Does ESG Investing Help VC Funds to Attract Startups? Experimental Evidence*

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Abstract

Despite recent progress in examining investors' ESG preferences, little is known about firms' preferences for ESG investors. This paper studies whether aiming for ESG influences startups' intentions to collaborate with venture capitalists through two complementary field experiments that involve real US startup founders and real-world stakes. The first experiment requires entrepreneurs to evaluate multiple randomly generated investor profiles so that they can receive a recommendation list containing real matched investors' information. The second experiment is a novel payment game created to elicit entrepreneurs' taste-driven preferences. Provided with real monetary incentives, entrepreneurs decide whether to pay for a more comprehensive investor recommendation list that contains a randomized number of ESG investors and is sold at a randomized price. Results find that (i) Aiming for E, S, and G has heterogeneous effects. Environmental initiatives reduce venture capitalists' attractiveness to startups while social initiatives might improve investors' attractiveness. (ii) Positive assortative matching based on ESG exists in the startup fundraising process. (iii) Male investors benefit from aiming for social impact while female investors get punished for aiming for environmental impact. (iv) A random utility model suggests that startup founders have taste-driven preferences for ESG investors.

Keywords: Venture Capital, Entrepreneurship, ESG, Sustainable Finance, Field Experiments
JEL Classification: G24, L26, C39, M14, C78

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1 Introduction

"ESG investing", also known as "sustainable investing" or "socially responsible investing", often refers to the investment strategy which considers environmental, social, and governance (ESG) factors during the investment process.[1] Following the release of the Principles for Responsible Investments (PRI) in 2006, ESG investing has gradually become a mainstream investment class and serves as a financial tool to address various environmental and social issues (Bialkowski and Starks, 2016; Hong, Karolyi and Scheinkman, 2020). During the process of ESG promotion, the private market plays an important role due to its powerful influence on early-stage firms' governance and operations (Bernstein, Giroud and Townsend, 2016). To understand the equilibrium outcomes of sustainable finance or ESG investment in the private market, theoretical work generally assumes that firms mainly maximize profits and do not have specific ESG preferences (Green and Roth, 2021; Gupta, Kopytov and Starmans, 2022; Oehmke and Opp, 2022). However, despite recent progress in studying motivations for ESG investments in the private market (Barber, Morse and Yasuda, 2021; Jeffers, Lyu and Posenau, 2021; Kovner and Lerner, 2015; Zhang, 2021), little empirical evidence exists on firms' preferences for ESG investors. Given that investments in the private market often involve a two-sided matching process (Chang, Gomez and Hong, 2021; Sørensen, 2007), understanding this question not only helps to explain the sustainable investing equilibrium in the private market but also provides insights into the benefits and costs of ESG adoption for investors. To fill this gap, the paper studies how ESG investing affects startups' intentions to collaborate with venture capitalists by using two complementary experiments with real US startup founders.

Extant theories yield ambiguous answers to this question. On the one hand, the well-known halo effect from corporate social responsibility might create positive social images, more social capital and goodwill for ESG venture capital (VC) funds. This might increase ESG investors' attractiveness to startups (Bénabou and Tirole, 2010; Fombrun and Shanley, 1990; Hong and Liskovich, 2015). On the other hand, adopting an ESG investing strategy also means that investors need to follow certain environmental and social mandates, potentially reducing startups' profitability due to any required ESG-related reforms. This might lower ESG investors' attractiveness to startups (Heinkel, Kraus and Zechner, 2001; Roth, 2021). Furthermore, as ESG criteria cover different dimensionalities of sustainability, aiming for different aspects of ESG might impose different influences on investors' ability to attract high-quality deal flows.

Identifying startups' preferences for ESG investors is empirically challenging. Firstly, standard databases usually record completed deals, which essentially capture the matching equilibrium outcomes. The unobservable matching process makes it difficult to separate investors' decisions from startups' decisions (Sørensen, 2007). Second, while several commercial databases contain ESG ratings of public firms, this information is rarely directly observable for large-scale private firms and VC funds. The ESG measurement issue is a natural barrier to studying the implications

[1] See "What is ESG Investing?" and "ESG In Venture Capital: How ESG will affect VC funds and startups?". "Sustainable investment", "ESG investment", and "SRI investment" are used interchangeably in this paper. Impact investing is often viewed as a subgroup of ESG investing, which cares about both financial profits and ESG impact.

of sustainable investing in the private market. Lastly, since standard databases do not observe startup founders' social preferences and their beliefs in the prospect of collaborating with ESG investors, it is almost infeasible to identify the nature of startups' preferences about ESG investors. These identification challenges motivate the use of experimental methods to elicit startups' preferences about ESG venture capitalists.

This paper implements two complementary experiments. One consists of a startup-side incentivized resume rating (IRR) experiment and the other involves a novel payment game. After constructing an individual-level global venture capitalist database, the researcher uses both experiments to provide startup founders with a customized investor recommendation service, creating a field setting. In the first IRR experiment, recruited startup founders need to evaluate multiple randomly generated venture capitalist profiles. Despite knowing these investor profiles to be synthetic, startup founders are willing to provide truthful evaluations to receive a recommendation list containing ten real matched venture capitalists' information. The more accurate startup founders' evaluations are, the more likely the machine learning algorithm can recommend matched investors. Similar "matching incentives" have been used in Kessler, Low and Sullivan (2019) and Zhang (2020). In the second payment game, all startup founders receive a lottery opportunity. Lottery winners can choose one of the following two options. Option 1 is to receive $500. Option 2 is to receive ($500 - price) and pay a *randomized* price for a more comprehensive investor recommendation list containing 200 real matched investors' information. Each control group subject will receive a normal recommendation list. Each treatment group subject will receive a recommendation list that prefers to recommend ESG investors given a similar matching quality. In this payment game, both the comprehensive recommendation list's price and the number of recommended ESG investors are orthogonally randomized.

The payment game is designed explicitly to complement the IRR experiment in the following ways. First of all, while the IRR experiment is mainly used to elicit startup founders' belief-driven preferences toward ESG investors,[2] the payment game essentially elicits subjects' taste-driven preferences for ESG investors. The combination of both experiments provides a complete picture of the nature of startup founders' preferences. Second, the payment game enables researchers to quantify experimental subjects' willingness to pay for the provided incentive. One typical concern of an IRR experiment is regarding how much experimental subjects value the provided incentive. Researchers can always implement various robustness checks with the payment game by zooming into the subgroup that decides to pay for the recommendation list.

The paper mainly finds the following four experimental results. First, aiming for different aspects of E (environmental), S (social), and G (governance) impact affects venture capitalists' ability to attract deal flows in different ways. Compared to conventional profit-driven investors, investors with environmental initiatives, on average, receive 3.5 percentage points lower contact interest ratings and are perceived to be 3.2 percentage points less likely to im-

[2]Belief-driven preferences generally refer to any preferences driven by financial motives. For example, startup founders prefer ESG investors if they perceive ESG investors to be more likely to help them generate higher financial returns, to show more investment intentions in their startups, or to involve less uncertainty and risk.

prove startups' profitability. This negative effect mainly hurts low-quality, less attractive venture capitalists. However, investors with social initiatives usually receive higher contact interest ratings from startup founders. This "social premium" is roughly equal to a 3.9 percentage points increase in contact interest ratings for subjects who choose to pay for the recommendation list. Not surprisingly, the "social premium" is mainly driven by female startup founders and those who start impact ventures. However, this "social premium" mainly benefits medium-level investors. Aiming for governance impact, which is mainly about increasing diversity in the management team in this experiment, does not significantly affect founders' fundraising decisions on average. Given these heterogeneous implications, bundling E, S, and G together inevitably masks important information. This calls for a more thorough investigation of the influence of different aspects of ESG initiatives.

Second, positive assortative matching (sorting) based on ESG characteristics of startups and investors exists. However, it happens asymmetrically. On average, profit-driven ventures are 4 percentage points less likely to approach ESG investors while impact ventures are only 1 percentage points more likely to approach ESG investors. Also, profit-driven ventures are mainly against investors with environmental initiatives, providing 6.72 percentage points lower quality evaluations, 8.02 percentage points lower availability evaluations, 4.12 percentage points lower informativeness evaluations, and 8.08 percentage points lower contact interest ratings. However, aiming for social or governance impact does not hurt ESG investors' attractiveness to these conventional startups. On the contrary, impact ventures mainly favor investors with social initiatives, providing 2.63 percentage points higher availability evaluations, 2.18 percentage points higher informativeness ratings, and 2.78 percentage points higher contact interest ratings. Aiming for environmental or governance impact does not increase ESG investors' attractiveness to impact ventures on the aggregate level.

Third, there are significant heterogeneous effects of adopting an ESG investing strategy based on both investors' and startups' characteristics. For investors' characteristics, the distributional effect based on quantile regressions shows that aiming for environmental impact mainly hurts low-quality and less attractive venture capitalists. Aiming for social impact mainly benefits investors whose attractiveness, measured by received contact interest ratings, falls between 40^{th} and 70^{th} quantiles. Also, female ESG investors face more difficulties in attracting startups. Experimental results show that female investors with environmental initiatives receive significantly more punishment (i.e., roughly 4 percentage points lower contact interest ratings) compared to similar male investors. However, male investors with social initiatives receive some premiums (i.e., roughly 3 percentage points higher contact interest ratings) for aiming for positive social impact.

For heterogeneous effects based on startups' characteristics, results show that both political views and gender are strongly correlated with startup founders' attitudes toward ESG investors. Female founders are mainly against environmental initiatives and favor social initiatives. Male founders are mainly against governance initiatives that encourage female leadership. Also, consistent with Hong and Kostovetsky (2012), Republican startup founders are

much more against ESG investing, especially those that incorporate environmental initiatives. Compared to similar Democratic startup founders, Republicans are also more against governance initiatives that increase gender diversity in leadership.

Fourth, startup founders have taste-driven preferences toward ESG investors. Conditional on similar matching quality of recommended investors, startup founders are roughly 13% more likely to pay for an investor recommendation list that prefers recommending ESG investors. Moreover, a random utility model shows that startup founders' average willingness to pay for extra ESG investors' information is more than $77. This provides causal evidence for the existence of startup founders' taste-driven preferences for ESG investors. However, the marginal utility for purchasing ESG investors' information decreases as the price of the recommendation list increases. This suggests that startups' taste-driven preferences towards ESG might decrease with higher stakes.

The contribution of this paper is both empirical and methodological. First, the paper is directly linked to the burgeoning empirical literature studying sustainable investing in the VC industry. Barber et al. (2021) and Kovner and Lerner (2015) find that VC funds with dual objectives have lower financial returns compared to conventional VC funds. Jeffers et al. (2021) analyze the risk exposure and risk-adjusted performance of impact investing funds, showing that impact VC funds do not underperform the benchmark VC funds after adjusting market risk exposure. Zhang (2021) implements a field experiment with real US venture capitalists. Experimental results discover multiple barriers for impact ventures to raise funding from VCs and show that VC investors view impact ventures as less profitable than similar profit-driven startups. [3] While previous literature mainly focuses on investors' decisions, this paper examines the opposite side and studies how startups' fundraising strategies react to investors' ESG characteristics. Startups' fundraising decisions directly influence venture capitalists' ability to attract deal flows and VC funds' financial performances through the sorting channel.

Second, the paper contributes to the literature that studies the implications of ESG initiatives. For relevant empirical work, Lindsey, Pruitt and Schiller (2021) shows that implementing ESG strategies can cost nothing in the public market. Hong and Liskovich (2015) finds that socially responsible firms are associated with two million dollars less in fines due to the halo effect. This paper shows that venture capitalists' environmental initiatives generate extra costs for investors. However, social initiatives can bring an extra premium in terms of attracting startups. Hence, the implications of ESG investment in the public market are not necessarily generalized to the private market due to the two-sided matching nature of private investment. Moreover, different aspects of ESG generate different implications. The discovered heterogeneous effects of ESG initiatives emphasize the importance of exploiting heterogeneous agent models when studying sustainable finance.

For relevant theoretical work, when studying how sustainable investing generates real impact, standard theoretical

[3] Other empirical papers that study impact investing in the private market include Bellon (2020), Geczy, Jeffers, Musto and Tucker (2021), etc.

models often assume that firms maximize their market value (Pástor, Stambaugh and Taylor, 2020).[4] This paper shows that besides potential financial motives, taste-driven factors also influence startups' fundraising decisions. Hence, it is helpful for future theories to consider taste-driven factors when modeling firms' decisions. Also, based on the theoretical framework of Green and Roth (2021), the documented positive assortative matching in this paper suggests that there is still space to improve their impact capital allocation process.[5]

Third, the paper contributes to the entrepreneurial finance literature that studies startups' fundraising behaviors. Smith (2001) finds that 71% of the responding companies in his survey received multiple financing offers from venture capitalists. Hsu (2004) also exploits multiple financing offer events. Hsu (2004) finds that when facing competing financing offers from different VCs, startups are more likely to accept high-reputation VC offers. Based on a two-sided matching framework, Sørensen (2007) shows that more experienced investors are matched with higher quality startups. Zhang and Ebrahimian (2020) implement an experimental system that studies the matching process between VCs and startups. This paper complements the previous literature by showing that investors' ESG characteristics also influence the two-sided matching outcomes between investors and startups.

Lastly, through novel experimental design, the paper also methodologically contributes to the growing experimental literature that elicits decision-makers' preferences. Originally created by Kessler et al. (2019) to study discrimination questions in the labor market, the IRR experimental method has been used in several papers to elicit investors' preferences (Zhang, 2020). This paper creates a novel payment game to complement the IRR experiment and solve its documented limitations. Moreover, the payment game also provides an alternative option to study taste-driven preferences in a field setting. Classical methods that elicit taste-driven preferences often involve lab experiments, such as the dictator game or the trust game. These methods often provide experimental subjects with an artificial lab setting (Riedl and Smeets, 2017), creating an "external validity" concern that subjects' behaviors in the lab are different from their behaviors in the field. The payment game in this paper provides a field setting that elicits subjects' taste-driven preferences by checking their willingness to pay for the provided matching service. Similar to the experimental technique used in Alesina, Miano and Stantcheva (2018), the payment game also checks how experimental subjects' decisions are affected by the randomized "prices".

The remainder of this paper is organized as follows. Section 2 presents the experimental design and implementation details. Section 3 analyzes startup founders' attitudes towards different types of ESG investors and profit-driven investors in the US venture capital industry. Importantly, this paper tests multiple coexisting mechanisms that drive startup founders' belief-driven preferences and taste-driven preferences about ESG investors. Section 4 concludes.

[4] Other theoretical papers related to sustainable finance in the private market include Oehmke and Opp (2022), Gupta et al. (2022), Chowdhry, Davies and Waters (2019), etc.

[5] Green and Roth (2021) study the equilibrium matching of investors to startup founders along the dimension of ESG and profitability. They show that when "values-aligned" ("impact-aligned") social investors dominate in the market, positive (negative) assortative matching happens. Since this paper finds that positive assortative matching exists along the ESG dimension, the majority of the social investors in the VC industry should still be values-aligned.

2 Experimental Design and Implementation

There are two sub-experiments designed to test the nature of startups' preferences on ESG investors. The first sub-experiment is an incentivized resume rating (IRR) experiment designed to directly identify the nature of different belief-driven preferences. Experimental subjects need to evaluate randomly generated synthetic venture capitalist profiles to obtain a recommendation list of real matched VC investors. Importantly, investors' philosophies of investment (i.e., ESG characteristics) are randomized. The second sub-experiment is a novel payment game designed to directly test the existence of taste-driven preferences in the field setting. If experimental subjects win a lottery, they can choose between receiving \$500 (i.e., Option 1) and receiving (\$500-price) & a more comprehensive investor recommendation list (i.e., Option 2). Both the price and the fraction of ESG investors in the recommendation list are randomized. Appendix Figure A1 provides the flow chart of these experiments.

Importantly, both sub-experiments are designed to fit startups' fund-raising settings and mimic a "field" environment as much as possible. The IRR experiment is essentially a startup-side data-driven matching tool that recommends real matched venture capitalists for startup founders. Multiple companies have provided similar commercial matching services by collecting basic background information of both startup founders and investors.[6] These matching tools are generally designed to reduce the frictions during the startup founders' fund-seeking process by facilitating startup founders to search for their "dream" investors. The payment game essentially elicits startups' willingness to pay for this recommendation service and naturally integrates with the IRR experiment. While most trust games or dictator games create an isolated lab experimental setting, this payment game is customized to startups' fundraising environment and complements the IRR experiment.

2.1 Recruitment Process and Sample Selection

To recruit a large number of real US startup founders who fit the research purpose, I collaborated with a third party that provides recruitment services targeting real US small business owners and startup founders between 03/2021-04/2022. The experiment further adds two filter questions and several screeners to recruit founders satisfying the following three criteria: 1) being a startup founder or business owner who plans to raise funding for his/her company from the venture capital industry, 2) understanding the designed incentive and agreeing that the more truthfully they reveal their preferences, the more benefits they can obtain from the study, 3) passing several carefully designed attention checks based on participants' evaluation time, inserted attention check questions, and Bot Detection algorithms designed by Qualtrics system. If participants fail any of these criteria, the Qualtrics system will automatically terminate the experimental process and inform experimental participants that they are no longer qualified for this study. Unqualified participants do not have a second chance to join the study. Similar to the classical IRR experimental design, all

[6] These companies include dealroom.co, VC Match, the Community Fund, VCWiz, etc.

experimental participants are informed of the research purpose, as required by Columbia IRB and SSE IRB. However, the consent form emphasizes the matching purpose of this created "investor-startup" matching tool.

The response rate of this study is roughly 6%, and Table 1 summarizes the background information of the recruited startup founders. Female startup founders account for 41.61% of all recruited startup founders. 89.44% founders' startups are still in the seed stage, consistent with the fact that mainly early-stage startups value the provided "matching incentives" more than later-stage startups. Roughly 50% recruited startup founders are Democratic, and 24% subjects are Republicans. Also, 63.98% of startups are B2C startups, and only 26.09% of the startups are in the Information Technology industry. According to the geographical distribution of recruited US startups, most of our sample startups are located in US startup hubs and tech centers. To the best of our knowledge, there is no data that records all US startups that consider funding from VC industry. Hence, there is no benchmark to compare the demographic information of recruited startups and check the sample selection issue.

2.2 Structure of the Matching Tool

After potential experimental subjects receive the recruitment email from the third-party recruitment company, they need to open the inserted survey link and read the consent form to decide whether to enter the designed matching tool and to participate in this experiment. The matching tool (i.e., the startup-version "Nano-Search Financing Tool") is based on Qualtrics and composed of the following four sections.

Part A: Evaluation Section (IRR Experiment to Detect Belief-driven Preferences)

Before the evaluation section formally starts, experimental subjects need to provide some non-sensitive background information about their startups, including their startup's industries/sectors, stages, number of employees, and the amount of money they aim to raise. This is a standard procedure used by other investor recommendation services on the market. Participants also need to assume that all investors to be evaluated are active investors, investing in the industry (industries) and stage(s) of their interest. After reading the relevant guidance and passing an attention check question, they will enter the formal investor evaluation section.

In the evaluation process, experimental subjects need to evaluate 20 randomly generated synthetic venture capitalists' profiles. Although participants know that these investor profiles are hypothetical, truthfully revealing their preferences about these investors helps the matching algorithm to generate better-matched investor recommendation lists for them. Essentially, this part follows an IRR experimental paradigm designed to directly identify belief-driven preferences.

A.1 Investor Profile Creation and Variation

Following a factorial experimental design, this sub-experiment randomizes multiple investors' individual-level char-

acteristics and fund-level characteristics simultaneously and independently. Each investor characteristic is dynamically populated from a pool of options, and the matching tool combines these randomly selected characteristics to create an investor profile. Profile templates are built-in HTML for display in a web browser and populated dynamically in Qualtrics using Javascript. The detailed randomization process is described in Table 2.

The following efforts are made to improve the realism of generated profiles. First, the wording used to describe investors' working experiences and funds' investment philosophies is extracted from real-world investors' experiences and funds' descriptions posted on their websites. The wording used further removes relative information indicating the investor's interested industries and stages. Second, most selected investors' characteristics try to mimic the real-world distribution. The number of deals is adjusted based on the investor's seniority, avoiding generating any unrealistic investor profiles. Third, generated profiles are essentially a combination of investors' publicly available information rather than their resumes. Unlike the job-seeking process, investors rarely post their resumes online. Instead, startup founders do due diligence on investors by collecting information from multiple online platforms, such as LinkedIn, personal websites, Crunchbase, AngelList, Pitchbook, etc. Therefore, the format of investor profiles mimics information posted on these platforms, displaying key points of investors' characteristics. To further enhance participants' experiences of participating in this study, the tool also provides a progress bar.

All investor profiles contain three sections in the following order: i) individual-level characteristics, including first name, last name, investment experience, educational background, and previous entrepreneurial experience or other working experience; ii) fund-level sensitive characteristics, including the fund's investment philosophy and type; iii) fund-level nonsensitive characteristics, including the fund's previous performance measured by the internal rate of return, investment style, fund size measured by AUM (i.e., asset under management) & dry powder, and location. This experiment only includes investor characteristics that are publicly available online because the recommendation algorithm is based on the public information of a large number of venture capitalists. Since this paper focuses on startups' preferences for different types of ESG investors, the paper mainly introduces the randomization process of investors' ESG characteristics here. For the creation and randomization process of other investors' characteristics, please see Zhang and Ebrahimian (2020).

Randomization of Investors' ESG Characteristics — Identifying ESG VC funds and accurately estimating their distribution in the US venture capital industry is challenging. Based on the survey evidence from Botsari and Lang (2020), "approximately 7 in 10 VCs incorporate ESG criteria into their investment decision process". However, survey respondents are likely to exaggerate their pro-social behaviors in an unincentivized survey based on Camerer and Hogarth (1999).[7] After considering this potential bias caused by exaggeration, this experiment randomly assigns 50% of hypothetical investors into impact funds and the other 50% into profit-driven funds. This also helps to maximize the experimental power.

[7] When using keyword methods, Barber et al. (2021) find that impact VC funds account for less than 5% of their total sample.

The generated ESG investors are further randomly assigned into different categories of ESG funds to study the effect of "E," "S," and "G" separately. Among these 50% ESG investors, 40% of them belong to "ESG funds" (i.e., VC funds that aim for positive environmental, social, and governance impacts). 20% of them belong to "Environmental Funds" (i.e., ESG VC funds that only aim for positive environmental impact). Another 20% of them belong to "Social Funds" (i.e., ESG VC funds that only aim for positive social impact). The rest 20% of them belong to "Governance Funds" (i.e., ESG VC funds that only aim for positive governance impact). This distribution reflects the fact that caring about the general impact of "ESG" is more common than caring about only one aspect of "ESG" for most ESG VC funds.

For different types of VC funds, each generated profile provides one piece of corresponding description to further elaborate the investor's investment philosophy. For example, profit-driven funds emphasize their goals of "enabling startups that grow faster and stronger" or "helping them scale rapidly." "Environmental Funds" are committed to "addressing the global environmental challenges." "Social Funds" aim to "generate positive social impact" or "address social and economic inequity." "Governance Funds" are "in support of driving capital to high growth companies with women leaders."[8] The selected wording of these descriptions is extracted from real VC firms' official websites. To avoid any idiosyncratic influence of certain wording, the research team create multiple pieces of descriptions for each investor category. For details, please see Table A1 in the Online Appendix.

Providing descriptions of investment philosophies has the following advantages. First, it increases the salience of investors' ESG characteristics and improves the experimental power. Second, it helps experimental subjects to better understand the meaning of "ESG funds", which some startup founders might feel unfamiliar with. Lastly, it provides a natural way to study the separate effect of "E," "S," and "G."

A.2 Evaluation Questions

For an IRR experiment, carefully-designed, theory-based evaluation questions are the keys to directly identifying the nature of startups' belief-driven preferences on ESG investors. Experimental subjects need to answer three mechanism questions and two decision questions when evaluating each investor profile. (see Appendix Figure A2 for an example of the designed evaluation questions.)

Mechanism Questions

Three mechanism questions are designed to test the following standard belief-driven sub-mechanisms which explain why investors' ESG characteristics might affect startup founders' collaboration intentions. The first sub-mechanism is that these characteristics might be perceived as signals of investors' abilities to help startups to achieve higher financial returns. If ESG investors' expertise is not in maximizing startups' profits, they might receive lower quality ratings

[8] Governance impact can also incorporate other dimensions, such as a transparent information disclosure process. However, it is very rare for VC firms to emphasize that they are more transparent than the market level. After checking multiple VC firms' official websites, the research team found that promoting female leadership is the most commonly emphasized "Governance"-related practice. Hence, "G" in this paper mainly stands for "promoting women's leadership" in the VC industry.

compared to profit-driven investors. It is also interesting to check which dimension of "E", "S", and "G" is considered the least profitable. To test this mechanism, startup founders need to evaluate each investor' potential to help them generate higher financial returns(i.e., quality ratings Q_1).

The second sub-mechanism is about sorting. Investors' ESG characteristics might be suggestive of their investment intentions for certain types of startups. If ESG investors prefer impact ventures, they might be more attractive to impact ventures and less attractive to profit-driven ventures. To test this channel, subjects need to evaluate the likelihood that each investor would show interest in their startups (i.e., availability ratings "Q_2").

The third sub-mechanism is about founders' beliefs of the informativeness of investors' profiles (i.e., "second moment beliefs"). If ESG VC funds suffer from more severe information asymmetry problems, startups might rationally choose profit-driven funds to avoid potential uncertainties.

Q_1 **(First Moment: Quality Evaluation)**

1. What's the probability that you feel [investor name] can help your company generate higher financial returns based on [his/her] quality? (Think only about your perception of [his/her] quality and attractiveness when gauging your interest level in the investor – imagine that [he/she] is guaranteed to finance your startup.)

Probability of helping you succeed (click on the bar)

(Not helpful) 0-10%-20%-30%-40%-50%-60%-70%-80%-90%-100% (Helpful for sure)

Q_2 **(Strategic Mechanism: Sorting)**

2. What's the probability that you think [investor name] would show interest (e.g. offer a meeting or further discussion) in providing funding for your startup? (Think only about whether you feel [he/she] would finance you or not–when gauging how likely [he/she] would be to finance your startup, imagine that [he/she] has many startups to choose from.)

Probability of showing interest

(Will not show interest) 0-10%-20%-30%-40%-50%-60%-70%-80%-90%-100% (Show interest for sure)

Q_5 **(Second Moment: Informativeness & Variance)**

5. Imagine that you have access to a professional online profile or resume of the investor. To what extent do you think the profile is informative for evaluating [investor name] as a prospective collaborator?[9]

Informativeness

(Not informative at all) 0-10%-20%-30%-40%-50%-60%-70%-80%-90%-100% (Provide all the information)

Decision Questions

[9]This evaluation question comes from the complementary survey used in Bartoš, Bauer, Chytilová and Matějka (2016).

Two decision questions are designed to capture two dimensions of startups' fundraising behaviors. The first decision question (i.e., Q_3) asks startup founders about their proposed fundraising plans for each investor (i.e., intensive margin). Q_3 is designed to elicit the *relative* funding amount compared to the founder's original fundraising plan rather than the absolute amount of funding. This design creates a standardized question that accommodates startups with different amounts of targeted funding.

The second decision question (i.e., Q_4) is about a startup's likelihood of contacting each investor (i.e., extensive margin). This is one of the most informative decisions that inform the general attractiveness of each investor during a startup's fundraising process. This decision also directly influences investors' potential deal flows. Although it is usually unobservable in standard databases, the IRR experiment can easily elicit startups' willingness to approach each type of investor.

Q_3 **(Intensive Margin: Fundraising Plan)**

3. How much money are you comfortable asking for from [investor name] compared to your original funding plan, considering both [his/her] potential interest in your startup and your collaboration interest with [him/her]? (For example, if you feel it is safe to ask for 80% of your original planned funding needed from [investor name], you can move the bar to 80%.)

Percentage 0-20%-40%-60%-80%-100%-120%-140%-160%-180%->=200%

Q_4 **(Extensive Margin: Likelihood of Contact)**

4. How likely would you be to contact [investor name] (e.g. send an email, build networks and relationships) for a meeting to discuss your startup financing, considering both [his/her] potential interest in your startup and your evaluation of [his/her] ability to help your startup succeed? (Remember that you have limited energy and the algorithm will generate the top 10 recommended investors to you based on your preference.)

Probability of Contact

(Will not contact) 0-10%-20%-30%-40%-50%-60%-70%-80%-90%-100% (Contact for sure)

Part B: Background Questions

Eight background questions are designed to test potential heterogeneous effects and investigate additional mechanisms. Standard background questions include the subject's gender, race, entrepreneurial experience, educational level, and startup founding team composition. One question asks about the subject's likelihood of talking with friends about this study. This helps to test whether startups' ESG preferences are partially correlated with their social image concerns. One question is about the subject's political views. As documented by Hong and Kostovetsky (2012), mutual fund managers' political contributions are strongly correlated with their SRI decisions. Another background

question directly asks about the goal of their startups, which helps to identify whether the subject's startup also cares about ESG.

Part C: Payment Game

Despite multiple impressive merits, the IRR experiment in Part A has several standard limitations. First, it can not directly identify *taste-driven* preferences. Second, it usually does not generate real economic outcomes, making it difficult to quantify experimental subjects' willingness to pay for supporting ESG. To solve these limitations, this experiment adds a novel payment game, which is designed to study *taste-driven* preferences on ESG investors in a field setting. Detailed illustration of this payment game is provided in Appendix Figure A3, Figure A4 and Figure A5.

In this payment game, all experimental subjects are informed that they could receive a lottery opportunity. Basically, two participants will be randomly selected as the lottery winners. The winners are offered the following two options. Option 1 is to receive $500. Option 2 is to receive ($500 - price) and a more comprehensive investor recommendation list containing the 200 most matched real venture capitalists' information. Following a factorial experimental design, two layers of randomization are orthogonally implemented at the same time.

The first layer is to randomize the characteristics of the more comprehensive investor recommendation list. Experimental Subjects will be randomly assigned to the Control group, Treatment 1 group, and Treatment 2 group with equal probability. For the Control group, a comprehensive investor list only contains the 200 most matched investors' information. For the Treatment 1 group, everything is the same as the control group except that to promote gender equality, the research team would prefer to recommend female investors conditional on the same matching quality. For the Treatment 2 group, to promote the social responsibility campaign in the entrepreneurial community, the research team would prefer to recommend ESG investors conditional on the same matching quality based on the experimental subjects' indicated beliefs. If more startup founders choose Option 2 in the Treatment 2 group compared to those in the Control group, it shows that subjects are willing to pay more to collaborate with the ESG investors. This preference is mainly driven by subjects' taste as recommended investors are of the same matching quality.

The second layer is to randomize the cost of supporting the social responsibility campaign in the entrepreneurial community. The price of a more comprehensive list is randomly drawn from [$20, $80]. The price range covers the market price, which is usually between $40 and $70. Randomizing price has the following advantages. First, it enables researchers to quantify subjects' willingness to pay to support ESG. Second, it increases the experimental power by ensuring that a reasonable share of subjects will choose Option 2. If researchers use a fixed price and set it too high (low), almost all the startup founders would choose Option 1 (Option 2). Importantly, it allows to investigate how stakes *causally* affect taste-driven preferences. Understanding this question is crucial for interpreting experimental results related to ESG preferences and guiding the development of theories in sustainable finance.

The last key element of this payment game is to ask experimental subjects about the their perceived algorithm

reliability (i.e., how likely they believe the matching algorithm will recommend a satisfactory list of matched investors for them). Although researchers promise to recommend more ESG investors conditional on the same quality, experimental subjects might not trust this promise. Therefore, this question must be added to control this confounding channel.

It should be noted that experimental subjects' decisions in this payment game are fully incentivized by the monetary rewards provided in the lottery opportunity. If startup founders choose to support the social responsibility campaign by paying for a list with more ESG investors, they will receive less monetary rewards when they win the lottery. Hence, the payment game generates real economic outcomes which can be measured by real money.

This sub-experiment also has other advantages compared to commonly used trust games and dictator games. First and foremost, it provides a field setting that elicits startup founders' willingness to pay for purchasing the matching service in their fundraising process. A classical criticism of trust games or dictator games is that the preferences elicited in an artificial lab setting can differ from experimental subjects' preferences in their daily decisions. The design of this payment game solves this issue by integrating itself with the startups' fundraising setting. This advantage also increases the chance of implementing this payment game in collaboration with industry practitioners as it helps to set the price for their products/services. Second, it complements the IRR experiment. One concern of the IRR experiment is whether experimental subjects really value the provided incentive. This payment game provides an answer to this question, and researchers can always implement robust checks for their results on the subgroup that chooses to pay for the recommendation list.

Part D: Donation Section (Elicit Social Preferences)

As documented by Riedl and Smeets (2017), mutual fund investors' SRI decisions can be explained by either signaling effects (i.e., social image concerns) or social preferences. To check the link between startup founders' preferences on ESG investors and their social preferences, Part D adds a donation section where experimental subjects' donations are also incentivized by real money.

In Part D, all startup founders are given another independent lottery opportunity. The research team will randomly choose another two lottery winners, and each of them will receive $1000. If subjects win the lottery, one of their following donation decisions will be randomly chosen to determine their finalized lottery payment. Therefore, it is important to reveal their truthful preferences in all of their donation decisions.

The first question is if they win the lottery, what percentage of the $1000 would they like to donate to an NGO that supports gender equality. For the second question, they need to decide how much of the $1000 they would donate to an NGO that aims to generate a positive environmental, social, and governance (ESG) impact on the entrepreneurial community. The research team will donate real money on behalf of experimental subjects to the corresponding NGOs. Therefore, experimental subjects' decisions not only affect their own received monetary rewards but also generate

real-world impact. A detailed illustration of the donation section is provided in Figure A6.

A.3 Incentive

In the most general form of an incentivized resume rating experiment, the incentive structure should guarantee that the more truthful and accurate experimental subjects' evaluation results are, the more value and benefits these subjects can receive from their participation. The most mainstream incentive structure used is the "matching incentive". In a two-sided matching market, such as the marriage market, entrepreneurial finance process, and the job-seeking process, researchers can use both data-driven methods and subjects' revealed preferences to help them identify the most matched collaborators or provide certain consulting services (Kessler et al., 2019; Low, 2014; Zhang, 2020). In our experimental setting, we chose to provide this standard "matching incentive" to all experimental participants.

Specifically, after evaluating 20 hypothetical investor profiles, each startup founder will receive ten profiles of real matched venture capital investors' information recommended by the matching algorithm. This recommendation service relies on the availability of a large comprehensive global venture capitalist database collected in Zhang (2020). Startup founders generally need to purchase a license to access this information on Pitchbook. Hence, we provide valuable benefits to experimental participants.

The machine learning algorithm uses Ridge regressions to provide each experimental subject with the contact information (e.g., email, telephone number) and other public information (e.g., title, VC company, etc.) of ten real investors recommended based on their preferences in the IRR experiment. The recommended investors will be further manually checked by the research team to avoid any problems that the algorithm does not take into consideration (e.g., whether the investor has invested in any competitors of the startup, etc.). Each experimental subject will receive their recommendation lists within two months by going to a shared Dropbox folder using the link left at the end of the experiment. Subjects also receive a unique file name and password, which are automatically generated by the Qualtrics system at the end of this experiment. The provided password is used to encrypt their investor recommendation lists. To avoid any potential gender and race discrimination problems, the algorithm does not use any gender or race information. Details of the matching algorithm are provided in the Online Appendix of Zhang and Ebrahimian (2020).

A.4 Reduce Noise

Providing monetary compensation will inevitably lead to more noisy outcomes as some participants attracted by this monetary compensation may not value the "matching incentive". For these noisy participants, their optimal strategy is to complete the tool as quickly as possible and get paid. To filter out such noisy participants, the experiment further exploits the following noise reduction techniques used by survey studies:

a. Attention Check Questions. The survey tool inserts one attention check question and several other background questions requiring participants to enter the answer manually. If participants fail the attention check question, the Qualtrics system will terminate their evaluation process and inform them that they are unqualified for this study. If

participants type in some irrelevant answers, their responses are also removed from our formal data analysis.[10]

b. Enough Evaluation Time. The formal data analysis only includes evaluation results from participants who satisfy the following criteria based on their evaluation time: 1) spend at least 15 minutes on this study.[11] 2) spend at least 50 (15) seconds on evaluating the first (second) profile.

c. Reasonable Rating Variations. If participants' evaluation results almost have no variations for Q_1 (i.e., quality evaluation) or Q_4 (i.e., likelihood of contacting the investor), their responses are also removed in the formal data analysis. The research team created the following three measures for each subject i to detect these situations using their evaluation ratings Y_{ij}^k for the k^{th} question of j^{th} profile: i) sample variance of Q_1 (i.e., $Var_i(Q_1)$), $\frac{1}{20-1}\sum_{j=1}^{j=20}(Y_{ij}^k - \frac{1}{20}\sum_{k=1}^{k=20} Y_{ij}^k)^2$ where $k = 1$. ii) sample variance of Q_4 (i.e., $Var_i(Q_4)$), $\frac{1}{20-1}\sum_{j=1}^{j=20}(Y_{ij}^k - \frac{1}{20}\sum_{k=1}^{k=20} Y_{ij}^k)^2$ where $k = 4$. iii) sum of sample variance of Q_1 and sample variance of Q_4 (i.e., $Var_i(Q_1) + Var_i(Q_4)$). If any of the three measures for subject i falls below the $5th$ percentiles of the corresponding measures in the full sample, the evaluation results of subject i will be removed. This criterion is not applied to Q_2 (i.e., likelihood of being invested), Q_3 (i.e., funding to raise), or Q_5 (i.e., informativeness) because it is reasonable that participants give the same evaluation for these questions. This can happen if participants find it hard to guess investors' decisions, have a determined amount of funding to raise, or believe that each profile has provided enough information.

If participants' evaluation results almost have no variations among Q_1, Q_2, Q_4, and Q_5 within the same profile, their data are also removed. To quantify this variation, the research team calculates the sample variance based on Q_1, Q_2, Q_4, and Q_5 for each subject i and profile j: $Var_{ij}^* = \frac{1}{4-1}\sum_{k\in\{1,2,4,5\}}(Q_{ij}^k - Mean_{ij})^2$ where $Mean_{ij} = \frac{1}{4}(Q_{ij}^1 + Q_{ij}^2 + Q_{ij}^4 + Q_{ij}^5)$. For each subject, if the percentage of profiles with "small sample variance" is more than 40%, their evaluations will be removed. "Small sample variance" is defined as $Var_{ij}^* \leq 5$.

d. Reasonable Answers to Text Entry Questions. When the tool asks participants to enter their industry background, amount of funding needed, or general comments about the study, any answers containing gibberish lead to the removal of subjects' evaluations.

e. Other Subsidiary Criteria. In addition to the criteria mentioned above, the following subsidiary criteria are also taken into consideration when the research team identifies "noisy participants". These criteria include i) a reasonable amount of required funding; ii) time spent on evaluating profiles (i.e., "Timing - Last Click," "Timing - Page Submit," "Duration (in seconds)"); iii) distribution of rating variations; iv) the list of low-quality responses identified by the Qualtrics team based on their designed "data scrub" algorithms.[12]

[10] For example, if the question asks participants to provide information about the detailed industry background of their startups and someone types in "1000", their responses become invalid and do not enter our sample pool.

[11] In a soft launch study, only 10% participants spent less than 15 minutes on this study. Such participants also gave more sloppy evaluation results and always preferred money to higher quality investor recommendation lists in the payment game. Hence, we decided to remove them from our formal study.

[12] Unreasonable amount of required funding includes extreme values, such as "25" or "8799977776555566432". "Timing - Last Click" measures duration between entering the profile and lastly clicking the profile. "Timing - Page Submit" measures time spent on each profile until subjects submit their evaluation results of the profile. "Duration (in seconds)" measures total time spent on this study.

It should be noted that these methods cannot fully eliminate all the noises, which biases the discovered results towards null results. However, these noise reduction techniques generally work well in terms of improving experimental power and detecting invalid responses in practice. All the data filtering process mentioned above has been specified in the pre-registration plan for this experiment.

3 Results

3.1 Different Belief-driven Preferences about E, S, and G

Although it is a common practice to bundle E, S, and G together to provide an aggregate rating, both researchers and practitioners realize the different potential implications of environmental, social and governance initiatives.[13] Table 3 first examines the aggregate effect of being an ESG investor (i.e., bundling E, S, and G together) on startup founders' evaluation results. Panel A analyzes 8,180 investor profiles' evaluations from all the recruited valid startup founders. Panel B focuses on the sub-sample of recruited startup founders, who are willing to pay for a more comprehensive investor recommendation list in the payment game. In Column (1), the dependent variable is the startup founder's evaluation results of Q_1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed and generate more profits. In Column (2), the dependent variable is the evaluation results of Q_2 (i.e., investment intentions), indicating the investor's probability of showing interest in their startups. In Column (3), the dependent variable is the evaluation results of Q_5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative enough. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups plan to ask for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG Fund" is an indicator that is equal to one if the investor works in an ESG VC fund which cares about ESG impact in general, and zero if the investor works in a profit-driven VC fund. Q_1, Q_2, and Q_5 are evaluation results of the investor's quality, availability, and informativeness, separately. All regression results add subject fixed effects. Standard errors in the parentheses are clustered within each startup founder.

Panel A of Table 3 provides weak evidence about the cost of ESG investing. Column (1) shows that compared to profit-driven investors' received quality ratings, ESG investors' quality ratings are 1.26 percentage points lower. This suggests that ESG investors are perceived to be less likely to help startups to generate higher profitability, which is statistically significant at the 5% level. Similarly, Column (2) shows that ESG investors are also perceived to be 1.10% less likely to show investment intentions to subjects' startups, which is statistically significant at the 10% level. Despite these negative effects on startup founders' beliefs, Columns (4)-(7) show being an ESG investor does not significantly affect startups' decisions on fundraising plans and intentions to approach the investor. Results are similar in Panel B

[13] "An Inconvenient Truth About ESG Investing", 2020 Harvard Business Review

for the subgroup of experimental subjects who value the "matching incentive" more. After adjusting the significance level using multiple hypothesis testing, coefficients of "ESG Fund" in Columns (1) and (2) become insignificant. To sum up, when E, S, and G are bundled together, the cost of ESG investing in the VC industry is slightly negative but not salient in terms of both economic magnitude and statistical significance.

Table 4 further investigates the different effects of E, S and G, separately, on startups' fundraising process. Similar to Table 3, Panel A analyzes all the profile evaluation results from the full sample while Panel B focuses on startup founders who choose to pay for the investor recommendation list in the payment game. Different from Table 3, "ESG Fund" is divided into the following more detailed categories: "ESG Fund," "Environmental Fund," "Social Fund," and "Governance Fund." Since the definition of "Governance" impact is often unambiguous and covers multiple dimensions, this experiment mainly examines the diversity issue in the management level. Hence, "G" has some overlaps with "S." Future researchers can examine other dimensions of "G," such as the inclusion of more independent board members or the provision of more transparent financial information.

Panel A of Table 4 shows that on average, most negative evaluations show up if an ESG VC fund only cares about positive *environmental* impact. In Columns (1) - (7), coefficients of "ESG Fund" are similar to coefficients of "ESG Fund" in Table 4 as these coefficients essentially capture the average treatment effect of bundling E, S, and G together. However, Columns (1) and (2) show that compared to a pure profit-driven venture capitalist, investors working in an "Environmental Fund" are considered to be less helpful (i.e., 3.17 percentage points lower in Q_1) and less likely to show investment interest (i.e., 3.40 percentage points lower in Q_2). Results are statistically significant at the 1% level. Columns (4) and (6) show that startup founders generally reduce the amount of funding to be raised from "Environmental Fund" by 2.8% and give 3.47 percentage points lower contact interest ratings compared to investors working in a profit-driven VC fund. Columns (5) and (7) show that after the regression controls subjects' evaluations on mechanism questions (i.e., Q_1, Q_2, and Q_5), negative impacts of "Environmental Fund" on startups' decisions (i.e., Q_3, Q_4) are almost fully absorbed. This provides suggestive evidence that startup founders might not have taste-driven preferences against ESG investors and most of their decisions can be explained by their beliefs. Panel B shows that these negative effects of aiming for positive environmental impact are even more severe among experimental subjects who value the incentives more. In Columns (1), (2), (4) and (6), the coefficients of "Environmental Fund" decreased to -3.46, -4.83, -3.87 and -4.65. This suggests that when incentives help to reduce noises in the experiment, the cost of targeting positive environmental impact is even higher.

However, both Panel A and Panel B show that focusing on positive social impact or governance impact does not significantly cause a negative influence on startups' willingness to collaborate on the aggregate level. Although coefficients of "Social Fund" and "Governance Fund" are generally insignificant, Column (6) in Panel A shows that aiming for positive social impact slightly increases startups' contact interest ratings by 1.64 percentage points. This result is statistically significant at the 10% level. Column (6) in Panel B confirms this finding, showing that when incentives

are more valuable, the positive effect of "Social Fund" increases to 3.89 percentage points more contact interest ratings compared to pure profit-driven funds. This result is statistically significant at the 1% level. Column (7) of Panel B shows that when the regression controls subjects' beliefs of investors' quality, availability, and informativeness, the positive effect of "Social Fund" still exists. This provides suggestive evidence that belief-driven preferences only explain parts of the preference for investors who care about positive social impact. Hence, taste-driven preferences possibly also exist, further increasing startups' contact interest ratings of "Social Funds".

An important insight from Table 3 and Table 4 is that E, S, and G, which essentially concentrate on different dimensions of sustainability, have heterogeneous implications on startups' intentions to collaborate. Hence, ESG investing strategies are also involved with different levels of costs, depending on which specific dimensions a VC fund mainly targets. Compared to S and G, E is associated with more costs in terms of attracting potential deal flows. Startups are less likely to approach investors aiming for positive environmental impact because these investors are perceived to be less beneficial to the startup's profitability. Bundling E, S, and G together inevitably masks these inherent differences, which calls for more detailed investigations of different dimensions of ESG or sustainability.

3.2 Positive Assortative Matching Based on ESG Characteristics

Unlike trading financial assets on the public market, entrepreneurial financing process in the VC industry is essentially a two-sided matching process. Hence, sorting plays a crucial role in explaining the financial performances of both VC funds and their portfolio companies (Sørensen, 2007). Zhang (2021) identifies US venture capitalists' ESG preferences with a symmetric IRR experiment, suggesting that sorting in the dimension of ESG characteristics might happen. When profit-driven investors expect impact ventures to demonstrate more intentions of collaboration with impact funds, profit-driven investors also show less interest in impact ventures due to less availability of these startups. However, these expectations in impact ventures' availability can be inaccurate. Unfortunately, extant literature provides little empirical evidence about whether such a sorting phenomenon indeed exists during startups' fundraising process.

Table 5 tests whether sorting based on startups' and investors' ESG characteristics exist by examining the evaluation results of startup founders from impact ventures and profit-driven ventures. Panel A uses all the evaluation results of recruited startup founders. Panel B zooms into the evaluation results of startup founders in impact ventures, who claim to care about positive ESG impact as indicated in their background information. Panel C focuses on the evaluation results of profit-driven startup founders who do *NOT* aim for positive ESG impact. "ESG Fund" and "Impact Venture" are indicators that are equal to one if the investor works in an ESG VC fund, and the experimental subject founded an impact venture which cares about their ESG impact. "ESG Fund × Impact Venture" is an interaction term of "ESG Fund" and "Impact Venture". Standard errors in the parenthesis are clustered at the experimental subject level.

Panel A of Table 5 shows that sorting exists in an asymmetric way during startups' fund-seeking process. While profit-driven startup founders give significantly lower ratings to ESG investors, founders in impact ventures only

provide a marginally higher rating to ESG investors. Columns (1), (2), (3), and (6) of Panel A find that compared to profit-driven investors, startup founders who maximize profits on average give ESG investors 3.82 percentage points lower quality ratings, 4.46 percentage points lower availability ratings, 1.85 percentage points lower informativeness ratings, and 4 percentage points lower contact interest ratings. Most results are statistically significant at the 1% level. Column (7) shows that the negative effect of "ESG Fund" on profit-driven startup founders' evaluations is fully absorbed by subjects' beliefs, suggesting that these negative evaluations are not caused by taste-driven preferences. Interestingly, profit-driven startup founders also adjust their fundraising plans by reducing roughly 3% of the amount of required funding when asking for money from ESG investors. This indicates their relatively pessimistic attitudes about collaborating with ESG VC funds.

However, the positive coefficients of "ESG Fund × Impact Venture" in Panel A show that startup founders in impact ventures are more positive about ESG investors. On average, these ESG startup founders give ESG investors 0.19 percentage points higher quality ratings, 0.8 percentage points higher availability ratings, 1.37 percentage points higher informativeness ratings, and 0.85 percentage points higher contact interest ratings. Column (4) further shows that ESG startups do not adjust their fundraising plans when considering working with ESG investors. However, it is obvious that impact ventures' support for ESG funds is much weaker than profit-driven ventures' preferences against ESG funds in terms of economic magnitudes. While sorting based on ESG characteristics does exist based on startups' fund-seeking behaviors, ESG investors suffer more from profit-driven startups' belief-driven preferences against them and benefit less from impact ventures' support for them.

Panel B of Table 5 further examines how startup founders of impact ventures evaluate investors' E, S, and G characteristics, separately. Almost all coefficients of "Environmental Fund" and "Governance Fund" are statistically insignificant, suggesting that aiming for positive environmental or governance impact does not influence their evaluations on average. The key driver of impact ventures' support for ESG VC funds is the goal of generating positive social impact. Columns (2), (3) and (6) show that investors with social initiatives are perceived to be 2.63 percentage points more likely to show investment intentions to impact ventures, 2.18 percentage points more informative, and "Social Funds" also receive 2.78 percentage points higher contact interest ratings compared to profit-driven funds. These findings are all statistically significant at the 1% level. One noteworthy finding is that based on Column (1), startup founders in impact ventures also do not view ESG funds as more beneficial to their profitability. Their preferences towards ESG funds are not driven by investors' potential to facilitate their profitability. This is consistent with the recent findings about impact funds' lower financial returns as documented in Barber, Morse and Yasuda (2020) and Kovner and Lerner (2015).

Panel C of Table 5 zooms into how profit-driven startup founders evaluate different detailed types of ESG funds. Unlike Panel B, most coefficients of "Environmental Fund" are strongly negative. Columns (1), (2), (3) and (6) show that investors who aim to generate positive environmental impact receive 6.72 percentage points lower quality

ratings, 8.02 percentage points lower availability ratings, 4.12 percentage points lower informativeness ratings, and 8.08 percentage points contact interest ratings compared to profit-driven VC funds. Column (4) further shows that startup founders reduce by 5.91% the amount of funding to be raised from "Environmental Funds" compared to their original fundraising plans. These results are all statistically significant at the 1% level. The economic magnitudes are large, indicating the non-negligible negative influence of environmental initiatives on most profit-driven startups' collaboration intentions. Columns (5) and (7) provide some good news that such negative effects on startup founders' decisions can be absorbed by founders' beliefs. Hence, this paper does not find any evidence of taste-driven preferences against "generating positive environmental impact". Interestingly, all the coefficients of "Social Fund" and "Governance Fund" are statistically insignificant. This suggests that aiming for positive social and governance impact does not significantly influence profit-driven startups' evaluation results on the aggregate level.

To sum up, while Table 5 confirms the existence of ESG-based sorting between startups and investors in the US entrepreneurial financing process, sorting happens in an asymmetric way. First, generally speaking, ESG funds do obtain support from impact ventures. However, the degree of such support is weaker than that of profit-driven startups' preferences against ESG funds. Second, impact ventures' preferences towards ESG funds mainly exist for those "Social Funds". However, profit-driven ventures' preferences against ESG funds mainly exist for those "Environmental Funds". Third, aiming for ESG does not increase the impact ventures' evaluations on the investor's ability to help them to generate more profits. However, it decreases profit-driven startup founders' assessments of ESG investors' corresponding ability.

3.3 Heterogeneous Evaluations Based on Startup Founders' Gender

Given that VC funds' ESG goals potentially generate different implications for women and men, Table 6 tests how female and male founders' evaluation results respond to investors' ESG characteristics differently. Panel A analyzes the evaluation results of recruited female startup founders. Panel B analyzes the evaluation results of recruited male startup founders. All regression results add subject fixed effects and standard errors in the parenthesis are clustered at the subject level.

Table 6 finds that female founders and male founders view ESG funds differently. Surprisingly, Panel A shows that female founders are more against "Environmental Funds" compared to male founders. On average, "Environmental Funds" receive 5.20 percentage points lower quality ratings, 5.67 percentage points lower availability ratings, and 6.04 percentage points lower contact interest ratings. All results are statistically significant at the 1% level. Female founders also reduce 6.61% of the amount of required funding when raising money from "Environmental Funds". However, such negative impacts are much weaker and statistically insignificant among male startup founders.

However, Panel A shows that women do prefer "Social Funds", which generally address social and economic inequality and help underprivileged groups. Some of these ESG funds also aim to increase the diversity of the entrepreneurial community and encourage more women to start their own businesses. Columns (1), (2), and (6) find

that these "Social Funds" are considered to be 2.59 percentage points more likely to promote women-led startups' growth and 3.52 percentage points more likely to invest in women-led companies. Not surprisingly, female startup founders also give "Social Funds" 3.96 percentage points higher contact interest ratings compared to conventional profit-driven funds. All the results are statistically significant at the 5% level. However, Panel B shows that male founders generally view "Social Funds" as similar to profit-driven funds, which is demonstrated by all the insignificant coefficients of "Social Funds" in Panel B.

In terms of the effect of "Governance" initiatives, this experiment mainly focuses on promoting female leadership. Panel A shows that female founders provide "Governance" investors with 2.77 percentage points higher availability ratings and 3.10 percentage points higher contact interest ratings. Results are statistically significant at the 10% level. On the contrary, Panel B finds that male founders are against this type of "Governance" investor. On average, investors working in "Governance Funds" are considered to be 2.14 percentage points less helpful and 3.10 percentage points less available by men-led startups. Not surprisingly, male startup founders are roughly 4% less likely to approach these ESG investors in the initial contact stage compared to profit-driven investors.

To summarize, Table 6 demonstrates that startup founders' gender is an important predictor of their attitudes towards ESG investors. Female founders and male founders hold divergent views on almost all the three dimensions of E, S, and G. While women are slightly for S and G, they are against E. While men are indifferent about E and S, they are against G, which encourages women to reach the senior management level. These results echo earlier findings of Table 3, Table 4 and Table 5 that E, S, and G have different influences on startup founders' assessments of an ESG investor. Since different groups have different opinions on ESG investors, it is helpful for theoretical work to incorporate such heterogeneity into their models.

3.4 Heterogeneous Evaluations Based on Startup Founders' Political Views

As documented in Hong and Kostovetsky (2012), investors' political views correlate with their socially responsible investment (SRI) decisions. Following this literature, Table 7 examines how Democratic and Republican founders' evaluation results respond to different types of ESG investors. Panels A and B analyze the evaluation results of recruited Democratic founders and Republican founders separately. Startup founders' political views are collected in the background information section. All regression results add subject fixed effects and standard errors in the parenthesis are clustered at the subject level.

Panel A of Table 7 shows that generally speaking, Democratic founders treat ESG investors and conventional profit-driven investors in a similar manner, which is demonstrated by the insignificant coefficients of "ESG Funds," "Environmental Fund," "Social Fund," and "Governance Fund." Although investors working in the "Environmental Fund" receive 2.2 percentage points lower availability ratings, this belief does not significantly affect Democratic founders' contact interest ratings or fundraising plans. Results suggest that Democratic founders do not have many belief-driven preferences against ESG VC funds.

In contrast to Panel A, Panel B of Table 7 shows that most Republican founders go against ESG investing. Investors from "ESG Funds" that aim for general positive ESG impact receive 4.20 percentage points lower quality evaluations, 5.30 percentage points lower availability evaluations, and 5.04 percentage points lower contact interest ratings. Most results are statistically significant at the 1% level. Similarly, aiming for positive environmental impact significantly reduces Republican startup founders' quality evaluations by 3.79 percentage points, availability evaluations by 4.09 percentage points, fundraising amount by 4.76 percentage points, and contact interest ratings by 5.18 percentage points. Also, any governance initiatives encouraging female leadership lower Republican founders' quality evaluations by 4.26 percentage points, availability evaluations by 3.57 percentage points, informativeness evaluations by 2.37 percentage points, fundraising amount by 6.04 percentage points, and contact interest ratings by 3.92 percentage points. Fortunately, Columns (5) and (7) show that most of these negative effects can be explained by subjects' beliefs. However, in Column (7), the significant coefficient of "Environmental Fund" suggests the existence of other types of preferences against environmental initiatives, which cannot be explained by investors' beliefs. However, targeting a general positive social impact does not significantly influence Republicans' evaluations.

In conclusion, results of Table 7 manifest that the findings of Hong and Kostovetsky (2012) and Di Giuli and Kostovetsky (2014) can also be generalized to startups' fundraising setting in the US venture capital industry. Compared to Democrats, Republicans are more against ESG investors based on their fund-seeking behaviors. Similar to startup founders' gender, startup founders' political view information is another predictor of their attitudes toward ESG investors. It should be noted that none of these two groups view ESG investors as outperforming conventional profit-driven investors in terms of improving startups' profits.

3.5 Female Investors Pay More Costs for Aiming for ESG

Previous tables examine how distinct groups of startup founders evaluate ESG investors differently. It is also important to examine whether aiming for ESG generates similar impact on investors with different background. Table 8 reports regression results testing the heterogeneous evaluation results on ESG investors based on the venture capitalist's gender. Panel A focuses on the evaluation results of female investors' profiles. Panel B focuses on the evaluation results of male investors' profiles. Similar to previous tables, all regressions add subject fixed effects, and standard errors are all clustered at the subject level.

Table 8 shows that on average, aiming for ESG significantly reduces female investors' attractiveness. However, these negative effects do not exist for male investors. In Panel A, compared to similar profit-driven female investors, female ESG investors receive 1.34 percentage points lower quality evaluations, 2.04 percentage points lower availability evaluations, and 1.97 percentage points lower contact interest ratings. Startups also reduce 2.11% amount of funding to be raised when facing female ESG investors. However, Panel B shows that startups generally treat male profit-driven investors and male ESG investors equally. Furthermore, male ESG investors' profiles are even considered to be 1.48 percentage points more informative than male profit-driven investors' profiles.

Table 9 further examines which dimension of E, S, and G lowers female investors' attractiveness to startups the most. Panel A of Table 9 shows that while S and G generally do not affect startups' evaluations of female investors, E causes the problem. Female ESG investors promoting environmental initiatives receive 3.97 percentage points lower quality evaluations, 5.15 percentage points lower availability evaluations, 2.15 percentage points lower informativeness evaluations, 4.73% less funding amount to be raised, and 5.43 percentage points lower contact interest ratings. Most results are statistically significant at the 1% level. What is worrisome is that based on Column (7), female ESG investors still receive 1.30 percentage points lower contact interest ratings compared to female profit-driven investors even after the regression controls startup founders' evaluations of investors' quality, availability, and informativeness. These results suggest that women get punished by startup founders for working in an ESG VC fund, especially those that care about environmental impact.

Interestingly, Panel B of Table 9 shows that these negative effects almost do not apply to male investors. Although Column (1) shows that aiming for environmental impact also reduces male ESG investors' quality evaluations by 2.24 percentage points compared to conventional investors, such quality evaluations do not affect startups' contact interest ratings and fundraising plans. Moreover, aiming for positive social impact significantly increases startups' evaluations of male ESG investors' availability and informativeness. Not surprisingly, startups also show significantly more intentions to approach them. Unlike female investors, male investors get rewarded for caring about social impact.

Combining results from Table 8 and Table 9, it is clear that female investors get punished for caring about environmental impact while male investors get premium for caring about social impact. Information asymmetry plays an important role here as most negative impacts from ESG on startups' decisions can be explained by startup founders' belief-driven preferences about each investor. Since women are generally more socially conscious and serve as a crucial force for promoting ESG investing,[14] this finding points out an important issue which is imperative to be addressed.

3.6 Distributional Effect: Low-quality Investors Pay More Costs for ESG Investing

Zhang (2021) discovers that venture capitalists' belief-driven preferences against ESG mainly exist when they evaluate high-quality, attractive startups. Would similar results still hold when startup founders evaluate venture capitalists? Table 10 first investigates effects of investors' ESG characteristics on the conditional quantiles and the conditional mean of startups' provided quality evaluations. Panel A examines founders' evaluations for all types of ESG VC funds and profit-driven VC funds. Panel B examines founders' evaluations for different categories of ESG VC funds. In each of Columns [1]–[10], the dependent variable is the investor's perceived quality ratings (i.e., Q_1). Coefficients in Columns [1]-[9] capture the impact of investors' ESG characteristics on the kth conditional percentile ($k \in 10, 20, ..., 90$) of the distribution of Q_1. In Column [10], the coefficient captures the average treatment effect on the conditional mean of Q_1. Standard errors in parenthesis are clustered at the subject level. Results are still robust after controlling subjects' rating levels in all quantile regressions.

[14] See "The future of socially responsible investing is in female hands" 2021, CNBC.

Results of Table 10 show that startup founders' preferences against ESG investors, especially those with environmental initiatives, mainly exist when they evaluate VC funds with less potentials of improving their profitability. Column (1) of Panel A shows that if investors with bottom 10th quality ratings implement ESG investing strategies, they receive 4 percentage points lower quality ratings compared to similar profit-driven VC funds. However, for investors whose quality is above the median, these negative effects become statistically insignificant and much weaker in terms of economic magnitudes. Similarly, Panel B shows that most negative evaluations of working in "Environmental Funds" mainly affect those low-quality investors. If investors with bottom 20th quality ratings aim to generate positive environmental impact, they receive 7 to 9 percentage points lower quality ratings compared to the situation where they aim to maximize profits. If investors' quality ratings are above the 60th quantile of the quality distribution, their environmental initiatives do not bring significant costs to them.

Table 11 examines the effects of investors' ESG characteristics on the conditional quantiles and the conditional mean of startups' indicated likelihood to contact the investor (i.e., the investor's attractiveness Q_4). Unlike quality ratings (i.e., Q_1), startups' contact interest ratings or attractiveness ratings (i.e., Q_4) are based on a comprehensive assessment of the investors' multiple characteristics. Furthermore, startup founders' taste-driven preferences also enter into their intentions to approach the investor.

Results of Table 11 also find that compared to profit-driven investment strategies, ESG investing lowers startups' intention to contact unattractive ESG investors. However, these effects do not exist among attractive investors. Columns (1) - (7) show that for investors with bottom 70th contact interest ratings, aiming for environmental impact further reduces startups' willingness to contact them by 3 to 8 percentage points. Results are statistically significant at the 1% level. For investors with the top 10th contact interest ratings, the coefficient of "Environmental Fund" becomes 0. However, aiming for social impact mainly benefits investors whose contact interest ratings are between the 40th and 70th quantiles. For the most attractive investors, this positive effect also disappears as demonstrated by the insignificant coefficient of "Social Fund" in Column (9). Column (2) shows that aiming for governance impact hurts investors whose contact interest ratings are at the 20th quantile of the distribution while Column (8) shows that it benefits investors whose contact interest ratings are at the 80th quantile. This effect is only statistically significant at the 10% level.

To conclude, ESG investing is more costly for low-quality, unattractive VC funds as it significantly reduces VC funds' ability to attract deal flows. However, this cost does not apply to high-quality, attractive VC funds. The distributional effects of investors' ESG characteristics on startups' preferences are opposite to the distributional effect of startups' ESG characteristics on investors' preferences. This confirms that sorting based on ESG characteristics happens asymmetrically in the US entrepreneurial financing process.

3.7 Existence of Taste-driven Preferences Towards ESG investors

Table 12 analyzes startup founders' behaviors in the payment game by first examining the impact of different

experimental treatments on subjects' likelihood to purchase a more comprehensive investor recommendation list with more ESG investors. The dependent variable is an indicator that equals one if the experimental subject chooses "Option 2" in the payment game (i.e., pays for a comprehensive list) and zero if the subject chooses "Option 1" (i.e., receives all the monetary awards rather than purchases the list). Columns (1) - (2) report OLS regression results. Columns (3) - (4) report Probit regression results. "Treatment1 (Gender)" is an indicator that is equal to one if the subject is assigned with Treatment 1 group in the payment game (i.e., conditional on the same quality, receiving more female investors' contact information), and zero otherwise. "Treatment2 (ESG)" is an indicator that is equal to one if the subject is assigned with Treatment 2 group in the payment game (i.e., conditional on the same quality, receiving more ESG investors' contact information), and zero otherwise. "Reliable Algorithm" indicates each subject's belief in the likelihood that this data-driven algorithm can recommend high-quality matched investors to the startup. Control variables include the startup founder's gender, ESG characteristics, race, political views, previous entrepreneurial experiences, educational background, the startup's stage, the number of employees, industry background, and the founding team composition. Standard errors in parentheses are robust standard errors.

Results of Table 12 discover the existence of startup founders' taste-driven preferences towards ESG investors. Columns (1) - (2) show that startup founders in the Treatment 2 group are 13% more likely to purchase an investor recommendation list favoring ESG investors compared to those in the Control group. Results are statistically significant at the 5% level. The significant coefficients of "Reliable Algorithm" suggest that although the payment game emphasizes that the algorithm only recommends more ESG investors conditional on the *same* matching quality, some experimental subjects still doubt the reliability of the recommendation algorithm in this situation. Importantly, these preferences cannot be explained by beliefs, and hence it captures founders' taste-driven preferences.

Since the dependent variable of Table 12 is a binary variable, Columns (3) - (4) further exploit Probit models to better capture the nonlinear relationship between regressors and the dependent variable. Results confirm the finding in Columns (1) and (2) as shown by the significant coefficients. Adding control variables about startup founders' background information does not change the magnitude or statistical significance of coefficients. To summarize, Table 12 shows that conditional on the same matching quality, startup founders on average still prefer to collaborate with ESG investors. The documented preferences against ESG investors in the IRR experiment are mainly driven by beliefs.

To quantify startup founders' willingness to pay for the extra information on ESG investors, this paper exploits a random utility model with binary choices: to purchase (Option 1) vs not to purchase (Option 2). There are N startup founders and the n^{th} founder faces a choice among J discrete options where $J = 2$, $j = 1$ for Option 1 and $j = 2$ for Option 2. Assume that startup founders' utility function is the following:

$$U_{nj} = V_{nj} + \epsilon_{nj}$$

where V_{ij} stands for utility from observable attributes of each option, and ϵ_{ij} stands for utility from unobservable attributes. ϵ_{ij} follows an i.i.d. extreme value type I distribution. The probability that a startup founder purchases an investor recommendation list is the following:

$$\begin{aligned} P_{n1} &= Pr(U_{n1} > Un2) \\ &= Pr(V_{n1} + \epsilon_{n1} > V_{n2} + \epsilon_{n2}) \\ &= \int_{\epsilon} \mathbb{1}(\epsilon_{n2} - \epsilon_{n1} < V_{n1} - V_{n2}) f(\epsilon_n) d\epsilon_n \end{aligned}$$

Further assume that V_{n2} is normalized to zero, and

$$V_{n1} = \beta_0 + \beta_1 \mathbb{1}(Treatment1) + \beta_2 \mathbb{1}(Treatment2) + \delta price$$

$\mathbb{1}(Treatment1)$ is equal to 1 if the startup founder is randomly assigned to purchase a more comprehensive investor recommendation list that prefers female investors conditional on similar matching quality, and zero otherwise. $\mathbb{1}(Treatment2)$ is equal to 1 if the startup founder is randomly assigned to purchase a list that prefers ESG investors conditional on similar matching quality, and zero otherwise. *price* is randomly generated for each comprehensive investor recommendation list. β_0 stands for the utility of obtaining a normal investor recommendation list. β_1 stands for the extra utility of obtaining an investor recommendation list that prefers female investors. β_2 stands for the extra utility of obtaining an investor recommendation list that prefers ESG investors. δ stands for the utility of paying for one extra dollar. It is easy to calculate that

$$P_{n1} = \frac{e^{V_{n1}}}{e^{V_{n1}} + e^{V_{n2}}} = \frac{e^{V_{n1}}}{e^{V_{n1}} + 1}$$

Table 13 reports the estimation results of different parameters in this logit model. Based on Columns (1) and (2), the coefficients of "Treatment2" are significantly positive, confirming that investors have taste-driven preferences towards ESG investors. The willingness to pay for extra ESG investors' information is more than $77, which is calculated by dividing the coefficient of "Treatment2" by the coefficient of "price."

3.8 Stakes Reduce Taste-driven Support for ESG investors

Understanding the properties of taste-driven ESG preferences has important implications in sustainable finance as it has been well-documented that non-pecuniary motivations play an important role in people's socially responsible behaviors. One important question is how taste-driven preferences vary with stakes, which directly influences whether

results from lab experiments or weakly incentivized experiments can be generalized to high-stake situations.

Although the intuition that stakes influence subjects' socially sensitive preferences has existed for a long time, there is limited empirical evidence on how stakes influence taste-driven preferences.[15] On the one hand, taste-driven preferences might be more stable and robust in different daily settings. Hence, stakes might have little influence on subjects' tastes. On the other hand, taste-driven preferences might also decrease with stakes. When facing a high-stake situation, taste might play a smaller role in the subjects' decisions.

Table 14 examines startup founders' preferences for ESG investors in both low-stake situations and high-stake situations. Panel A focuses on a low-stake situation where the price/cost of a more comprehensive investor recommendation list is below or equal to the median price (i.e., \$48). Panel B focuses on a high-stake situation where the price/cost of a more comprehensive investor recommendation list is above the median price (i.e., \$48). Standard errors are robust standard errors and are reported in parentheses.

Results of Table 14 show that taste-driven preferences toward ESG investors are more salient when the price is lower and these preferences become weaker when the price is higher. Panel A shows that the treatment effect of favoring ESG investors in the investor recommendation process increases the probability of purchasing the comprehensive investor recommendation list by 15% in OLS regressions. However, Panel B shows that these treatment effects decrease to 10% in OLS regressions when the price is above the median level. Results also become statistically insignificant in Panel B.

To confirm the results mentioned above, Figure 3 further demonstrates how experimental subjects' marginal utility from purchasing the treatment group investor recommendation list varies with the price of the service. The left Panel focuses on the marginal utility in the Treatment 1 group. The right Panel focuses on the marginal utility in the Treatment 2 group. The dashed lines indicate the 95% confidence interval estimated using the random utility model. The right panel shows that although the subjects' marginal utility in Treatment 2 group is significantly positive, the magnitude of the marginal utility does indeed decline as the price goes up.

4 Conclusion

ESG investing in the private equity market has drawn more and more attention as ESG investors can potentially shape portfolio companies' strategies and creates positive environmental and social benefits. However, almost little empirical evidence exists about firms' preferences about ESG investors, which directly influences ESG VC funds' deal flows given that investment in the private market usually involves a two-sided matching process. If adopting ESG investing directly increases investors' attractiveness to firms, it helps explain why ESG investing might provide investors with extra benefits. If the opposite happens, it helps investors to build a better understanding of the associated costs of

[15] Camerer and Hogarth (1999) review 74 experiments with no, low, or high performance-based financial incentives and find that subjects behave more realistically in high-stake situations. Zhang (2021) and Zhang (2020) exploit quantile regressions and find that investors' belief-driven preferences are more against ESG and minority founders when they evaluate attractive startups.

ESG investing in the private market.

This paper implements two complements experiments with real US startup founders to understand the startup founders' preferences for different types of ESG investors in the venture capital industry. In the first IRR experiment, experimental subjects need to evaluate multiple randomly generated synthetic venture capitalist profiles. The more truthfully they reveal their preferences, the more matched investors will be recommended by a machine learning matching algorithm. In the second payment game, experimental subjects need to decide whether to receive a $500 monetary compensation or use a portion of the $500 to purchase a more comprehensive investor recommendation list. This experiment orthogonally randomizes both the recommendation list' price and whether the algorithm prefers to recommend ESG investors given the same matching quality. Experimental subjects' decisions directly influence the rewards they will receive if they become lottery winners. Therefore, both experiments are incentivized by real-world stakes.

Results of the IRR experiment show that adopting ESG investing strategies influences startup founders' willingness to collaborate with venture capitalists. First, E, S, and G have different implications based on startup founders' revealed preferences. Aiming for positive environmental impact lowers startups' intentions of contacting the investor by roughly 4 percentage points on average as it is a signal of lower quality and less investment intention. This effect mainly applies to low-quality investors. However, aiming for positive social impact increases startup founders' contact interest ratings by 2 to 4 percentage points. This effect mainly applies to median-quality investors. Second, sorting based on investors' and startups' ESG characteristics happens in an asymmetric way during the entrepreneurial financing process. While impact ventures slightly prefer contacting ESG investors aiming for social impact, profit-driven startups give 8.08 percentage points lower contact interest ratings to ESG investors with environmental initiatives. Third, there are stark heterogeneous preferences about ESG investors among different groups of startup founders. While female startup founders are against environmental initiatives, male startup founders are against governance initiatives that encourage female leadership. Moreover, while Democrats are indifferent between ESG investors and profit-driven investors, Republicans are against ESG investors. Importantly, compared to male investors, ESG investing is more costly for female investors

Results of the payment game show that startup founders do indeed have taste-driven preferences for ESG investors. On average, experimental subjects are 15% more likely to purchase an investor recommendation list containing more ESG investors compared to a normal investor recommendation list when the price is relatively low. However, this treatment effect becomes insignificant and decreases to 10% when the price is relatively high. Also, a random utility model finds that the marginal utility of purchasing a recommendation list with more ESG investors decreases with prices. This suggests that taste-driven preferences might decrease with involved stakes (Camerer and Hogarth, 1999). Future researchers can replicate these experiments in different countries and at different times. It is also interesting to explore the implication of the discovered preferences on the long-run equilibrium of ESG investing.

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Tables

Table 1: Summary Statistics of Startup Founders

Panel A: Founder Demographic Information

Demographic Information	N	Fraction (%)
Female Founder	167	40.83%
Minority Founder	91	22.25%
Serial Founder	168	41.08%
Educational Background		
High school graduate, diploma or the equivalent	89	21.76%
Bachelor's degree	136	33.25%
Master's degree	84	20.54%
Doctorate degree	23	5.62%
Professional degree	39	9.54%
Other	38	9.29%
Political Attitudes		
Democratic	206	50.37%
Republican	98	23.96%
Constitution Party	6	1.47%
Green Party	7	1.71%
Libertarian Party	15	3.67%
I do not want to say	35	8.56%
Others	42	10.27%

Panel B: Startup Background Information

Category	N	Fraction (%)
Standard Classification		
B2B	89	21.76%
B2C	279	68.22%
Healthcare	16	3.91%
Others	25	6.11%
Detailed Classification		
Information technology	90	22.00%
Consumers	117	28.61%
Healthcare	25	6.11%
Clean technology	22	5.38%
Finance	53	12.96%
Media	22	5.38%
Energy	10	2.44%
Education	16	3.91%
Life sciences	8	1.96%
Transportation & Logistics	23	5.62%
Manufacture & Construction	68	16.63%
Others	93	22.74%

Continued

Category	N	Fraction (%)
Stage		
Seed Stage (developing products or services)	91	22.25%
Seed Stage (mature products, no revenue)	116	28.36%
Seed Stage (mature products, positive revenue)	158	38.63%
Series A	17	4.16%
Series B	12	2.93%
Series C or later stages	9	2.20%
Others	6	1.47%
Number of Employees		
0-5 employees	191	46.70%
5-20 employees	63	15.40%
20-50 employees	67	16.38%
50-100 employees	49	11.98%
100+ employees	39	9.54%
Startup Team Composition		
Both male and female founders	248	60.64%
Only female founders	82	20.05%
Only male founders	79	19.32%
Startup Philosophy		
Financial Gains	360	88.02%
Promote Diversity	242	59.17%
ESG Criteria	261	63.81%

Notes. This table reports descriptive statistics for the startup founders who participate in this experiment. In total, 409 startup founders from the U.S. provide evaluations of 8180 randomly generated investor profiles. Panel A reports the demographic information of recruited founders. "Female Founder" is an indicator variable which equals one if the founder is female, and zero otherwise. "Minority Founder" is an indicator variable which equals one if the investor is Asian, Hispanic, Middle Eastern, Native American, Pacific Islander, or African Americans, and zero otherwise. Founders who prefer not to disclose their races are not included in this variable. "Serial Founder" is equal to one if the founder is a serial startup founder, and zero otherwise. Panel B reports background information of participants' startups. Based on the standard classification methods of industries, founders reports their startups' general business categories and each founder can only choose one unique classification from B2B, B2C, Healthcare, and others. Based on the detailed classification methods of startups' industry backgrounds, founders can select multiple industries as their startups' industry backgrounds. "Others" includes HR tech, Property tech, infrastructure, etc. Sector *Stage* reports the stage distribution of the participants' startups, where each founder can only choose one unique stage. Sector *Number of Employees* reports startups' current total number of employees, and founders can only choose one of the categories that fit them the best. Sector *Startup Team Composition* reports the gender composition of startups' co-founders. Sector *Startup Philosophy* provides the startups' goals, which contains whether they aim for any financial returns, promote diversity of the entrepreneurial community, and care about ESG impact. Each founder can choose multiple startup goals.

Table 2: Randomization of Investor Profile Components

Profile Component	Randomization Description	Analysis Variable
Investor's individual-level demographic information		
First and last name	Drawn from list of 50 candidate names given randomly assigned race and gender (for names, see Online Appendix Section A.2). To maximize the experimental power, Race randomly drawn (50% Asian, 50% White), Gender randomly drawn (50% Female, 50% Male)	Female, white (25%) Male, white (25%) Female, Asian (25%) Male, Asian (25%)
Educational background		
Degree	Degree drawn randomly (50% Bachelor (BA/BS), 50% graduate school degrees (JD/MBA/Master/PhD))	Bachelor Degree (10/20)
College	College drawn randomly (50% prestigious universities, 50% common universities)	Prestigious College (10/20)
Investment experience		
Years of investment experience	Drawn Unif [0,30] to integers	Years of Investment
Number of deals involved	3×Years of experience + Drawn Unif [-2,2] to integers	Deals
Entrepreneurial experience	Drawn randomly (50% with entrepreneurial experience, 50% without entrepreneurial experience)	With Entrepreneurial experience (10/20)
Investor's fund-level information (Sensitive characteristics)		
Fund type	Drawn randomly (50% profit-driven fund, 50% ESG fund)	ESG Fund (10/20)
Investment philosophy	Drawn randomly (50% profit-driven fund, 20% ESG fund, 10% ESG fund focusing on environmental issues, 10% ESG fund focusing on social issues, 10% ESG fund focusing on governance issues)	Investment Philosophy
Senior management composition	Drawn Unif [0%,20%] to integers. "relatively high" if the fraction of women is more than 10%, "relatively low" if the fraction of women is less than 10%.	Fraction of Women
(Non-sensitive characteristics)		
Previous performance	Drawn randomly (20% first-time fund, 80% funds with historical performance). For funds with historical performance, its internal rate of return (i.e., irr) drawn from Normal distribution N(19.8%, 34%) to second decimal place.	IRR
Fund size	Drawn randomly (50% small fund, 50% large fund). AUM is drawn Unif [1,130] to integers for small funds, drawn Unif [130,1500] to integers for large funds. Dry powder is calculated as 0.27×AUM.	Large Fund (10/20)
Investment style	Drawn randomly (80% Value-added, 20% Spray and pray)	Value-added style (16/20)
Location	Drawn randomly (90% US, 10% Foreign)	US Funds (18/20)

Notes. This table provides the randomization process of each investor profile's component and the corresponding analysis variables. Profile components are listed based on their categories. Weights of characteristics are shown as fractions when they are fixed across subjects (e.g., each subject observe exactly 10/20 profiles with larger funds) and percentages when they represent a draw from a probability distribution. Variables in the right-hand column are randomized to test how startup founders respond to these analysis variables.

Table 3: Startups' Evaluation Results on ESG Funds

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Full Sample							
ESG Fund	-1.26**	-1.10*	0.20	-0.97	0.06	-0.91	-0.06
	(0.59)	(0.60)	(0.45)	(0.87)	(0.55)	(0.64)	(0.29)
Q1					0.45***		0.35***
					(0.04)		(0.02)
Q2					0.49***		0.43***
					(0.04)		(0.03)
Q5					0.32***		0.27***
					(0.04)		(0.02)
Mean of Dep. Var.	62.63	58.98	66.98	89.86	89.86	59.90	59.90
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180
R-squared	0.45	0.51	0.53	0.63	0.81	0.45	0.83
Panel B: Sub Sample Who Pay for the List							
ESG Fund	-1.39	-1.62*	0.14	-0.79	0.56	-0.97	0.17
	(0.93)	(0.90)	(0.69)	(1.24)	(0.76)	(0.94)	(0.40)
Q1					0.42***		0.34***
					(0.04)		(0.03)
Q2					0.50***		0.43***
					(0.05)		(0.04)
Q5					0.30***		0.28***
					(0.05)		(0.03)
Mean of Dep. Var.	63.93	60.56	69.14	88.38	88.38	62.36	62.36
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,040	4,040	4,040	4,040	4,040	4,040	4,040
R-squared	0.37	0.42	0.44	0.60	0.80	0.38	0.82

Notes. This table reports the regression results of how startups' evaluation results respond to investors' ESG characteristics (ESG Funds vs Profit-driven Funds). Panel A analyzes 8,180 investor profiles' evaluations from all the recruited valid startup founders. Panel B focuses on the sub-sample of recruited startup founders who are willing to pay for a more comprehensive investor recommendation list in the payment game. In Column (1), the dependent variable is the startup founder's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed and generate more profits. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in their startups. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative enough. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups feel comfortable about asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG Fund" is an indicator that is equal to one if the investor works in an ESG VC fund which cares about ESG, and zero if the investor works in a profit-driven VC fund. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects. Standard errors in the parentheses are clustered within each startup founder. *** $p<0.01$, ** $p<0.05$, * $p<0.1$ indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 4: Startups' Evaluation Results on Detailed Categories of ESG Funds

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Full Sample							
ESG Fund	-1.35*	-1.26*	0.11	-0.74	0.44	-1.28	-0.31
	(0.74)	(0.76)	(0.59)	(1.11)	(0.76)	(0.80)	(0.37)
Environmental Fund	-3.17***	-3.40***	-0.90	-2.80**	0.56	-3.47***	-0.69
	(0.94)	(0.90)	(0.70)	(1.34)	(0.92)	(0.98)	(0.46)
Social Fund	0.43	1.12	1.16*	0.53	-0.58	1.64*	0.70
	(0.82)	(0.79)	(0.64)	(1.16)	(0.83)	(0.89)	(0.49)
Governance Fund	-0.85	-0.70	0.52	-1.09	-0.54	-0.15	0.31
	(0.87)	(0.89)	(0.71)	(1.37)	(0.92)	(0.95)	(0.44)
Q1					0.45***		0.35***
					(0.04)		(0.02)
Q2					0.49***		0.42***
					(0.04)		(0.03)
Q5					0.32***		0.27***
					(0.04)		(0.02)
Mean of Dep. Var.	62.63	58.98	66.98	89.86	89.86	59.90	59.90
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180
R-squared	0.45	0.51	0.53	0.63	0.81	0.45	0.83
Panel B: Sub Sample Who Pay for the List							
ESG Fund	-1.61	-2.31**	-0.28	-0.92	0.99	-1.84	-0.22
	(1.13)	(1.12)	(0.89)	(1.51)	(1.05)	(1.14)	(0.48)
Environmental Fund	-3.46**	-4.83***	-1.06	-3.87**	0.31	-4.65***	-1.10
	(1.45)	(1.40)	(1.10)	(1.93)	(1.27)	(1.51)	(0.70)
Social Fund	1.18	2.11*	1.62*	1.97	-0.06	3.89***	2.13***
	(1.34)	(1.22)	(0.97)	(1.63)	(1.14)	(1.34)	(0.68)
Governance Fund	-1.45	-0.78	0.73	-0.21	0.57	-0.39	0.23
	(1.27)	(1.32)	(1.02)	(1.97)	(1.23)	(1.40)	(0.65)
Q1					0.42***		0.34***
					(0.04)		(0.03)
Q2					0.50***		0.43***
					(0.05)		(0.04)
Q5					0.30***		0.28***
					(0.05)		(0.03)
Mean of Dep. Var.	63.93	60.56	69.14	88.38	88.38	62.36	62.36
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,040	4,040	4,040	4,040	4,040	4,040	4,040
R-squared	0.37	0.42	0.44	0.60	0.80	0.39	0.83

Notes. This table reports the regression results of how startups' evaluation results respond to investors' E, S, and G characteristics separately. Panel A is based on 8,180 investor profiles' evaluations provided by the full sample of recruited startup founders. Panel B uses the sub sample of recruited startup founders who are willing to pay for a comprehensive investor recommendation list in the payment game. For Column (1), the dependent variable is the startup's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in the startup. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups are comfortable asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG Fund", "Environmental Fund", "Social Fund", and "Governance Fund" are indicators that equal one if the investor works in an ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects and cluster the standard errors within each startup founder. Standard errors are reported in the parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$ indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 5: Heterogeneous Evaluation Results on ESG Funds (Sorting)

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Full Sample							
ESG Fund	-3.82***	-4.46***	-1.85**	-2.91*	2.21**	-4.00***	-0.31
	(1.15)	(1.09)	(0.82)	(1.58)	(1.05)	(1.18)	(0.51)
Impact Venture	3.89**	3.28	4.60**	10.59***	5.96*	3.46*	-0.21
	(1.90)	(2.01)	(1.90)	(3.98)	(3.29)	(2.02)	(0.92)
ESG Fund×	4.01***	5.26***	3.22***	3.04	-2.91**	4.85***	0.44
Impact Venture	(1.30)	(1.27)	(0.96)	(1.85)	(1.22)	(1.37)	(0.60)
Q1					0.43***		0.30***
					(0.09)		(0.04)
Q2					0.73***		0.49***
					(0.07)		(0.04)
Q5					0.12		0.20***
					(0.08)		(0.03)
Mean of Dep. Var.	62.63	58.98	66.98	89.86	89.86	59.90	59.90
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180
R-squared	0.01	0.01	0.02	0.01	0.41	0.01	0.71
Panel B: Impact Ventures							
ESG Fund	0.41	0.92	1.20*	0.70	-0.37	0.62	-0.24
	(0.78)	(0.82)	(0.68)	(1.28)	(0.86)	(0.91)	(0.45)
Environmental Fund	-1.16	-0.77	0.92	-1.04	-0.41	-0.85	-0.38
	(1.08)	(1.03)	(0.82)	(1.68)	(1.15)	(1.14)	(0.57)
Social Fund	1.20	2.63***	2.18***	0.66	-1.99**	2.78***	0.65
	(0.94)	(0.94)	(0.72)	(1.34)	(0.95)	(1.06)	(0.62)
Governance Fund	0.10	0.34	1.32	-0.39	-1.07	1.07	0.53
	(1.02)	(1.07)	(0.83)	(1.70)	(1.16)	(1.13)	(0.54)
Q1					0.49***		0.33***
					(0.05)		(0.03)
Q2					0.50***		0.44***
					(0.05)		(0.04)
Q5					0.35***		0.27***
					(0.05)		(0.03)
Mean of Dep. Var.	64.77	61.11	69.22	94.24	94.24	62.03	62.03
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,220	5,220	5,220	5,220	5,220	5,220	5,220
R-squared	0.45	0.51	0.53	0.63	0.81	0.45	0.82

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel C: Not Impact Ventures							
ESG Fund	-4.46***	-5.10***	-1.81*	-3.30	1.39	-4.63***	-0.47
	(1.46)	(1.45)	(1.08)	(2.06)	(1.46)	(1.46)	(0.60)
Environmental Fund	-6.72***	-8.02***	-4.12***	-5.91***	1.71	-8.08***	-1.31
	(1.74)	(1.61)	(1.26)	(2.20)	(1.55)	(1.75)	(0.80)
Social Fund	-0.93	-1.53	-0.63	0.29	1.57	-0.38	0.74
	(1.52)	(1.41)	(1.24)	(2.17)	(1.59)	(1.60)	(0.81)
Governance Fund	-2.53	-2.54	-0.90	-2.33	0.12	-2.29	-0.11
	(1.60)	(1.57)	(1.29)	(2.32)	(1.53)	(1.73)	(0.75)
Q1					0.38***		0.37***
					(0.06)		(0.04)
Q2					0.48***		0.40***
					(0.07)		(0.05)
Q5					0.29***		0.26***
					(0.06)		(0.04)
Mean of Dep. Var.	58.87	55.21	63.02	82.13	82.13	56.15	56.15
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,960	2,960	2,960	2,960	2,960	2,960	2,960
R-squared	0.43	0.49	0.52	0.62	0.80	0.45	0.84

Notes. This table reports the regression results of how different types of startups (i.e., those who care about ESG impact vs those who do not care about ESG impact) evaluate investors' ESG characteristics (ESG Funds vs Profit-driven Funds). Panel A uses all the evaluation results of recruited startup founders. Panel B zooms into the evaluation results of startup founders in impact ventures, who claim to care about positive ESG impact as indicated in their background information. Panel C focuses on the evaluation results of profit-driven startup founders who do *NOT* aim for positive ESG impact as indicated in their background information. For Column (1), the dependent variable is the startup's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in the startup. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups are comfortable asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG Fund" and "Impact Venture" are indicators that equal one if the investor works in an ESG VC fund, and the experimental subject founded an impact venture which cares about their ESG impact. "ESG Fund × Impact Venture" is an interaction term of "ESG Fund" and "Impact Venture". "ESG", "Environment", "Social", and "Governance" are indicators that equal one if the investor works in an ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects and cluster the standard errors within each startup founder. Standard errors are reported in the parentheses. *** p<0.01, ** p<0.05, * p<0.1 indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 6: Heterogeneous Evaluation Results on Detailed Categories of ESG Funds (Gender)

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Female Founders							
ESG	-1.29	-0.72	0.10	0.28	1.18	-0.83	-0.08
	(1.22)	(1.24)	(0.95)	(1.98)	(1.34)	(1.41)	(0.59)
Environment	-5.20***	-5.67***	-1.65	-6.61***	-0.81	-6.04***	-1.02
	(1.52)	(1.46)	(1.10)	(2.07)	(1.40)	(1.73)	(0.79)
Social	2.59**	3.52**	2.22*	2.93	-0.80	3.97**	0.75
	(1.29)	(1.39)	(1.13)	(2.03)	(1.27)	(1.63)	(0.75)
Governance	1.02	2.77*	1.37	1.14	-1.25	3.10*	0.95
	(1.43)	(1.42)	(1.24)	(2.24)	(1.46)	(1.64)	(0.72)
Q1					0.42***		0.30***
					(0.06)		(0.03)
Q2					0.54***		0.54***
					(0.06)		(0.04)
Q5					0.34***		0.25***
					(0.05)		(0.03)
Mean of Dep. Var.	61.36	54.99	64.89	82.88	82.88	56.81	56.81
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,340	3,340	3,340	3,340	3,340	3,340	3,340
R-squared	0.44	0.48	0.52	0.58	0.79	0.43	0.84
Panel B: Male Founders							
ESG	-1.40	-1.63*	0.11	-1.45	-0.11	-1.59*	-0.55
	(0.92)	(0.95)	(0.74)	(1.28)	(0.89)	(0.94)	(0.44)
Environment	-1.77	-1.83	-0.39	-0.17	1.59	-1.70	-0.31
	(1.19)	(1.12)	(0.92)	(1.73)	(1.22)	(1.14)	(0.55)
Social	-1.06	-0.53	0.44	-1.13	-0.53	0.03	0.49
	(1.04)	(0.92)	(0.76)	(1.36)	(1.09)	(0.99)	(0.64)
Governance	-2.14**	-3.10***	-0.07	-2.63	-0.24	-2.39**	-0.54
	(1.09)	(1.11)	(0.83)	(1.72)	(1.18)	(1.13)	(0.52)
Q1					0.48***		0.40***
					(0.05)		(0.03)
Q2					0.44***		0.31***
					(0.05)		(0.04)
Q5					0.31***		0.28***
					(0.06)		(0.03)
Mean of Dep. Var.	63.51	61.73	68.42	94.67	94.67	62.03	62.03
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,840	4,840	4,840	4,840	4,840	4,840	4,840
R-squared	0.46	0.52	0.53	0.66	0.81	0.48	0.82

Notes. This table reports the regression results of how female and male startup founders' evaluation results respond to investors' detailed ESG characteristics. Panel A analyzes evaluation results of recruited female startup founders. Panel B analyzes evaluation results of recruited male startup founders. For Column (1), the dependent variable is the startup's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in the startup. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups are comfortable asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG", "Environment", "Social", and "Governance" are indicators that equal one if the investor works in ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects and cluster the standard errors within each startup founder. Standard errors are reported in the parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$ indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 7: Heterogeneous Evaluation Results on Detailed Categories of ESG Funds (Political Views)

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Democratic Party							
ESG Fund	0.49	0.43	1.33*	-0.30	-1.18	0.34	-0.35
	(0.91)	(0.95)	(0.69)	(1.35)	(1.00)	(0.95)	(0.46)
Environmental Fund	-1.45	-2.20*	-0.15	-0.03	1.79	-1.43	0.07
	(1.06)	(1.14)	(0.87)	(1.78)	(1.29)	(1.22)	(0.61)
Social Fund	0.25	0.28	0.92	-0.93	-1.48	0.79	0.35
	(1.05)	(1.06)	(0.72)	(1.57)	(1.07)	(1.21)	(0.66)
Governance Fund	0.61	0.66	0.77	1.62	0.75	1.50	0.81
	(1.15)	(1.21)	(0.98)	(1.94)	(1.30)	(1.29)	(0.60)
Q1					0.55***		0.38***
					(0.06)		(0.04)
Q2					0.44***		0.42***
					(0.06)		(0.05)
Q5					0.31***		0.24***
					(0.07)		(0.04)
Mean of Dep. Var.	65.42	62.76	68.96	96.84	96.84	62.50	62.50
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,120	4,120	4,120	4,120	4,120	4,120	4,120
R-squared	0.49	0.55	0.55	0.68	0.84	0.49	0.84
Panel B: Republican Party							
ESG Fund	-4.20**	-5.30***	-1.57	-2.91	1.77	-5.04***	-0.72
	(1.75)	(1.72)	(1.34)	(2.34)	(1.51)	(1.88)	(0.74)
Environmental Fund	-3.79*	-4.09**	-1.38	-4.76*	-0.87	-5.18**	-1.63*
	(2.15)	(1.93)	(1.46)	(2.83)	(1.82)	(2.11)	(0.89)
Social Fund	0.88	0.64	0.43	0.38	-0.43	1.09	0.39
	(1.69)	(1.64)	(1.38)	(2.13)	(1.69)	(1.86)	(0.92)
Governance Fund	-4.26**	-3.57*	-2.37**	-6.04**	-1.80	-3.92**	-0.22
	(1.83)	(1.84)	(1.15)	(2.41)	(1.46)	(1.95)	(0.91)
Q1					0.40***		0.31***
					(0.07)		(0.05)
Q2					0.45***		0.50***
					(0.07)		(0.05)
Q5					0.40***		0.26***
					(0.07)		(0.04)
Mean of Dep. Var.	60.89	55.00	65.14	84.97	84.97	58.10	58.10
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,960	1,960	1,960	1,960	1,960	1,960	1,960
R-squared	0.43	0.48	0.53	0.57	0.78	0.41	0.84

Notes. This table reports the regression results of how Democratic and Republican startup founders' evaluation results respond to different types of ESG investors. Panel A uses the evaluation results of recruited Democratic startup founders. Panel B uses the evaluation results of recruited Republican startup founders. For Column (1), the dependent variable is the startup's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in the startup. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups are comfortable asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG Fund", "Environmental Fund", "Social Fund", and "Governance Fund" are indicators that equal one if the investor works in an ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects and cluster the standard errors within each startup founder. Standard errors are reported in the parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$ indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 8: Heterogeneous Evaluation Results on ESG Funds Based on Investor's Gender

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Female Investors' Profiles							
ESG Fund	-1.34*	-2.04***	-0.61	-2.11*	-0.34	-1.97**	-0.48
	(0.75)	(0.77)	(0.60)	(1.15)	(0.77)	(0.85)	(0.39)
Q1					0.49***		0.35***
					(0.05)		(0.03)
Q2					0.45***		0.42***
					(0.05)		(0.03)
Q5					0.29***		0.28***
					(0.05)		(0.03)
Mean of Dep. Var.	62.94	59.58	67.75	90.50	90.50	60.47	60.47
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,113	4,113	4,113	4,113	4,113	4,113	4,113
R-squared	0.48	0.53	0.55	0.65	0.82	0.48	0.84
Panel B: Male Investors' Profiles							
ESG Fund	-1.08	0.04	1.48**	0.64	0.58	0.30	0.28
	(0.80)	(0.78)	(0.63)	(1.20)	(0.83)	(0.84)	(0.42)
Q1					0.42***		0.36***
					(0.05)		(0.03)
Q2					0.52***		0.42***
					(0.05)		(0.04)
Q5					0.34***		0.26***
					(0.05)		(0.03)
Mean of Dep. Var.	62.33	58.37	66.20	89.21	89.21	59.32	59.32
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,067	4,067	4,067	4,067	4,067	4,067	4,067
R-squared	0.48	0.54	0.55	0.65	0.82	0.49	0.84

Notes. This table reports the regression results testing the heterogeneous evaluation results on ESG funds based on the venture capitalist's gender. Panel A focuses on evaluation results of female investors' profiles. Panel B focuses on evaluation results of male investors' profiles. For Column (1), the dependent variable is the startup's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in the startup. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups are comfortable asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG Fund" is an indicator that is equal to one if the investor works in an ESG VC fund, and zero if the investor works in a profit-driven VC fund. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects and cluster the standard errors within each startup founder. Standard errors are reported in the parentheses. *** p<0.01, ** p<0.05, * p<0.1 indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 9: Heterogeneous Evaluation Results on Detailed Categories of ESG Funds Based on Investor's Gender

Dependent Variable	Q1 Quality	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Female Investors' Profiles							
ESG	-0.69	-1.60*	0.06	-1.32	-0.27	-1.68	-0.79
	(0.96)	(0.96)	(0.78)	(1.54)	(1.14)	(1.05)	(0.52)
Environment	-3.97***	-5.15***	-2.15**	-4.73**	0.19	-5.43***	-1.30*
	(1.28)	(1.28)	(1.03)	(2.01)	(1.46)	(1.37)	(0.69)
Social	0.24	-0.14	0.39	-0.65	-0.82	0.86	0.72
	(1.28)	(1.22)	(0.98)	(1.75)	(1.19)	(1.36)	(0.73)
Governance	-1.74	-1.85	-1.56	-2.67	-0.52	-2.14	-0.33
	(1.40)	(1.38)	(1.15)	(2.12)	(1.36)	(1.51)	(0.63)
Q1					0.49***		0.35***
					(0.05)		(0.03)
Q2					0.46***		0.42***
					(0.05)		(0.03)
Q5					0.29***		0.28***
					(0.05)		(0.03)
Mean of Dep. Var.	62.94	59.58	67.75	90.50	90.50	60.47	60.47
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,113	4,113	4,113	4,113	4,113	4,113	4,113
R-squared	0.49	0.53	0.55	0.65	0.82	0.49	0.84
Panel B: Male Investors' Profiles							
ESG	-2.04**	-0.87	0.54	0.17	1.30	-0.82	0.13
	(0.97)	(1.01)	(0.82)	(1.51)	(1.09)	(1.06)	(0.56)
Environment	-2.24*	-1.36	0.65	-0.39	1.04	-1.45	-0.26
	(1.33)	(1.22)	(1.01)	(1.80)	(1.19)	(1.33)	(0.66)
Social	0.93	3.01***	2.53**	2.54	-0.29	2.98**	0.73
	(1.17)	(1.14)	(0.99)	(1.80)	(1.27)	(1.19)	(0.67)
Governance	0.07	0.50	3.11***	0.88	-0.47	1.75	0.70
	(1.22)	(1.22)	(1.02)	(1.95)	(1.39)	(1.33)	(0.67)
Q1					0.42***		0.36***
					(0.05)		(0.03)
Q2					0.52***		0.42***
					(0.05)		(0.04)
Q5					0.34***		0.26***
					(0.05)		(0.03)
Mean of Dep. Var.	62.33	58.37	66.20	89.21	89.21	59.32	59.32
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,067	4,067	4,067	4,067	4,067	4,067	4,067
R-squared	0.48	0.54	0.55	0.65	0.82	0.49	0.84

Notes. This table reports the regression results testing the heterogeneous evaluation results on detailed categories of ESG funds based on the venture capitalist's gender. Panel A focuses on evaluation results of female investors' profiles. Panel B focuses on evaluation results of male investors' profiles. For Column (1), the dependent variable is the startup's evaluation results of Q1 (i.e., quality evaluation), indicating the investor's probability of helping the startup to succeed. In Column (2), the dependent variable is the evaluation results of Q2 (i.e., investment intentions), indicating the investor's probability of showing interest in the startup. In Column (3), the dependent variable is the evaluation results of Q5 (i.e., informativeness of investors' profiles), indicating whether the investor's profile is informative. The dependent variable of Columns (4)-(5) is the startup's fundraising plan, indicating the relative amount of money that startups are comfortable asking for from the investor. The dependent variable of Columns (6)-(7) stands for the startup's likelihood of contacting the investor, which directly measures the investor's attractiveness. "ESG", "Environment", "Social", and "Governance" are indicators that equal one if the investor works in an ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. Q1, Q2, and Q5 are evaluation results of the investor's quality, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. All regression results add subject fixed effects and cluster the standard errors within each startup founder. Standard errors are reported in the parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$ indicate statistical significance at 1%, 5%, and 10% levels, respectively.

Table 10: Quantile-Regression Estimates for Startups' Evaluations on Investors' Quality

	Quality (i.e., Q_1)									
	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
Panel A: ESG Funds										
ESG Fund	-4.00***	-2.00	-1.00	0.00	-1.00	1.00*	0.00	-1.00	-1.00	-1.26**
	(1.45)	(1.58)	(0.86)	(0.81)	(0.65)	(0.52)	(0.55)	(0.67)	(0.64)	(0.59)
Mean of Dep. Var.	20	40	51	60	68	74	80	86	95	62.63
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180
Panel B: Detailed Categories of ESG Funds										
ESG	-3.00*	-2.00	0.00	-0.00	-1.00	-0.00	-0.00	-1.00	-2.00**	-1.35*
	(1.78)	(1.89)	(1.08)	(1.01)	(0.85)	(0.68)	(0.72)	(0.77)	(0.91)	(0.74)
Environment	-7.00***	-9.00***	-2.00	-4.00***	-4.00**	-1.00	-1.00	-2.00	0.00	-3.17***
	(2.12)	(2.42)	(1.47)	(1.29)	(1.62)	(0.99)	(0.89)	(1.24)	(1.03)	(0.94)
Social	-1.00	-0.00	1.00	1.00	1.00	1.00	-0.00	-0.00	0.00	0.43
	(2.38)	(2.13)	(1.33)	(1.16)	(1.07)	(0.82)	(0.83)	(1.01)	(0.99)	(0.82)
Governance	-3.00	-2.00	-1.00	-1.00	-0.00	1.00	-0.00	-0.00	1.00	-0.85
	(2.28)	(3.30)	(1.14)	(1.40)	(1.04)	(0.83)	(0.88)	(1.08)	(0.76)	(0.87)
Mean of Dep. Var.	20	40	51	60	68	74	80	86	95	62.63
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180

Notes. This table reports the effects of investors' ESG characteristics on the quantiles and the mean of startups' provided quality evaluations. Panel A examines the evaluation differences for ESG VC funds and profit-driven VC funds. Panel B examines the evaluation differences for various detailed categories of ESG VC funds. "ESG Fund" is an indicator that equals one if the investor works in an ESG VC fund, and zero otherwise. "ESG", "Environment", "Social", and "Governance" are indicators that equal one if the investor works in an ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. In each of Columns [1]–[9], the dependent variable is the kth percentile ($k \in 10, 20, ..., 90$) of the distribution of the investor's perceived quality (i.e., Q_1); in Column [10], the dependent variable is average investor quality. Standard errors are clustered at the subject level, and reported in parentheses. $*p < 0.10, **p < 0.05, ***p < 0.01$

Table 11: Quantile-Regression Estimates for Startups' Evaluations on Investors' Attractiveness

	Attractiveness (i.e., Q_4)									
	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
Panel A: ESG Funds										
ESG Fund	-3.00**	-5.00***	-2.00**	-1.00	0.00	0.00	0.00	0.00	0.00	-0.91
	(1.53)	(1.50)	(0.96)	(0.96)	(0.94)	(0.65)	(0.58)	(0.54)	(0.85)	(0.64)
Mean of Dep. Var.	15	32	48	56	65	72	79	85	95	59.90
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180
Panel B: Detailed Categories of ESG Funds										
ESG Fund	-4.00**	-5.00**	-2.00*	-2.00	-1.00	-1.00	-0.00	-0.00	-1.00	-1.28
	(1.81)	(2.35)	(1.16)	(1.26)	(1.09)	(0.88)	(0.70)	(0.77)	(1.16)	(0.80)
Environmental Fund	-6.00***	-8.00***	-7.00***	-4.00**	-4.00***	-2.00	-3.00***	-1.00	0.00	-3.47***
	(1.93)	(2.52)	(2.06)	(1.60)	(1.32)	(1.27)	(0.84)	(1.38)	(1.27)	(0.98)
Social Fund	1.00	1.00	1.00	3.00**	4.00***	3.00***	2.00**	1.00	0.00	1.64*
	(2.26)	(4.03)	(1.49)	(1.48)	(1.21)	(1.00)	(0.80)	(0.86)	(1.27)	(0.89)
Governance Fund	-2.00	-5.00*	-3.00	1.00	3.00**	1.00	1.00	2.00*	1.00	-0.15
	(1.90)	(2.84)	(1.97)	(1.75)	(1.18)	(0.91)	(0.92)	(1.16)	(1.16)	(0.95)
Mean of Dep. Var.	15	32	48	56	65	72	79	85	95	59.90
Observations	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180	8,180

Notes. This table reports the effects of investors' ESG characteristics on the quantiles and the mean of startups' indicated likelihood to contact the investor (i.e., the investor's attractiveness Q_4). Panel A examines the evaluation differences for ESG VC funds and profit-driven VC funds. Panel B examines the evaluation differences for various detailed categories of ESG VC funds. "ESG Fund" is an indicator that equals one if the investor works in an ESG VC fund, and zero otherwise. "ESG Fund", "Environmental Fund", "Social Fund", and "Governance Fund" are indicators that equal one if the investor works in an ESG VC fund that focuses on general "ESG" impact, only focuses on positive "environmental" impact, only focuses on positive "social" impact, and only focuses on positive "Governance" impact, and zero otherwise. In each of Columns [1]–[9], the dependent variable is the kth percentile ($k \in 10, 20, ..., 90$) of the distribution of the investor's perceived attractiveness (i.e., Q_4); in Column [10], the dependent variable is average investor attractiveness. Standard errors are clustered at subject level, and reported in parentheses. $*p < 0.10, **p < 0.05, ***p < 0.01$

Table 12: Willingness to Pay for ESG Fund Investors (Payment Game)

	Dependent Variable: **1**{*Pay for Comprehensive Investor Recommendation List*}			
	OLS	OLS	Probit	Probit
	(1)	(2)	(3)	(4)
Treatment1 (Gender)	0.07	0.07	0.19	0.19
	(0.06)	(0.06)	(0.15)	(0.15)
Treatment2 (ESG)	0.13**	0.13**	0.35**	0.35**
	(0.06)	(0.06)	(0.15)	(0.15)
Reliable Algorithm	0.01***	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Control		Yes		Yes
Observations	409	409	409	409
R-squared	0.06	0.06	0.05	0.05

Notes. This table tests the existence of startup founders' taste-driven preferences towards ESG investors. Reported regression results examine the impact of different experimental treatments on experimental subjects' likelihood to pay for a more comprehensive investor recommendation list with more ESG investors. The dependent variable is an indicator which equals one if the experimental subject chooses "Option 2" in the payment game (i.e., pays for a comprehensive list), and zero if the subject chooses "Option 1" (i.e., receives all the monetary awards rather than purchases a comprehensive list). Columns (1) - (2) report OLS regression results. Columns (3) - (4) report Probit regression results. "Treatment1 (Gender)" is an indicator which is equal to one if the subject is assigned with Treatment 1 in the payment game (i.e., conditional on the same quality, receives more female investors' contact information), and zero otherwise. "Treatment2 (ESG)" is an indicator which is equal to one if the subject is assigned with Treatment 2 in the payment game (i.e., conditional on the same quality, receives more ESG investors' contact information), and zero otherwise. "Reliable Algorithm" indicates each subject's beliefs of the likelihood that the data-driven algorithm can recommend high-quality matched investors to the startup. Control variables include the startup founder's gender, ESG characteristics, race, political views, previous entrepreneurial experiences, educational background, and the startup's stage, number of employees, industry background, and the founding team composition. Standard errors in parentheses are robust standard errors. $*p < 0.10, **p < 0.05, ***p < 0.01$.

Table 13: Willingness to Pay Based on Random Utility Model (Payment Game)

	Dependent Variable: $\mathbf{1}\{$*Pay for Recommendation List*$\}$	
	(1)	(2)
Treatment1 (Gender)	0.30	0.27
	(0.25)	(0.28)
Treatment2 (ESG)	0.56**	0.71**
	(0.25)	(0.31)
Price	-0.00	-0.01
	(0.01)	(0.01)
Reliable Algorithm	0.02***	0.03***
	(0.00)	(0.01)
Control	No	Yes
Observations	409	409

Notes. This table estimates startup founders' willingness to way for extra ESG investors' information based on a random utility model. The dependent variable is an indicator which equals one if the experimental subject chooses "Option 2" in the payment game (i.e., pays for a comprehensive list), and zero if the subject chooses "Option 1" (i.e., receives all the monetary awards rather than purchases a comprehensive list). "Treatment1 (Gender)" is an indicator which is equal to one if the subject is assigned with Treatment 1 in the payment game (i.e., conditional on the same quality, receives more female investors' contact information), and zero otherwise. "Treatment2 (ESG)" is an indicator which is equal to one if the subject is assigned with Treatment 2 in the payment game (i.e., conditional on the same quality, receives more ESG investors' contact information), and zero otherwise. "Reliable Algorithm" indicates each subject's beliefs of the likelihood that the data-driven algorithm can recommend high-quality matched investors to the startup. "price" is the randomly generated price for each comprehensive investor recommendation list. "1(price¿$48)" equals one if "price¿$48", and zero otherwise. $\mathbb{1}(price > \$48) \times$ Treatment1 and $\mathbb{1}(price > \$48) \times$ Treatment2 are the corresponding interaction terms. Control variables include the startup founder's gender, ESG characteristics, race, political views, previous entrepreneurial experiences, educational background, and the startup's stage, number of employees, industry background, and the founding team composition. Standard errors are robust standard errors, and reported in parentheses. $*p < 0.10, **p < 0.05, ***p < 0.01$.

Table 14: Willingness to Pay for ESG Fund Investors Based on Stakes (Payment Game)

	Dependent Variable: **1**{*Pay for Recommendation List*}			
	OLS	OLS	Probit	Probit
	(1)	(2)	(3)	(4)
Panel A: Low Stake: price<=$48				
Treatment1 (Gender)	0.06	0.06	0.16	0.16
	(0.08)	(0.08)	(0.22)	(0.22)
Treatment2 (ESG)	0.15*	0.15*	0.42**	0.42**
	(0.08)	(0.08)	(0.21)	(0.21)
Reliable Algorithm	0.01***	0.01***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)	(0.00)
Control		Yes		Yes
Observations	211	211	211	211
R-squared	0.08	0.08	0.06	0.06
Panel B: High Stake: price>$48				
Treatment1 (Gender)	0.08	0.08	0.21	0.21
	(0.08)	(0.08)	(0.22)	(0.22)
Treatment2 (ESG)	0.10	0.10	0.27	0.27
	(0.09)	(0.09)	(0.23)	(0.23)
Reliable Algorithm	0.005***	0.005***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Control		Yes		Yes
Observations	198	198	198	198
R-squared	0.05	0.05	0.03	0.03

Notes. This table tests how startup founders' taste-driven preferences about ESG investors vary in different situations. Panel A reports regression results in a low-stake situation where the price/cost of a more comprehensive investor recommendation list is below or equal to the median price (i.e., $48). Panel B reports regression results in a high-stake situation where the price/cost of a more comprehensive investor recommendation list is above the median price (i.e., $48). The dependent variable is an indicator which equals one if the experimental subject chooses "Option 2" in the payment game (i.e., pays for a comprehensive list), and zero if the subject chooses "Option 1" (i.e., receives all the monetary awards rather than purchases a comprehensive list). Columns (1) - (2) report OLS regression results. Columns (3) - (4) report Probit regression results. "Treatment1 (Gender)" is an indicator which is equal to one if the subject is assigned with Treatment 1 in the payment game (i.e., conditional on the same quality, receives more female investors' contact information), and zero otherwise. "Treatment2 (ESG)" is an indicator which is equal to one if the subject is assigned with Treatment 2 in the payment game (i.e., conditional on the same quality, receives more ESG investors' contact information), and zero otherwise. "Reliable Algorithm" indicates each subject's beliefs of the likelihood that the data-driven algorithm can recommend high-quality matched investors to the startup. Control variables include the startup founder's gender, ESG characteristics, race, political views, previous entrepreneurial experiences, educational background, and the startup's stage, number of employees, industry background, and the founding team composition. Standard errors are robust standard errors, and reported in parentheses. $*p < 0.10, **p < 0.05, ***p < 0.01$.

Figures

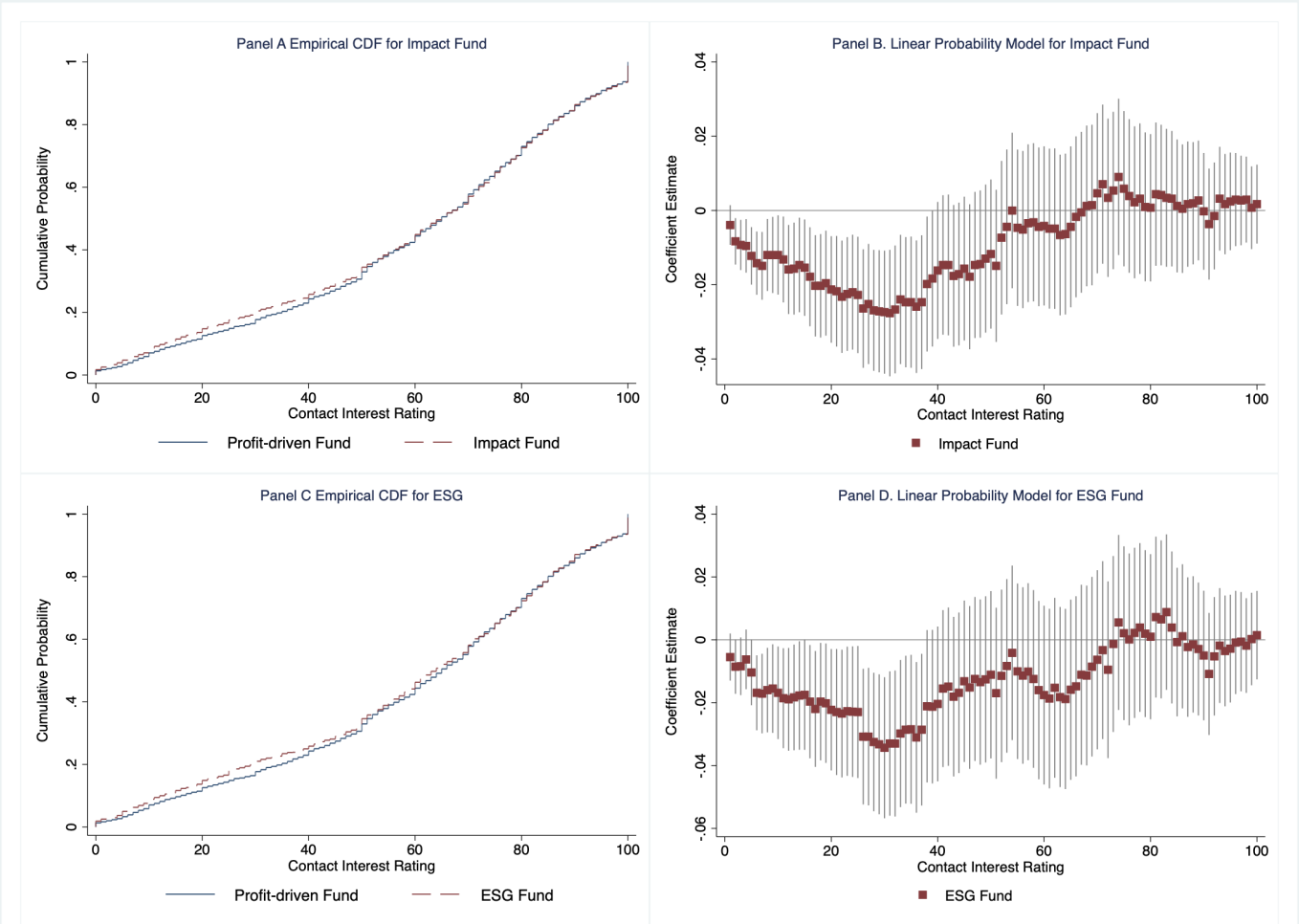


Figure 1: Distributional Effect of Impact Fund Across Startups' Contact Interest Ratings

Notes. This figure demonstrates the effect of investor's ESG characteristics across startup founders' contact interest ratings. Panel A provides the empirical CDF for being an impact fund on startup founders' contact interest rating (i.e. $Pr(\text{Contact Interest} \leq x|\text{Impact Fund})$ and $Pr(\text{Contact Interest} \leq x|\text{Profit-driven Fund})$). Panel B provides the OLS coefficient estimates (i.e. $Pr(\text{Contact Interest} \leq x|\text{Impact Fund}) - Pr(\text{Contact Interest} \leq x|\text{Profit-driven Fund})$) and the corresponding 95% confidence level. Similarly, Panels C provide the empirical CDF for being an ESG fund, defined as a subgroup of impact funds that aim for general positive environmental, social, and governance impact. Panels D provide the OLS coefficient estimates for being an ESG fund.

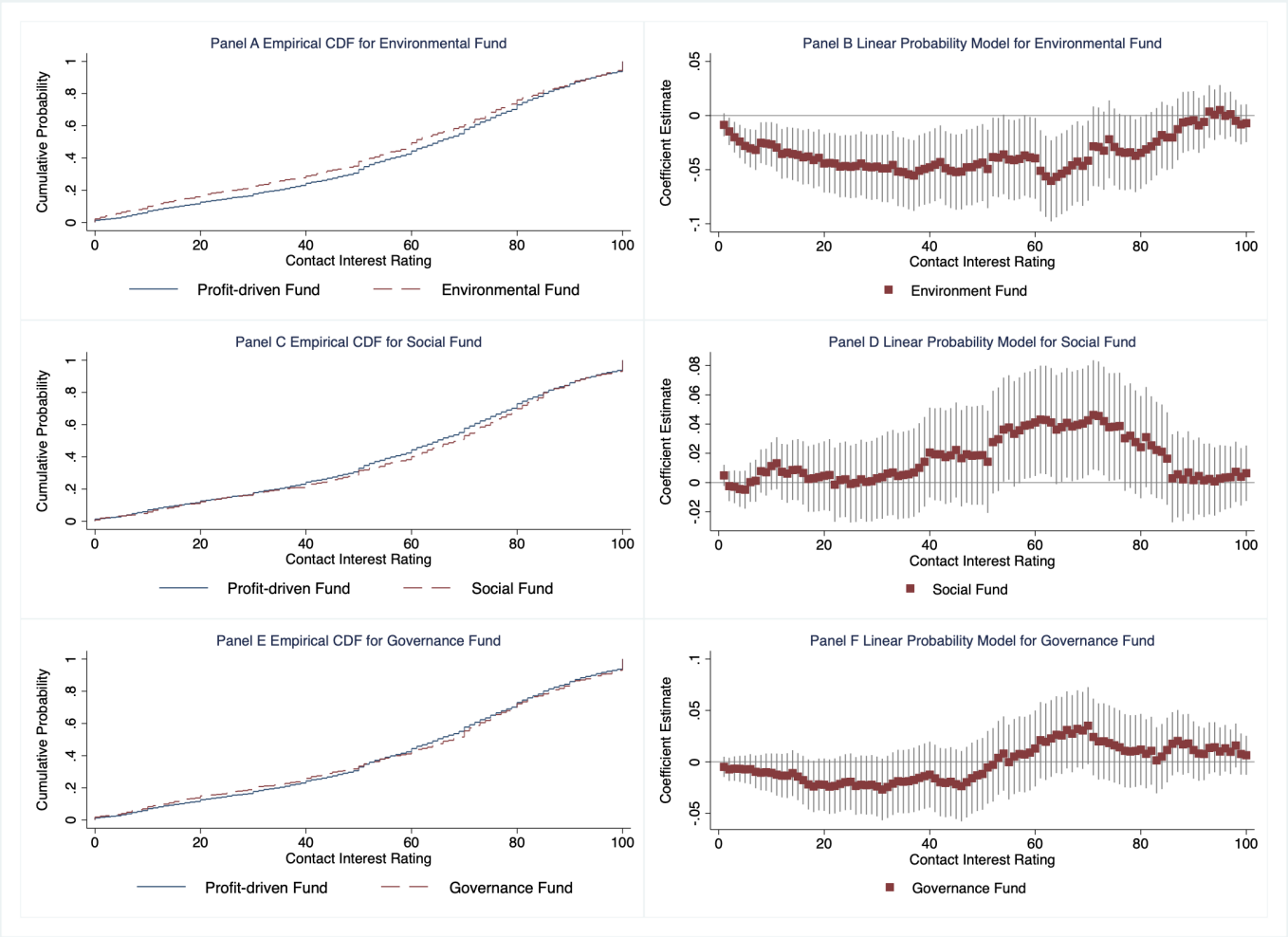


Figure 2: Distributional Effect of Detailed Categories of Impact Fund Across Startups' Contact Interest Ratings

Notes. This figure demonstrates the effect of investor's detailed ESG characteristics (i.e., separate E, S, and G characteristics) across startup founders' contact interest ratings. "Environmental Fund", "Social Fund", and "Governance Fund" are defined as a subgroup of impact funds that mainly aims for positive environmental impact, social impact, and governance impact, separately. Panel A provides the empirical CDF for being an "Environmental Fund" on startup founders' contact interest rating (i.e. $Pr(\text{Contact Interest} \leq x|\text{Environmental Fund})$ and $Pr(\text{Contact Interest} \leq x|\text{Profit-driven Fund})$). Panel B provides the OLS coefficient estimates (i.e. $Pr(\text{Contact Interest} \leq x|\text{Environmental Fund}) - Pr(\text{Contact Interest} \leq x|\text{Profit-driven Fund})$) and the corresponding 95% confidence level. Similarly, Panels C and E provide the empirical CDF for being a "Social Fund" and "Governance Fund", separately. Panels D and F provide the OLS coefficient estimates for being a "Social Fund" and "Governance Fund", separately.

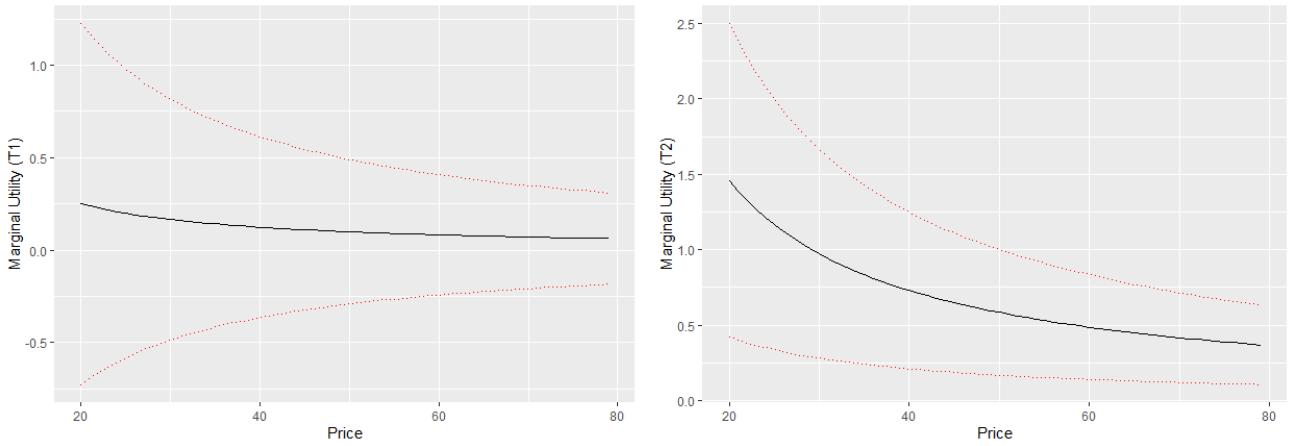


Figure 3: Marginal Utility and Price

Notes. This figure demonstrates how experimental subjects' marginal utility from purchasing treatment group investor recommendation list varies with the price of the service. The left Panel focuses on the marginal utility in the Treatment 1 group. The right Panel focuses on the marginal utility in the Treatment 2 group. The dashed lines indicate the 95% confidence interval estimated using the random utility model.

Appendix

Table A1: Descriptions of VC Funds' Investment Philosophies

Fund Type	Description
Profit-driven Funds	We maximize our efforts and financial performances when we find extraordinary people, companies, and ideas. We have an established track record of success building strong companies. We believe our leadership makes us uniquely suited to deliver a better, fairer, and faster IPO. We exist to inspire business leaders and innovators to help them generate excellent financial performance. We have the ability to think strategically around how you position the business for further growth and fundraising rounds. We aim to support great entrepreneurs throughout different stages of faster growth. We partner with entrepreneurs to transform their ideas into world-changing companies and achieve great financial performance. We are a venture capital firm, enabling startups that grow faster and stronger. We are as ambitious as our founders and know winning requires passion. We aim to build iconic companies that made history. We remain committed to making our existing portfolio companies on their way to great success. We aim to preserve legacy and improve our portfolio companies financial performance, making us a preferred partner for founders who are interested in faster growth. We help to build iconic companies with faster IPO speed. We are a VC firm helping companies and businesses grow faster. We help insightful companies build solid foundations for great success and faster growth. We help founders develop their businesses at every stage of growth and aims to achieve great success. We back ambitious founders and help their startups to thrive. We maximize our financial performance by building the next generation of transformative companies. We'll do everything we can to help you rapidly scale. We help our portfolio companies to be operationally excellent to drive faster growth and great success. We target startups with amazing products/services, and help them scale rapidly.
ESG Funds	We combine good financial performance with its environmental and social targets while taking into account the principles of good corporate governance. We have been investing to generate social and environmental impact alongside a healthy financial return. We are a leading impact investment fund. Our investments are guided by the conviction that creating positive, sustainable impact can go hand-in-hand with delivering market-rate, risk-adjusted returns for our investors. As a pioneering impact investor, we are dedicated to generating lasting positive impact for communities and the environment. We support founders who innovate considering social and environmental impact being a foundation of the company, a part of its DNA, to deliver scalable social and environmental impact. We provide startups access to essential capital and services to achieve positive environmental and social impact. We support sustainable economic growth, regional development, secure employment and aim for positive social and environmental impact. Through the use of tailored financing alternatives, we support exceptional impact driven entrepreneurs who are able to create innovative, self-sustaining and scalable business models to address the most pressing social and environmental challenges.

Fund Type	Description
	We invest in transformational companies that address key problems in environmental and social issues.
	We are a fund manager that specializes in sustainable and impact investing. We aim to generate attractive risk-adjusted financial returns for our investors alongside measurable positive social and/or environmental impact.
Environmental Funds	We invest in breakthrough venture companies developing solutions addressing our global environmental challenges.
	We are a venture capital fund, which invests in start-ups that generates positive environmental impact.
	Our fund was founded with the recognition that sustainability is becoming central to consumer and business decision-making. For over a decade, we have partnered with high-quality management teams building a more environmentally sound, resource efficient future.
	At our fund, we're enabling the mitigation of climate change and environmental crisis through groundbreaking innovations.
	We exist for more than returns and our mission is to develop the world's most environment friendly, sustainable, inclusive and mission-driven ecosystem.
	We support companies from start-up to scale-up with a special focus on positive environmental impact.
	We provide tailored equity and mezzanine impact financing to environment friendly startups that also deliver solid financial returns to investors.
	We are a team of impact venture builders dedicated to supporting the people and ideas that turn existing environmental challenges into de-carbonized solutions.
	We are an impact VC fund supporting impact ventures that also deliver decent risk-adjusted financial returns.
	We're forward-thinking industry leaders dedicated to making a global impact by providing innovative financial solutions to solve climate change and other environmental challenges.
Social Funds	We work to address social and economic inequity through new financial solutions that help empower people, build sustainable communities and inspire systemic change.
	We are committed to making communities work for all people. We bring financial and analytical tools to partnerships that work to ensure that everyone has access to essential opportunities.
	We are a pioneering VC firm that delivers positive social and financial value. Our mission is to deliver attractive social and financial returns to our investors by investing in companies improving livelihood.
	We are a proven market leader in the global impact investing industry that invests to connect capital with the communities that need it most.
	We provide critical growth capital to innovative, high-impact, scalable businesses that are addressing the challenges faced by low-income communities, creating an opportunity to achieve significant impact while achieving risk-adjusted financial returns for investors.
	We invest in growing social innovation startups and delivering capacity building support; efforts that support our work to build a foundation of equity, inclusiveness, and cooperation for communities.
	We invest in overlooked startups in sectors, industries and communities that can transform the future value we seek. We envision a world with decreased gender-based violence and sexism, racial prejudice and xenophobia, class and status segregation, and exploitative business practices.
	We are an impact investment firm. Our mission is to mobilize massive amounts of capital that will build a foundation of equity, inclusiveness, and cooperation for communities.
	We are a pioneer and leading impact investing manager, delivering competitive returns alongside positive social impact.

Fund Type	Description
	We are an institutional impact investment manager that provides capital to demonstrate and scale responsible innovation in lending for underserved communities.
Governance Funds	We are a fund manager, in support of driving capital to high growth companies with women leaders.
	We are an impact investment platform that uses technology to unlock diversified and proven community investments that generate economic mobility and financial inclusion.
	We implement gender programmes to bring women into C-Suite and ownership during our investment in startups.
	We are an impact venture fund focused on social justice, environmental resilience and economic sustainability. We have a foundational focus on diversity, equity and inclusion.

Notes. This table provides the selected wording that describes investment philosophies of different types of VC funds. Each piece of description is dynamically populated from a pool of options.

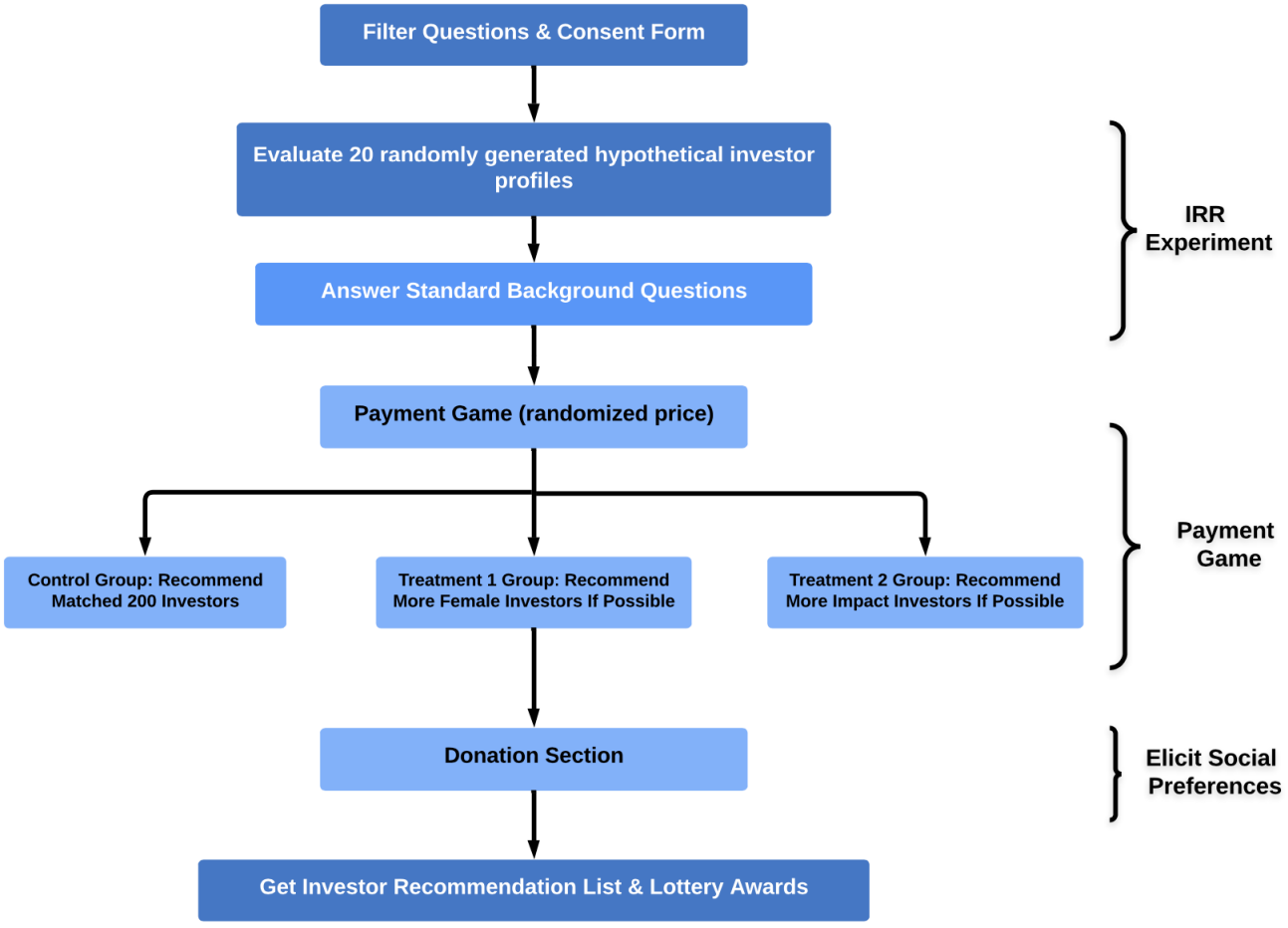


Figure A1: Flow Chart of Experiments

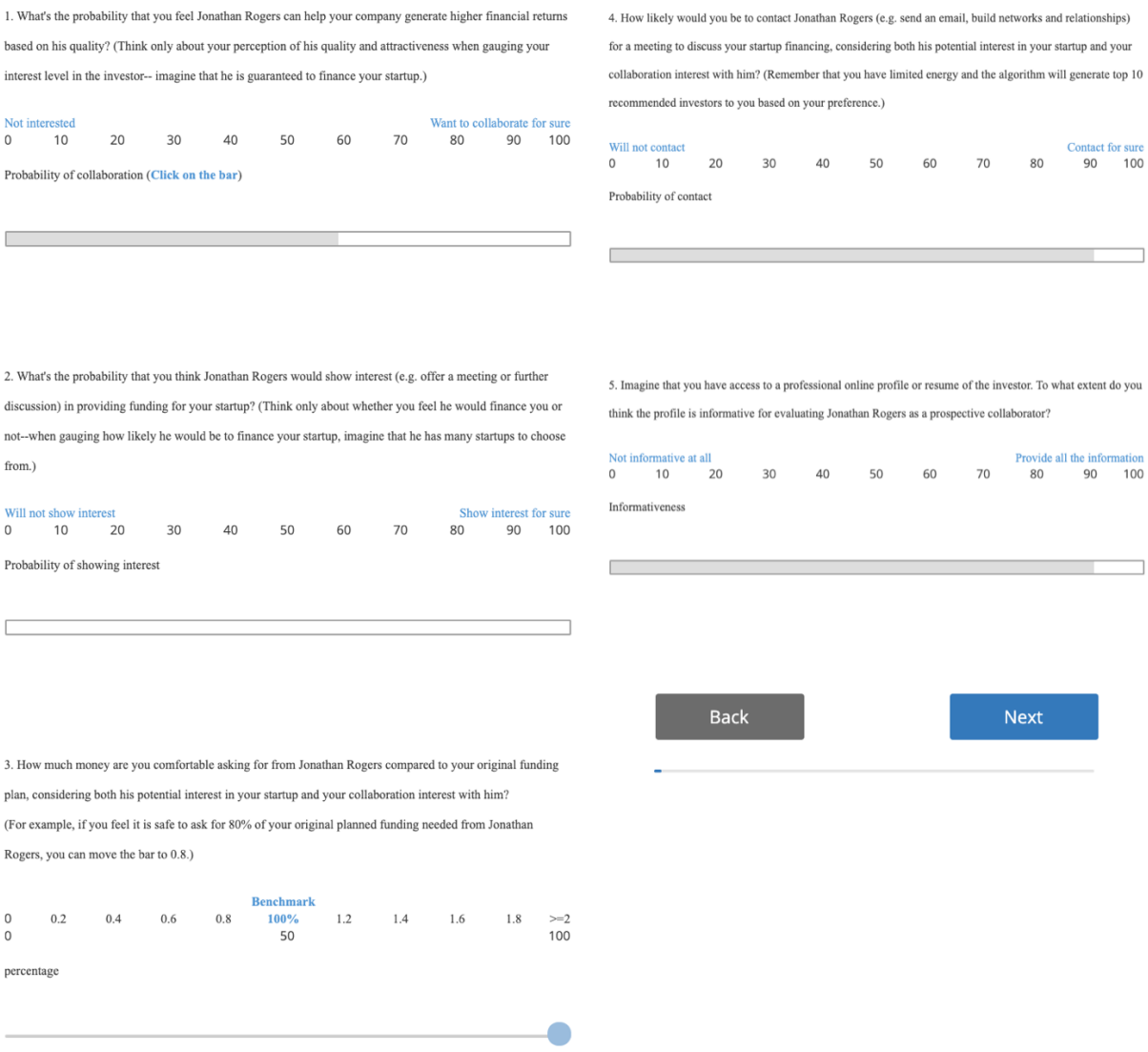


Figure A2: Sample Evaluation Questions of the IRR Experiment

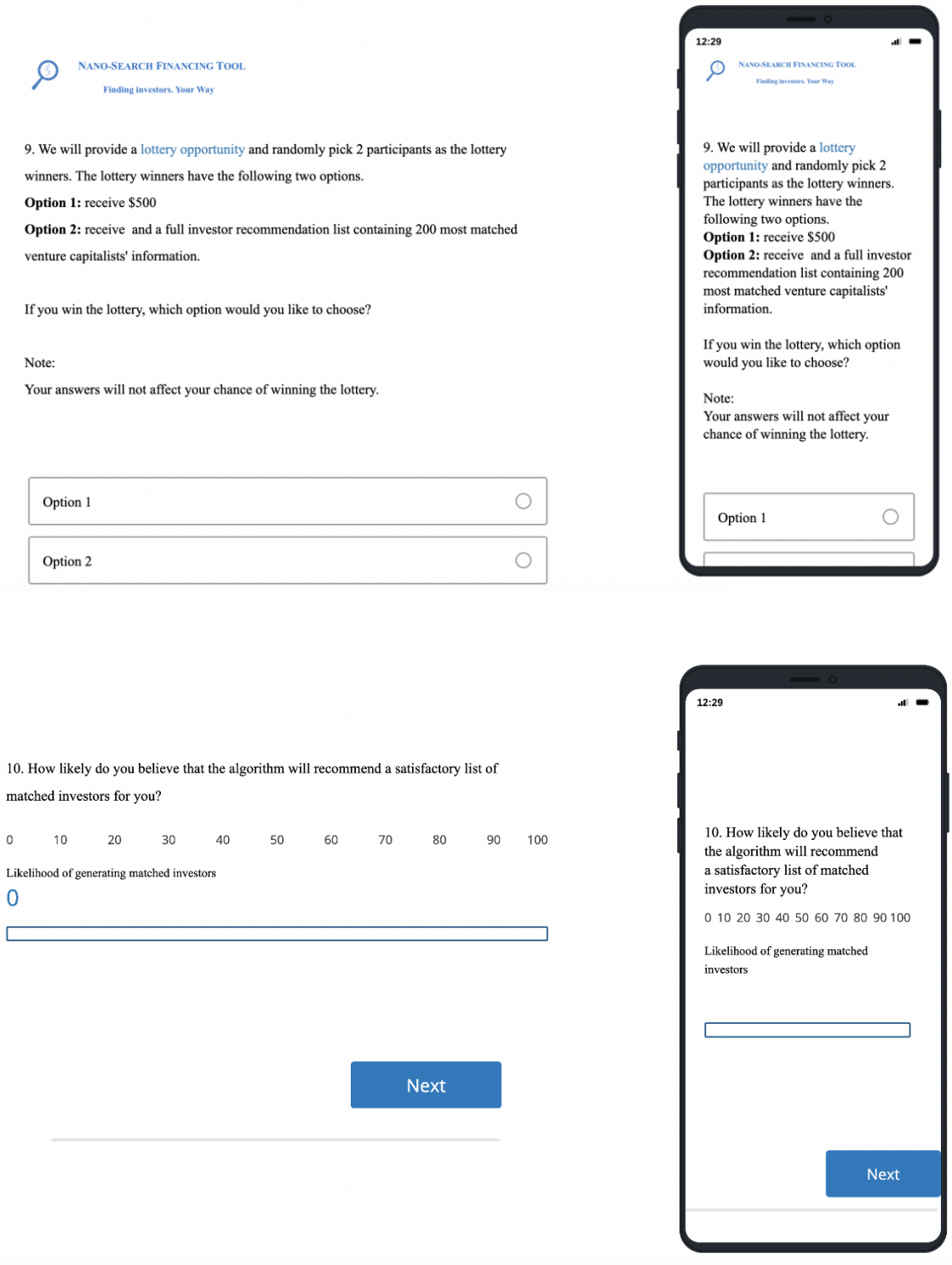


Figure A3: Payment Game Control Group

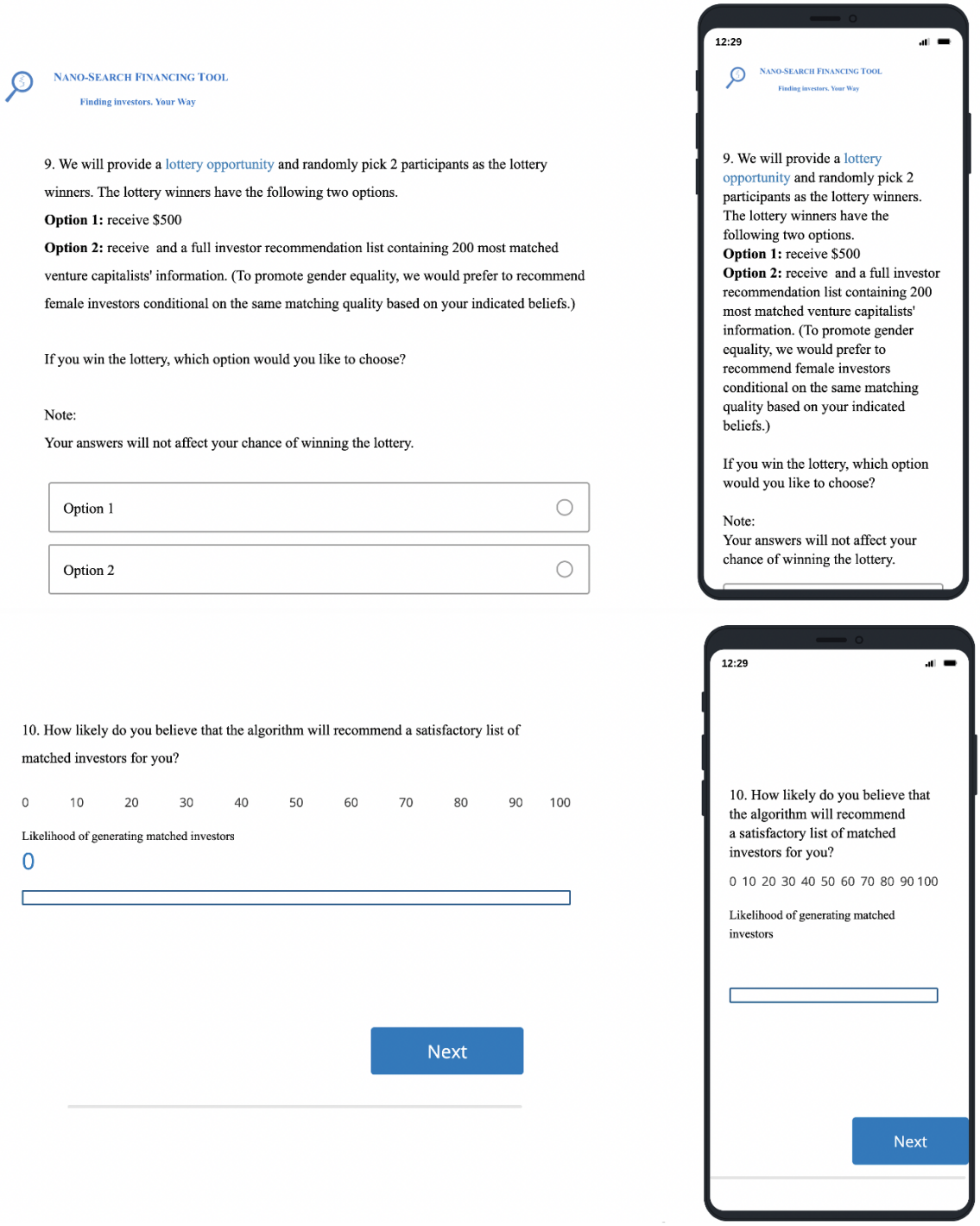


Figure A4: Payment Game Treatment Group 1

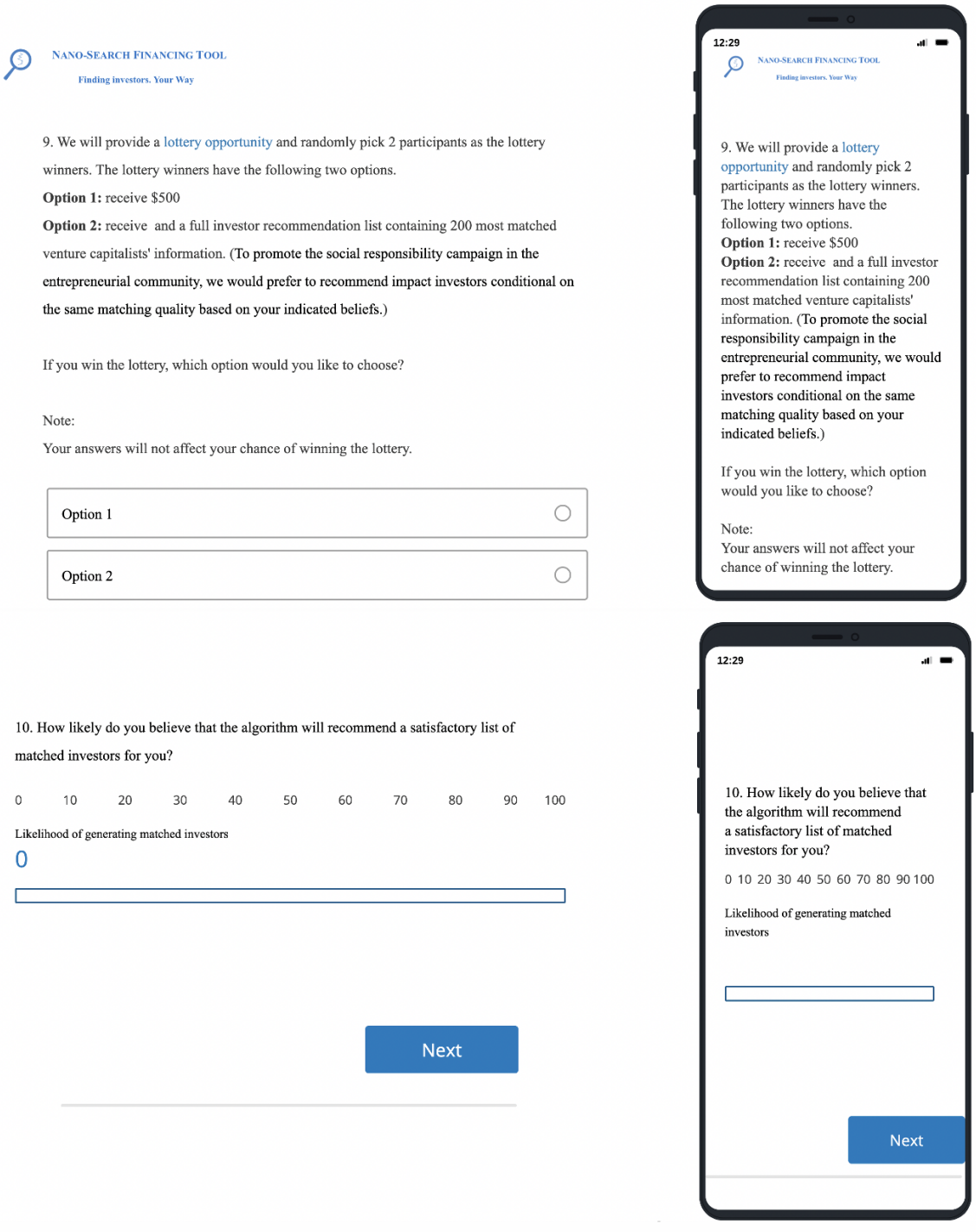


Figure A5: Payment Game Treatment Group 2

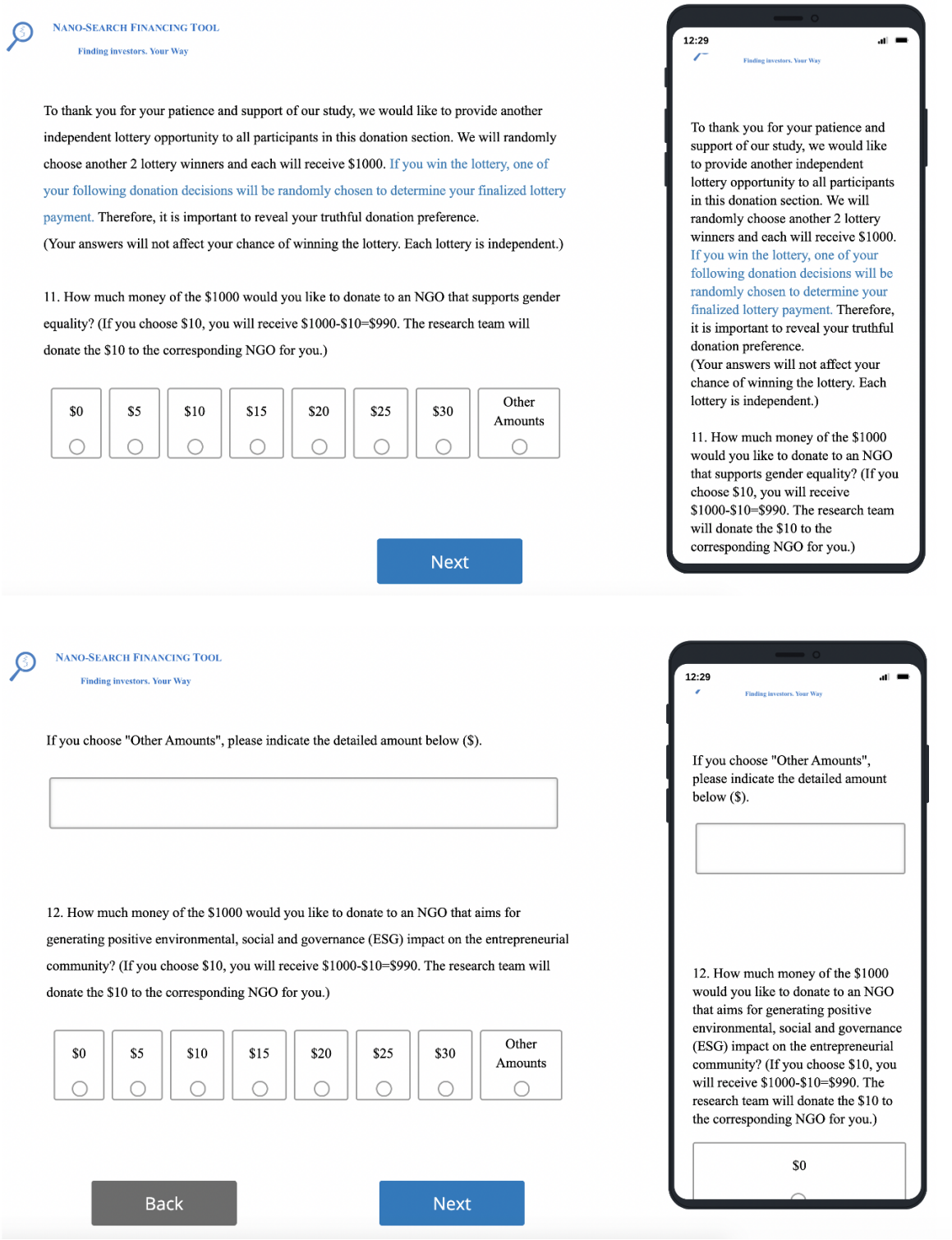
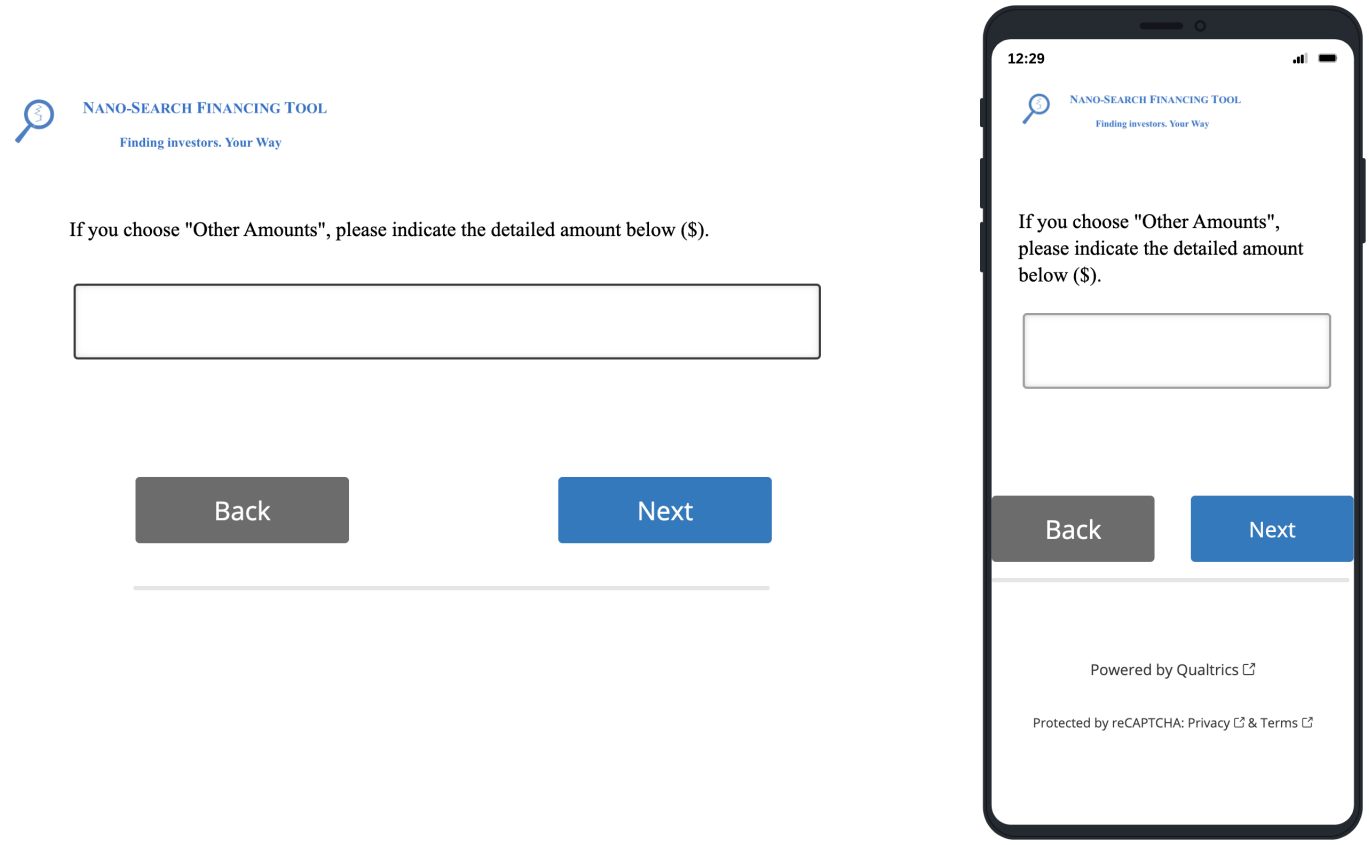


Figure A6: Social Preference Elicitation Section (Donation Section)



Social Preference Elicitation Section (Donation Section)