Cognitive Dissonance and Information Avoidance in Sustainable Investment Decisions

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Abstract

In recent years, sustainable investments have become increasingly central in global financial markets. This is not only due to the growing environmental and social awareness of economic actors, but also to the emergence of more forward-looking risk management strategies. These strategies can deal with regulatory, reputational and market uncertainties (Lewis et al., 2016; Park & Oh, 2022). Integrating environmental, social and governance (ESG) criteria into investors' decision-making processes is now widely recognised as a strategic lever, capable of combining financial performance and ethical responsibility (Mervelskemper et al., 2014). Nevertheless, an increase in the focus on sustainable finance does not guarantee investment behaviour consistent with sustainability principles, particularly among retail investors. While the availability of ESG data has increased, significant obstacles persist related to the fragmented, opaque or expensive nature of such information (Billio et al., 2021). In this context, the psychological mechanisms of cognitive dissonance, information avoidance and selective exposure can profoundly influence individuals' choices, making an effective transition towards more informed and sustainable investment decisions difficult (Pröllochs et al., 2018; Huck et al., 2015).
The present study aims to investigate how the psychological and informational factors mentioned above influence individual investors' decision-making processes in the presence of conflicting, uncertain or costly sustainability information. The study will examine the interaction between the accessibility, reliability and cost of sustainability information and the propensity of individuals to make choices consistent with their pro-social and pro-environmental orientations (Caferra et al., 2021; Whitmarsh & O'Neill, 2010). Following the extant literature on information avoidance and cognitive dissonance, it was hypothesised that the presence of economic costs or uncertainty in accessing ESG data would reduce the propensity to inquire and, consequently, the frequency of making sustainable choices. It was also predicted that the conflict between economic performance and environmental impact would favour selfish behaviour, especially in the absence of clear and reliable information, while individuals with strong pro-environmental orientations would show greater value coherence, but only under favourable information conditions.

To address these hypotheses, an online behavioural experiment was conducted based on a Stated Choice Experiment (SCE), drawing inspiration from the model developed by Momsen and Ohndorf (2022) for green consumption, with adaptations made to the context of sustainable financial investments. The experiment involved a sample of 136 university students, recruited from UnitelmaSapienza University, who participated remotely via the z-Tree unleashed platform (Duch et al., 2020). The experiment was carried out individually and

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remotely, with participants always connected and video cameras active to ensure compliance with the established protocol and prevent any communication between them. Adherence to the experimental protocol was ensured by real-time monitoring, and a virtual room on Google Meet was utilised for clarification without compromising the experimental integrity.

The experiment consisted of two phases. In the first phase, participants completed a preliminary questionnaire assessing socio-demographic characteristics and behavioural attitudes, including pro-social orientation, pro-environmental identity and risk attitudes (Caferra et al., 2021; Eckel & Grossman, 2002; Whitmarsh & O'Neill, 2010). The collected data were aggregated into synthetic indices that allowed for the categorisation of subjects according to the degree of inclination towards altruistic, ecological and risk-averse behaviour. In the second phase of the experiment, participants were presented with 24 investment decisions, each between two options (G1 and G2) characterised by different financial returns and probability of carbon offsets. The experimental conditions were designed to simulate realistic scenarios in which sustainability information could be fully available, partial, uncertain or associated with a cost. The distinction between the investment options was based on the presence or absence of a conflict between economic return and sustainable impact. Investment choices were divided into two categories: 'aligned interest' situations (where the most profitable investment was also the most sustainable) and 'conflicting interest' situations (where the most sustainable investment offered the lowest return). The analysis was primarily oriented towards the latter, as they constitute a suitable context for the emergence of cognitive dissonance.

The experimental conditions were divided into five treatments: a control group with full and free access to information and four experimental groups in which access to sustainability information was subject to limitations in terms of cost, uncertainty or both. In the control group, participants received both the financial return and the probability that the investment would contribute to the sustainable fund, thus being able to make fully informed decisions. In the experimental groups, on the other hand, only returns were initially shown, while information on sustainability could be requested via two separate buttons: one for 'good news' and one for 'bad news', each with a 50% probability of revealing whether the most or least profitable option was also the most sustainable. nn certain conditions, no financial cost was incurred for requesting information, while in others, each click on the buttons resulted in a slight reduction in the return on the selected investment. In a further variant, the information provided could be inaccurate: every time the participant requested information, there was a 25% probability that it was incorrect. Finally, in the most restrictive condition, economic limitations and uncertainty combined, access to information entailed a cost and, at the same time, the content provided could be unreliable. This design enabled the observation of how variations in cognitive and economic costs influenced both the propensity to inform and the final investment choices.

The results support the theoretical hypotheses formulated. Participants in the control group, who had full access to information, made a higher percentage of sustainable choices. This finding indicates that the accessibility and clarity of information are crucial factors in the adoption of responsible investment behaviour. Conversely, the introduction of a modest economic cost or a margin of uncertainty has a substantial impact on the demand for information, leading to a corresponding decline in the frequency of sustainable choices. It is also interesting to note that subjects tend to avoid information completely or to request it only when they are certain of its reliability, confirming the hypothesis that uncertainty acts as a cognitive barrier that promotes avoidance. Another central element concerns the role of differences in performance between options. The analysis demonstrates that as the difference in return between the sustainable and non-sustainable options increases, the propensity to choose the sustainable option decreases significantly. This supports the idea that high economic incentives reduce the effectiveness of value orientations and that professed preferences for sustainability do not always translate into actual behaviour when they imply a perceived cost. However, individuals with a high pro-environmental orientation demonstrate greater resistance to this dynamic, maintaining a higher propensity to make sustainable choices, but only under conditions of clear and reliable access to information. Conversely,

when information is uncertain or costly, these individuals also tend to adopt more selfish behaviour, highlighting the fragility of ethical motivations in contexts of imperfect information. Concerning information behaviour, it has been demonstrated that the propensity to avoid information increases significantly in those treatments that involve a cost for its acquisition. Concurrently, the perceived reliability of the information has been identified as a key factor. Participants tend to avoid information when there is a risk that the information is incorrect or has the potential to be inaccurate or misleading. The findings of this study imply that if sustainability-related information is not perceived as credible and easily accessible, it is not only ignored but may also reinforce rationalisation mechanisms that lead to the justification of less sustainable choices. In summary, the study demonstrates that the clarity of ESG transparency policies is a crucial factor in their effectiveness and that the presence of cognitive or economic barriers to information can hinder regulatory and market efforts to promote responsible finance.

This study makes a significant contribution to the ongoing discourse on sustainable finance by offering experimental evidence on the role of cognitive bias in decision-making processes. Specifically, it demonstrates that cognitive dissonance is not merely a theoretical construct but a tangible factor influencing economic choices, particularly in contexts of information uncertainty. The findings underscore the notion that information, despite its theoretical availability, is not utilized efficiently if it incurs a cost, is associated with uncertainty, or engenders potential psychological distress. Consequently, public policies and market strategies that are oriented towards the promotion of ESG investments must consider these factors and go beyond the mere disclosure of data. It is essential to also focus on how this information is presented, perceived and integrated into individuals' decision-making processes. The findings of this study are of relevance to the field of regulation. To encourage sustainable investment among retail investors, it is essential to develop tools that reduce costs, enhance the reliability of sources, and ensure the accessibility and comprehensibility of ESG information. Addressing the fragmentation and absence of standards in ESG ratings is crucial, as this contributes to uncertainty and investor cognitive dissonance. The implementation of more harmonised and transparent rating methodologies will serve to limit avoidance strategies and thereby foster investor confidence. The study demonstrates that the influence of cognitive bias cannot be ignored, even among investors with strong environmental motivations. To promote truly sustainable finance, it is therefore necessary to act on the psychological and behavioural mechanisms that govern the use of information. Key steps to be taken to make sustainability policies more effective and to bring financial markets closer to the long-term goals of sustainable development are as follows: reducing uncertainty, simplifying access to and improving the reliability of ESG information.

Keywords: Sustainable Finance, Cognitive Dissonance, Information Avoidance, ESG Transparency, Investment Decision, Making