Social Responsible Investing: a lab-in-the field experiment.

Carlos Gracia-Lázaro, Sandro Meloni, Alberto Antonioni, José A. Cuesta, Angel Sánchez, and Yamir Moreno

Socially responsible investing (SRI), or ethical investment, is any investment strategy based on maximizing both financial returns and social good, by integrating social, ethical or environmental criteria into financial investment decisions. While conventional investment focuses on financial risk and profit maximization, SRI includes other objectives and limitations.

Besides, in the framework of game theory, the Public Goods game has become a standard for studying group interactions between individuals and in particular multi-agent economical interactions.

In this work, we analyze how social taxes affect cooperation in a Public Goods game and how people distribute their investments in funds with different social fees. In our experiment, 140 volunteers distributed in groups of 10 players played two different experiments, each one consisting of 20 rounds. In every round, each player was provided with 100 monetary units (hereafter, ECU), and he/she was allowed to contribute and distribute that amount into 5 available common funds. Each of these funds has associated a different contribution (from 0% to 20%) to a non governmental organization. The sum of the contributions to the common funds, after discounting the social fee, was multiplied by an enhancement factor, and then equally divided among the ten participants. The obtained payoff in each round was the sum of the share and the ECUs held back, i.e. the amount that was not invested in the common fund. This payoff could not be used in subsequent rounds. Each player accumulates the earnings of each round. At the end of the experiment, each player received the sum of the payoffs.

We have studied two different scenarios, while in a setup the social fee was deducted from the players' contributions (*players pay*), in the other setup the fee was deducted from the fund (*bank pays*). Nevertheless, both setups were equivalent regarding payoffs and contributions to the NGO. In addition each volunteer played two different treatments: While in a treatment players had to invest all the available amount each round, in the other treatment they were able to save part of their initial endowment and put it directly in their earnings. These four configurations allow us to study framing effects in social investments and cooperation issues.

We found higher values of social contribution when the social fee was deducted from the fund (*bank pays*) regarding the situation in which the fee is deducted directly from players' contribution (*players pay*). We also observed higher values of investment in the *bank pays* treatment, despite having always available a fund without social fee. In addition, we found that the social contributions, as well as the cooperative level, were significantly greater in women compared to men. These findings have potential applications to design tax and financial policies and to strengthen social investment.