disaggregating consumption therefore provides a more granular view of how sustainable consumption and investment relate across domains. In particular, it allows us to examine whether individuals engage in domain-specific moral compensation—for instance, offsetting carbon-intensive consumption through sustainable investment (cf. Famulok et al., 2024)—or whether sustainability preferences operate consistently across domains.

To this end, we decompose monthly consumption into finer categories and identify four sustainable and three unsustainable categories based on transaction-level keyword matching.¹⁶ We classify three categories as sustainability-oriented: *Donations* (charitable giving), *Green Mobility* (public transport and bicycle-related expenditures), and *Circular Economy* (reuse and repair activities). We further consider *E-Commerce* (online retail purchases) as an ambiguous domain, given its potentially opposing sustainability implications through logistics efficiency and increased material throughput (Kim et al., 2022; Weideli, 2013). Finally, we identify three categories that are commonly associated with environmental or social concerns: *Energy Consumption* (household energy expenditures), *Brown Mobility* (private transport and air travel), and *Fast Economy* (fast food and fast fashion spending). Consistent with our main analysis, we first calculate monthly spending proportions of each category and subsequently aggregate these on the individual level.

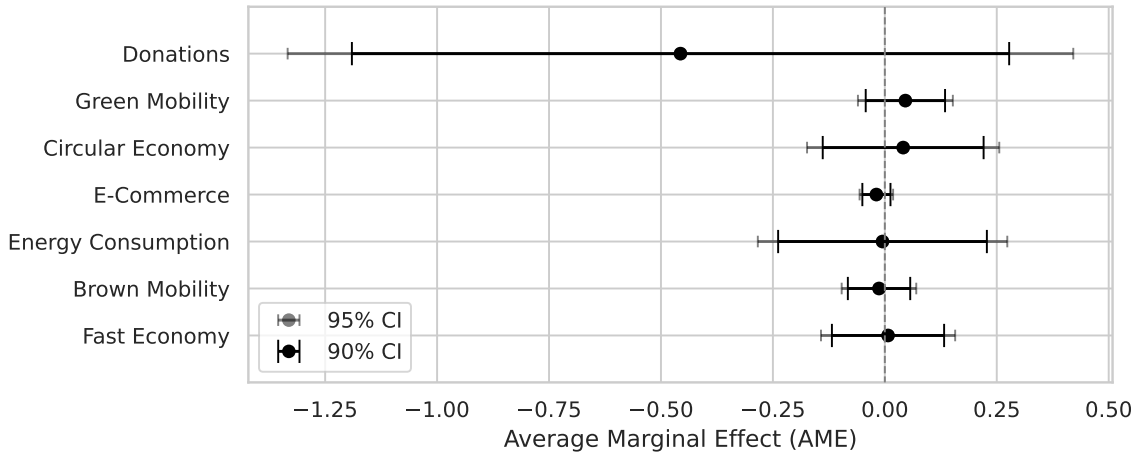


Figure 3: Consumption categories and SRI PROPORTION. Average marginal effect estimates of fractional response logistic regressions controlling for FEMALE, AGE, LOG(SAVINGS) and INVESTMENT PROPORTION. Average marginal effects confidence intervals beyond zero indicate statistical significance. Error bars span the 90% and 95% confidence intervals around the estimate. Table A13 Model (2) presents the corresponding regression results.

¹⁵ We also re-estimate the baseline keywords-based SRI specification on the ESG risk score subsamples, which yielded the same pattern as the full sample—positive before controls, non-significant after (Table A15).

¹⁶ Subsection C.3 presents the keywords for each category.

Figure 3 illustrates the fractional response regression coefficients and associated 90% and 95% confidence intervals, and Table A13 reports the full results in table format. In the baseline specification, green mobility expenditures are positively associated with sustainable investment, consistent with cross-domain alignment. At the same time, fast-economy spending also exhibits a positive correlation, which could be interpreted as suggestive of moral compensation. However, neither of these patterns are robust. Once we control for demographic and financial characteristics, none of the category-specific coefficients remain statistically significant.

Taken together, the disaggregated analysis reinforces the main finding: cross-domain sustainability does not operate through systematic substitution between consumption and investment. Instead, the absence of robust category-level effects suggests that the link between SRC and SRI is not driven by specific behavioral channels but reflects broader individual heterogeneity. At the same time, the lack of strong associations across categories may indicate that many consumption choices—particularly in domains such as energy or mobility—are partly constrained and therefore only imperfectly capture underlying sustainability preferences.

4 Discussion & Conclusion

We examined whether individual efforts in socially responsible investing (SRI) and socially responsible consumption (SRC) crowd out each other. Using survey responses from 1,021 retail banking clients and administrative banking records covering more than 15,000 clients over a three-year period, we found no evidence of economically meaningful crowding-out between sustainable consumption and sustainable investment behavior. In survey data, stated SRI and SRC preferences align after controlling for a wide range of behavioral SRI determinants including expectations, perceptions, preferences and literacy. In administrative data, no measure of sustainable investment shows crowding-out with sustainable consumption. For the baseline keyword-based measure, associations are non-significant after controlling for investor gender, age, savings, and proportion of investment, and statistical equivalence tests allow us to reject negative associations more extreme than a Cohen’s d of -0.1 . ESG risk scores likewise display no systematic relationship with sustainable consumption. The only positive association arises for SFDR Article 9 holdings; given how rare these holdings are in our sample, we treat it as suggestive rather than as an established finding.

Additional analyses reinforce this pattern. No SRI-SRC crowding-out emerges when accounting for geographical ease of SRC access, savings levels, or portfolio concentration. Similarly, the extensive-margin and intensive-margin decompositions do not provide any evidence that sustainable consumption relates with either participation in sustainable investing or the share of portfolios allocated to sustainable assets. Panel fixed-effects estimates also show no meaningful within-individual relationship between changes in sustainable consumption and changes in sustainable investment behavior over time. Finally, we explore whether the relationship differs across consumption domains, including donations, green mobility, circular economy, brown mobility, energy, fast economy, and e-commerce expenditures, but do not find evidence of significant relationships across these categories.

While our keywords-based analysis aligns with SRI identification strategies in prior studies (e.g., Andersen et al., 2023), the null results of our main analysis should be interpreted with caution. Keywords approaches remain conservative and may under-identify sustainable behaviors. For instance, we are not able to identify sustainable product purchases at conventional supermarkets. As a result, potential measurement error may attenuate smaller underlying relationships between SRI and SRC. Nevertheless, our SRC measure appears to capture meaningful variation in sustainability-oriented consumption behavior, as reflected in its positive association with stated SRC preferences (see Subsection 3.1).

To address the limitations of our keywords identification approach, we consider ESG metrics and regulatory investment sustainability classifications as alternative SRI proxies. The positive association we observe for SFDR Article 9 funds—which we read as suggestive given the small share of clients holding such funds—is consistent with sustainability preferences translating into investment behavior more readily when products carry clear, pre-existing, and easily recognizable sustainability characteristics. This interpretation is consistent with recent evidence from

Allcott et al. (2026), who show that Article 9 funds already received higher inflows than Article 6 funds prior to the implementation of the SFDR, indicating that investors were able to identify these funds as sustainable. By contrast, the absence of systematic relationships using ESG risk scores may reflect the broader difficulty of interpreting and aggregating ESG information consistently. Berg et al. (2022) show that ESG ratings diverge substantially across providers because of differences in scope, measurement, and weighting methodologies, with correlations across major ESG ratings often remaining relatively low. Their evidence suggests that ESG metrics may capture heterogeneous and sometimes inconsistent dimensions of sustainability, making them less transparent and potentially less salient for retail investors. A similar interpretation may also help explain why our keyword-based SRI classifications lose significance once demographic, wealth, and portfolio controls are introduced. While this keywords approach capture both funds and underlying assets marketed as sustainable, this broader classification remains considerably more heterogeneous and less standardized than SFDR Article 9 classifications only for funds. As a result, the sustainability signal embedded in the keywords-based measure may become more diffuse and partly absorbed by investor characteristics. In that sense, the lack of robust associations with ESG risk scores and keyword-based classifications in our setting may not necessarily imply an absence of sustainability preferences, but rather that these broader sustainability measures are less likely to translate into clear and observable investment choices compared to Article 9 funds.

We also replicated the analysis using specific categories of consumption that may be more clearly identifiable than the SRC aggregate. The absence of a robust relationship between donation and SRI in our setting is particularly informative in light of the substitution mechanism proposed by An et al. (2023). Using data from an Australian investment platform around the introduction of a new social investment fund, they find that investors who switch into the social fund subsequently reduce charitable donations. Importantly, this reduction is concentrated in charities with objectives closer to those of the social fund, implying that sustainable investment can partially crowd out direct donations. In contrast, we do not observe robust positive or negative associations between donation and SRI. In our setting, the sustainable investment and consumption measures cover a broader set of behaviors than the direct comparison between charitable donations and a social investment fund studied by An et al. (2023). Our measures capture sustainability behavior across multiple years and several types of SRI products. As a result, investors may substitute away from donations only toward certain sustainable investments that are closely related to the donation theme, while continuing to invest in other SRI products that are less directly connected. This broader aggregation may therefore attenuate substitution effects and help explain why we do not observe a robust relationship in our setting.

A similar interpretation may apply to the remaining consumption categories. Green mobility and circular-economy expenditures represent relatively direct forms of sustainability-oriented consumption, while brown mobility, energy, and fast-economy expenditures capture domains more commonly associated with environmental or social concerns. If investors used sustainable assets to compensate for less responsible consumption, one might expect positive associations between SRI and brown mobility, energy, or fast-economy spending. Conversely, if sustainability preferences were consistently expressed across domains, one might expect positive associations between SRI and green mobility or circular economy. However, these consumption categories likely capture a broad mix of motivations and behaviors that are not necessarily directly linked to investment decisions. For example, transportation, energy, or consumption choices may reflect geography, infrastructure constraints, income, household composition, or lifestyle preferences in addition to sustainability considerations. Similarly, our SRI measures aggregate multiple types of sustainable investment products and strategies over several years. As a result, any direct substitution or complementarity mechanism may become diluted once demographic and wealth controls are included.

It is important to emphasize that all analyses in this paper are correlational and do not support causal interpretation. Our estimates establish that sustainable investment and consumption do not substitute across individuals—with a positive co-movement appearing when SRI is measured through officially classified SFDR Article 9 holdings—but several elements prevent us from attributing this alignment to a causal effect of one domain on the other. First, the cross-sectional associations are vulnerable to omitted-variable bias: unobserved

characteristics such as underlying environmental values, financial sophistication, advisor relationships, or exposure to sustainability-oriented information could jointly drive both behaviors and generate the observed correlation without any direct link between them. Our panel fixed-effects specifications absorb time-invariant individual heterogeneity of this kind, but they identify the relationship only from within-person variation, which is limited given that both SRI and SRC behaviors are highly persistent over the sample period; they therefore cannot rule out time-varying confounders. Second, the direction of any effect is not identified—stronger sustainable investment could plausibly shape consumption, consumption could shape portfolio choices, or both could respond to a common third factor—so our results speak to the joint distribution of the two behaviors rather than to a directional mechanism. Establishing causality would require exogenous variation in one domain—for example, a regulatory shock such as the staggered introduction or reclassification of SFDR-labeled products, quasi-random assignment of sustainable investment options or defaults, or advisor-driven variation in product exposure—that shifts SRI (or SRC) independently of the other. We view such designs, together with product-level consumption data, as the most promising route for future work, and we interpret our findings accordingly: as evidence on whether sustainable behaviors are aligned or substituted in observed behavior, not as estimates of a causal cross-domain spillover.

Our findings yield several implications for policy and financial practice. First, given the lack of behavioral crowding-out between SRI and SRC, policies aimed at strengthening either domain need not fear substitution effects. Second, financial institutions may effectively evaluate retail customer demand for officially classified sustainable investment products by eliciting sustainable consumption preferences or analyzing behaviors. Individuals who express pro-environmental values are often underrepresented in financial markets (Anderson & Robinson, 2022), risking insufficient long-term wealth accumulation for retirement. Offering credible and accessible SRI options could facilitate their engagement with equity-based savings, thus aligning financial inclusion and sustainability goals. Third, our results highlight the importance of belief formation and perceived knowledge: beliefs about the impact, risks, and returns of SRI, as well as self-assessed SRI literacy, were key predictors of SRI preferences. These findings underscore the responsibility of both regulators and financial providers to promote transparency and investor education (see also Filippini et al., 2024). Our results suggest that consumers who state a preference for sustainable consumption are also inclined toward sustainable investment when products carry a regulatory signal, such as SFDR Article 9 classification. This points to the role of credible product design for translating existing consumer preferences into investment behavior.

Combining survey evidence with three years of large-stakes behavioral records, this paper has found no evidence of systematic SRI-SRC crowding-out—across survey and administrative data, alternative sustainability definitions, the extensive and intensive margins, within-individual dynamics, and disaggregated consumption categories. This consistency across very different sources of variation is the central result: it favors theories in which sustainability preferences are integrated across domains rather than accounts built on financial hedging or moral licensing. Where a positive association does appear, it is for investments carrying a credible, recognizable regulatory label rather than diffuse fund names or opaque ESG risk scores—suggesting that whether sustainability preferences translate into portfolios may depend less on their strength than on whether the financial product makes them legible.

References

- Abouarab, R., Mishra, T., & Wolfe, S. (2025). Spotting portfolio greenwashing in environmental funds: R. abouarab et al. *Journal of Business Ethics*, 197(4), 811–839.
- Allcott, H., Egan, M. L., Smeets, P., & Yang, H. (2026, January). *The effects of regulating greenwashing: Evidence from europe’s sustainable finance disclosure regulation (sfdr)* (Working Paper No. 34624). National Bureau of Economic Research. <https://doi.org/10.3386/w34624>
- AMF. (2022). *Finance durable : Bien comprendre la taxonomie et le règlement sfdr pour exprimer vos préférences* [Accessed: 2026-05-05]. <https://www.amf-france.org/fr/espace-epargnants/comprendre-les-produits-financiers/finance-durable/faire-un-placement-durable/finance-durable-bien-comprendre-la-taxonomie-et-le-reglement-sfdr-pour-exprimer-vos-preferences>
- AMF. (2023, May). *Sustainable finance disclosure regulation: The amf proposes a targeted review to include minimum environmental requirements for fund names*. Autorité des Marchés Financiers (AMF). <https://www.amf-france.org/en/news-publications/news-releases/amf-news-releases/sustainable-finance-disclosure-regulation-amf-proposes-targeted-review-include-minimum-environmental>
- An, J., Briley, D., Danziger, S., & Levi, S. (2023). The impact of social investing on charitable donations. *Management Science*, 69(2), 1264–1274.
- Andersen, S., Chebotarev, D., Filali Adib, F. Z., & Nielsen, K. M. (2023). Rich and responsible: Is esg a luxury good? *Available at SSRN 4615424*.
- Anderson, A., & Robinson, D. T. (2022). Financial literacy in the age of green investment. *Review of Finance*, 26(6), 1551–1584.
- Assaf, C., Monne, J., Harriet, L., & Meunier, L. (2024). Esg investing: Does one score fit all investors’ preferences? *Journal of Cleaner Production*, 443, 141094.
- Avramov, D., Cheng, S., Lioui, A., & Tarelli, A. (2022). Sustainable investing with esg rating uncertainty. *Journal of financial economics*, 145(2), 642–664.
- Barber, B. M., Morse, A., & Yasuda, A. (2021). Impact investing. *Journal of Financial Economics*, 139(1), 162–185. <https://doi.org/10.1016/j.jfineco.2020.07.008>
- Berg, F., Kölbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of esg ratings. *Review of Finance*, 26(6), 1315–1344.
- Brunen, A.-C., & Laubach, O. (2022). Do sustainable consumers prefer socially responsible investments? a study among the users of robo advisors. *Journal of Banking & Finance*, 136, 106314.
- Ceccarelli, M., Ramelli, S., & Wagner, A. F. (2024). Low carbon mutual funds. *Review of Finance*, 28(1), 45–74.
- Chen, X., Garlappi, L., & Lazrak, A. (2023). Responsible consumption, demand elasticity, and the green premium. *Demand Elasticity, and the Green Premium (August 31, 2023)*.
- Cocco, J. F., Gomes, F. J., & Maenhout, P. J. (2005). Consumption and portfolio choice over the life cycle. *The Review of Financial Studies*, 18(2), 491–533. Retrieved November 21, 2025, from <http://www.jstor.org/stable/3598044>
- Cooper, M. J., Dimitrov, O., & Rau, P. R. (2001). A rose. com by any other name. *The journal of Finance*, 56(6), 2371–2388.
- Cooper, M. J., Gulen, H., & Rau, P. R. (2005). Changing names with style: Mutual fund name changes and their effects on fund flows. *The Journal of Finance*, 60(6), 2825–2858.

- Degryse, H., Di Giuli, A., Sekerci, N., & Stradi, F. (2023). Sustainable Investments: One for the Money, Two for the Show. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4411343>
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual risk attitudes: Measurement, determinants, and behavioral consequences. *Journal of the European Economic Association*, 9(3), 522–550. <https://doi.org/10.1111/j.1542-4774.2011.01015.x>
- Duchêne, S., Nguyen-Huu, A., Dubois, D., & Willinger, M. (2025a). Environmental framing and moral preferences in portfolio choice: Evidence from a lab-in-the-field experiment. *Available at SSRN 5700273*.
- Duchêne, S., Nguyen-Huu, A., Dubois, D., & Willinger, M. (2025b). Valuing environmental externalities under risk: Evidence from a lab-in-the-field experiment. *Available at SSRN 5722730*.
- ESMA. (2023, December). Final report on draft regulatory technical standards on the review of principal adverse impact (pai) and financial product disclosures in the sfdr delegated regulation [JC 2023 55, Joint Committee on Sustainable Finance, European Supervisory Authorities (ESAs)].
- European Commission. (2023). Commission delegated regulation (eu) 2023/2486 of 27 june 2023 supplementing regulation (eu) 2020/852 by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to environmental objectives, and amending commission delegated regulation (eu) 2021/2178 as regards specific public disclosures for those economic activities [CELEX: 32023R2486].
- European Social Survey. (2024). Ess11, edition 4.0.
- Famulok, J., Kormanyos, E., & Worring, D. (2024). Do Investors Use Sustainable Assets as Carbon Offsets? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4349209>
- Filippini, M., Leippold, M., & Wekhof, T. (2024). Sustainable finance literacy and the determinants of sustainable investing. *Journal of Banking & Finance*, 163, 107167. <https://doi.org/10.1016/j.jbankfin.2024.107167>
- Financial Times. (2021). *The whistleblower who calls esg a deadly distraction* [Accessed: 2026-06-16]. <https://www.ft.com/content/4fdc6cdf-7bd6-41bc-b376-2137521e3017>
- Gacem, S., Hervé, F., & Marsat, S. (2025). When green turns red: Is the perception of greenwashing a barrier to individual green investment? *Finance Research Letters*, 107605.
- Giglio, S., Maggiori, M., Stroebel, J., Tan, Z., Utkus, S., & Xu, X. (2025). Four facts about esg beliefs and investor portfolios. *Journal of Financial Economics*, 164, 103984.
- Giglio, S., Maggiori, M., Stroebel, J., & Utkus, S. (2021). Five facts about beliefs and portfolios. *American Economic Review*, 111(5), 1481–1522.
- Greenwood, R., & Shleifer, A. (2014). Expectations of returns and expected returns. *The Review of Financial Studies*, 27(3), 714–746.
- Gutsche, G., & Ziegler, A. (2019). Which private investors are willing to pay for sustainable investments? Empirical evidence from stated choice experiments. *Journal of Banking & Finance*, 102, 193–214. <https://doi.org/10.1016/j.jbankfin.2019.03.007>
- Hakenes, H., & Schliephake, E. (2024). Responsible investment and responsible consumption. *Available at SSRN 3846367*.
- Heeb, F., Kölbel, J. F., Ramelli, S., & Vasileva, A. (2026). Green investing and political behavior. *The Review of Financial Studies*, hhag055.
- INSEE. (2025a). *La consommation des ménages pendant les fêtes de fin d'année* (tech. rep.). <https://www.insee.fr/fr/statistiques/8388028?sommaire=8388054>

- INSEE. (2025b). Population et structure de la population.
- Jørring, A. T. (2024). Financial sophistication and consumer spending. *The Journal of Finance*, 79(6), 3773–3820.
- Kim, Y., Kang, J., & Chun, H. (2022). Is online shopping packaging waste a threat to the environment? *Economics Letters*, 214, 110398.
- List, J. A., & Gallet, C. A. (2001). What experimental protocol influence disparities between actual and hypothetical stated values? *Environmental and resource economics*, 20, 241–254.
- Merritt, A. C., Effron, D. A., & Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and personality psychology compass*, 4(5), 344–357.
- Morningstar. (2025). *Sfdr article 8 and 9 funds: Requirements, inflows, esg risks* [Accessed: 2025-11-11]. Morningstar. <https://www.morningstar.com/business/insights/blog/esg/sfdr-article-8-funds>
- Parker, J. A. (1999). The reaction of household consumption to predictable changes in social security taxes. *American Economic Review*, 89(4), 959–973. <https://doi.org/10.1257/aer.89.4.959>
- Riedl, A., & Smeets, P. (2017). Why Do Investors Hold Socially Responsible Mutual Funds?: Why Do Investors Hold Socially Responsible Mutual Funds? *The Journal of Finance*, 72(6), 2505–2550. <https://doi.org/10.1111/jofi.12547>
- Sauzet, M., & Zerbib, O. D. (2024). When green investors are green consumers. *EUROFIDAI-ESSEC*. <https://ssrn.com/abstract=4098124%20or%20http://dx.doi.org/10.2139/ssrn.4098124>
- Stantcheva, S. (2023). How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics*, 15(1), 205–234.
- Weideli, D. (2013). Environmental analysis of us online shopping mit center for transportation & logistics. <https://api.semanticscholar.org/CorpusID:2525625>

Appendices

for Online Publication

Beyond the Basket: Are Sustainable Investing and Sustainable Consumption
Substitutes?

A Tables & Figures

Table A1: Summary Statistics for the Final Survey Sample ($N = 1,021$). SRI PREFERENCE is the proportion of a hypothetical 10,000 euros endowment allocated to SRI. SRC PREFERENCE is a Likert-scale assessment of one's own willingness to pay more for environmentally-friendly goods. Likewise, IMPACT BELIEF, SRI HIGHER RETURN EXPECT, SRI LOWER RISK EXPECT and GREENWASHING BELIEF, are Likert-scale assessments. SRI LITERACY is self-assessed on a scale from 1–10. EXPERIENCED ESG ISSUE is a dummy variable that equals 1 if the respondent has faced at least one environmental or social issue. ALTRUISM reflects social preference following Riedl and Smeets (2017). RISK AVERSION is based on the financial risk willingness item from (Dohmen et al., 2011) with inversed scores. ECONOMIC EXPECT. (INFLATION EXPECT.) measures respondent expectation of lower to higher economic growth (inflation) in the next 12 months. RETURN-IMPACT TRADEOFF (RISK-IMPACT TRADEOFF) captures respondent willingness to trade off investment return (risk) with its environmental impact. AGE is measured in years and FEMALE is coded 1 if the respondent registered as a female client (0 otherwise). LOG(SAVINGS) is the log transformation of outstanding amounts in savings products (including investments), measured in euros.

Variable	Mean	Std. Dev.	Min.	p25	Median	p75	Max.
SRI PREFERENCE	0.506	0.262	0	0.3	0.5	0.7	1
SRC PREFERENCE	5.536	2.442	1	4	6	7	10
IMPACT BELIEF	6.939	2.261	1	6	7	8	10
SRI HIGHER RETURN EXPECT	5.514	2.121	1	5	5	7	10
SRI LOWER RISK EXPECT	5.351	1.938	1	5	5	7	10
GREENWASHING BELIEF	6.325	2.025	1	5	6	8	10
SRI LITERACY	3.453	2.110	1	2	3	5	10
EXPERIENCED ESG ISSUE	0.661	0.474	0	0	1	1	1
ALTRUISM	5.255	2.820	1	3	5	7	10
RISK AVERSION	5.821	2.219	1	4	6	7	10
ECONOMIC EXPECT.	2.258	0.914	1	2	2	3	4
INFLATION EXPECT.	3.516	0.969	1	3	4	4	5
RETURN-IMPACT TRADEOFF	3.179	1.480	1	2	3	5	5
RISK-IMPACT TRADEOFF	2.675	1.416	1	2	2	4	5
FEMALE	0.542	0.499	0	0	1	1	1
AGE	45.295	13.351	18	35	46	57	66
LOG(SAVINGS)	7.350	3.787	0	4.625	8.626	10.246	14.276

Table A2: OLS regression results of SRI preference on SRC preference. SRI PREFERENCE is measured by the proportion of a hypothetical 10,000 euros endowment allocated to SRI. SRC PREFERENCE is a Likert-scale assessment of one's own willingness to pay more for environmentally-friendly goods on a scale from 1 to 10. IMPACT BELIEF, GREENWASHING BELIEF, SRI HIGHER RETURN EXPECT, SRI LOWER RISK EXPECT are Likert-scale assessments on a scale from 1 to 10. SRI LITERACY is self-assessed on a scale from 1 to 10. EXPERIENCED ESG ISSUE is a dummy variable that equals 1 if the respondent has faced at least one environmental or social issue. Controls in Model 3 comprised self-reported altruism, self-reported risk aversion, female, age, and log total savings. Coefficients represent average marginal effects. Heteroskedasticity-robust standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$.

	Dependent variable: SRI PREFERENCE		
	(1)	(2)	(3)
SRC PREFERENCE	0.0325*** (0.0035)	0.0203*** (0.0036)	0.0189*** (0.0040)
IMPACT BELIEF		0.0111** (0.0041)	0.0107* (0.0042)
SRI HIGHER RETURN EXPECT		0.0272*** (0.0046)	0.0263*** (0.0047)
SRI LOWER RISK EXPECT		0.0150*** (0.0045)	0.0148** (0.0046)
GREENWASHING BELIEF		−0.0040 (0.0039)	−0.0044 (0.0039)
SRI LITERACY		0.0112** (0.0038)	0.0113** (0.0041)
EXPERIENCED ESG ISSUE		0.0137 (0.0154)	0.0145 (0.0154)
Controls	No	No	Yes
Adj R-squared	0.092	0.226	0.232
N	1.021	1.021	1.021

Table A3: Fractional response regression results of individual individual willingness to give up return (Model 1) and to take additional investment risk (Model 2) for environmental investment impact on SRC preference. SRC PREFERENCE is measured by the proportion of a hypothetical 10,000 euros endowment allocated to SRI. IMPACT BELIEF, GREENWASHING BELIEF, SRI HIGHER RETURN EXPECT, SRI LOWER RISK EXPECT are Likert-scale assessments on a scale from 1 to 10. SRI LITERACY is self-assessed on a scale from 1 to 10. EXPERIENCED ESG ISSUE is a dummy variable that equals 1 if the respondent has faced at least one environmental or social issue. Controls comprised self-reported altruism, self-reported risk aversion, female, age, and log total savings. Coefficients represent average marginal effects. Heteroskedasticity-robust (HC3) standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$.

	Dependent variable:	
	RETURN-IMPACT TRADEOFF	RISK-IMPACT TRADEOFF
	(1)	(2)
SRC PREFERENCE	0.1253*** (0.0291)	0.0817*** (0.0287)
IMPACT BELIEF	0.0955*** (0.0307)	0.0971*** (0.0334)
SRI HIGHER RETURN EXPECT	0.0121 (0.0340)	0.0174 (0.0362)
SRI LOWER RISK EXPECT	0.0216 (0.0353)	−0.0092 (0.0386)
GREENWASHING BELIEF	−0.0297 (0.0301)	−0.0033 (0.0300)
SRI LITERACY	0.0659* (0.0305)	0.0213 (0.0318)
EXPERIENCED ESG ISSUE	0.2660* (0.1158)	0.1029 (0.1185)
Controls	Yes	Yes
N	1,021	1,021

Table A4: Fractional response regression results of SRI preference on donation reward choice. SRI PREFERENCE is measured by the proportion of a hypothetical 10,000 euros endowment allocated to SRI. CHOICE: DONATION is a dummy that equals 1 if the respondent chose to donate their potential survey reward. IMPACT BELIEF, GREENWASHING BELIEF, SRI HIGHER RETURN EXPECT, SRI LOWER RISK EXPECT are Likert-scale assessments on a scale from 1 to 10. SRI LITERACY is self-assessed on a scale from 1 to 10. EXPERIENCED ESG ISSUE is a dummy variable that equals 1 if the respondent has faced at least one environmental or social issue. Controls in Model 3 comprised self-reported altruism, self-reported risk aversion, female, age, and log total savings. Coefficients represent average marginal effects. Heteroskedasticity-robust (HC3) standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$.

	Dependent variable: SRI PREFERENCE		
	(1)	(2)	(3)
CHOICE: DONATION	0.1364*** (0.0293)	0.1069*** (0.0279)	0.0971*** (0.0271)
IMPACT BELIEF		0.0156*** (0.0040)	0.0137*** (0.0040)
SRI HIGHER RETURN EXPECT		0.0318*** (0.0045)	0.0275*** (0.0046)
SRI LOWER RISK EXPECT		0.0157*** (0.0047)	0.0138*** (0.0046)
GREENWASHING BELIEF		−0.0050 (0.0041)	−0.0054 (0.0040)
SRI LITERACY			0.0129*** (0.0042)
EXPERIENCED ESG ISSUE			0.0222 (0.0153)
Controls	No	No	Yes
N	1,021	1,021	1,021

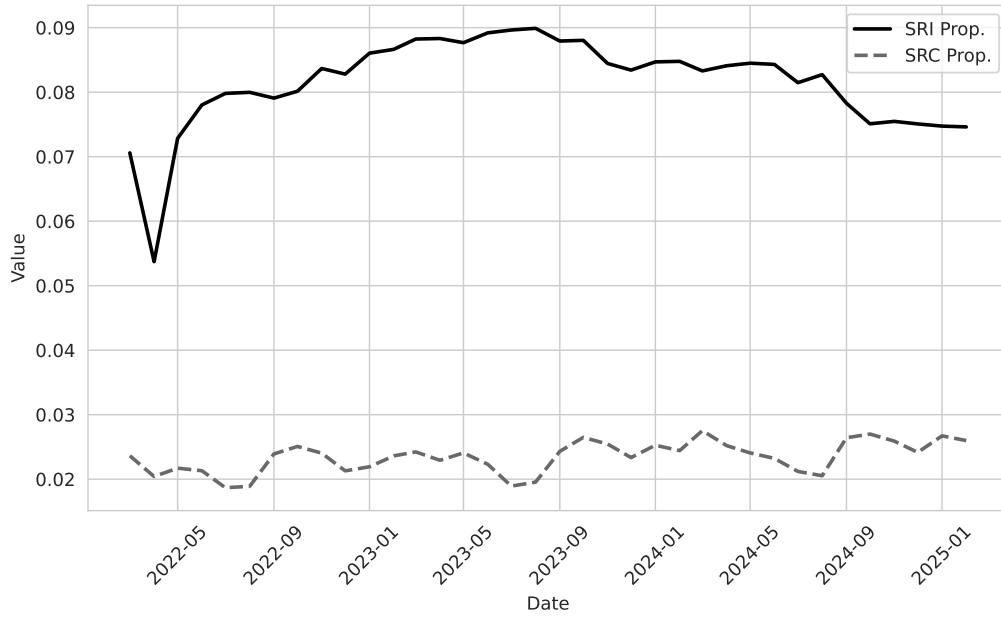


Figure A1: Historical SRI and SRC proportions aggregated over sample investors and months. The dashed line shows the development of investors' average SRC proportions, while the solid line displays the development of investors' average SRI proportions.

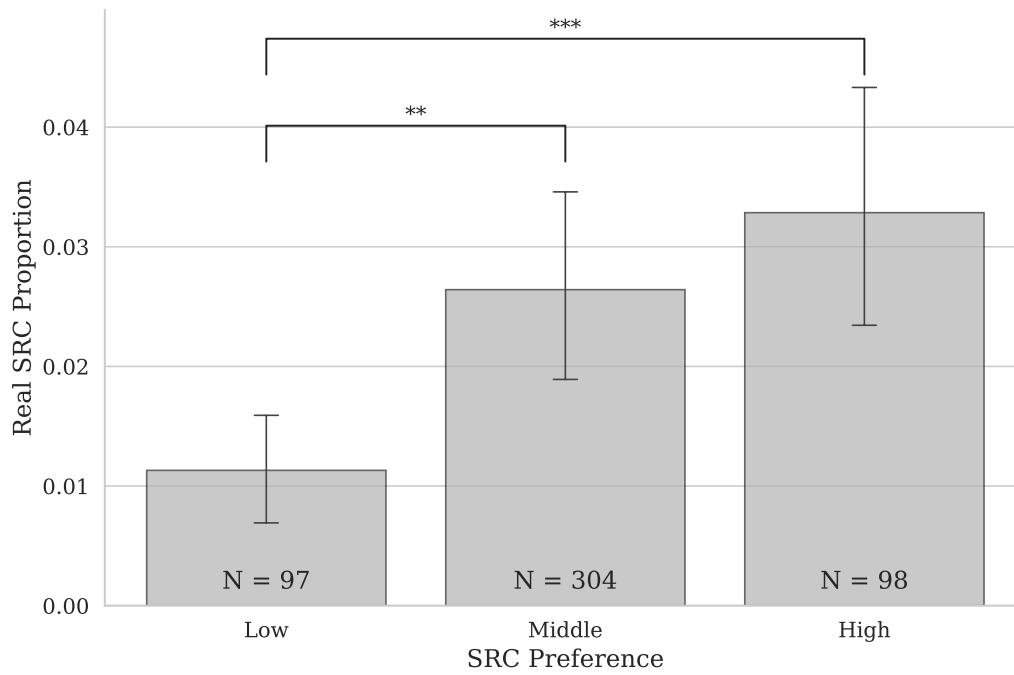


Figure A2: The figure reports the average real SRI PROPORTION by levels of SRC PREFERENCE, a Likert-scale measure of an individual's willingness to pay more for environmentally-friendly goods (1–10). “Low” corresponds to values 1–3, “Middle” to 4–7, and “High” to 8–10. Error bars represent standard errors. Differences across groups are tested using two-sample t-tests. * $p < .05$; ** $p < .01$; *** $p < .001$.

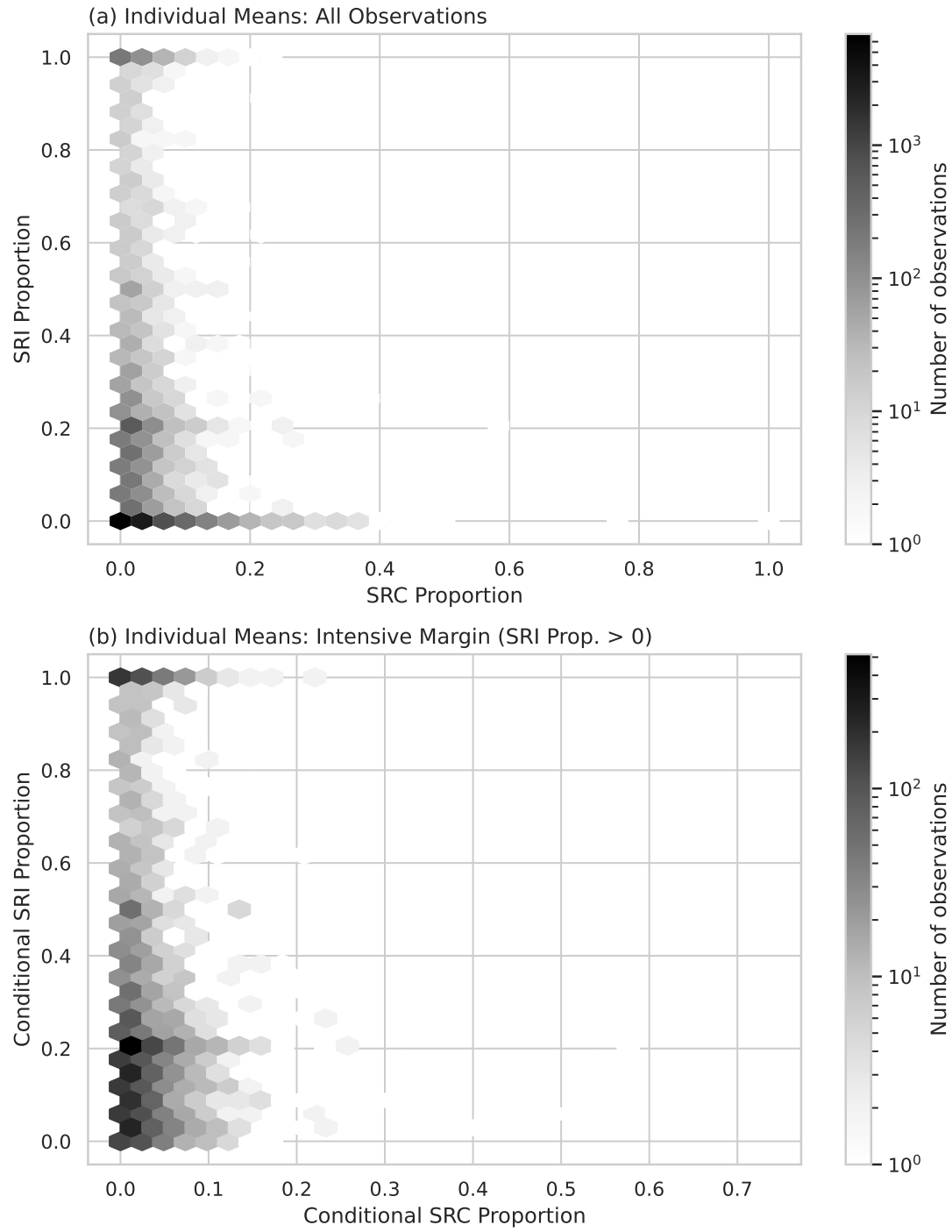


Figure A3: The figure displays hexbin density plots of individual-level averages. Panel (a) includes all observations, while Panel (b) conditions on $\text{SRI PROPORTION} > 0$ (intensive margin). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0–1), and SRI PROPORTION is the corresponding proportion of sustainable investments. Shading indicates the number of observations within each bin on a logarithmic scale.

Table A5: Descriptive Statistics: Portfolio Sustainability. Statistics are computed on individual (client-level) means over the panel. Article 6, Article 8, and Article 9 report the portfolio share invested in funds of the respective SFDR classification (Article 6: no sustainability objective; Article 8: promotes environmental or social characteristics; Article 9: sustainable investment objective). SRI (Keywords) is the portfolio share in sustainable investments identified via keywords. ESG Risk Score is the portfolio-weighted ESG risk score. N is the number of unique clients with non-missing data for each variable.

Variable	Mean	Std. Dev.	Min	p25	Median	p75	Max	N
ARTICLE 6 PROPORTION	0.340	0.397	0.000	0.000	0.150	0.667	1.000	7910
ARTICLE 8 PROPORTION	0.653	0.399	0.000	0.302	0.816	1.000	1.000	7910
ARTICLE 9 PROPORTION	0.007	0.076	0.000	0.000	0.000	0.000	1.000	7910
SRI PROPORTION	0.080	0.199	0.000	0.000	0.000	0.043	1.000	15660
ESG RISK SCORE	19.801	3.664	1.015	17.992	18.781	21.761	55.201	11695

Table A6: Correlation Matrix: Portfolio Sustainability. The table reports pairwise Spearman correlation coefficients, computed on individual means over the panel. ARTICLE 6 PROPORTION, ARTICLE 8 PROPORTION, and ARTICLE 9 PROPORTION denote the portfolio share invested in funds of the respective SFDR classification. SRI PROPORTION is the portfolio share in sustainable investments identified via keywords. ESG RISK SCORE is the portfolio-weighted ESG risk score.

	Article 6	Article 8	Article 9	SRI (Keywords)	ESG Risk Score
ARTICLE 6 PROPORTION	1.000				
ARTICLE 8 PROPORTION	−0.981	1.000			
ARTICLE 9 PROPORTION	−0.063	−0.096	1.000		
SRI PROPORTION	−0.042	0.023	0.131	1.000	
ESG RISK SCORE	0.300	−0.280	−0.101	−0.205	1.000

Table A7: Mixed-effects regression results of SRI PROPORTION on SRC PROPORTION. SRI PROPORTION is the value-weighted proportion of individual investments classified as sustainable using a keywords identification method (0-1). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Coefficients represent marginal effects. Standard errors, clustered at the individual level, in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)		
	(1)	(2)	(3)
SRC PROPORTION	−0.0012 (0.0026)	0.0018 (0.0011)	0.0014 (0.0011)
SRI PROPORTION $t-1$		0.9185*** (0.0054)	0.9181*** (0.0054)
AGE			−0.0001*** (0.0000)
FEMALE			0.0002 (0.0003)
LOG(SAVINGS)			0.0002** (0.0001)
INVESTMENT PROPORTION			0.0000 (0.0000)
Equivalence test p -value SRC PROPORTION	0.000	0.000	0.000
Month-Year FE	VII Yes	Yes	Yes
Individual RE	Yes	Yes	Yes
Overall R^2	0.0008	0.9560	0.9560
Observations	391,392	391,392	391,392
N Investors	15,367	15,367	15,367

Table A8: Fractional response logistic regression results of the average client's SRI PROPORTION on SRC PROPORTION, stratified by the average number of assets held by the client. 2 AVG. ASSETS denotes the subsample of clients holding at least two assets, while 3 AVG. ASSETS denotes the subsample of clients holding at least three assets. SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Model 2 and 4 controls for AGE, FEMALE, LOG(SAVINGS) and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Robust standard errors in parentheses * $p < .05$; ** $p < .01$; *** $p < .001$

	DV: SRI PROPORTION (0-1)		SRI PROPORTION (0-1)	
	2 AVG. ASSETS		3 AVG. ASSETS	
	(1)	(2)	(3)	(4)
SRC PROPORTION	0.1230*	0.0820	0.0884	0.0828
	(0.0486)	(0.0512)	(0.0553)	(0.0567)
FEMALE		0.0107*		0.0117*
		(0.0045)		(0.0048)
AGE		−0.0008***		0.0001
		(0.0002)		(0.0002)
LOG(SAVINGS)		−0.0022		−0.0096***
		(0.0015)		(0.0018)
INVESTMENT PROPORTION		−0.0021		−0.0493**
		(0.0029)		(0.0165)
Equivalence test p -value SRC PROPORTION		0.000	0.000	0.000
N	7,575	7,575	5,602	5,602

Table A9: Fractional response logistic regression results of the average client's SRI PROPORTION on SRC PROPORTION, including an interaction with LOG(SAVINGS). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Model 2 controls for AGE, FEMALE and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Robust standard errors in parentheses * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)	
	(1)	(2)
SRC PROPORTION	0.2650	0.1255
	(0.2029)	(0.2276)
SRC PROPORTION $\times$ LOG(SAVINGS)	−0.0169	−0.0096
	(0.0190)	(0.0213)
LOG(SAVINGS)	0.0020*	0.0040***
	(0.0009)	(0.0010)
FEMALE		0.0026
		(0.0033)
AGE		−0.0014***
		(0.0001)
INVESTMENT PROPORTION		0.0056
		(0.0029)
Equivalence test p -value SRC PROPORTION	0.107	0.043
N	15,660	15,660

Table A10: Fractional response logistic regression results of the average client's SRI PROPORTION on SRC PROPORTION and URBAN. SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). URBAN is a dummy variable indicating if the investors' registered post code is in a city with at least 100,000 inhabitants. Model 2 controls for AGE, FEMALE, LOG(SAVINGS) and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Robust standard errors in parentheses * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)	
	(1)	(2)
SRC PROPORTION	0.0692 (0.0368)	0.0072 (0.0399)
URBAN	0.0123* (0.0052)	0.0089 (0.0053)
SRC PROPORTION $\times$ URBAN	0.0354 (0.0767)	0.0347 (0.0818)
FEMALE		0.0026 (0.0033)
AGE		−0.0014*** (0.0001)
LOG(SAVINGS)		0.0038*** (0.0009)
INVESTMENT PROPORTION		0.0055 (0.0030)
Equivalence test p -value SRC PROPORTION	0.107	0.043
N	15,660	15,660

Table A11: Fractional response logistic regression results of the average client's SRI PROPORTION on SRC PROPORTION, separated into EXTENSIVE MARGIN and INTENSIVE MARGIN. The INTENSIVE MARGIN is defined for observations with SRI PROPORTION > 0, while the EXTENSIVE MARGIN considers the full sample of clients. SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Model 2 and 4 control for AGE, FEMALE and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Robust standard errors in parentheses * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0/1)		SRI PROPORTION >0	
	EXTENSIVE MARGIN		INTENSIVE MARGIN	
	(1)	(2)	(3)	(4)
SRC PROPORTION	0.2830** (0.0899)	0.0114 (0.0893)	0.0688 (0.0973)	0.0774 (0.0948)
FEMALE		−0.0517*** (0.0074)		0.0566*** (0.0085)
AGE		−0.0046*** (0.0003)		0.0012** (0.0004)
LOG(SAVINGS)		0.0588*** (0.0021)		−0.0540*** (0.0031)
INVESTMENT PROPORTION		0.1707*** (0.0247)		−0.1634*** (0.0406)
Equivalence test p -value SRC PROPORTION		0.000	0.000	0.000
N	15,660	15,660	4,612	4,612

Table A12: Fractional response logistic regression results of the average client's ARTICLE 9 PROPORTION and ESG RISK SCORE on SRC PROPORTION. ARTICLE 9 PROPORTION is the value-weighted proportion of individual investments under the scope of SFDR Article 9. ESG RISK SCORE is the portfolio value-weighted Morningstar Sustainalytics©ESG risk score. SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). Model 2 and 4 controls for AGE, FEMALE, LOG(SAVINGS) and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Robust standard errors in parentheses * $p < .05$; ** $p < .01$; *** $p < .001$

	ARTICLE 9 PROPORTION (0-1)		ESG RISK SCORE (0-1)	
	(1)	(2)	(3)	(4)
SRC PROPORTION	0.0369*** (0.0103)	0.0393*** (0.0107)	−0.0059 (0.0097)	−0.0137 (0.0098)
AGE		0.0003* (0.0001)		−0.0002*** (0.0000)
FEMALE		0.0045* (0.0018)		−0.0015* (0.0007)
LOG(SAVINGS)		−0.0002 (0.0003)		−0.0004* (0.0002)
INVESTMENT PROPORTION		0.0018*** (0.0005)		−0.0008 (0.0007)
Equivalence test p -value SRC PROPORTION			0.000	0.000
N	7,910	7,910	11,695	11,695

Table A13: Fractional response logistic regression results of the average client's SRI PROPORTION on different categories of consumption. These categories represent the value-weighted proportions of individual consumption classified using a keywords identification method (0–1). Model 2 controls for AGE, FEMALE and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Robust standard errors in parentheses * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)	
	(1)	(2)
DONATIONS	−0.3144 (0.4386)	−0.4561 (0.4478)
GREEN MOBILITY	0.1741*** (0.0490)	0.0464 (0.0541)
CIRCULAR ECONOMY	0.0785 (0.1018)	0.0414 (0.1096)
E-COMMERCE	0.0079 (0.0179)	−0.0186 (0.0191)
ENERGY CONSUMPTION	−0.0744 (0.1486)	−0.0047 (0.1422)
BROWN MOBILITY	0.0331 (0.0394)	−0.0126 (0.0425)
FAST ECONOMY	0.1802** (0.0678)	0.0077 (0.0764)
FEMALE		0.0027 (0.0034)
AGE		−0.0014*** (0.0001)
LOG(SAVINGS)		0.0038*** (0.0009)
INVESTMENT PROPORTION		0.0056 (0.0030)
N	15,660	15,660

Table A14: Fractional response logistic regression results of the client's average SRI PROPORTION on average SRC PROPORTION, estimated on the Article 9 subsample. SRI PROPORTION is the value-weighted proportion of individual investments classified as sustainable using a keywords identification method (0-1). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). The sample is restricted to the 7,910 clients for whom SFDR Article 9 classifications are available, so that the keyword-based estimates are comparable to the Article 9 results in [Table A12](#). Model (2) controls for AGE, FEMALE, LOG(SAVINGS) and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Heteroskedasticity-robust (HC3) standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)	
	(1)	(2)
SRC PROPORTION	0.2214*** (0.0587)	0.0610 (0.0645)
FEMALE		0.0234*** (0.0056)
AGE		−0.0031*** (0.0002)
LOG(SAVINGS)		0.0069*** (0.0014)
INVESTMENT PROPORTION		0.0034 (0.0035)
Equivalence test p -value SRC PROPORTION		0.000
N	7,910	7,910

Table A15: Fractional response logistic regression results of the client's average SRI PROPORTION on average SRC PROPORTION, estimated on the ESG risk score subsample. SRI PROPORTION is the value-weighted proportion of individual investments classified as sustainable using a keywords identification method (0-1). SRC PROPORTION is the value-weighted proportion of individual consumption classified as responsible using a keywords identification method (0-1). The sample is restricted to the 11,695 clients for whom portfolio ESG risk scores are available, so that the keyword-based estimates are comparable to the ESG risk score results in Table A12. Model (2) controls for AGE, FEMALE, LOG(SAVINGS) and INVESTMENT PROPORTION. Coefficients represent average marginal effects. Heteroskedasticity-robust (HC3) standard errors in parentheses. * $p < .05$; ** $p < .01$; *** $p < .001$

	SRI PROPORTION (0-1)	
	(1)	(2)
SRC PROPORTION	0.1103** (0.0414)	0.0259 (0.0451)
FEMALE		0.0093* (0.0041)
AGE		−0.0018*** (0.0002)
LOG(SAVINGS)		0.0048*** (0.0011)
INVESTMENT PROPORTION		0.0083 (0.0044)
Equivalence test p -value SRC PROPORTION		0.000
N	11,695	11,695

B Survey Instructions

Email Invitation

Dear Client,

We need your input.

In order to support our commitment to **improving our understanding of investments that align with your values**, we are pleased to launch **a new survey dedicated to responsible investing**.

There are no right or wrong answers. The estimated completion time is about 12 minutes.

A gift for your participation?

Each participant has the chance to win a €100 gift card. In total, 20 randomly selected participants will be contacted within a maximum of four weeks after the end of the survey.

I participate in the survey

This survey is co-organized by [name of the bank], the Center for Environmental Economics of Montpellier (CEE-M), Montpellier Business School, and the Amundi Investment Institute. Your response will help advance scientific research on responsible investment.

Survey Introduction, first page

Dear Participant,

We thank you in advance for your valuable participation. Your input will contribute to the development of responsible financial products and support rigorous academic research. It is essential to help us build a more responsible and sustainable future. Your responses will be treated confidentially using pseudonymized identifiers.

Participants who complete the survey are eligible to enter a prize draw:

- I agree to participate in the prize draw.
- I do not wish to participate in the prize draw.

Prize Preference (if selected)

If you win the prize draw, which option would you prefer?

€100 gift card (Ethi’Kdo – sustainable commerce)

€100 generic gift card (Kadéos)

€100 Amazon gift card

€100 donation to the UN Sustainable Development Goals (SDG) Fund

€100 donation to “Les Restos du Cœur de l’Hérault”

€100 donation to the World Wildlife Fund (WWF)

Part 1

Table B16: Questions asked to all participants on economic preferences and expectations

Question	Response Options	
Risk Aversion Generally speaking, do you like taking risks?	Scale: 1 (<i>Not at all</i>) to 10 (<i>Very much</i>)	
Loss Aversion To what extent do you agree with the following statement: <i>“Losing €100 hurts more than gaining €100 feels good.”</i>	Scale: 1 (<i>Strongly disagree</i>) to 10 (<i>Strongly agree</i>)	
Inflation Expectations Compared to the past 12 months, how do you expect inflation to evolve over the next 12 months?	Inflation will increase	Inflation will remain stable
	Inflation will decrease	Prices will stay flat
	Prices will fall	I don’t know
Economic Outlook Compared to the past 12 months, how do you expect France’s general economic situation to evolve over the next 12 months?	Improve significantly	Improve slightly
	Remain stable	Worsen slightly
	Worsen significantly	I don’t know

Part 2

Table B17: Questions asked to all participants regarding investment products and financial behaviors

Question	Response Options	
Investment Vehicles Which of the following financial products do you hold? (multiple answers possible)	Savings accounts / term deposits	Life insurance
	Securities account / PEA	Company savings plan (PEE)
	Retirement savings (PER)	None / Other
Instruments Held What types of investments do you hold? (multiple answers possible)	Individual stocks	Individual bonds
	Equity funds / ETFs	Bond funds / ETFs
	Real estate funds	Private equity / VC
	Cryptocurrencies	None / Other
Portfolio Management What investment management modes do you use? (multiple answers possible)	Mandate-based (delegated)	Advisory (guided by advisor)
	Self-managed	Other

Table B18: Questions asked to participants who answered “Yes” to: *Do you invest in responsible investment products?*

Question	Response Options	
SRI Portfolio Share What share of your financial investments are in responsible products?	1–10%	11–25%
	26–50%	51–75%
	More than 75%	I don’t know
SRI Types Held Which types of responsible investments do you hold? (multiple answers possible)	Individual stocks	Individual bonds
	Equity/ETF funds	Bond/ETF funds
	Real estate funds	Private equity/VC
	Cryptocurrencies	Solidarity funds
	None	Other
Motivations for SRI What are your top 3 motivations for choosing SRI? (ranked)	Higher returns	Lower risk
	Climate risk resilience	Social/environmental impact
	Positive self-image	Carbon offsetting
	Compensating policy failures	Advisor recommendation
	I don’t know	Other
SRI Approach Preference Which responsible investment approaches do you prefer? (multiple answers possible)	Positive screening	Negative screening
	Shareholder engagement	Thematic investing
	Indifferent	I don’t know
SRI Identification How do you identify a responsible investment? (multiple answers possible)	Fund name	ESG labels (e.g., ISR, Greenfin)
	SFDR classification	Fund objectives
	ESG metrics	I don’t know / Other
Hypothetical SRI Allocation	If you had €10,000 to invest over a 10-year period, how would you allocate it between the following options (slider scale): Traditional: fund linked to the performance of all listed companies in France Responsible: fund linked to the performance of listed companies identified as responsible	

Table B19: Questions asked to participants who answered “No” or “I don’t know” to: *Do you invest in responsible investment products?*

Question	Response Options	
Reasons for Not Investing in SRI What are your top 3 reasons for not investing in responsible products? (ranked)	Lack of knowledge about SRI	SRI has lower returns
	SRI is riskier	Lack of real impact
	Don’t trust ESG labels	Advisor never mentioned it
	I don’t know	Other
Reasons for Not Knowing if You Hold SRI (Only if respondent selected “I don’t know”) Top 3 reasons for being uncertain	Don’t know what SRI means	Cannot identify whether investments are SRI
	Uncertain about impact	Don’t trust ESG labels
	Rely on advisor	I don’t know / Other
SRI Identification How would you identify a responsible investment? (multiple answers possible)	Fund name	ESG labels (ISR, Greenfin)
	SFDR classification	Fund objectives
	ESG metrics	I don’t know / Other

Table B20: Questions asked to all participants on perceptions of responsible investment

Question	Response Options
Responsible investments will be more profitable than conventional investments over the next 10 years.	<i>Scale: 1 (Strongly disagree) to 10 (Strongly agree), plus “I don’t know”</i>
Responsible investments will be less risky than conventional investments over the next 10 years.	<i>Scale: 1 (Strongly disagree) to 10 (Strongly agree), plus “I don’t know”</i>
Responsible investments have a positive impact on the environment and/or society.	<i>Scale: 1 (Strongly disagree) to 10 (Strongly agree), plus “I don’t know”</i>
To what extent do you believe that responsible investments are associated with greenwashing (i.e., a marketing strategy to make companies appear more responsible than they actually are)?	<i>Scale: 1 (Not at all associated) to 10 (Highly associated), plus “I don’t know”</i>

Part 3

Table B21: Questions asked to all participants regarding climate and social issues

Question	Response Options	
Environmental Challenges Which of the following environmental challenges concern you the most? (Ranked from most to least important)	Consequences of temperature change and seasonal shifts	Air and water pollution
	Scarcity of natural resources	Increase in household and industrial waste
	Extinction of plant and animal species (biodiversity)	Extreme weather conditions (storms, heatwaves, floods, forest fires)
	I am not concerned about any environmental issue	I don't know
	Other	
Social Challenges Which of the following social challenges concern you the most? (Ranked from most to least important)	Social inequality (unemployment, gender inequality, poverty, racial discrimination)	Political and geopolitical issues (corruption, wars, etc.)
	Degradation of health and well-being	Degradation of infrastructure (hospitals, schools, public buildings, etc.)
	Degradation of education or access to education	I am not concerned about any social issue
	I don't know	Other
Priorities in Social and Environmental Issues When it comes to addressing social and environmental issues, what is your priority?	Strongly prioritize social issues	Slightly prioritize social issues
	No preference between the two	Slightly prioritize environmental issues
	Strongly prioritize environmental issues	I don't know
Personal or Close Experience with Environmental Challenges Have you (or your close ones) been confronted with any of the following environmental challenges?	Consequences of temperature change	Air and water pollution
	Scarcity of natural resources	Increase in household and industrial waste
	Extinction of plant and animal species (biodiversity)	Extreme weather conditions (storms, heatwaves, floods, forest fires)
	None	Other
Personal or Close Experience with Social Challenges Have you (or your close ones) been confronted with any of the following social challenges?	Social inequality (unemployment, gender inequality, poverty, racial discrimination)	Geopolitical issues (corruption, wars, etc.)

B.1 Part 4

Table B22: Sources of Financial Advice (All Respondents)

Financial Advice Sources	What are your sources of financial advice?	
	<i>(Multiple answers possible)</i>	
	- Friends, family, or acquaintances	- Internet resources
	- Financial books, magazines, newspapers	- Mailings
	- Television or radio	- Seminars
	- Social media	- Bank advisors
	- Financial advisors (e.g., tax consultants)	- Chatbots/robo-advisors
	- I have not received/applied financial advice	- Other
Social Media Platforms	Please specify which social media you use:	
	<i>(Multiple answers possible)</i>	
	- Facebook	- TikTok
	- X (formerly Twitter)	- Telegram
	- LinkedIn	- Snapchat
	- YouTube	- WeChat
	- Instagram	- Other
	- WhatsApp	

B.2 Part 5

Table B23: Miscellaneous Topics – All Respondents

Question	Answer Options
Altruism	To what extent are you willing to donate to good causes (e.g. charities) without expecting anything in return? <i>Scale: 1 (Not at all) to 10 (Completely)</i>
Personal image	How important is your personal image (how others perceive you)? <i>Scale: 1 (Not at all important) to 10 (Very important)</i>
Risky assets share	What percentage of your household's investments are in risky assets (including employee savings plans, life insurance, etc.)? 0%, 1–10%, 11–25%, 26–50% 51–75%, More than 75%, I don't know
Investment experience	For how long have you been investing in financial markets (including employee savings plans, life insurance, etc.)? Never, Less than 1 year, 1–3 years 3–5 years, 5–10 years, More than 10 years, I don't know
Financial knowledge	How would you rate: a) Your general financial knowledge? b) Your knowledge of responsible investment? <i>Scale: 1 (Very low) to 10 (Very high)</i>
Investment horizon	Today, how long do you plan to keep the majority of your savings invested? Never, Less than 1 year, 1–3 years 3–5 years, 5–10 years, More than 10 years, I don't know
SRC preference	To what extent do you agree with the statement: “I am willing to pay more for environmentally friendly products.” <i>Scale: 1 (Strongly disagree) to 10 (Strongly agree)</i>
Current support of charitable causes	Do you currently support any charitable causes (e.g. donating to environmental or social initiatives, participating in fundraising events)? Yes No

C Keyword lists

C.1 SRI

Table C24: Keyword-Based SRI Classification by Category

Category	SRI Keywords	
	English	French
General	¹⁷	Agir
	Better World	Meilleur Monde
	Carbon Offset,	Compensation Carbone,
	Low Carbon	Faible Carbone
	Consci[ous]	Consci[ent]
	Develop[ment]	Développe[ment]
	ESG	RSE
	Future	Avenir
	Invest Beyond	Invest Au-Delà
	Respons[ible]	Respons[able]
	SDG	ODD
	SRI	ISR
	Sustain[able]	Dura[ble]
	Adapt[ation]	
	Ambi[tion]	
	Engage[ment]	
	Impact	
	Transition	
Environment	Circular Economy	Economie circulaire
	Clean energy	Energie propre
	Climate	Climat
	Earth	Terre
	Eco[logical]	Eco[logique]
	Environ[ment]	Environ[nement]
	Green	Vert
	Ocean	Océan
	Solar	Solaire
	Renewable	Renouvelable
	Water	Eau
	Aqua	
	Blue Economy	
	Food for Generations	
	Net Zero	
	Planet	
Social	Ethi[cal]	Ethi[que]
	Gender	Genre
	Health[y]	Santé, Sain
	Human	Humain
	Soli[darity]	Soli[darité]
	Women	Femmes
	Work, Employment	Travail, Emploi
	Education	
Governance	Local	
	Social	
	Diversit[y]	Diversit[é]
	Governance	Gouvernance
	Integr[ity]	Intégrité, intègre
	Transparen[t]	

C.2 SRC

Table C25: Keyword-Based SRC Classification by Category

Category	SRC Keywords				
General	Association,	Bio,	Local,	Nature,	Vegan
	English	French	English	French	
	Botanic	Botanique	Climate	Climat	
	Conscious	Responsable	Eco-friendly	Écoresponsable	
	Ecological	Écologique	Environment	Environnement	
	Fair	Équitable	Green	Vert	
	Natural	Naturel	Organic	Biologique	
	Planet	Planète	Plant-base	À base de plantes	
	Solar	Solaire	Sustainable	Durable	
	Wind-power	Énergie éolienne			
Green mobility	Bicycle (Vélo), Bird, Blablacar, Citiz, Cie transp stbg, Cycling, Deutschland gm, Dott, Fairtiq, Flixbus, Free2move, Greencar, Indigo weel, Idfm, Jump Transit, Keolis lyon, Klaxit, Lime, Mobike, Nextbike, Optibus, Ouibus, Pédibus, Geta pony, Public transport (Transports publique), Regietransp 30, Ratp, RtM, Scooter, Share now (Rental), Sncf, Tam, Tbm, Tcl, Tisseo ¹⁸ , Trainline, Transdev, Uber green, Velib, Yego, Zity eco				
Circular economy	Beebs, Boncoin, Circulaire, Emmaüs, Epicerie solidaire, Fairmoove, Geev, La recyclerie, Leboncoin, Momox, Recycle (Recycler), Recyclage, Recyclable, Renewable (Renouvelable), Repair café, Reporterre, Second hand (D’occasion), Smala, Too good to go, Troc.com, Vinted, Wedressfair, Zero waste (Zéro déchet)				
Donations	Abiosol, Acted, Action climat montpellier, Action contre la faim, ActionAid france, Age de faire, Apprentis, Association, Asso bouillargues, Asso seconde vie, Base de plantes, Biodiversity international, Blairoudeurs, Boulangerie ange, Bwa de senteur, Caissargues pour tous, Carma family, Centre sociaux, Cevennes paysages, Change.org, Centre social, Climate action network, Conseil intenational des enfants, Cpme gard, Croix-rouge, Culture manuelle et technique, Donation, Du salut, Emmaus, Endozen, Enforac, Energumenes theatre, Envirobat, Fibois, Fondation, Footprint, For the planet, Fresque, Futur paris, Fuxus, Gaia mater, Graines de fermiers, Greenpeace, Handicap, Hbc teyran, Helloasso, Humanicare, Les restos du coeur, Lpcr groupe, Ma2m, Mayane, Medecins sans frontieres, Mode circulaire, Muccapuzza, Oasis citadine, Oxfam, Paysages 32, Rainforest alliance, Recif, Recycleurs, Red cross, Reporterre, Rewilding, Rimba, Secours, Simple thing, Son chemin, Solidarite, Sourire d’enfant, Telethon, Think innov, Vault, Vign prop asso, Volontaire, Wwf, Zero waste, Sea shephard				

C.3 Other Consumption categories

Table C26: Keyword Mapping for Consumption Categories

Category	Keywords / Merchant Identifiers
Energy Consumption	Antargaz, Axpo, Beem energy, Borne charging (Borne recharge), Butagaz, Cdiscount energy (Cdiscount énergie), Charging station (Charge électrique), Coriance, Dalkia, Direct energy (Direct énergie), Edf, Ekwateur, Electricity (Électricité), Energy consumption (Consommation énergie), Enedis, Engie, Eni, Gas bill (Facture gaz), Gas subscription (Abonnement gaz), Grdf, Hvv energie, Iberdrola, Idex, Kwh, Mint energy (Mint énergie), Mwh, Ohm-energy (Ohm-énergie), Octopus energy, Primagaz, Prio energy, Proxelia, Rte, Sowee, Suez, Totalenergies, Vattenfall, Veolia.
E-Commerce	Afterpay, Aliexpress, Alipay, Amazon prime, Amzn, Apple pay, Back market, Billetweb, Cdiscount, E.leclerc web, Google pay, Klarna, La redoute, Le bon coin, Lydia, Mangopay, Paypal, Paylib, Payzen, Rakuten, Sepa direct debit, Sofort, Temu, Troc.com, Uber eats, Veepee, Vinted, Wechat pay, Wish, Zalando, .fr, .com
Fast Economy	Aliexpress, Bchef, Bershka, Big fernand, Boohoo, Brioche dorée, Burger, Burger king, C&a, Deliveroo, Domino, Doner, Eat salad, Five guys, Flunch, Foodpanda, Forever 21, H&m, Kfc, Kiabi, Mac donalds, Mc do, New look, O'tacos, Popeyes, Pret a manger, Pretamanger, Primark, Pull & bear, Quick, Shein, Starbucks, Subway, Taco, Temu, Topshop, Uniqlo, Wish, Zalando, Zara.
Brown Mobility	<p>Related car expenditures: Acajou, Alamo, Aprr, Avis, Avia, Bp, Bolt, Budget, Carrefour carburant, Carglass, Dyneff, Esso, Essox, Europcar, Feu vert, Freenow, Getaround, Gulf, Hertz, Indigo park, Intermarché carburant, Keddy, Midas, Norauto, Ouicar, Parking, Petrol, Q-park, Sanef, Shell, Sixt, Speedy, Station, Station-service, Stationnement, Télépéage, Totalenergies, Uber, Vinci autoroutes, Virtuo</p> <p>Air Travel: Aer Lingus, Air france, Air portugal, Air tahiti nui, Air transat, American airlines, British airways, Corsair, Easyjet, Emirates, French bee, Iberia, Jet2, Lufthansa, Norwegian, Qatar airways, Ryanair, Saudia, Tap portugal, Tui fly, Transavia, Turkish airlines, Volotea, Vueling, Wizz air</p>