

Startups' Strategies for Green Funding Adoption*

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Abstract

This paper examines how firms choose between ESG and profit-driven investors during the fundraising process within the startup-venture capital (VC) context. It employs real-stakes placement experiments with US startup founders, linking founders' experimental behaviors with their real-world fundraising activities. While founders derive positive non-pecuniary utility from partnering with ESG VCs, VCs targeting environmental impact still struggle to attract startups due to financial reasons, with lower-quality VCs more affected. Founders believe such collaborations could hinder profitability and the likelihood of raising funding. Particularly, profit-driven startups, smaller startups, Republican founders, and startups in heavy industries demonstrate less interest in adopting green funding.

Keywords: Climate Finance, ESG, Sustainable Finance, Field Experiments, Venture Capital

JEL Classification: Q01, Q56, C91, C93, G24, L26, M13

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1 Introduction

The private market plays a crucial role in ongoing environmental, social, and governance (ESG) investment initiatives, as most industrial greenhouse gas emissions come from private firms (Gözlügöl and Ringe, 2022), and private investors hold substantial sway over firms’ governance and operations (Bernstein, Giroud and Townsend, 2016). Unlike public stock trading, private market investments often involve a two-sided matching process where investors and firms (i.e., investees) choose each other (Chang, Gomez and Hong, 2021; Chen and Song, 2013). Most research about private market ESG investments focuses on the capital supply side and examines investors’ ESG preferences for green assets and investment strategies (Barber, Morse and Yasuda, 2021; Jeffers, Lyu and Posenau, 2021; Kovner and Lerner, 2015; Zhang, 2021). Little is known about firms’ fundraising strategies (i.e., the capital demand side), particularly how firms choose between ESG and profit-driven investors when seeking collaborations in their fundraising process. Given firms’ significant bargaining power in raising capital (Ebrahimian and Zhang, 2020; Ewens, Gorbenko and Korteweg, 2022), understanding this question holds first-order importance in explaining the equilibrium of ESG investing in this matching context. To fill the gap, this paper employs complementary real-stakes placement experiments with real US startup founders. It provides the first evidence of firms’ strategies for green funding adoption in the private market and their preference for ESG investors.

Prevailing theories often provide ambiguous answers to this question. On the one hand, firms may favor ESG investors for their positive social image and support for ESG goals, especially if firms’ decision-makers also value the non-financial benefits of ESG engagement (Bénabou and Tirole, 2010; Fombrun and Shanley, 1990; Hong and Liskovich, 2015). On the other hand, ESG investments may involve costly ESG mandates, which are likely to reduce firms’ profitability and collaboration intentions with ESG investors (Heinkel, Kraus and Zechner, 2001; Zhang, 2021).

Economists encounter several empirical challenges in determining how investors’ ESG characteristics affect firms’ fundraising decisions from observational data. Firstly, standard databases typically record only completed deals, leaving a firm’s investor selection process largely unobserved. Moreover, an underdeveloped ESG rating system in the private market and the lack of natural experimental settings are all barriers to establishing related causal evidence. Also, given that ESG investing is a fast-growing field in the private market, the limited data on ESG investors could lead

to weak statistical power in standard regression estimations.

To address these empirical challenges, the paper conducts experiments in the startup-venture capital (VC) context as the VC industry provides a suitable testing ground for this question. Given that a company’s business model is generally stable from startup to IPO (Kaplan, Sensoy and Strömberg, 2009), understanding a startup’s willingness to partner with green investors is vital for financial markets to promote societal sustainability. Also, the VCs’ investment choices and startups’ collaboration decisions jointly affect the investment outcomes in a two-sided matching process (Ewens et al., 2022). Hence, insights from startups’ adoption of green funding may enhance our understanding of similar private investment contexts. Lastly, the rich VC data and the feasibility of recruiting startup decision-makers make it possible to conduct field experiments in this context.

This paper starts with an incentivized resume rating (IRR) experiment designed to identify belief-driven mechanisms (i.e., financial motives) influencing founders’ collaboration intentions.¹ Each participating founder assesses 20 hypothetical VC profiles with orthogonally randomized individual-level and fund-level characteristics, including investors’ entrepreneurial experience, ESG characteristics, funds’ historical financial performances, and other important characteristics. Founders are asked to indicate their likelihood of contacting each VC. Moreover, they also need to evaluate multiple dimensions of the VC profiles, such as the VCs’ potential to improve startups’ profitability, investment likelihood, and profile informativeness. Participants know these profiles are hypothetical, but they are incentivized to provide truthful evaluations to receive a recommendation list containing information on ten *real* matched VC investors. The more accurate their evaluations are, the more likely the recommendation algorithm can suggest matched investors based on their evaluations and an individual-level global VC database. Hence, the experiment essentially offers personalized investor recommendation services to startup founders, providing a real-world context. In total, 409 real US startup founders participated in the study between 03/2021 and 04/2022, providing evaluations for 8,180 VC profiles. I further replicated this experiment with an additional 65 US startup founders sourced directly from the Crunchbase platform between 09/2023 and 10/2023, providing evaluations for another 1,300 VC profiles. These founders cover a diverse range of industries commonly invested in by US VCs.

¹Belief-driven mechanisms encompass any collaboration motivations driven by financial considerations, such as perceiving ESG VCs as more likely to increase startups’ financial returns, exhibit stronger investment intentions in startups, or involve reduced uncertainty and risk.

While the IRR experiment primarily identifies *belief-driven* mechanisms, the paper also introduces a novel payment game that identifies the *same* participants' *preferences* for ESG VCs (i.e., non-pecuniary motives). The idea is to test whether founders are more willing to collaborate with ESG VCs and pay for their contact information when recommended ESG VCs have equivalent quality and investment likelihood as recommended profit-driven VCs.² All founders participating in the IRR experiment become eligible for a lottery, where winners decide between two options. Option 1 offers a direct \$500 compensation. Option 2 involves paying a randomized price to receive a more comprehensive recommendation list containing additional information on 200 real matched VC investors and keeping the remaining money (i.e., \$500 - the price of the list). Control group subjects are informed that they will receive a standard recommendation list. Treatment group subjects are informed that they will receive a list favoring ESG VCs *under equivalent matching quality*. Hence, both the list's price and the number of recommended ESG VCs are independently randomized. Unlike traditional experimental methods that elicit preferences using artificial tasks within a lab environment, the payment game provides a real-world context by examining participants' willingness to pay for the personalized VC recommendation service.

Compared to alternative experimental designs, such as classical online survey experiments or correspondence tests, the experiments above possess several key advantages. Firstly, they replicate a real-world startup fundraising environment and provide incentives to participants without deception. Secondly, they can directly identify both financial motives and non-pecuniary motives behind startups' fundraising decisions. Lastly, the experiments yield rich results based on both investors' characteristics and founders' backgrounds, enabling an in-depth analysis of the research question.

The experimental results first show that VCs' ESG characteristics significantly influence startup founders' collaboration intentions. Compared to similar profit-driven VCs, VCs targeting environmental impact (i.e., "environmental VCs") receive, on average, 3.47 percentage points (p.p.) lower contact interest ratings from all the recruited founders and 4.65 p.p. lower contact interest ratings from founders who decide to purchase the recommendation service (i.e., the "paid" founders). The magnitude of this effect is approximately 82% of the effect of investors' entrepreneurial experience, one of the most important human capital characteristics of VC investors documented in

²Assume that participants' behaviors are influenced solely by their beliefs and preferences. When beliefs are controlled, behaviors reflect preferences.

the literature ([Bottazzi, Da Rin and Hellmann, 2008](#); [Gompers and Mukharlyamov, 2022](#)). This collaboration intention is mainly driven by financial reasons. Environmental VCs are perceived as 3.17 p.p. less likely to enhance a startup’s profitability, and 3.40 p.p. less likely to show investment intentions. Furthermore, this adverse effect predominantly affects lower-quality and less attractive VCs, with high-quality VCs less affected. These results are robust in the replication experiment. A complementary survey involving 281 US startup founders suggests that the “profitability concern” is driven by both the perceived higher cost of mandates imposed by environmental VCs and concerns about environmental VCs’ expertise in improving startups’ profitability.

Secondly, the payment game further provides causal evidence regarding founders’ positive ESG preferences during their fundraising endeavors. Startup founders are approximately 13% more likely to pay for an investor recommendation list that prioritizes ESG investors. This ESG preference is also observed among profit-driven founders. A discrete choice model confirms this finding, indicating that founders’ additional willingness to pay for the information about ESG investors is more than \$77. Therefore, as long as ESG investors do not negatively impact startup profitability and exhibit comparable investment intentions, founders do exhibit a preference for them. While both social preferences and social signaling might explain founders’ ESG preferences ([Riedl and Smeets, 2017](#)), this paper only discovers a significant positive correlation between founders’ social preferences, measured by their donation to ESG NGOs, and founders’ attitudes towards ESG VCs in the IRR experiment. This implies that the pro-social tendencies of startup founders might play a role in shaping their ESG preferences. However, the paper does not find evidence supporting the role of social signaling. Overall, these findings align with earlier results showing that founders avoid collaborating with environmental VCs due to financial reasons rather than their preferences.

Thirdly, given that startup founders from diverse backgrounds may hold divergent attitudes toward green funding, further analysis of these heterogeneous effects can provide ESG VCs with practical insights to customize their deal attraction strategies. The paper finds that while founders from ESG startups slightly prefer ESG VCs, founders from solely profit-driven startups tend to avoid collaborating with ESG VCs, especially environmental VCs. Consistent with [Hong and Kostovetsky \(2012\)](#), compared to Democratic founders, Republican founders exhibit greater hesitancy in collaborating with environmental VCs and governance VCs that promote gender diversity in leadership. Consistent with [Ivanov, Kruttli and Watugala \(2023\)](#), the paper also discovers a “size

effect:” compared to founders from larger startups, founders from smaller startups are more likely to avoid collaborating with environmental VCs. Moreover, founders from clean industries, such as clean technology, education, and IT, tend to evaluate ESG VCs more positively. Conversely, those in polluting industries, such as transportation and logistics, exhibit less enthusiasm towards ESG VCs. The study also reveals founders’ propensity to avoid collaborating with ESG investors in situations where founders have fewer funding opportunities and become less selective, such as during an economic recession. To sum up, substantial heterogeneous effects exist based on startups’ ESG characteristics, startup size, founders’ political views, and market conditions.

To validate the IRR experiment, this paper examines correlations between participants’ evaluations within the experiment and their startups’ real-world fundraising outcomes. The results demonstrate that startup founders who have successfully raised funding from ESG VCs tend to show a significantly higher interest in contacting ESG VCs during the IRR experiment. This correlation between experimental behaviors and real-world fundraising outcomes becomes even stronger when analyzing “Environmental VCs” and “Social VCs” separately. Furthermore, the paper reveals that other clearly desirable VC characteristics, such as investors’ entrepreneurial experience and strong historical financial performance, notably enhance participants’ ratings. These additional analyses provide further credibility to the experiment’s findings.

The contribution of this paper is both empirical and methodological. Firstly, it adds to the burgeoning empirical literature on sustainable finance within the private market. While existing research has predominantly focused on investors’ ESG preferences and investment strategies (i.e., the capital supply side) (Barber et al., 2021; Cole, Melecky, Mölders and Reed, 2020; Jeffers et al., 2021; Kovner and Lerner, 2015),³ this paper provides novel insights on the capital demand side, examining how firms choose between ESG investors and profit-driven investors within the startup-VC context. A closely related study by Zhang (2021) investigates the tension between profits and ESG preference in the VCs’ investment processes through a similar field experiment and analyzes its theoretical implications in VCs’ staging financing context. Complementing Zhang (2021), this paper shows that startup founders also face the trade-off between profitability and ESG preferences. When considering collaboration with environmental VCs, concerns about profitability often dominate founders’ positive ESG preference, making founders hesitant to collaborate with these

³Other related empirical papers include Bellon (2020), Geczy, Jeffers, Musto and Tucker (2021), etc.

environmental VCs. This hesitancy adversely affects the quality of deal flows for such ESG VCs and helps explain the documented lower financial performance of ESG VC funds from a matching perspective (Barber et al., 2021). Moreover, the reluctance is primarily observed among profit-driven founders and those in heavy industries. This suggests that ESG investors aiming to influence firms’ operations and governance for environmentally friendly outcomes may encounter resistance from profit-driven firms, thus limiting the effectiveness of their role as a “washing machine” that makes brown firms green (Bellon, 2020; Gollier and Pouget, 2014).⁴

For relevant theoretical work in sustainable finance, standard models often assume that firms seek to maximize their market value (Chowdhry, Davies and Waters, 2019; Heinkel et al., 2001; Pástor, Stambaugh and Taylor, 2020), capturing all the financial motives that influence their decisions. However, recent sustainability theories relax this assumption and explore more generalized situations where all agents consider ESG impact and possess ESG preferences (Geelen, Hajda and Starmans, 2022; Gupta, Kopytov and Starmans, 2022; Oehmke and Opp, 2022). This paper provides the first empirical evidence of founders’ non-pecuniary utility from collaborating with ESG investors. Thus, it challenges the traditional “profit-maximization” assumption in standard models and offers crucial empirical validation for recent theoretical assumptions.

The paper also contributes to the entrepreneurial finance literature on startups’ fundraising behaviors by documenting the importance of VCs’ ESG characteristics in a startup’s fundraising process. Smith (2001) finds that 71% of the responding companies in his survey received multiple financing offers from VCs. Hsu (2004) also exploits multiple financing offer events, demonstrating that startups are more likely to accept high-reputation VC offers when facing competing financing offers from different VCs. Based on a two-sided matching framework, Sørensen (2007) shows that sorting is almost twice as important as direct influence for the IPO rates of VCs’ portfolio companies. Ebrahimian and Zhang (2020) quantify the equilibrium payoffs associated with appealing VC characteristics. However, despite the increasing attention to sustainable finance, little empirical evidence exists concerning how VCs’ ESG characteristics impact firms’ fundraising decisions. By directly observing how real founders evaluate multiple VCs with randomly assigned ESG characteristics, this paper complements the literature by identifying the influence of VCs’ ESG characteristics

⁴Krueger, Sautner and Starks (2020) show that most institutional investors mitigate climate risks by engaging with their portfolio firms. If profit-driven firms resist funding from ESG investors, these investors can not exert direct influence on these firms via their engagement efforts.

on startups’ collaboration intentions. The documented heterogeneous effects based on startup characteristics, VC characteristics, and market conditions further provide practical guidance to ESG VCs on enhancing their deal flows.

On the methodological front, the paper contributes to the experimental literature by creating a novel experimental design to elicit decision-maker preferences in a field setting. Classical methods for eliciting preferences often involve controlled lab experiments (Brodback, Günster and Pouget, 2020; Heeb, Kölbl, Paetzold and Zeisberger, 2021; Riedl and Smeets, 2017). In contrast, the payment game elicits subjects’ preferences based on their willingness to pay for an investor recommendation service, thus integrating with the same field context used in the IRR experiment. Additionally, it helps to assess how much value participants place on the provided matching incentives in the IRR experiment, allowing the quantification of the strength of these incentives.

The paper is organized as follows. Section 2 presents the experimental design and implementation details. Section 3 analyzes startup founders’ experimental behaviors in both the IRR experiment and the payment game. Section 4 further discusses what drives founders’ “profitability concerns” with a complementary survey. Section 5 concludes.

2 Experimental Design and Implementation

There are mainly two sub-experiments designed to test the nature of startups’ collaboration inclinations towards ESG VCs. The first sub-experiment is an IRR experiment designed to directly identify *belief-driven* mechanisms (i.e., financial motives). The second sub-experiment is a payment game designed to directly test the existence of any *taste-driven* mechanisms (i.e., preferences or non-pecuniary motives). Figure 1 provides the flow chart of these experiments.

[Insert Figure 1 here]

Real-world Setting The experimental design offers several advantages. Importantly, unlike typical online survey experiments, both sub-experiments are designed to replicate a real-world startup fundraising environment (i.e., a “field” setting) and they incentivize participants’ experimental behaviors accordingly. For instance, the IRR experiment provides startup founders with

a personalized real investor recommendation service, utilizing a data-driven matching tool and a comprehensive individual-level VC database. Such data-driven matchmaking service for startups and investors is also provided by commercial firms like [SuperWarm.AI](#) and [dealroom.co](#), streamlining the fundraising process and reducing search friction for startup founders. However, our investor recommendation service in the IRR experiment is free of charge, which provides real benefits to participants without deception. In Section 3, the paper demonstrates that participants’ behaviors in the experiment significantly correlate with their real-world fundraising outcomes, further validating the experiment’s stakes. Moreover, while the IRR experiment offers an investor recommendation service, the payment game is designed to elicit startup founders’ willingness to pay (WTP) for this service, seamlessly integrating it with the IRR experiment.

2.1 Recruitment Process and Sample Selection

To recruit a large sample of real US startup founders, I first partnered with a third-party recruitment company (i.e., Qualtrics Panel) that connects with US small business owners and startup founders between March 2021 and April 2022. After completing the study, participants receive both their customized investor recommendation lists and roughly \$50 monetary compensation. This main experiment includes two filter questions and various screening criteria to identify qualified participants who need to satisfy the following three criteria: 1) being a startup founder or business owner planning to raise funding from the VC industry, 2) understanding the designed incentive and agreeing to provide honest evaluations to maximize the benefits from the study, and 3) successfully passing attention checks based on participants’ evaluation time, inserted attention check questions, and Bot Detection algorithms designed by the Qualtrics system.⁵ Similar to the classical IRR experimental design, all participants are informed that the project is a research study, as required by the Institutional Review Board (IRB). However, the consent form emphasizes the matching service provided to startup founders, without mentioning the research purpose of testing startup founders’ opinions on ESG investors.

The response rate of this main experiment is approximately 6%, and Table 1 summarizes the background information of the recruited startup founders. Among these founders, 40.83% are fe-

⁵If participants fail any of these criteria, the Qualtrics system will immediately terminate the experimental process, informing participants that they are no longer qualified for this study. Unqualified participants do not have a second chance to join the study.

male, 22.25% belong to minority groups. Notably, the majority of these founders (89.44%) are in the seed stage, consistent with the fact that early-stage startups value the provided “matching incentives” more than later-stage startups. Regarding political affiliation, 50.37% of the founders are Democratic, while 23.96% align with the Republican party. The recruited founders represent a diverse range of industries commonly invested in by VC firms, with 22.00% in Information Technology, 28.61% in the Consumer sector, 6.11% in Healthcare, and 5.38% in Clean Technology.

[Insert Table 1 here]

As required by the recruitment company, the main experiment can not collect any information of participants’ identities. This helps to mitigate potential Hawthorne effect or observer bias when examining participants’ socially sensitive behaviors. However, approximately 20 participants reached out to the research team using their personal email addresses during the experiment, allowing the research team to identify some of them online. Among these startup founders, around 60% had their startups listed on Crunchbase. About 20% operated smaller businesses, such as art studios, music studios, or online cosmetic and skincare product sales. The remaining 20% of founders could not be identified online based on their email addresses.

To verify the external validity of the experimental results and to link participants’ experimental behaviors with their real-world fundraising activities, I further replicated the experiment by recruiting 65 US startup founders directly from the Crunchbase platform between 09/2023 and 10/2023. Online Appendix Table A1 summarizes the background information of these Crunchbase-listed startup founders. Compared to Table 1, these Crunchbase-listed founders have fewer female founders, with only 10.77% being female. However, as with the main experiment, a majority of founders in the replication experiment (92.31%) are at the seed stage and operate in various industries that are commonly targeted by VC firms.

To the best of my knowledge, there is no perfect benchmark database that captures all US startup founders who consider raising VC funding.⁶ Due to this database limitation, researchers

⁶Commonly used VC commercial databases, such as Pitchbook or VentureXpert, typically focus on tracking completed deals and funded startups. Unfortunately, they do not include startups that seek VC funding but are rejected. Startups whose information was recorded by Crunchbase tend to be more mature and larger compared to the pool of all startups. For example, Citibank, one of the most well-established investment banks, is also listed on Crunchbase. Census data provide self-employed status and firm registry date, which is often used by researchers to

lack a comprehensive view of what startups consider VC funding in the market. However, consistent results from both the main experiment and the replication experiment strengthen confidence in the external validity of our experimental findings.

2.2 Structure of the Matching Tool

Upon receiving the recruitment email, potential participants can open the survey link, read the consent form, and decide whether to participate in the study by entering the Qualtrics-based matching tool. The tool consists of the following sections.

Section A: Profile Evaluation Section

Before the profile evaluation section starts, participants are required to provide essential background details about their startups, such as industry, stage, number of employees, and fundraising goals. This aligns with standard practice in other investor recommendation services. Participants should also assume that all hypothetical VCs they evaluate are active and invest in their industry and stage. After reading the guidance and passing an attention check question, they can proceed to the formal investor evaluation section.

During the evaluation, participants assess 20 randomly generated hypothetical VC profiles. While they understand these profiles are hypothetical, providing honest evaluations helps the matching algorithm generate more accurate investor recommendations. This section essentially follows a standard IRR experiment that directly identifies various belief-driven mechanisms.

Investor Profile Creation and Variation Similar to a factorial experimental design, the IRR experiment *orthogonally* randomizes various investor characteristics simultaneously. These investor characteristics are randomly selected from a pool of predefined options and dynamically combined to create hypothetical investor profiles. The profiles are displayed in a web browser using built-in HTML templates and populated in Qualtrics with Javascript. The detailed randomization process is described in Table 2, and an example profile is provided in Online Appendix Figure A1. The validity of the randomization is justified in Online Appendix Table A2.

identify startups or entrepreneurs. However, these data do not observe companies' potential fundraising plans and many small businesses do not consider VCs as their fundraising options.

[Insert Table 2 here]

All investor profiles consist of the following sections, presented in the following order: i) individual-level characteristics, including first name, last name, investment experience, educational background, and previous entrepreneurial or working experience; ii) fund-level characteristics, including the fund’s investment philosophy (ESG-oriented or profit-oriented), fund type, previous financial performance (measured by internal rate of return), investment style, fund size (measured by AUM - assets under management - and dry powder), and location. Given the focus of this paper on startups’ collaboration intentions with different types of ESG investors, the paper mainly describes the creation process of investors’ ESG characteristics here.⁷

The following efforts have been made to improve the realism of generated profiles. Firstly, the language used to describe investors’ work experiences and fund investment philosophies is drawn from real-world sources such as investors’ biographies and fund descriptions found on their websites. This language is carefully refined to exclude any industry or stage-specific details, ensuring a realistic portrayal. Secondly, most selected investor characteristics aim to mimic real-world distributions. Thirdly, these profiles are constructed as a composite of publicly available information about investors rather than traditional resumes, reflecting how startup founders typically conduct due diligence on investors.⁸ Importantly, this approach is in line with the recommendation algorithm’s reliance on publicly accessible data about a large number of VCs, providing more credibility to the recommendation service. Additionally, a progress bar is included in the tool to enhance participants’ experience in this study.

Randomization of Investors’ ESG Characteristics Identifying ESG VC funds and estimating their distribution in the US VC industry is challenging. Survey data from [Botsari and Lang \(2020\)](#) suggests that “approximately seven in ten VCs incorporate ESG criteria into their investment decision process.” However, in a study using keyword methods, [Barber et al. \(2021\)](#) found that impact VC funds comprised less than 5% of their total sample. Given this inconsistent

⁷For details on the creation process of other investor characteristics, please refer to the online appendix of [Ebrahimian and Zhang \(2020\)](#).

⁸Unlike job seekers, investors rarely post their resumes online. Hence, startup founders conduct due diligence by collecting information from various online platforms like LinkedIn, personal websites, Crunchbase, AngelList, Pitchbook, and others. Therefore, the format of investor profiles replicates the information typically found on these platforms, highlighting key investor characteristics.

evidence, this experiment randomly assigns 50% of hypothetical investors to solely profit-driven VCs and the remaining 50% to ESG-related VCs to maximize statistical power. The ESG-related VCs are further classified into various categories: “ESG Funds” targeting general ESG impact (20%), “Environmental Funds” focusing solely on positive environmental impact (10%), “Social Funds” concentrating on positive social impact (10%), and “Governance Funds” dedicated to positive governance impact (10%).

Each generated investor profile includes a corresponding description that elaborates on the investor’s investment philosophy based on their fund categories. For example, profit-driven funds emphasize their mission of “enabling startups to grow faster and stronger” or “supporting rapid scaling.” “Environmental Funds” are dedicated to “addressing global environmental challenges,” while “Social Funds” focus on “creating positive social impact” and “addressing social and economic inequality.” “Governance Funds” support “channeling capital into high-growth companies with women leaders.”⁹ The selected wording of these descriptions is sourced 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 Online Appendix Table A3.

Providing investment philosophy descriptions is crucial for testing the effects of investors’ ESG characteristics for the following reasons. Firstly, it enhances the salience of investors’ ESG characteristics, improving the experimental power. Secondly, as some startup founders might be unfamiliar with sustainable finance, the descriptions can clarify the concept of “ESG funds” for participants. Lastly, it provides a natural way to study the separate effect of “E,” “S,” and “G.”

Evaluation Questions In an IRR experiment, well-designed, theory-based evaluation questions are the keys to directly identifying belief-driven mechanisms that explain how investors’ ESG characteristics impact startup founders’ collaboration intentions. In this study, participants are required to assess each investor profile by answering three mechanism questions and two decision questions. The designed evaluation questions are provided in Online Appendix Figure A2.

Regarding the mechanism questions, the first sub-mechanism question (i.e., Q_1 profitability

⁹Note that generally speaking, “G” can incorporate other dimensions, such as transparent information disclosure or having more independent board members. However, it is very rare for VC firms to emphasize this. After checking multiple impact 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.

evaluation) assesses an investor’s potential to improve a startup’s profitability. If collaborating with ESG investors influences startups’ profitability due to investors’ “ESG mandates” or their expertise, founders might have different inclinations towards working with them. The second sub-mechanism (i.e., Q_2 availability ratings) is about matching, requiring participants to evaluate the likelihood of each investor showing interest in their startups. Investors’ ESG characteristics may signal their investment intentions for specific startup types. For example, if ESG investors prefer ESG startups, they might be more appealing to ESG startups and less so to profit-driven startups. The third sub-mechanism question (Q_5) examines founders’ perceptions of the informativeness of investors’ profiles, akin to assessing the “second moment statistics” of each profile. If ESG VC funds are perceived to have more severe information asymmetry issues, startups may rationally choose profit-driven funds to mitigate potential uncertainties.

Regarding the decision questions, the first one (i.e., Q_3 fundraising amount) is about startup founders’ intended fundraising plans for each investor, which captures the intensive margin of their fundraising behaviors.¹⁰ The second decision question (i.e., Q_4 contact interest ratings) is about the likelihood of startups reaching out to each investor, which captures the extensive margin of founders’ fundraising behaviors. According to [Zhang \(2020,2\)](#), contact interest ratings are the most informative measurement of a candidate’s overall appeal and they are also highly correlated with participants’ real-world behaviors.

Background Questions After the formal evaluation section, eight background questions are designed to explore potential heterogeneous effects and additional mechanisms. These include standard questions about participant demographics like gender, race, entrepreneurial experience, education, and startup team composition. Another question is about the likelihood of participants talking with friends about their fundraising strategies in the study, which is a measure used by [Riedl and Smeets \(2017\)](#) to test whether participants’ ESG preference is explained by the social signaling channel. An additional background question asks for participants’ political views. As documented by [Hong and Kostovetsky \(2012\)](#), mutual fund managers’ political contributions are strongly correlated with their SRI decisions. Hence, this information helps to examine whether

¹⁰ Q_3 is designed to obtain information about the funding amount relative to the founder’s initial fundraising plan, rather than focusing on the absolute funding amount. This approach ensures a standardized question suitable for startups with different amounts of targeted funding.

similar correlations between political affiliations and ESG attitudes also exist in startup founders' fundraising process. One last background question focuses on the mission of participants' startups, helping to identify whether the startup is profit-driven or ESG-oriented.

Section B. Payment Game

Despite its numerous merits, the IRR experiment in Section A comes with standard limitations. Firstly, while it can identify belief-driven mechanisms, it offers only suggestive evidence for taste-driven mechanisms. Secondly, it is hard to evaluate how much participants value the provided incentives. To address these limitations, this paper introduces a novel experimental design, payment game, which complements the IRR experiment and provides a similar field setting. Detailed illustrations of this payment game are provided in Appendix Figure A3, Figure A4 and Figure A5.

The core idea behind this payment game is that, when the matching quality between the recommended ESG investors and profit-driven investors is equivalent (i.e., all belief-driven mechanisms have been controlled), participants' willingness to pay for the chance to connect with ESG investors serves as a measure of their ESG preferences (i.e., non-pecuniary motives for collaborating with ESG investors).¹¹ In an ideal scenario, researchers could sell the recommendation service to participants and assess their willingness to pay for it. However, due to IRB regulations, making money from research projects is not allowed and the following alternative approach is used here to provide a similar setting.

In the payment game, all participants are informed about a lottery opportunity where two individuals are randomly selected as lottery winners. Participants face two options: Option 1 provides a straightforward \$500 reward, while Option 2 offers a reduced cash prize (\$500 minus the service price) along with a more comprehensive investor recommendation list that includes information on the top 200 best matched real VCs. Therefore, participants' choices not only impact their potential reward from the lottery but also reveal whether they want to pay for the investor recommendation service (i.e., the provided matching incentive in the IRR experiment).

Following a factorial experimental design, the payment game orthogonally randomizes both the number of recommended ESG investors and the price of the recommendation service. Participants

¹¹As shown in a complementary survey discussed later in this paper, the IRR experiment captures all the major belief-driven mechanisms that affect founders' fund-seeking behaviors.

are randomly assigned to three groups with equal probability: Control group, Treatment 1 group, and Treatment 2 group. In the Control group, the recommended investor list includes information on the top 200 best-matched investors. In the Treatment 1 group, everything remains the same as the Control group, except that, to promote gender equality, the research team would prefer to recommend female investors when the matching quality is equivalent. In the Treatment 2 group, the research team prioritizes recommending ESG investors with equivalent matching quality to promote ESG campaign in the entrepreneurial community. If more startup founders in the Treatment 2 group choose Option 2 compared to those in the Control group, it indicates a greater willingness to pay for collaboration with ESG investors. This is likely to stem from subjects' ESG preferences rather than beliefs, as the recommended ESG investors and profit-driven investors have equivalent matching quality.

At the same time, the price of the recommendation list is randomly drawn from [\$20, \$80]. This pricing range covers the mainstream market prices and offers several advantages. Firstly, exogenously determined price simplifies the estimation of participants' WTP as researchers do not need to adopt advanced econometric techniques to address the typical endogeneity issues related to price. Secondly, this approach improves the experimental power by ensuring that a reasonable number of subjects will choose Option 2. If researchers use a fixed price and set it too high (low), almost all the participants would choose Option 1 (Option 2) and the experiment can not create enough variations.

One crucial element of this payment game involves incorporating a question about participants' perception of the algorithm reliability, essentially gauging how likely participants believe the matching algorithm is able to recommend a satisfactory list of investors for them. Even though researchers promise to recommend ESG investors of the same matching quality, participants with a strong ESG preference in the Treatment 2 group might still choose not to pay for the service if they lack trust in the algorithm. Thus, it is important to control this confounding channel. Moreover, the algorithm reliability rating serves as another indicator of how much participants might value the provided incentive.

When using the payment game, it is important for researchers to note the following points. Firstly, whenever feasible, participants' decisions within the payment game should be incentivized. When IRB does not allow researchers to sell products/services directly to participants, the method

used in this paper serves as an alternative option. Secondly, besides integrating with the IRR experiment, the payment game can also be used independently to test participants' preference. Essentially, it assists in determining the optimal price of a product or service by eliciting consumers' willingness to pay for specific product characteristics. Thus, it provides valuable insights for industry practitioners when researchers seek collaboration with them. Lastly, as the payment game implements *across-individual* level randomization, participants make their decisions without realizing the existence of this sub-experiment. Hence, researchers do not need to worry about the observer bias issue.

Section C: Donation Section (Social Preference Elicitation)

As shown in [Riedl and Smeets \(2017\)](#), mutual fund investors' SRI decisions can also be influenced by their social preferences. To examine whether social preferences also explain startup founders' potential ESG preferences, there is a donation section introduced at the end of the matching tool. The participants' social preferences are measured based on their donation behaviors. Furthermore, these donation behaviors are incentivized by an additional lottery that offers real monetary rewards.

In this section, all participants are informed about an additional, separate lottery opportunity. Two participants will be randomly selected as lottery winners, each receiving \$1000. If a subject becomes a lottery winner, one of their subsequent donation decisions will be randomly chosen to determine their final lottery rewards. Therefore, it's crucial for participants to honestly express their preferences in all of their donation decisions.

Among the subsequent donation questions, the first one asks participants to decide the amount of the \$1000 they would like to donate to an NGO supporting gender equality if they win the lottery. The second question asks them to determine the amount they would donate to an NGO focusing on generating a positive ESG impact within the entrepreneurial community. The research team will make real monetary donations on behalf of the experimental participants to the respective NGOs. Hence, their decisions not only affect their own monetary rewards but also have real-world impact. A detailed illustration of the donation section is provided in [Figure A6](#).

2.3 Incentive and Validity

In the most general form of an IRR experiment, the incentive structure should ensure that participants’ truthful and accurate evaluations bring them more benefits in the study. One commonly used incentive structure is the “matching incentive.” In two-sided matching markets, such as the entrepreneurial financing market and the job market, researchers can utilize both data-driven methods and participants’ revealed preferences to identify their most matched collaborators and provide certain consulting services (Kessler, Low and Sullivan, 2019; Low, 2014; Zhang, 2020). In the IRR experiment of this paper, this standard “matching incentive” is employed for all participants. Specifically, after evaluating 20 hypothetical investor profiles, each participant will receive information about the top ten best-matched investors recommended by a matching algorithm. This recommendation service is based on an extensive global VC investor database collected in Zhang (2020). Since startup founders typically need to purchase a license to access similar information on Pitchbook, the study provides valuable benefits to the experimental participants. Details of the matching algorithm are provided in the Online Appendix Section A.

Validity of the Incentive To assess the validity of the incentive, this paper first examines participants’ algorithm reliability ratings. The corresponding descriptive summary statistics are provided in Online Appendix Table A4. On average, participants in the main experiment believe that the likelihood that the algorithm can provide satisfactory recommendations is 73.15%, with a median rating of 76%. When focusing on ratings provided by founders who choose to pay for the service (referred to as “purchasing founders”), the mean and median of these ratings increase to 78.15% and 81%, respectively. These relatively high algorithm reliability ratings demonstrate that participants trust this algorithm. Similar results also exist in the replication experiment.

Moreover, it is noteworthy that 49.39% of participants choose to pay for a more comprehensive recommendation list, suggesting that at least half of them place value on the incentive. As documented in Camerer and Hogarth (1999), participants tend to be more pro-social in a study compared to their real-world behaviors when the incentives are weak. Considering that participants assign significantly lower ratings to environmental VCs compared to similar profit-driven VCs in this study, the provided incentive is strong enough to detect these less politically correct behaviors. Moreover, Section 3 further shows that the direction of the observed effects remain quite similar

between the full sample and the “purchasing founders” subsample who place more value on the provided incentive.

Validity of the IRR Experiment To justify the validity of the IRR experiment, Section 3 shows that participants’ evaluations in the replication experiment significantly correlate with their startups’ real-world fundraising outcomes. Moreover, Online Appendix Table A5 shows that besides VCs’ ESG characteristics, several other VC characteristics, such as the investor’s entrepreneurial experience, VC funds size, and VC historical performance, all strongly affect startup founders’ evaluations. These findings align with both the VC literature and anecdotal evidence.

2.4 Noise Reduction Technique

To increase the sample size, participants in the main experiment are also provided with approximately \$50 monetary compensation besides the customized investor recommendation lists. This monetary compensation may introduce additional noise into the experiment, as some participants may only value this payment rather than the “matching incentive.” For participants primarily motivated by the monetary compensation, their optimal strategy is to expedite the completing of the study and receive payment quickly. I employ several standard pre-registered noise reduction techniques to ensure careful participant recruitment and minimize the noise in the study. These techniques include attention check questions, evaluation time and variation thresholds, validity checks for text-input answers, and other subsidiary methods. Details of the noise reduction techniques are provided in Online Appendix Section B.

3 Results

3.1 *Startup Founders Avoid Collaborations with Environmental VCs.*

Table 3 examines the impact of VCs’ E, S, and G characteristics on startup founders’ evaluations in the main experiment. Panel A analyzes 8,180 VC profiles’ evaluations from all the recruited founders. Panel B focuses on evaluations from the sub-sample startup founders who choose to pay for the investor recommendation service in the payment game (i.e., “purchasing founders”). The dependent variable is startup founders’ profitability ratings (i.e., Q_1) in Column (1), availability

ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). “ESG VC”, “Environmental VC”, “Social VC”, and “Governance VC” 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.¹² Following [Kessler et al. \(2019\)](#), all regressions add subject fixed effects, which account for the possibility that founders have different rating levels and allow some participants to be more lenient with their ratings. Standard errors in the parentheses are clustered within each startup founder.

[Insert Table 3 here]

Column (1) of Panels A and B in Table 3 indicates that startup founders perceive collaborating with “Environmental VCs” as more costly to their profitability. Compared to a solely profit-driven VC, environmental VCs are perceived to be 3.17 p.p. less likely to help startups generate more profits and 3.40 p.p. less likely to show investment interest in these startups. Results are statistically significant at the 1% level even after adjusting for multiple hypothesis testing with Westfall-Young stepdown adjusted p-values. The magnitude of this effect is approximately 82% (calculated as 3.17 divided by 3.86) of the effect of investors’ entrepreneurial experience, one of the most important human capital characteristics of VC investors ([Bottazzi et al., 2008](#); [Gompers and Mukharlyamov, 2022](#)) (see Panel A of Online Appendix Table A5). Panel B further confirms these findings for startup founders who highly value the provided “matching incentive” and pay for the recommendation service.

Due to the “profitability concern” and “matching concern”, Columns (4) and (6) further show that compared to similar profit-driven VCs, startup founders are less confident about raising funding from environmental VCs and give 3.47 p.p. lower contact interest ratings to them. This effect corresponds to a 5.1% decrease compared to the average contact interest rating level. However,

¹²Since 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.

after controlling for startup founders’ beliefs in VCs’ influence on startups’ profitability, investment likelihood, and informativeness, the negative effects of “Environmental VC” on startup founders’ decisions disappear in Columns (5) and (7). This suggests that startups, on average, avoid collaborating with environmental VCs due to these negative perceptions. In Panel B, the coefficients of “Environmental VC” further decreased to -3.46, -4.83, -3.87 and -4.65 in Columns (1), (2), (4) and (6). This indicates that when incentives help to reduce noises in the experiment, the cost of targeting positive environmental impact is even higher.¹³ These results also exist in the replication experiment, as shown in the Online Appendix Table A6.

Link with Real-world Fundraising Outcomes Given that the identity of each recruited startup founder is observable in the replication experiment, Table 4 further examines the correlations between participants’ real-world fundraising outcomes (as recorded in Pitchbook and Crunchbase) and their evaluations in the IRR experiment. Out of 65 participating founders who are directly recruited from Crunchbase, 43 have publicly available fundraising outcomes, while the remaining do not have public fundraising records. In Columns (1)-(3), the dependent variables are founders’ “Attitudes towards Environmental VCs,” “Attitudes towards Social VCs,” and “Attitudes towards ESG VCs” estimated in the IRR experiment.¹⁴ The independent variables $1\{\text{Raised Funding From E Investors}\}$, $1\{\text{Raised Funding From S Investors}\}$, and $1\{\text{Raised Funding From ESG Investors}\}$ are indicators that equal one if the founder’s startup previously raised funding from investors focusing on environmental, social, or general ESG impacts, respectively, and zero otherwise. Table 4 demonstrates that founders who have successful fundraising experiences with ESG investors also tend to assign higher contact interest ratings to ESG VCs in the IRR experiment. This correlation between experimental behaviors and real-world fundraising outcomes becomes even stronger when analyzing “Environmental VCs” and “Social VCs” separately, as shown in Columns (1) and (2).

¹³Startup founders who choose to purchase the comprehensive recommendation service in the payment game, on average, invest over 10% additional evaluation time in this study. Considering the associated costs, this heightened attention further signifies their higher valuation of the provided incentive compared to non-purchasing startup founders.

¹⁴“Attitudes towards Environmental VCs,” “Attitudes towards Social VCs,” and “Attitudes towards ESG VCs” are the coefficients β_i^1 , β_i^2 , and β_i^4 of the following regression, where each startup founder i ’s contact interest ratings Q_4 are modeled using OLS regressions: $Q_{4ij} = \beta_0 + \beta_i^1 \text{Environmental VCs}_{ij} + \beta_i^2 \text{Social VCs}_{ij} + \beta_i^3 \text{Governance VCs}_{ij} + \beta_i^4 \text{ESG VCs}_{ij} + \epsilon_{ij}$. Essentially, these coefficients quantify the effect of VCs’ ESG characteristics on the founder’s contact interest ratings.

[Insert Table 4 here]

Implication As demonstrated in subsequent sections, the negative evaluations of “Environmental VCs” predominantly emanate from profit-driven startups and those in brown industries. However, these aggregate-level findings still bear profound implications for ESG investors operating within the VC industry. ESG VCs typically exert positive ESG impact through the following two channels: 1) “green firm fostering”, which provides essential funding and guidance to green startups and nurturing their growth, and 2) the “washing machine” role, which imposes ESG mandates on normal or brown firms, making them greener by directly influencing firm governance. If profit-driven firms are less willing to collaborate with “environmental VCs” in this two-sided matching market, their fundraising decisions can significantly reduce the positive environmental impact imposed by ESG VCs by limiting their “washing machine” roles. Additionally, some startups might not fully realize their potential positive environmental impact. For example, solely profit-driven startups selling organic food might still be ideal targets for some environmental VCs. If these profit-driven startups refrain from approaching “Environmental VCs” at the initial stage of their fundraising process, it could subsequently affect the financial performance of these environmental VCs through the deal flow channel.

Table 5 further examines whether pursuing a positive environmental impact has different effects on high-quality and low-quality environmental VCs in the main experiment. To investigate these heterogeneous effects, I create an “objective” quality measure (i.e., \hat{Q}_4) for each investor profile using the following OLS regression for each startup founder i based on other orthogonally randomized VC characteristics:

$$Y_{ij} = \alpha_i + \beta_i X_{ij} + \epsilon_{ij}$$

where Y_{ij} represents the contact interest rating received by investor j , which is evaluated by startup founder i . Compared to other ratings in an IRR experiment, contact interest ratings (Q_4) have been documented to be more informative and have stronger correlations with participants’ real-world decisions (Zhang, 2021). Therefore, Q_4 is the most appropriate rating for measuring an investor’s overall appeal to startup founders. X_{ij} includes other orthogonally randomized VC characteristics

used in Online Appendix Table A5. These VC characteristics include “Top School”, “Graduate Degree”, “Years of Investment Experience”, “Squared Years of Investment Experience”, “Entrepreneurial Experience”, “First Time Fund”, “Better Historical Performance”, “Larger Fund”, “Value Added Style”, and “US Fund”.

[Insert Table 5 here]

Table 5 uses the full sample in the main experiment to examine the interaction effects between investors’ ESG characteristics and their “objective” quality (i.e., \hat{Q}_4). The dependent variable is profitability evaluation (i.e., Q_1) in Columns (1) and (2), availability rating (i.e., Q_2) in Columns (3) and (4), and contact interest rating (i.e., Q_4) in Columns (5) and (6). Columns (1), (3), and (5) include evaluations from all founders, while Columns (2), (4), and (6) include evaluations from only “purchasing founders” who pay for the recommendation list. “High-Quality Investor” is an indicator variable that equals one if investors’ received “objective” quality measure (i.e., \hat{Q}_4) is above 50, and zero otherwise. All the regressions include subject fixed effects. Standard errors in parentheses are clustered at the startup founder level.

The results show that the adverse effects of pursuing a positive environmental impact are predominantly observed among low-quality VCs. Specifically, Columns (1), (3), and (5) show that, for low-quality investors, aiming for a positive environmental impact reduces startup founders’ profitability ratings by 5.91 p.p., availability ratings by 6.79 p.p., and contact interest ratings by 5.03 p.p. compared to similar profit-driven VCs. When focusing on “purchasing founders” who place higher value on experimental incentives and likely provide more accurate evaluations, Columns (2), (4), and (6) show that these negative effects become even stronger, with profitability ratings decreasing by 8.28 p.p., availability ratings decreasing by 9.62 p.p., and contact interest ratings decreasing by 8.07 p.p. These results align with the findings in Table 3, indicating that both the “profitability concern” and the “matching concern” (i.e., the likelihood of securing investments) contribute to founders’ reluctance to collaborate with low-quality environmental VCs. Online Appendix Table A7 and Table A8 further confirm these findings by analyzing sub-sample evaluations of low-quality VCs in both the main experiment and the replication experiment.

However, as shown in Table 5, the coefficients of the interaction term between “Environmental

VC” and “High-Quality Investor” are consistently positive across all the Columns and statistically significant at the 1% level. This implies that high-quality investors experience less pronounced negative effects from pursuing a positive environmental impact compared to low-quality investors. As shown in the subsample analysis, when focusing on the evaluations of high-quality VCs, all the coefficients for “Environmental VC” are close to zero and become statistically insignificant. This suggests that, if VCs have not demonstrated their capacity for improving startups’ profitability, an emphasis on pursuing a positive environmental impact could exacerbate startup founders’ “profitability concerns”. However, top-tier VCs that prioritize environmental impact do not experience such adverse effects.

Besides dividing the sample into high-quality VCs and low-quality VCs, Online Appendix Table A9 extends the analysis from Table 5 by using quantile regressions to explore the distributional effect based on investor quality. The dependent variable is investors’ received profitability ratings (i.e., Q_1) in Panels A and C, and contact interest ratings (i.e., Q_4) in Panels B and D. In Columns (1)–(9), the reported coefficient stands for the effect of the independent variable on the k th conditional percentile ($k \in 10, 20, \dots, 90$) of investors’ received profitability ratings (i.e., Q_1) in Panels A and C, and contact interest ratings (i.e., Q_4) in Panels B and D. Standard errors in parentheses are clustered at the startup founder level.

Consistent with the results in Table 5, Columns (1) and (2) in Panel A demonstrate that environmental VCs falling within the bottom 10th or 20th percentile of the profitability rating distribution receive ratings that are 7.00 p.p. or 9.00 p.p. lower compared to similar profit-driven VCs, respectively. These results are statistically significant at the 1% level. Similarly, as shown in Panel B, environmental VCs with contact interest ratings below the median receive ratings 4.00 p.p. to 9.00 p.p. lower than similar profit-driven VCs. These results are also statistically significant at the 1% level. However, for VCs with relatively high profitability ratings or contact interest ratings, these negative effects become statistically insignificant and much weaker in economic magnitude. Notably, VCs above the 90th percentile of the contact interest rating distribution experience no discount from startups. Panels C and D show that these findings are more pronounced when focusing on evaluations from those “purchasing founders”. Online Appendix Table A10 shows that results are robust when controlling for startup founders’ rating levels.

3.2 *Existence of Taste-driven Preferences Towards ESG VCs*

Despite the growing literature exploring investors’ ESG preferences for green firms, there exists little empirical evidence regarding the potential existence of firms’ ESG preferences for green investors in their fundraising choices. On the one hand, if startup founders are solely profit-driven, as classical sustainable finance theories suggest, their fundraising behaviors should be influenced only by belief-driven mechanisms and not by taste-driven mechanisms. On the other hand, if founders derive non-pecuniary utility from collaborating with ESG investors, they might prefer ESG investors over profit-driven investors of similar quality. Investigating this question has crucial implications for developing sustainable finance theories within the private market and helping ESG investors to refine their investment strategies. In this subsection, I investigate whether founders exhibit positive preferences for ESG VCs by analyzing results from both the payment game and the donation game.

Payment Game Table 6 examines founders’ taste-driven preferences towards ESG investors through an analysis of their behavior in the payment game. Panel A covers all recruited startup founders in the main experiment, while Panel B focuses on profit-driven founders who are uninterested in ESG impact. The dependent variable is an indicator which equals one if the founder chooses “Option 2” in the payment game (i.e., purchase a comprehensive list), and zero if the founder chooses “Option 1” (i.e., receive all the monetary awards rather than purchase an investor list). Columns (1) and (2) report OLS regression results, while Columns (3) and (4) provide Probit regression results. “Treatment1 (Gender)” is an indicator for being assigned to the Treatment 1 group in the payment game (i.e., conditional on the same matching quality, the founder will receive more female investors’ contact information). Similarly, “Treatment2 (ESG)” is an indicator for being assigned to the Treatment 2 group (i.e., conditional on the same matching quality, the founder will receive more ESG investors’ contact information). “Reliable Algorithm” captures founders’ confidence in the algorithm’s ability to suggest high-quality investor matches. Control variables include the startup founder’s 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.

[Insert Table 6 here]

Panel A of Table 6 documents the existence of startup founders’ taste-driven preferences for ESG investors. The coefficients of “Treatment 2” are 0.13 in Columns (1) and (2), indicating that founders are roughly 13% more likely to purchase a recommendation list with more ESG investors compared to a normal investor recommendation list of the same matching quality. Since the dependent variable is binary, Columns (3) - (4) further exploit Probit models to capture the nonlinear relationship between independent variables and the dependent variable. The results remain robust and statistically significant at the 5% level. Adding control variables related to startup founders’ background information does not change the magnitude or statistical significance of these coefficients.

Assuming founders’ payment choices are driven by their beliefs (i.e., financial motives) and preferences (i.e., non-pecuniary motives), then founders’ willingness to pay (WTP) for ESG investors’ contact information after controlling for investors’ matching quality (i.e., the belief-driven mechanisms) would reflect their preference for ESG investors. In the IRR experiment, founders’ behaviors are influenced by both beliefs and preferences and they tend to avoid collaborating with ESG VCs due to the dominant role of belief-driven mechanisms. However, in the payment game, founders’ behaviors are only influenced by preferences because recommended ESG investors and profit-driven investors have equivalent matching quality. In this situation, founders tend to prefer ESG VCs. Importantly, the payment game does not detect a preference for female investors as all the coefficients of “Treatment 1” are insignificant. This proves that the identified ESG preference is not mechanically driven by the experimental design.

Notably, Panel B of Table 6 also detects a modest ESG preference among profit-driven founders who are exclusively focused on financial gains and do not care about ESG impact. The coefficients of “Treatment 2” are positive in all Columns and statistically significant at the 10% level. This implies that profit-driven founders are also inclined towards ESG investing if ESG investors do not negatively impact startups’ profitability and express comparable investment intentions. In this situation, investors’ positive ESG characteristics effectively become a “free lunch” for startup founders. Similar results are also observed in the replication experiment, as shown in Online Appendix Table A11.

In summary, both Table 6 and Table A11 demonstrate that, given the same matching quality, startup founders overall still exhibit a preference for partnering with ESG investors. The previous

reluctance observed in collaborating with ESG investors based on the IRR experiment is primarily attributed to financial reasons (i.e., belief-driven mechanisms), such as concerns about profitability and the likelihood of securing funding.

Some readers may be concerned that, in addition to belief-driven mechanisms captured by the IRR experiment, other unobservable belief-driven factors could also affect participants’ fundraising decisions. Under these circumstances, the payment game may not fully control for all major belief-driven mechanisms, and the results in Table 6 might be influenced by other potential unobservable factors rather than founders’ ESG preferences. To address this concern, I conduct a complementary survey with 281 US startup founders. In this survey, founders are asked if factors other than those mentioned in the IRR experiment also influence their fundraising decisions.¹⁵ The survey results show that 88.26% of founders state that no additional factors influence their fundraising decisions. The remaining 11.74% of founders do not mention any additional belief-driven mechanisms. Instead, they primarily mention macro-economic factors such as the economic environment and regulations, or personal factors such as the opinions of their friends and the compatibility of their culture with that of the investor. The impact of these macro-economic factors and personal factors should be similar for both the treatment group and the control group due to the randomization process.

Since the payment game orthogonally randomizes both the recommendation list price and the quantity of included ESG investors, this paper uses a standard discrete choice model to quantify startup founders’ willingness to pay for the information about additional ESG investors. Each founder is presented with a binary decision: Option 1 (receiving all monetary awards) or Option 2 (purchasing the recommendation list and receiving the remaining money). With a total of N startup founders, each facing $J = 2$ discrete options (denoted as $j = 1$ for Option 1 and $j = 2$ for Option 2), this model assumes the following utility function for startup founders:

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

where V_{ij} stands for the utility from observable attributes of each option, and ϵ_{ij} stands for the

¹⁵As discussed in Section 4, this complementary survey is also designed to investigate what explains founders’ “profitability concerns” when considering collaboration with environmental VCs. Further details regarding its implementation are provided in Online Appendix Section C.

utility from the 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:

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

Further assume that V_{n1} is normalized to zero, and

$$V_{n2} = \beta_0 + \beta_1 \mathbb{1}(Treatment1) + \beta_2 \mathbb{1}(Treatment2) + \delta price$$

β_0 denotes the utility associated with obtaining a normal investor recommendation list. β_1 stands for the additional utility of obtaining an investor recommendation list favoring female investors conditional on similar matching quality. β_2 stands for the additional utility of obtaining an investor recommendation list favoring ESG investors conditional on similar matching quality. δ represents the utility of spending an additional dollar. The additional willingness to pay for $\mathbb{1}(Treatment2)$ is quantified as the absolute value of $\frac{\beta_2}{\delta}$. To estimate these parameters, the Logit model establishes the following relationship:

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

Based on Columns (1) and (2) of Panel A in Online Appendix Table A12, the coefficients of “Treatment2” are significantly positive, confirming the existence of taste-driven preferences towards ESG investors. The willingness to pay for additional ESG investors’ information is more than \$77, which is calculated by dividing the coefficient of “Treatment2” by the coefficient of “price.” Similar results also exist in the replication experiment, as shown in Panel B of Table A12. Considering that the market price for a similar online investor matching service is approximately \$50 per month, this extra willingness to pay is not trivial.

Donation Game In addition to the evidence from the payment game, this paper also presents complementary evidence showing that founders’ ESG preferences are related to their social pref-

erences. [Riedl and Smeets \(2017\)](#) demonstrate that both social preferences and social signaling can explain mutual fund investors' socially responsible investment (SRI) decisions. Following their work, this paper uses a donation game to assess the pro-social tendencies of participating startup founders. Therefore, it's feasible to explore the correlation between founders' ESG attitudes, as observed in the IRR experiment, and their real-money incentivized donation behaviors towards ESG NGOs. A significant positive correlation would imply that the pro-social tendencies of startup founders play a role in shaping their ESG preferences.

Online Appendix Table [A13](#) shows that founders who rate ESG VCs more favorably in terms of contact interest ratings are also more likely to donate to ESG NGOs. Specifically, founders with "Attitudes towards ESG VCs" above the sample median are 8.4% more likely to donate to ESG NGOs than other founders. This finding suggests that, similar to investors, startups founders' social preferences might also help to explain their ESG preferences.

However, the paper does not find evidence that supports the role of social signaling. Using a similar method in [Riedl and Smeets \(2017\)](#), Online Appendix Table [A14](#) examines the correlation between founders' ESG attitudes and their propensity to discuss their fundraising strategies with friends. The results show that all the correlations are insignificant. Hence, the study does not find social signaling as a significant factor in explaining founders' ESG preferences.

3.3 Heterogeneous Effects

Considering the potential divergent attitudes towards green funding among startup founders from different backgrounds, it is helpful to explore additional heterogeneous effects. Such analysis would enable a more nuanced understanding of which startups are more inclined towards the adoption of green funding and which are less so. This section analyzes the heterogeneous effects related to startups' ESG characteristics, startup size, founders' political views, startup industry background, and market conditions, using the extensive background information collected on startup founders and their companies. To enhance the statistical power, the sample incorporates evaluations from founders in both the main experiment and the replication experiment when analyzing these heterogeneous effects.

3.3.1 *Matching Based on ESG Characteristics*

To investigate the existence of founders’ matching preferences based on startup ESG characteristics, Table 7 analyzes the interaction effects between VCs’ ESG traits and startups’ ESG traits. “ESG Startup” is an indicator for whether founders care about the ESG impact of their startups. “ESG VC \times ESG Startup”, “Environmental VC \times ESG Startup”, “Social VC \times ESG Startup”, and “Governance VC \times ESG Startup” are all interaction terms. All regressions add subject fixed effects. Standard errors in parentheses are clustered at the startup founder level.

[Insert Table 7 here]

The results show the presence of ESG-based matching preferences in startups’ fundraising processes. While profit-driven founders provide significantly lower ratings for ESG VCs, ESG founders are significantly more friendly to these VCs. Columns (1), (2), and (6) reveal that, compared to similar profit-driven VCs, profit-driven founders on average assign ESG VCs 5.20 p.p. lower profitability ratings, 5.48 p.p. lower availability ratings, and 4.87 p.p. lower contact interest ratings. Most of these findings hold statistical significance at the 1% level and remain highly significant after adjusting for multiple hypothesis testing. The observed negative coefficients of “ESG VC” suggest a clear intention among profit-driven founders for collaborating with profit-driven VCs. This collaboration intention stems from both perceived benefits of enhancing their profitability and an increased likelihood of securing investment. Fortunately, Column (7) shows that the negative effect of “ESG VC” on profit-driven founders’ evaluations is fully absorbed by founders’ beliefs, negating taste-driven preferences as the cause. Notably, the positive coefficients of the “ESG VC \times ESG Startup” interaction term indicate that ESG founders’ evaluations of ESG investors are significantly more positive than those of profit-driven founders.

An interesting observation is that the observed ESG-based matching preferences are asymmetric. Profit-driven founders show a tendency to avoid collaborating with ESG investors, particularly with environmental VCs. When comparing coefficients across different ESG VC categories, it seems that profit-driven founders rate environmental VCs much lower than social VCs. This poses a significant challenge for ESG VCs aiming to promote societal green transition, considering the clear reluctance of profit-driven startups to collaborate with them. On the other hand, ESG founders display a mild

inclination to collaborate with ESG investors, especially for social VCs. The differing collaboration intentions between ESG startup founders and profit-driven startup founders are driven by their distinct perceptions of financial benefits from partnering up with ESG VCs.

In addition to decomposing ESG investors into E, S, and G categories, it would be insightful to apply a similar breakdown to ESG startups, allowing for a comprehensive three-by-three matrix depicting heterogeneous evaluations. However, due to the unclear definition of G for startups and the lack of relevant collected data, Online Appendix Table A15 primarily offers two-by-two matrices pertaining to E and S. Since startups' "environmental missions" are not directly collected in the experiment, startups are classified as "E-startups" based on the following approximation criteria: 1) startups that claim to aim for ESG impact but not social impact, such as gender diversity issues; 2) startups in clean technology or energy industry; or 3) startups' business models can generate positive environmental impact if the founders' identity is observable. Hence, the classification of "E startups" is relatively noisy. Startups are classified as "S startups" if their founders claim to care about social impact, such as gender diversity issues. This classification of "S startups" is more accurate as the information is directly collected.

Aligned with ESG-based matching preferences, Online Appendix Table A15 demonstrates that E startups favor E funds, and S startups prefer S funds. Although the positive evaluations of "E funds" from "E startups" are less significant due to the noisy classification of "E startups", the positive evaluations of "S funds" by "S startups" are highly statistically significant. In Panel A, "S startup" founders rate "S funds" 3.53 p.p. higher in contact interest ratings. Panel B further indicates that "S funds" are perceived as 2.90 p.p. more inclined to express investment intentions toward "S startups" and 1.94 p.p. more likely to assist "S startups" in improving profitability.

However, the preference for "S funds" among "S startup" founders doesn't necessarily extend to their preference for "E funds." Interestingly, "S startup" founders rate "E funds" 2.27 p.p. lower in profitability ratings, 2.69 p.p. lower in investment likelihood ratings, and 2.85 p.p. lower in contact interest ratings. These significant results emphasize the distinctiveness between the E and S dimensions, suggesting differences in skill sets and investment inclinations between E and S investors.

Since the preceding findings rely on subjects' self-reported "startup missions" for the startup classification, Online Appendix Table A16 substantiates the validity of this information by exam-

ining the correlation between these startup missions and founders’ donation behaviors. Panel A demonstrates that founders who claim to care about ESG impact also donate more to ESG-focused NGOs. Similarly, Panel B reveals that founders who claim to care about gender diversity issues and social impact also donate more to gender-related NGOs. All these correlations are statistically significant at the 1% level. Given that participants’ donation behaviors are incentivized with real money, these positive correlations enhance the credibility of the self-reported startup mission information and the related experimental results.

3.3.2 *Heterogeneous Effects Across Startup Size*

As discussed by [Ivanov et al. \(2023\)](#), smaller firms tend to be more adversely influenced by climate policies compared to larger firms due to the size effect. Therefore, it is important to investigate whether there are heterogeneous effects of VCs’ ESG characteristics based on the startup size. Table 8 reports the regression results that demonstrate how founders of larger and smaller startups evaluate different types of ESG VCs. In this analysis, “Larger Startup” is an indicator variable that equals one if the participant’s startup has more than 50 employees, and zero otherwise. All regression results add subject fixed effects and standard errors are clustered within each participant.

[Insert Table 8 here]

Table 8 reveals significant interaction effects between investors’ ESG characteristics and startup size. The coefficients for “Environmental VC” are significantly negative in Columns (1), (2), and (6). However, the interaction term between “Environmental VC” and “Large Startup” becomes significantly positive in Columns (1), (2), and (6). This suggests that founders of larger startups are more receptive to funding from environmental VCs compared to founders of smaller startups. Specifically, founders of smaller startups assign 5.27 p.p. lower profitability ratings, 5.63 p.p. lower availability ratings, and 5.62 p.p. lower contact interest ratings to environmental VCs compared to similar profit-driven VCs. However, founders of larger startups provide similar evaluations for profit-driven VCs and ESG VCs. These results remain robust after adjusting for multiple hypothesis testing.

Notably, this finding is consistent with [Ivanov et al. \(2023\)](#), which suggests that environmental mandates might impose relatively greater costs on smaller firms. Nevertheless, participants' evaluations of social VCs are quite similar between founders of larger startups and founders of smaller startups. Hence, the size effect appears to be more pronounced in the realm of environmental considerations (E) compared to that of social considerations (S).

3.3.3 Democrats Assign More Favorable Ratings to ESG VCs.

As documented in [Hong and Kostovetsky \(2012\)](#), investors' political views correlate with their SRI decisions. Following this literature, [Table 9](#) examines how startup founders with varying political views evaluate ESG VCs. Panel A uses all evaluations from recruited founders. Panel B specifically focuses on evaluations from Democratic founders and Republican founders. The founders' political views are collected from the background information section. All regressions add subject fixed effects and standard errors in parentheses are clustered at the startup founder level.

[Insert [Table 9](#) here]

Panel A of [Table 9](#) reveals that consistent with [Hong and Kostovetsky \(2012\)](#), Democratic founders provide significantly more positive ratings for ESG investors compared to other founders. In [Column \(6\)](#), the coefficients of “ESG VCs \times Democratic Founder”, “Environmental VCs \times Democratic Founder,” and “Governance VCs \times Democratic Founder” are 3.35 p.p. , 3.77 p.p. , and 3.93 p.p., respectively, all statistically significant. This suggests a positive interaction effect between collaborating with ESG VCs and Democratic founders.

When comparing evaluations from Democratic founders and Republican founders in [Panel B](#), the results show that Republican founders often assign lower ratings to ESG VCs compared to Democratic founders. In [Columns \(1\), \(2\), and \(6\)](#), the coefficient of “ESG VC” is -4.83 p.p., -5.60 p.p., and -5.65 p.p., which are all statistically significant at the 5% level. This indicates that Republican founders often prefer profit-driven VCs. However, the coefficient of “ESG VC \times Democratic Founder” all become significantly positive in these [Columns](#), confirming the positive interaction effect between collaborating with ESG VCs and Democratic founders. Across different ESG investor categories, Republican founders exhibit reluctance to collaborate not only with en-

vironmental VCs but also governance VCs advocating gender diversity at the management level in this experiment. Again, as indicated in Column (7), this collaboration intentions are mainly motivated by financial reason (i.e., belief-driven mechanisms).

In summary, Table 9 extends the conclusions from previous research such as [Hong and Kostovetsky \(2012\)](#) and [Di Giuli and Kostovetsky \(2014\)](#) to the context of startups’ fundraising. Republican founders exhibit a greater aversion towards ESG VCs in their fundraising activities compared to their Democratic counterparts. Thus, founders’ political affiliations serve as an indicator influencing their perspectives on ESG investors. It is worth noting that neither of these groups perceives environmental VCs as superior to profit-driven VCs in terms of enhancing startups’ profitability.

3.3.4 *Heterogeneous Effects Across Industries*

Given that startup founders from various industries might have different evaluations of ESG VCs, Online Appendix Table A17 explores the heterogeneous effects across startups’ industries. The recruited startup founders are categorized into twelve sub-samples based on their industry backgrounds. Within each sub-sample, I calculate the founders’ attitudes towards ESG VCs, environmental VCs, social VCs, and governance VCs. These attitudes are measured by the coefficients β_{1i} , β_{2i} , β_{3i} , and β_{4i} of the following regression, which uses startup founder i ’s contact interest ratings to VC j : $Q_{4ij} = \beta_{0i} + \beta_{1i}\text{ESG VC}_{ij} + \beta_{2i}\text{Environmental VC}_{ij} + \beta_{3i}\text{Social VC}_{ij} + \beta_{4i}\text{Governance VC}_{ij} + \alpha_i + \epsilon_{ij}$. They stand for the effects of “ESG VC”, “Environmental VC”, “Social VC”, and “Governance VC” on startup founders’ contact interest ratings (i.e., Q_4). Panels A, B, C, and D rank industries based on these coefficients within each industry sub-sample.

According to Panel A, industries that relatively favor ESG VCs include education, clean technology, life sciences, and IT sectors. Conversely, industries displaying the greatest hesitancy towards collaborating with ESG VCs include transportation & logistics, healthcare, and consumer sectors. In Panel B, only founders in the clean technology industry express a favorable inclination towards “Environmental VCs,” while those in transportation & logistics exhibit the most reluctance. Panel C reveals the strong preference for “Social VCs” from founders in the education industry, whereas founders in the life science industry show the most hesitancy. In Panel D, founders in the clean technology industry distinctly exhibit the highest preference for “Governance VCs,” while media industry founders manifest the highest degree of reluctance.

In summary, founders within industries characterized by environmentally conscientious practices, such as clean technology, education, and IT, exhibit an affinity for ESG investors. On the other hand, startup founders working in sectors with a greater environmental impact, like transportation & logistics, demonstrate a less enthusiastic stance toward ESG investors.

3.3.5 *Collaboration Inclinations Vary With Market Conditions.*

Utilizing the approach developed by [Kessler et al. \(2019\)](#), the IRR experiment can also explore how founders’ collaboration inclinations change across various market conditions, measured by startup founders’ internal thresholds. These thresholds fluctuate in response to the capital supply in the market. When the market capital supply is abundant (limited) during an economic boom (bust), founders are more (less) selective when seeking potential investors due to increased (diminished) outside options. In this market condition, founders’ internal thresholds become higher (lower).

Figure [A7](#) illustrates these dynamic changes of founders’ collaboration tendencies for ESG investors based on their contact interest ratings. The sample includes all evaluations from startup founders participating in the IRR experiment. Panels A and C provide the empirical cumulative density function (CDF) for an investor’s ESG characteristics across founders’ contact interest ratings. Panels B and D provide the corresponding OLS coefficient estimates and their 95% confidence intervals for an investor’s ESG characteristics across founders’ contact interest ratings.¹⁶ In Panels A and B, “ESG VCs”, “Environmental VCs”, “Social VCs”, and “Governance VCs” are combined together and collectively referred to as “Combined ESG VCs”. In Panels C and D, the analysis focuses solely on the comparison between investors’ preferences for ESG VCs to their preferences for profit-driven VCs.

Figure [A7](#) shows that founders tend to avoid collaborations with ESG investors, especially during economic recessions when capital supply is limited and generating profits becomes crucial for startup survival. Panel A shows that the CDF for a “combined ESG VC” is to the left of

¹⁶Regressions used in Panels B, and D are the same as those used in [Kessler et al. \(2019\)](#): for each selected internal threshold x ,

$$\text{Callback}_{ij} = \beta_0 + \beta_1 \text{Combined ESG VC}_{ij} + \epsilon_{ij}$$

where $\text{Callback}_{ij} = 1$ if $\text{Contact Interest Ratings}_{ij} \geq x$ and $\text{Callback}_{ij} = 0$ if $\text{Contact Interest Ratings}_{ij} < x$. The confidence intervals are calculated using robust standard errors. However, results are similar when clustering standard errors at the startup founder level.

the CDF for a profit-driven VC when founders’ internal thresholds are lower. This indicates that the CDF for profit-driven VCs first-order stochastically dominates the CDF for a “combined ESG VC” in this situation. Panel B confirms this finding and shows that the coefficients of “Combined ESG VC” are negative when founders’ internal thresholds are lower. The most pronounced effect is observed when the internal thresholds are approximately equal to 30%, as measured by Q_4 . Panels C and D provide similar results when focusing on “ESG VCs”.

Figure A8 further explores the nuanced dynamics of founders’ willingness to collaborate with Environmental (E), Social (S), and Governance (G) VCs. Panels A and B show a general reluctance among founders to work with environmental VCs under most market conditions. However, Panels C and D indicate that founders usually do not significantly differentiate between social VCs and profit-driven VCs in their collaboration decisions. Panels E and F reveal a reluctance to collaborate with governance VCs when there are fewer funding opportunities. To sum up, these findings suggest that founders’ tendencies to collaborate with ESG VCs vary depending on the market conditions.

4 Discussion

4.1 What Drives the “Profitability” Concern?

As shown in Section 3, the “profitability concern” is one of the major reasons why startups, particularly profit-driven ones, are reluctant to collaborate with environmental VCs. This “profitability concern” might be driven by two reasons. Firstly, the potential environmental mandates might introduce additional operational costs for startups, thus negatively affecting a startup’s overall profitability. Secondly, compared to profit-driven VCs, the expertise and network of environmental VCs might be more related to generating a positive environmental impact instead of maximizing profitability. Hence, their profit-generation capabilities might be lower compared to their profit-driven counterparts.

To further explore the mechanisms driving founders’ “profitability concern”, the research team conducted a supplementary survey involving 281 US startup founders between 06/2023 and 07/2023. Since the survey is relatively short, each founder received only a \$20 compensation upon completing the questionnaire. In addition to essential background information, each survey participant mainly provided the following ratings related to environmental VCs: collaboration interest ratings,

profitability ratings, cost ratings, and capability ratings.¹⁷ Based on a typical description of environmental VCs, participants are also asked to assess whether environmental VCs are generating a positive environmental impact, solely pursuing profits, or aiming for both impact and profits. This question helps investigate whether concerns about investor greenwashing drive any lower capability ratings assigned to environmental VCs. Details about the survey implementation and survey questions are provided in Online Appendix Section C.

The results show that both mechanisms coexist. Founders who give lower profitability ratings and collaboration interest ratings to environmental VCs also provide worse cost ratings and lower capability ratings to these VCs. Specifically, these founders' cost ratings are only 36.13 points and significantly below 50 (i.e., the neutral point where mandates are equally costly between profit-driven VCs and environmental VCs). This suggests that founders who prefer profit-driven VCs view environmental mandates as more costly to their startups. Similarly, these founders' capability ratings are only 35.98 and significantly below 50 (i.e., the neutral point where profit-driven VCs and environmental VCs are equally capable). This indicates that founders who prefer profit-driven VCs also view environmental VCs as less capable of improving their profitability. All the results are statistically significant at the 1% level. Therefore, to address startup founders' "profitability concern," environmental VCs need to convince founders that their investors are equally capable of driving profitability and that their mandates do not lead to higher operational costs compared to profit-driven VCs. Consistent with the experimental findings in Section 3, founders, on average, also assign significantly lower collaboration interest ratings and profitability ratings to environmental VCs in this complementary survey.

However, the survey does not find evidence that the "greenwashing concern" mainly drives

¹⁷Specifically, collaboration interest ratings gauge participants' preference for collaborating with "environmental VC funds" compared to "profit-driven VC funds." The rating scale ranges from 0 to 100, with 0 indicating a preference for "working with profit-driven VCs," 50 indicating indifference between these funds, and 100 indicating a preference for "working with environmental VCs." Profitability ratings assess how founders perceive collaborating with "environmental VCs" would impact their startups' future profitability. This rating also uses a scale from 0 to 100, with 0 indicating that environmental VCs would "decrease their future profitability," 50 indicating "similar effects between these funds," and 100 indicating that environmental VCs would "improve their future profitability." Cost ratings examine whether mandates imposed by "environmental VC funds" are more or less costly compared to mandates from "profit-driven VC funds." This cost rating ranges from 0 to 100, with 0 indicating that environmental VCs' mandates are more costly, 50 indicating that the mandates are equally costly between these two types of funds, and 100 indicating that environmental VCs' mandates are less costly. Lastly, capability ratings measure whether investors in environmental VC funds are more or less capable of helping startups achieve higher profitability. This capability rating also ranges from 0 to 100, with 0 indicating that investors in environmental VC funds are less capable, 50 indicating equal capability between these two types of investors, and 100 indicating that investors in environmental VC funds are more capable.

founders' lower capability ratings. Compared to founders who perceive environmental VCs as aiming for only environmental impact or both impact and profits (i.e., impact funds), founders who perceive environmental VCs as solely pursuing profits are more likely to have greenwashing concerns. They might question whether these VCs really generate a positive impact and walk the talk. However, the average capability ratings of these founders are 47.25 and not significantly below 50. Instead, the average capability ratings assigned by founders who view environmental VCs as generating a positive environmental impact are 46.03 and significantly below 50. These results suggest that generating impact is costly, and the survey does not support the “greenwashing concern.”

4.2 Different Effects of “S” on Founders’ Collaboration Intentions

While the impact of “environmental VCs” is consistent across both the main experiment and the replication experiment, the influence of “social VCs” and “governance VCs” is slightly different in these experiments. In the main experiment, founders do not assign lower ratings to “social VCs” and “governance VCs”. In fact, as shown in Table 3, the “purchasing founders” even assign higher contact interest ratings to “social VCs.” However, in the replication experiment, founders rate both “social VCs” and “governance VCs” significantly lower than profit-driven VCs. Considering the lower number of female founders in the replication experiment, Online Appendix Table A18 further explores the heterogeneous effects based on the gender of startup founders, providing explanations for these differing results.

Table A18 shows that female founders rate “social VCs” and “governance VCs” more favorably than male founders do. The coefficients for “Social VCs” and “Governance VCs” are significantly negative in Columns (1), (2), and (6), indicating male founders’ reluctance to collaborate with these types of VCs, which often aim to support unprivileged groups and female leadership. However, the coefficients for the interaction terms “Social VCs × Female Founder” and “Governance VCs × Female Founder” are significantly positive in these columns, indicating a greater willingness among female founders to collaborate with these VCs. Notably, the coefficients of the interaction term “Environmental VCs × Female Founder” are insignificant in all Columns, suggesting similar attitudes towards “Environmental VCs” between male and female founders. These findings highlight that, although E, S, and G are often grouped together, they can have very distinct effects.

5 Conclusion

ESG investing in the private market is gaining increasing attention because ESG investors can promote the growth of clean firms and encourage brown portfolio companies to become more environmentally friendly by influencing their governance and operations. Unlike investments in the public market, private market investments often involve a two-sided matching process between investors and firms. Existing research is primarily centered on investors' ESG preferences and investment strategies (i.e., the capital supply side). However, there is little empirical evidence regarding firms' fundraising strategies (i.e., the capital demand side), particularly how firms choose between ESG and profit-driven investors in their fundraising process.

This paper implements complementary real-stakes placement experiments involving real US startup founders to examine the impact of VCs' ESG characteristics on startup founders' collaboration intentions. In the first IRR experiment, founders evaluate multiple randomly generated hypothetical VC profiles, wherein providing truthful evaluations enhances the accuracy of investor recommendations provided by a data-driven matching algorithm. In the second payment game, founders have the option to either receive a \$500 monetary compensation or use a part of this amount to buy a more comprehensive investor recommendation list. This payment game orthogonally randomizes both the recommendation list's price and the algorithm's preference for recommending ESG investors under equivalent matching quality. In these experiments, founders' decisions directly influence the investor recommendation lists they receive and their potential rewards as lottery winners. Thus, both experiments are incentivized by real-world stakes.

The paper presents the following main findings. Firstly, startup founders do take investors' ESG characteristics into consideration when seeking VC funding. Founders tend to avoid collaborations with environmental VCs due to financial reasons (i.e., concerns about profitability and matching likelihood). However, the effect is mainly observed for low-quality VCs. Secondly, the payment game offers empirical evidence that startup founders derive positive non-pecuniary utility from partnerships with ESG VCs. Conditional on equivalent matching quality, founders are 13% more likely to select an investor recommendation list with more ESG investors. The paper further shows that startup founders' social preferences might play a role in shaping their ESG preferences. Thirdly, substantial heterogeneous effects exist. Profit-driven startups, smaller startups,

Republican founders, and startups in heavy industries are less interested in adopting green funding. Founders also tend to avoid collaborations with ESG investors during economic recessions.

Future research could conduct similar experiments in different countries and across various time periods to assess the generalizability of the findings. This experimental study does not replace the need for (quasi-)experimental research. As more data becomes available, future research could provide larger-scale evidence in alternative empirical settings to help deepen our understanding of how firms respond to investors' ESG strategies in the private market. Additionally, an important but under-explored question is related to the implications of the observed firm-side ESG preferences on both short-term and long-term equilibriums within the context of ESG investing. Exploring these questions would be a valuable direction for future research.

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Table 1: Summary Statistics of Startup Founders (Main Experiment)

This table reports descriptive statistics for the startup founders who participate in the main 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 startup founder is Asian, Hispanic, Middle Eastern, Native American, Pacific Islander, or African Americans, and zero if the investor is Caucasian. 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 standard industry classification methods, founders report their startups’ general business categories; each founder can choose only one category such as B2B, B2C, Healthcare, or 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. “Stage” reports the stage distribution of the participants’ startups, where each founder can only choose one unique stage. “Number of Employees” reflects the current total number of employees in each startup, with founders selecting the category that best fits their situation. “Startup Team Composition” reports the gender composition of startups’ co-founders. “Startup Goals” provides the startups’ goals, which contain whether they aim for any financial returns, promote diversity of the entrepreneurial community, and care about other ESG impact. Each founder can choose multiple startup goals.

Panel A: Founder Demographic Information

Demographic Information	N	Fraction (%)
Female Founder	167	40.83%
Minority Founder	91	22.25%
Serial Founder	168	41.08%
<i>Educational Background</i>		
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%
<i>Political Attitudes</i>		
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 (%)
<i>Standard Classification</i>		
B2B	89	21.76%
B2C	279	68.22%
Healthcare	16	3.91%
Others	25	6.11%
<i>Detailed Classification</i>		
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%
<i>Stage</i>		
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%
<i>Number of Employees</i>		
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%
<i>Startup Team Composition</i>		
Both male and female founders	248	60.64%
Only female founders	82	20.05%
Only male founders	79	19.32%
<i>Startup Philosophy</i>		
Financial Gains	360	88.02%
Promote Diversity	242	59.17%
ESG Criteria	261	63.81%

Table 2: Randomization of Investor Profile Components

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 observes 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.

Profile Component	Randomization Description	Analysis Variable
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%)
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)
Years of investment experience	Drawn Unif [0,30] to integers	Years of Investment
Number of deals involved	$3 \times \text{Years of experience} + \text{Drawn Unif} [-2,2]$ to integers	Deals
Entrepreneurial experience	Drawn randomly (50% with entrepreneurial experience, 50% without entrepreneurial experience)	With Entrepreneurial experience (10/20)
Fund type	Drawn randomly (50% profit-driven VC, 50% ESG VC)	ESG VC (10/20)
Investment philosophy	Drawn randomly (50% profit-driven VC, 20% ESG VC, 10% ESG VC focusing on environmental issues, 10% ESG VC focusing on social issues, 10% ESG VC 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
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 $0.27 \times \text{AUM}$.	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)

Table 3: Startups' Evaluation Results on Detailed Categories of ESG VCs (Main Experiment)

This table reports the regression results of how startups' evaluation results respond to investors' E, S, and G characteristics separately in the main experiment. Panel A is based on the evaluations of 8,180 investor profiles, provided by all the recruited founders. Panel B uses the evaluations from "purchasing founders" who pay for the recommendation list in the payment game. The dependent variable is startup founders' profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. All regressions add subject fixed effects. Standard errors in parentheses are clustered within each startup founder. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Q1 Profitability	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Full Sample</i>							
ESG VC	-1.35* (0.74)	-1.26* (0.76)	0.11 (0.59)	-0.74 (1.11)	0.44 (0.76)	-1.28 (0.80)	-0.31 (0.37)
Environmental VC	-3.17*** (0.94)	-3.40*** (0.90)	-0.90 (0.70)	-2.80** (1.34)	0.56 (0.92)	-3.47*** (0.98)	-0.69 (0.46)
Social VC	0.43 (0.82)	1.12 (0.79)	1.16* (0.64)	0.53 (1.16)	-0.58 (0.83)	1.64* (0.89)	0.70 (0.49)
Governance VC	-0.85 (0.87)	-0.70 (0.89)	0.52 (0.71)	-1.09 (1.37)	-0.54 (0.92)	-0.15 (0.95)	0.31 (0.44)
Q1					0.45*** (0.04)		0.35*** (0.02)
Q2					0.49*** (0.04)		0.42*** (0.03)
Q5					0.32*** (0.04)		0.27*** (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
<i>Panel B: Sub Sample Who Pay for the Service</i>							
ESG VC	-1.61 (1.13)	-2.31** (1.12)	-0.28 (0.89)	-0.92 (1.51)	0.99 (1.05)	-1.84 (1.14)	-0.22 (0.48)
Environmental VC	-3.46** (1.45)	-4.83*** (1.40)	-1.06 (1.10)	-3.87** (1.93)	0.31 (1.27)	-4.65*** (1.51)	-1.10 (0.70)
Social VC	1.18 (1.34)	2.11* (1.22)	1.62* (0.97)	1.97 (1.63)	-0.06 (1.14)	3.89*** (1.34)	2.13*** (0.68)
Governance VC	-1.45 (1.27)	-0.78 (1.32)	0.73 (1.02)	-0.21 (1.97)	0.57 (1.23)	-0.39 (1.40)	0.23 (0.65)
Q1					0.42*** (0.04)		0.34*** (0.03)
Q2					0.50*** (0.05)		0.43*** (0.04)
Q5					0.30*** (0.05)		0.28*** (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

Table 4: Linking Founders' Experimental Behaviors with Real-world Fundraising Outcomes

This table examines the correlations between startup founders' evaluations in the IRR experiment and their fundraising outcomes as recorded on Crunchbase and Pitchbook. Out of 65 recruited founders who are directly recruited from Crunchbase, 43 have publicly available fundraising outcomes, while the remaining do not have public fundraising records. In Columns (1)-(3), the dependent variables are founders' "Attitudes towards Environmental VCs," "Attitudes towards Social VCs," and "Attitudes towards ESG VCs" estimated in the IRR experiment. These dependent variables are the coefficients β_i^1 , β_i^2 , and β_i^4 of the following regression, where each startup founder i 's contact interest ratings Q_4 are modeled using OLS regressions: $Q_{4ij} = \beta_0 + \beta_i^1 \text{Environmental VCs}_{ij} + \beta_i^2 \text{Social VCs}_{ij} + \beta_i^3 \text{Governance VCs}_{ij} + \beta_i^4 \text{ESG VCs}_{ij} + \epsilon_{ij}$. Essentially, they quantify the effect of VCs' ESG characteristics on the founder's contact interest ratings and indicate the founder's attitude towards Environmental VCs, Social VCs, and ESG VCs, respectively. The independent variables 1{Raised Funding From E Investors}, 1{Raised Funding From S Investors}, and 1{Raised Funding From ESG Investors} are dummy variables that equal one if the founder's startup previously raised funding from investors focusing on environmental, social, or general ESG impacts, respectively, and zero otherwise. Standard errors reported in parentheses are robust standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	Attitudes towards Environmental VCs (1)	Attitudes towards Social VCs (2)	Attitudes towards ESG VCs (3)
1{Raised Funding From E Investors}	25.79** (8.70)		
1{Raised Funding From S Investors}		17.78** (8.28)	
1{Raised Funding From ESG Investors}			12.43* (7.21)
Observation	43	43	43
R-squared	0.10	0.02	0.07

Table 5: Evaluations of High-quality VCs and Low-quality VCs

This table examines the heterogeneous effects of investors’ ESG characteristics on high-quality VCs and low-quality VCs. It uses the full sample in the main experiment to examine the interaction effects between investors’ ESG characteristics and their “objective” quality measurements (i.e., \hat{Q}_4). The \hat{Q}_4 values are predicted using OLS models based on other orthogonally randomized investor characteristics in Online Appendix Table A5. These investor characteristics include “Top School”, “Graduate Degree”, “Years of Investment Experience”, “Squared Years of Investment Experience”, “Entrepreneurial Experience”, “First Time Fund”, “Better Historical Performance”, “Larger Fund”, “Value Added Style”, and “US Fund”. The dependent variable is profitability evaluation (i.e., Q_1) in Columns (1) and (2), availability rating (i.e., Q_2) in Columns (3) and (4), and contact interest rating (i.e., Q_4) in Columns (5) and (6). Columns (1), (3), and (5) include evaluations from all founders, while Columns (2), (4), and (6) include only “purchasing” founders who value the incentives more and pay for the recommendation list. “High-Quality Investor” is an indicator variable that equals one if investors’ received “objective” quality measure (i.e., \hat{Q}_4) is above 50, and zero otherwise. “ESG VC”, “Environmental VC”, “Social VC”, and “Governance VC” are the corresponding indicators. All the regressions include subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** p<0.01, ** p<0.05, * p<0.1

Dependent Variable	Q1	Q1	Q2	Q2	Q4	Q4
	Profitability All Startup Founders (1)	Profitability “Purchasing” Founders (2)	Availability All Startup Founders (3)	Availability “Purchasing” Founders (4)	Contact All Startup Founders (5)	Contact “Purchasing” Founders (6)
ESG VC	-2.35* (1.31)	-2.23 (1.97)	-3.01** (1.32)	-4.14** (1.92)	-2.43* (1.28)	-2.86 (1.98)
Environmental VC	-5.91*** (1.43)	-8.28*** (2.11)	-6.79*** (1.31)	-9.62*** (2.13)	-5.03*** (1.27)	-8.07*** (1.93)
Social VC	-0.68 (1.48)	-2.17 (2.50)	-1.26 (1.48)	-1.65 (2.53)	-0.01 (1.56)	1.28 (2.72)
Governance VC	-4.11** (1.64)	-4.38* (2.40)	-3.91*** (1.49)	-3.95* (2.31)	-2.42 (1.56)	-2.25 (2.41)
ESG VC × High-Quality Investor	2.02 (1.37)	1.42 (2.04)	3.12** (1.33)	3.11 (1.97)	2.45* (1.29)	2.15 (2.04)
Environmental VC × High-Quality Investor	4.96*** (1.55)	7.77*** (2.33)	5.90*** (1.46)	7.69*** (2.42)	3.47** (1.41)	6.02*** (2.23)
Social VC × High-Quality Investor	1.03 (1.61)	2.90 (2.60)	2.88* (1.60)	3.51 (2.63)	1.61 (1.62)	1.44 (2.70)
Governance VC × High-Quality Investor	5.00*** (1.78)	4.60* (2.60)	4.91*** (1.65)	4.92* (2.57)	3.63** (1.72)	3.21 (2.74)
High-Quality Investor	25.52*** (1.22)	26.63*** (1.59)	24.08*** (1.17)	25.55*** (1.61)	34.52*** (1.14)	35.39*** (1.59)
Mean of Dep. Var.	62.63	63.93	58.97	60.56	59.90	62.36
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,180	4,040	8,180	4,040	8,180	4,040
R-squared	0.57	0.51	0.62	0.55	0.64	0.59

Table 6: Willingness to Pay for ESG Investors (Payment Game, Main Experiment)

This table tests the existence of startup founders' taste-driven preferences towards ESG VCs. Panel A examines the behaviors of all recruited founders in the main experiment. Panel B concentrates on solely profit-driven founders in the main experiment. The dependent variable is an indicator which equals one if the startup founder 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) and (2) report OLS regression results. Columns (3) and (4) report Probit regression results. "Treatment1 (Gender)" is equal to one if the subject is assigned to the Treatment 1 group (i.e., conditional on the same matching quality, the founder will receive more female investors' contact information), and zero otherwise. "Treatment2 (ESG)" is equal to one if the subject is assigned to the Treatment 2 group in the payment game (i.e., conditional on the same matching quality, the founder will receive 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 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. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable:	$\mathbf{1}\{\text{Pay for Recommendation List}\}$			
	OLS (1)	OLS (2)	Probit (3)	Probit (4)
<i>Panel A: Full Sample</i>				
Treatment1 (Gender)	0.07 (0.06)	0.05 (0.06)	0.19 (0.15)	0.14 (0.16)
Treatment2 (ESG)	0.13** (0.06)	0.13** (0.06)	0.35** (0.15)	0.39** (0.17)
Reliable Algorithm	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.02*** (0.00)
Control	No	Yes	No	Yes
Observations	409	409	409	409
R-squared	0.06	0.19	0.05	0.15
<i>Panel B: Solely Profit-driven Startup Founders</i>				
Treatment1 (Gender)	0.08 (0.11)	0.04 (0.12)	0.23 (0.28)	0.10 (0.32)
Treatment2 (ESG)	0.19* (0.10)	0.19* (0.11)	0.50* (0.26)	0.63** (0.31)
Reliable Algorithm	0.00** (0.00)	0.00* (0.00)	0.01** (0.00)	0.01** (0.01)
Control	No	Yes	No	Yes
Observations	136	136	136	133
R-squared	0.06	0.27	0.04	0.22

Table 7: Evaluations From ESG Startups and Profit-driven Startups

This table tests whether startup founders from ESG startups and profit-driven startups evaluate VCs' ESG characteristics differently. The sample includes evaluations of founders from both the main experiment and the replication experiment. The dependent variable is startup founders' profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). "ESG Startup" is an indicator that equals one if the startup founder claims to care about ESG impact, and zero otherwise. "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. All regressions add subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Q1 Profitability (1)	Q2 Availability (2)	Q5 Informativeness (3)	Q3 Fundraising Plan (4)	Q3 Fundraising Plan (5)	Q4 Contact (6)	Q4 Contact (7)
ESG VC	-5.20*** (1.40)	-5.48*** (1.42)	-1.85* (1.06)	-5.57** (1.93)	-0.17 (1.33)	-4.87** (1.48)	-0.21 (0.59)
Environmental VC	-9.10*** (1.63)	-10.49*** (1.56)	-5.15*** (1.26)	-8.73*** (2.03)	1.72 (1.37)	-10.54*** (1.67)	-1.47* (0.75)
Social VC	-3.84** (1.47)	-4.81*** (1.44)	-2.38* (1.23)	-3.94** (1.99)	0.71 (1.45)	-4.00** (1.61)	0.05 (0.74)
Governance VC	-5.15** (1.66)	-5.42*** (1.63)	-2.72* (1.39)	-5.05** (2.12)	0.57 (1.47)	-5.42** (1.74)	-0.57 (0.71)
ESG VC × ESG Startup	5.69*** (1.59)	6.22*** (1.64)	2.88** (1.27)	6.20** (2.29)	-0.07 (1.57)	5.35** (1.73)	-0.07 (0.73)
Environmental VC × ESG Startup	7.97*** (1.94)	9.80*** (1.86)	5.78*** (1.50)	7.45** (2.62)	-2.37 (1.77)	9.78*** (2.01)	1.24 (0.94)
Social VC × ESG Startup	4.76** (1.75)	7.15*** (1.71)	4.22** (1.45)	4.77** (2.39)	-1.93 (1.74)	6.39*** (1.93)	0.52 (0.95)
Governance VC × ESG Startup	4.71** (1.95)	4.86** (1.95)	3.47** (1.62)	4.12 (2.69)	-1.28 (1.85)	5.48** (2.08)	0.82 (0.90)
Q1					0.45*** (0.04)		0.34*** (0.02)
Q2					0.45*** (0.04)		0.43*** (0.03)
Q5					0.31*** (0.04)		0.27*** (0.02)
Mean of Dep. Var.	60.96	57.00	66.13	86.48	86.48	58.45	58.45
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9480	9480	9480	9480	9480	9480	9480
R-squared	0.46	0.52	0.56	0.63	0.80	0.47	0.84

Table 8: Heterogeneous Evaluations Based on Startup Size

This table tests the “size effect” and reports the regression results that illustrate how founders of larger startups and founders of smaller startups evaluate different types of ESG VCs. The sample includes evaluations of founders from both the main experiment and the replication experiment. The dependent variable is startup founders’ profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). “ESG VC”, “Environmental VC”, “Social VC”, and “Governance VC” are the corresponding indicators. “Larger Startup” is equal to one if the startup has more than 50 employees, and equal to zero otherwise. All regression results add subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Q1 Profitability (1)	Q2 Availability (2)	Q5 Informativeness (3)	Q3 Fundraising Plan (4)	Q3 Fundraising Plan (5)	Q4 Contact (6)	Q4 Contact (7)
ESG Fund	-2.38** (0.90)	-2.36** (0.93)	-0.25 (0.72)	-2.37* (1.29)	-0.15 (0.87)	-2.07** (0.98)	-0.16 (0.41)
Environmental VC	-5.27*** (1.12)	-5.63*** (1.08)	-1.71** (0.85)	-5.36*** (1.50)	0.09 (0.99)	-5.62*** (1.17)	-0.91* (0.53)
Social VC	-1.40 (0.99)	-0.90 (0.98)	0.02 (0.82)	-1.26 (1.33)	-0.23 (0.93)	-0.36 (1.11)	0.50 (0.53)
Governance VC	-3.24** (1.08)	-3.46** (1.10)	-1.00 (0.90)	-3.50** (1.51)	-0.17 (1.00)	-3.16** (1.19)	-0.28 (0.51)
ESG Fund × Larger Startup	2.71** (1.15)	2.75** (1.22)	0.44 (1.07)	2.27 (1.93)	-0.33 (1.47)	1.73 (1.34)	-0.51 (0.80)
Environment Fund × Larger Startup	4.68** (1.55)	5.00** (1.53)	-0.03 (1.38)	5.49** (2.69)	1.14 (1.99)	4.68** (1.61)	0.92 (0.81)
Social VC × Larger Startup	1.80 (1.53)	1.39 (1.47)	0.30 (1.22)	0.51 (2.31)	-1.03 (1.89)	0.51 (1.54)	-0.79 (1.05)
Governance VC × Larger Startup	4.49** (1.70)	4.74** (1.60)	1.61 (1.37)	4.58 (2.87)	-0.08 (2.24)	5.02** (1.60)	0.99 (0.84)
Q1					0.45*** (0.04)		0.34*** (0.02)
Q2					0.45*** (0.04)		0.43*** (0.03)
Q5					0.31*** (0.04)		0.27*** (0.02)
Mean of Dep. Var.	60.96	57.00	66.13	86.48	86.48	58.45	58.45
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9480	9480	9480	9480	9480	9480	9480
R-squared	0.461	0.516	0.556	0.630	0.799	0.467	0.838

Table 9: Heterogeneous Evaluations Based on Startup Founders' Political Views

This table presents regression results exploring how startup founders with varying political views evaluate ESG investors. The sample includes evaluations from both the main experiment and the replication experiment. Panel A uses all evaluation results from recruited founders. Panel B specifically focuses on evaluations from Democratic founders and Republican founders. The dependent variable is startup founders' profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. Q_1 , Q_2 , and Q_5 are evaluation results of the investor's influence on startups' profitability, availability (i.e., likelihood of showing interest in the startup), and the informativeness of each investor's profile, separately. "Democratic Founder" is an indicator which equals one for Democratic startup founders and zero otherwise. All regressions add subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Q1 Profitability	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Full Sample</i>							
ESG VC	-3.54** (1.11)	-3.51** (1.14)	-1.38 (0.90)	-2.79* (1.68)	0.82 (1.14)	-3.38** (1.25)	-0.27 (0.54)
Environmental VC	-5.66*** (1.45)	-5.87*** (1.31)	-2.55** (1.06)	-6.58*** (1.83)	-0.58 (1.22)	-6.56*** (1.44)	-1.38** (0.66)
Social VC	-1.67 (1.25)	-1.12 (1.21)	-0.38 (1.13)	-0.18 (1.63)	1.20 (1.19)	-0.57 (1.37)	0.59 (0.68)
Governance VC	-3.85** (1.35)	-4.03** (1.33)	-1.52 (1.11)	-5.44** (1.79)	-1.41 (1.27)	-4.13** (1.45)	-0.65 (0.65)
ESG VC × Democratic Founder	3.42** (1.48)	3.40** (1.54)	2.49** (1.20)	1.73 (2.16)	-2.12 (1.48)	3.35** (1.62)	0.03 (0.70)
Environmental VC × Democratic Founder	2.64 (1.85)	2.46 (1.80)	1.71 (1.43)	4.64* (2.58)	1.81 (1.74)	3.77* (1.94)	1.33 (0.90)
Social VC × Democratic Founder	1.24 (1.66)	0.99 (1.64)	0.95 (1.37)	-2.02 (2.27)	-3.32** (1.63)	0.63 (1.84)	-0.48 (0.93)
Governance VC × Democratic Founder	2.99 (1.82)	2.99 (1.85)	1.68 (1.52)	5.76** (2.62)	2.54 (1.79)	3.93** (1.97)	1.16 (0.86)
Q1					0.45*** (0.04)		0.34*** (0.02)
Q2					0.45*** (0.04)		0.43*** (0.03)
Q5					0.31*** (0.04)		0.27*** (0.02)
Mean of Dep. Var.	60.96	57.00	66.13	86.48	86.48	58.45	58.45
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9480	9480	9480	9480	9480	9480	9480
R-squared	0.46	0.52	0.56	0.63	0.80	0.47	0.84

Dependent Variable	Q1 Profitability (1)	Q2 Availability (2)	Q5 Informativeness (3)	Q3 Fundraising Plan (4)	Q3 Fundraising Plan (5)	Q4 Contact (6)	Q4 Contact (7)
<i>Panel B: Only Democratic Founders and Republican Founders</i>							
ESG VC	-4.83** (1.81)	-5.60** (1.78)	-2.14 (1.45)	-3.31 (2.36)	2.22 (1.49)	-5.65** (1.94)	-0.86 (0.70)
Environmental VC	-4.74** (2.18)	-5.11** (1.97)	-1.97 (1.45)	-6.69** (2.91)	-1.48 (1.77)	-5.58** (2.12)	-1.09 (0.96)
Social VC	-0.12 (1.75)	-0.66 (1.77)	-0.54 (1.66)	0.13 (2.20)	0.66 (1.70)	-0.18 (1.97)	0.30 (0.88)
Governance VC	-5.43** (1.92)	-4.47** (1.85)	-3.24** (1.25)	-7.55** (2.48)	-1.83 (1.41)	-5.42** (2.02)	-0.68 (0.90)
ESG VC × Democratic Founder	4.71** (2.06)	5.50** (2.06)	3.25* (1.65)	2.25 (2.72)	-3.55** (1.77)	5.62** (2.20)	0.64 (0.82)
Environmental VC × Democratic Founder	1.72 (2.47)	1.70 (2.33)	1.13 (1.74)	4.75 (3.43)	2.79 (2.16)	2.78 (2.49)	1.12 (1.13)
Social VC × Democratic Founder	-0.31 (2.06)	0.53 (2.10)	1.11 (1.83)	-2.33 (2.71)	-2.79 (2.02)	0.23 (2.32)	-0.18 (1.08)
Governance VC × Democratic Founder	4.57** (2.28)	3.42 (2.25)	3.40** (1.62)	7.87** (3.13)	2.97 (1.90)	5.23** (2.42)	1.22 (1.07)
Q1					0.50*** (0.04)		0.34*** (0.03)
Q2					0.43*** (0.04)		0.46*** (0.03)
Q5					0.34*** (0.05)		0.25*** (0.02)
Mean of Dep. Var.	63.01	59.05	67.63	90.97	90.97	60.06	60.06
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6700	6700	6700	6700	6700	6700	6700
R-squared	0.48	0.53	0.54	0.64	0.81	0.47	0.85

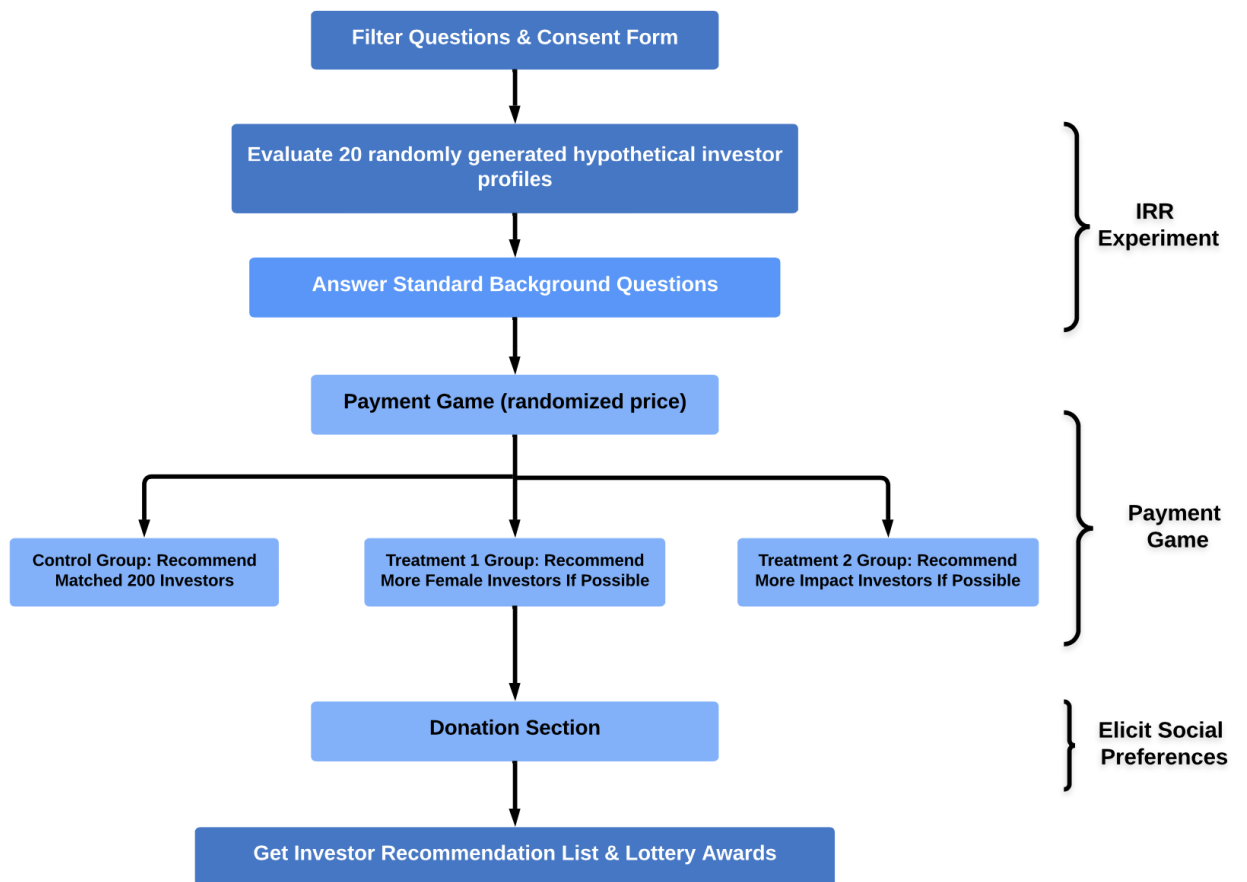


Figure 1: Flow Chart of Experiments

Internet Appendix

Table A1: Summary Statistics of Startup Founders (Replication Experiment)

This table reports descriptive statistics for the startup founders who participate in the replication experiment and are recruited directly on the Crunchbase platform. In total, 65 startup founders from the U.S. provide evaluations of 1300 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 startup founder is Asian, Hispanic, Middle Eastern, Native American, Pacific Islander, or African Americans, and zero if the investor is Caucasian. 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 standard industry classification methods, founders report their startups’ general business categories; each founder can choose only one category such as B2B, B2C, Healthcare, or 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. “*Stage*” reports the stage distribution of the participants’ startups, where each founder can only choose one unique stage. “*Number of Employees*” reflects the current total number of employees in each startup, with founders selecting the category that best fits their situation. “*Startup Team Composition*” reports the gender composition of startups’ co-founders. “*Startup Goals*” provides the startups’ goals, which contain whether they aim for any financial returns, promote diversity of the entrepreneurial community, and care about other ESG impact. Each founder can choose multiple startup goals.

Panel A: Founder Demographic Information

Demographic Information	N	Fraction (%)
Female Founder	7	10.77%
Minority Founder	26	40.00%
Serial Founder	47	72.31%
<i>Educational Background</i>		
High school graduate, diploma or the equivalent	3	4.62%
Bachelor’s degree	31	47.69%
Master’s degree	19	29.23%
Doctorate degree	5	7.69%
Professional degree	5	7.69%
Other	2	3.08%
<i>Political Attitudes</i>		
Democratic	24	36.92%
Republican	7	10.77%
Green Party	1	1.54%
Libertarian Party	7	10.77%
I do not want to say	19	29.23 %
Others	7	10.77%

Panel B: Startup Background Information

Category	N	Fraction (%)
<i>Standard Classification</i>		
B2B	31	47.69 %
B2C	16	24.62 %
Healthcare	12	18.46 %
Others	6	9.23%
<i>Detailed Classification</i>		
Information technology	40	61.54%
Consumers	10	15.38%
Healthcare	13	20.00%
Clean technology	2	3.08%
Finance	9	13.85%
Media	1	1.54%
Energy	1	1.54%
Education	4	6.15%
Life sciences	1	1.54%
Transportation & Logistics	2	3.08%
Manufacture & Construction	2	3.08%
Others	3	4.62%
<i>Stage</i>		
Seed Stage (developing products or services)	11	16.92%
Seed Stage (mature products, no revenue)	24	36.92%
Seed Stage (mature products, positive revenue)	25	38.46%
Series A	3	4.62%
Series B	2	3.08%
<i>Number of Employees</i>		
0-5 employees	36	55.38%
5-20 employees	22	33.85%
20-50 employees	7	10.77%
<i>Startup Team Composition</i>		
Both male and female founders	7	10.77%
Only female founders	3	4.62%
Only male founders	55	84.62%
<i>Startup Philosophy</i>		
Financial Gains	60	92.31%
Promote Diversity	45	69.23%
ESG Criteria	16	24.62%

Table A2: Correlations of Orthogonally Randomized Investor Characteristics

This table reports correlations of orthogonally randomized investor characteristics used in the IRR experiment.

	ESG Fund	Environmental Fund	Social Fund	Governance Fund	Top School	Graduate Degree	Years of Experience	Squared Years of Experience	Entrepreneurial Experience	First Time Fund	IRR	Large Fund	Value Added Style	US Fund
ESG VC	1.0000													
Environmental VC	-0.1653	1.0000												
Social VC	-0.1643	-0.1102	1.0000											
Governance VC	-0.1671	-0.1121	-0.1114	1.0000										
Top School	-0.0023	0.0082	0.0128	-0.0005	1.0000									
Graduate Degree	-0.0126	-0.0039	-0.0095	0.0299	0.0031	1.0000								
Years of Experience	0.0018	0.0032	-0.0004	0.0056	-0.0116	0.0006	1.0000							
Squared Years of Experience	0.0041	0.0058	-0.0008	0.0092	-0.0106	0.0034	0.9706	1.0000						
Entrepreneurial Experience	-0.0017	-0.0027	-0.0032	-0.0072	-0.0086	0.0190	0.0107	0.0108	1.0000					
First Time Fund	0.0113	0.0086	0.0014	-0.0118	0.0031	-0.0324	0.0049	0.0087	0.0055	1.0000				
IRR	0.0061	-0.0131	0.0028	0.0179	0.0128	0.0063	-0.0030	-0.0029	0.0276	N/A	1.0000			
Large Fund	0.0044	-0.0103	0.0014	0.0237	-0.0028	0.0084	0.0044	0.0060	0.0088	0.0105	0.0055	1.0000		
Value Added Style	-0.0061	0.0045	-0.0113	0.0040	-0.0046	-0.0116	-0.0082	-0.0063	-0.0097	0.0147	-0.0012	-0.0007	1.0000	
US Fund	0.0058	0.0058	0.0115	-0.0159	-0.0061	0.0038	-0.0002	-0.0063	0.0088	-0.0096	-0.0213	-0.0009	-0.0062	1.0000

Table A3: Descriptions of VCs' Investment Philosophies

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

Fund Type	Description
<i>Profit-driven VCs</i>	<p>We maximize our efforts and financial performances when we find extraordinary people, companies, and ideas.</p> <p>We have an established track record of success building strong companies.</p> <p>We believe our leadership makes us uniquely suited to deliver a better, fairer, and faster IPO.</p> <p>We exist to inspire business leaders and innovators to help them generate excellent financial performance.</p> <p>We have the ability to think strategically around how you position the business for further growth and fundraising rounds.</p> <p>We aim to support great entrepreneurs throughout different stages of faster growth.</p> <p>We partner with entrepreneurs to transform their ideas into world-changing companies and achieve great financial performance.</p> <p>We are a venture capital firm, enabling startups that grow faster and stronger.</p> <p>We are as ambitious as our founders and know winning requires passion. We aim to build iconic companies that made history.</p> <p>We remain committed to making our existing portfolio companies on their way to great success.</p> <p>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.</p> <p>We help to build iconic companies with faster IPO speed.</p> <p>We are a VC firm helping companies and businesses grow faster.</p> <p>We help insightful companies build solid foundations for great success and faster growth.</p> <p>We help founders develop their businesses at every stage of growth and aims to achieve great success.</p> <p>We back ambitious founders and help their startups to thrive.</p> <p>We maximize our financial performance by building the next generation of transformative companies.</p> <p>We'll do everything we can to help you rapidly scale.</p> <p>We help our portfolio companies to be operationally excellent to drive faster growth and great success.</p> <p>We target startups with amazing products/services, and help them scale rapidly.</p>
<i>ESG VCs</i>	<p>We combine good financial performance with its environmental and social targets while taking into account the principles of good corporate governance.</p> <p>We have been investing to generate social and environmental impact alongside a healthy financial return.</p> <p>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.</p> <p>As a pioneering impact investor, we are dedicated to generating lasting positive impact for communities and the environment.</p> <p>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.</p> <p>We provide startups access to essential capital and services to achieve positive environmental and social impact.</p> <p>We support sustainable economic growth, regional development, secure employment and aim for positive social and environmental impact.</p> <p>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.</p>

Fund Type	Description
	<p>We invest in transformational companies that address key problems in environmental and social issues.</p> <p>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.</p>
<i>Environmental VCs</i>	<p>We invest in breakthrough venture companies developing solutions addressing our global environmental challenges.</p> <p>We are a venture capital fund, which invests in start-ups that generates positive environmental impact.</p> <p>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.</p> <p>At our fund, we're enabling the mitigation of climate change and environmental crisis through groundbreaking innovations.</p> <p>We exist for more than returns and our mission is to develop the world's most environment friendly, sustainable, inclusive and mission-driven ecosystem.</p> <p>We support companies from start-up to scale-up with a special focus on positive environmental impact.</p> <p>We provide tailored equity and mezzanine impact financing to environment friendly startups that also deliver solid financial returns to investors.</p> <p>We are a team of impact venture builders dedicated to supporting the people and ideas that turn existing environmental challenges into de-carbonized solutions.</p> <p>We are an impact VC fund supporting impact ventures that also deliver decent risk-adjusted financial returns.</p> <p>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.</p>
<i>Social VCs</i>	<p>We work to address social and economic inequity through new financial solutions that help empower people, build sustainable communities and inspire systemic change.</p> <p>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.</p> <p>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.</p> <p>We are a proven market leader in the global impact investing industry that invests to connect capital with the communities that need it most.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>We are a pioneer and leading impact investing manager, delivering competitive returns alongside positive social impact.</p>

Fund Type	Description
	We are an institutional impact investment manager that provides capital to demonstrate and scale responsible innovation in lending for underserved communities.
<i>Governance VCs</i>	<p>We are a fund manager, in support of driving capital to high growth companies with women leaders.</p> <p>We are an impact investment platform that uses technology to unlock diversified and proven community investments that generate economic mobility and financial inclusion.</p> <p>We implement gender programmes to bring women into C-Suite and ownership during our investment in startups.</p>

Table A4: Descriptive Statistics of Variables (Main Experiment)

This table reports descriptive summary statistics of variables used in the main experiment. Q_1 (Profitability Ratings), Q_2 (Availability Ratings), Q_3 (Relative Fundraising Amount), Q_4 (Contact Interest Ratings), and Q_5 (Informativeness Ratings) are participants' evaluation results of investor profiles. The detailed evaluation questions are provided in Online Appendix Figure A2. "Algorithm Reliability Ratings" indicate how likely participants believe the matching algorithm is able to recommend a satisfactory list of investors for them. "Algorithm Reliability Ratings (Purchasing Founders)" are ratings provided by startup founders who choose to pay for the recommendation service in the payment game. "Donation Amount to Gender-related NGOs" and "Donation Amount to ESG-related NGOs" indicate the amount of money participants would donate to gender-related NGOs and ESG-related NGOs, respectively, in the incentivized donation section.

	Obs.	Mean	S.D	Min	Max	Percentile		
						10	50	90
Q_1 (Profitability Ratings)	8,180	62.63	26.73	0	100	10	68	95
Q_2 (Availability Ratings)	8,180	58.98	26.99	0	100	18	63	92
Q_3 (Relative Fundraising Amount)	8,180	89.86	49.75	0	200	22	91	161
Q_4 (Contact Interest Ratings)	8,180	59.90	28.17	0	100	15	65	95
Q_5 (Informativeness Ratings)	8,180	66.98	24.66	0	100	30	72	97
Algorithm Reliability Ratings	8,180	73.15	21.89	0	100	48	76	100
Algorithm Reliability Ratings (Purchasing Founders)	4,040	78.16	18.16	0	100	50	81	100
Donation Amount to Gender-related NGOs	8,180	36.71	88.85	0	1000	0	25	30
Donation Amount to ESG-related NGOs	8,180	29.55	65.36	0	1000	0	20	30

Table A5: Startup Founders' Evaluations of Other VC Characteristics

This table examines how startups' evaluations respond to other orthogonally randomized VC characteristics. 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 "purchasing founders" who are willing to pay for a comprehensive investor recommendation list in the payment game. Panel C is based on 1,300 investor profiles' evaluations provided by the recruited startup founders listed on Crunchbase in the replication experiment. The dependent variable is startup founders' profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). Independent variables are orthogonally randomized VC characteristics, which are defined in Table 2. All regressions add subject fixed effects. Standard errors reported in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	Q1 Profitability	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Full Sample</i>							
Top School	0.88* (0.48)	0.82* (0.45)	0.49 (0.39)	0.59 (0.73)	-0.35 (0.51)	0.53 (0.49)	-0.26 (0.26)
Graduate Degree	0.33 (0.45)	0.13 (0.43)	0.18 (0.37)	0.88 (0.66)	0.61 (0.50)	0.16 (0.47)	-0.06 (0.29)
Years of Investment Experience	0.42** (0.14)	0.22* (0.13)	0.39*** (0.11)	0.47** (0.20)	0.05 (0.13)	0.33** (0.13)	-0.01 (0.07)
Squared Years of Investment Experience	-0.01 (0.00)	-0.00 (0.00)	-0.01** (0.00)	-0.01 (0.01)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Entrepreneurial Experience	3.86*** (0.59)	4.02*** (0.56)	2.74*** (0.48)	4.65*** (0.79)	0.11 (0.55)	3.86*** (0.59)	0.09 (0.29)
First Time Fund	2.31*** (0.67)	1.26** (0.63)	1.42** (0.59)	3.00*** (1.00)	0.91 (0.70)	2.17*** (0.69)	0.46 (0.39)
Better Historical Performance	4.98*** (0.72)	3.06*** (0.69)	3.11*** (0.61)	6.12*** (1.15)	1.44** (0.71)	4.46*** (0.74)	0.62* (0.35)
Larger Fund	1.95*** (0.48)	1.21*** (0.44)	0.89** (0.41)	3.39*** (0.83)	1.66** (0.66)	1.45*** (0.52)	0.03 (0.27)
Value Added Style	-0.13 (0.58)	0.87 (0.58)	-0.01 (0.50)	0.30 (0.88)	-0.06 (0.60)	0.37 (0.65)	0.05 (0.33)
US Fund	0.98 (0.83)	0.77 (0.75)	-0.16 (0.68)	-0.09 (1.20)	-0.85 (0.87)	0.18 (0.84)	-0.44 (0.48)
Q1					0.44*** (0.04)		0.34*** (0.02)
Q2					0.49*** (0.04)		0.43*** (0.03)
Q5					0.32*** (0.04)		0.26*** (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	8180	8180	8180	8180	8180	8180	8180
R-squared	0.47	0.52	0.54	0.64	0.81	0.47	0.83

Dependent Variable	Q1 Profitability	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel B: Sub Sample Who Pay for the Service</i>							
Top School	1.27* (0.70)	1.25* (0.70)	0.93* (0.53)	0.41 (1.06)	-1.02 (0.70)	0.27 (0.71)	-0.96** (0.38)
Graduate Degree	0.25 (0.69)	0.13 (0.67)	0.22 (0.59)	0.80 (0.95)	0.56 (0.70)	0.08 (0.71)	-0.12 (0.41)
Years of Investment Experience	0.16 (0.21)	-0.01 (0.18)	0.29* (0.15)	0.33 (0.29)	0.18 (0.18)	0.13 (0.19)	-0.01 (0.09)
Squared Years of Investment Experience	0.00 (0.01)	0.00 (0.01)	-0.00 (0.00)	-0.01 (0.01)	-0.01 (0.01)	0.00 (0.01)	0.00 (0.00)
Entrepreneurial Experience	4.20*** (0.99)	4.33*** (0.93)	2.70*** (0.80)	4.77*** (1.31)	0.06 (0.84)	4.30*** (0.97)	0.24 (0.43)
First Time Fund	1.25 (1.01)	1.08 (0.99)	0.71 (0.90)	2.07 (1.47)	0.79 (1.01)	1.68 (1.09)	0.59 (0.56)
Better Historical Performance	3.66*** (1.01)	1.89** (0.94)	2.32*** (0.84)	3.76** (1.51)	0.60 (0.99)	2.99*** (0.99)	0.29 (0.46)
Larger Fund	1.56** (0.70)	1.45** (0.68)	0.70 (0.60)	4.07*** (1.13)	2.49*** (0.84)	1.17 (0.77)	-0.19 (0.40)
Value Added Style	0.47 (0.83)	1.30 (0.92)	0.14 (0.75)	1.06 (1.28)	0.17 (0.89)	0.59 (1.03)	-0.17 (0.47)
US Fund	1.65 (1.25)	0.98 (1.16)	-0.02 (1.04)	0.95 (1.63)	-0.22 (1.24)	1.02 (1.23)	0.05 (0.62)
Q1					0.42*** (0.04)		0.34*** (0.03)
Q2					0.50*** (0.05)		0.44*** (0.04)
Q5					0.30*** (0.05)		0.28*** (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	0.39	0.43	0.45	0.61	0.80	0.40	0.83

Dependent Variable	Q1 Profitability	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel C: Crunchbase-listed Founders (Replication Experiment)</i>							
Top School	1.51 (1.21)	1.27 (1.22)	0.63 (0.88)	1.68 (2.01)	0.48 (1.75)	0.54 (1.47)	-0.74 (0.85)
Graduate Degree	0.89 (1.57)	0.90 (1.45)	0.37 (1.11)	2.99 (2.16)	2.23 (1.66)	1.55 (1.33)	0.73 (0.71)
Years of Investment Experience	1.00** (0.32)	0.03 (0.33)	0.31 (0.24)	0.23 (0.43)	-0.29 (0.41)	0.32 (0.38)	-0.12 (0.21)
Squared Years of Investment Experience	-0.02* (0.01)	0.01 (0.01)	-0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	-0.00 (0.01)	0.00 (0.01)
Entrepreneurial Experience	8.80*** (1.77)	6.18*** (1.66)	3.42** (1.22)	5.64** (2.44)	-0.93 (1.95)	7.63*** (1.70)	0.82 (0.97)
First Time Fund	-0.26 (1.73)	1.22 (1.83)	2.03 (1.29)	0.09 (2.50)	-0.60 (2.04)	0.18 (1.59)	-0.93 (1.02)
Better Historical Performance	5.48** (1.87)	1.94 (1.58)	0.74 (1.31)	4.73** (2.11)	1.51 (1.79)	5.37** (1.67)	2.45** (0.97)
Larger Fund	4.83*** (1.28)	4.37** (1.39)	2.85** (1.20)	17.34*** (3.13)	13.23*** (2.77)	5.89*** (1.55)	1.40 (0.84)
Value Added Style	0.14 (1.84)	0.87 (1.87)	0.23 (1.45)	1.77 (2.59)	1.39 (2.11)	3.09 (1.92)	2.57** (0.91)
US Fund	1.18 (2.04)	3.62 (2.18)	2.18 (1.74)	0.46 (2.94)	-1.64 (2.48)	3.37 (2.23)	0.63 (1.25)
Q1					0.45*** (0.08)		0.33*** (0.06)
Q2					0.30*** (0.07)		0.46*** (0.06)
Q5					0.22** (0.10)		0.31*** (0.06)
Mean of Dep. Var.	50.45	44.54	60.78	65.21	65.21	49.36	49.36
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1300	1300	1300	1300	1300	1300	1300
R-squared	0.48	0.47	0.67	0.58	0.72	0.50	0.86

Table A6: Startups' Evaluations on Detailed Categories of ESG VCs (Replication Experiment)

This table reports the regression results of how startup founders' evaluations respond to investors' E, S, and G characteristics, separately. Panel A is based on 1,300 investor profiles' evaluations provided by all the recruited Crunchbase-listed founders in the replication experiment. Panel B uses the sub sample of Crunchbase-listed founders who pay for a recommendation list in the payment game. The dependent variable is startup founders' profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. All regressions add subject fixed effects. Standard errors reported in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Q1 Profitability	Q2 Availability	Q5 Informativeness	Q3 Fundraising Plan	Q3 Fundraising Plan	Q4 Contact	Q4 Contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Full Sample</i>							
ESG VC	-5.08* (2.82)	-5.47* (3.00)	-1.87 (2.41)	-9.36** (3.68)	-4.92** (2.32)	-4.59 (3.23)	0.20 (1.18)
Environment VC	-13.24*** (3.21)	-13.95*** (3.46)	-7.69** (2.92)	-15.28*** (4.15)	-3.16 (2.50)	-13.80*** (3.61)	-0.61 (1.54)
Social VC	-10.35*** (2.99)	-11.61*** (2.98)	-6.65** (2.85)	-11.64** (3.74)	-1.81 (2.79)	-12.11*** (3.35)	-1.28 (1.31)
Governance VC	-12.05** (3.62)	-14.26*** (3.46)	-8.30** (3.18)	-12.25** (3.97)	-0.46 (2.85)	-15.14*** (3.60)	-2.02 (1.48)
Q1					0.47*** (0.08)		0.33*** (0.05)
Q2					0.30*** (0.07)		0.46*** (0.06)
Q5					0.22** (0.10)		0.30*** (0.05)
Mean of Dep. Var.	50.45	44.54	60.78	65.21	65.21	49.36	49.36
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1300	1300	1300	1300	1300	1300	1300
R-squared	0.46	0.48	0.67	0.55	0.70	0.50	0.85
<i>Panel B: Sub Sample Who Pay for the Service</i>							
ESG VC	-4.92 (3.32)	-4.69 (3.57)	-2.80 (2.83)	-9.80** (4.36)	-5.42** (2.68)	-4.23 (3.85)	0.55 (1.40)
Environmental VC	-14.16*** (3.74)	-15.56*** (3.90)	-9.18** (3.49)	-16.70** (4.84)	-3.14 (2.76)	-14.79*** (4.09)	0.19 (1.62)
Social VC	-10.74** (3.55)	-12.59*** (3.29)	-7.59** (3.31)	-10.27** (4.33)	0.42 (3.14)	-12.63** (3.93)	-0.75 (1.53)
Governance VC	-12.27** (4.17)	-14.44*** (3.98)	-9.81** (3.75)	-13.29** (4.65)	-0.80 (3.11)	-17.02*** (4.22)	-3.15* (1.75)
Q1					0.44*** (0.08)		0.40*** (0.06)
Q2					0.33*** (0.07)		0.45*** (0.06)
Q5					0.23** (0.10)		0.25*** (0.06)
Mean of Dep. Var.	50.28	45.77	60.83	64.96	64.96	51.40	51.40
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1060	1060	1060	1060	1060	1060	1060
R-squared	0.43	0.46	0.66	0.56	0.71	0.46	0.85

Table A7: Evaluations of High-quality VCs and Low-quality VCs (Subsample Analysis)

This table examines the heterogeneous effects of investors' ESG characteristics on high-quality VCs and low-quality VCs by analyzing each sub-sample in the main experiment. Panels A and B focus on evaluations of high-quality VCs (with "objective" quality measure $\hat{Q}_4 > 50$) and low-quality VCs (with "objective" quality measure $\hat{Q}_4 \leq 50$), respectively. The \hat{Q}_4 values are predicted using OLS models based on other orthogonally randomized investor characteristics in Online Appendix Table A5. These investor characteristics include "Top School", "Graduate Degree", "Years of Investment Experience", "Squared Years of Investment Experience", "Entrepreneurial Experience", "First Time Fund", "Better Historical Performance", "Larger Fund", "Value Added Style", and "US Fund". The dependent variable is profitability evaluation (Q_1) in Columns (1) and (2), availability rating (Q_2) in Columns (3) and (4), and contact interest rating (Q_4) in Columns (5) and (6). Columns (1), (3), and (5) include evaluations from all founders, while Columns (2), (4), and (6) include only "purchasing founders" who value the incentives and pay for the recommendation list. "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. All the regressions include subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	Q1		Q2		Q4	
	Profitability All Startup Founders	Profitability "Purchasing" Founders	Availability All Startup Founders	Availability "Purchasing" Founders	Contact All Startup Founders	Contact "Purchasing" Founders
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: High-quality VCs (i.e., $\hat{Q}_4 > 50$)</i>						
ESG VC	-0.25 (0.63)	-0.69 (1.02)	0.23 (0.63)	-0.91 (0.99)	0.16 (0.65)	-0.60 (1.00)
Environmental VC	-0.78 (0.83)	-0.31 (1.27)	-0.71 (0.83)	-1.66 (1.30)	-1.33 (0.86)	-1.72 (1.35)
Social VC	0.42 (0.80)	0.66 (1.25)	1.80** (0.75)	2.07* (1.11)	1.84** (0.72)	2.85** (1.03)
Governance VC	1.17 (0.75)	0.45 (1.15)	1.14 (0.81)	1.12 (1.24)	1.60* (0.82)	1.29 (1.29)
Mean of Dep. Var.	73.08	73.56	70.41	70.83	74.10	75.05
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,573	2,879	5,573	2,879	5,573	2,879
R-squared	0.39	0.31	0.43	0.37	0.33	0.28
<i>Panel B: Low-quality VCs (i.e., $\hat{Q}_4 \leq 50$)</i>						
ESG VC	-2.10 (1.33)	-1.80 (2.03)	-2.74** (1.35)	3.77* (2.00)	-2.43* (1.31)	-2.74 (2.07)
Environmental VC	-5.71*** (1.42)	-7.13*** (2.09)	-6.26*** (1.25)	-7.95*** (2.03)	-4.76*** (1.23)	-6.51*** (1.93)
Social VC	-0.33 (1.55)	-1.71 (2.63)	-0.62 (1.52)	-0.41 (2.60)	0.32 (1.60)	1.98 (2.80)
Governance VC	-3.28* (1.71)	-3.61 (2.54)	-3.40** (1.54)	-3.72 (2.43)	-1.68 (1.60)	-1.04 (2.53)
Mean of Dep. Var.	40.30	40.04	34.54	35.09	29.54	30.91
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,607	1,161	2,607	1,161	2,607	1,161
R-squared	0.47	0.38	0.47	0.33	0.24	0.20

Table A8: Evaluations of High-quality VCs and Low-quality VCs (Replication Experiment)

This table examines the heterogeneous effects of investors' ESG characteristics on high-quality VCs and low-quality VCs. The sample only includes evaluations provided by founders who participate in the replication experiment. Panels A and B focus on evaluations of high-quality VCs (with "objective" quality measure $\hat{Q}_4 > 50$) and low-quality VCs (with "objective" quality measure $\hat{Q}_4 \leq 50$), respectively. The \hat{Q}_4 values are predicted using OLS models based on other orthogonally randomized investor characteristics in Online Appendix Table A5. These investor characteristics include "Top School", "Graduate Degree", "Years of Investment Experience", "Squared Years of Investment Experience", "Entrepreneurial Experience", "First Time Fund", "Better Historical Performance", "Larger Fund", "Value Added Style", and "US Fund". The dependent variable is profitability rating (Q_1) in Columns (1) and (2), availability rating (Q_2) in Columns (3) and (4), and contact interest rating (Q_4) in Columns (5) and (6). Columns (1), (3), and (5) include evaluations from all founders, while Columns (2), (4), and (6) include only "purchasing founders" who value the incentives and pay for the recommendation list. "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. All the regressions include subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	Q1		Q2		Q4	
	Profitability All Startup Founders	Profitability "Purchasing" Founders	Availability All Startup Founders	Availability "Purchasing" Founders	Contact All Startup Founders	Contact "Purchasing" Founders
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: High-quality VCs (i.e., $\hat{Q}_4 > 50$)</i>						
ESG VC	1.11 (2.21)	-0.12 (2.27)	-0.51 (2.81)	-1.02 (3.10)	-1.05 (2.25)	-1.85 (2.46)
Environmental VC	-6.40 (4.00)	-7.61 (4.31)	-6.94 (4.42)	-8.49* (4.90)	-4.60 (3.98)	-5.36 (4.51)
Social VC	1.89 (2.81)	1.65 (3.20)	-1.27 (3.26)	-3.51 (3.47)	-0.84 (2.36)	-0.50 (2.48)
Governance VC	-5.52 (3.62)	-4.91 (3.70)	-9.44** (3.88)	-8.42** (3.87)	-11.65** (4.89)	-12.19** (5.26)
Mean of Dep. Var.	68.73	68.00	62.12	61.42	74.95	74.15
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	662	576	662	576	662	576
R-squared	0.38	0.38	0.43	0.44	0.26	0.25
<i>Panel B: Low-quality VCs (i.e., $\hat{Q}_4 < 50$)</i>						
ESG VC	-7.14** (3.31)	-5.83 (4.40)	-8.01** (3.40)	-6.47 (4.50)	-5.14 (3.86)	-4.42 (5.07)
Environmental VC	-10.47** (3.11)	-11.41** (3.78)	-13.29*** (3.33)	-14.88*** (4.03)	-12.73*** (3.21)	-13.95** (4.02)
Social VC	-10.00** (3.14)	-9.83** (3.93)	-11.94*** (2.82)	-11.03** (3.41)	-9.38** (3.63)	-9.11* (4.64)
Governance VC	-9.66** (4.36)	-9.05* (5.25)	-10.72** (4.05)	-10.42** (4.96)	-8.79** (3.74)	-10.29** (4.65)
Mean of Dep. Var.	31.48	29.19	26.30	27.14	22.81	24.32
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	638	484	638	484	638	484
R-squared	0.38	0.28	0.44	0.38	0.26	0.24

Table A9: Quantile-Regression Estimates for Startups' Evaluations on Investors' Quality

This table reports the effects of investors' ESG characteristics on the conditional quantiles and the conditional mean of startups' provided evaluations in the main experiment. Panels A and B use evaluations from all recruited startup founders, while Panels C and D focus on "purchasing founders" who purchase the recommendation service and highly value the provided "matching incentives." The dependent variable in Panels A and C is investors' received profitability ratings (Q_1). The dependent variable in Panels B and D is investors' received contact interest ratings (Q_4). In each of Columns (1)–(9), the reported coefficient stands for the effect of each independent variable on the k th conditional percentile ($k \in 10, 20, \dots, 90$) of investors' received profitability ratings (i.e., Q_1) in Panels A and C, and contact interest ratings (i.e., Q_4) in Panels B and D. "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. Standard errors in parentheses are clustered at the startup founder level. $*p < 0.10$, $**p < 0.05$, $***p < 0.01$

	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
Panel A. Profitability Evaluations (i.e., Q_1)										
ESG VC	-3.00* (1.78)	-2.00 (1.89)	0.00 (1.08)	-0.00 (1.01)	-1.00 (0.85)	-0.00 (0.68)	-0.00 (0.72)	-1.00 (0.77)	-2.00** (0.91)	-1.35* (0.74)
Environmental VC	-7.00*** (2.12)	-9.00*** (2.42)	-2.00 (1.47)	-4.00*** (1.29)	-4.00*** (1.62)	-1.00 (0.99)	-1.00 (0.89)	-2.00 (1.24)	0.00 (1.03)	-3.17*** (0.94)
Social VC	-1.00 (2.38)	-0.00 (2.13)	1.00 (1.33)	1.00 (1.16)	1.00 (1.07)	1.00 (0.82)	-0.00 (0.83)	-0.00 (1.01)	0.00 (0.99)	0.43 (0.82)
Governance VC	-3.00 (2.28)	-2.00 (3.30)	-1.00 (1.14)	-1.00 (1.40)	-0.00 (1.04)	1.00 (0.83)	-0.00 (0.88)	-0.00 (1.08)	1.00 (0.76)	-0.85 (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
Panel B. Contact Interest Ratings (i.e., Q_4)										
ESG VC	-4.00** (1.81)	-5.00** (2.35)	-2.00* (1.16)	-2.00 (1.26)	-1.00 (1.09)	-1.00 (0.88)	-0.00 (0.70)	-0.00 (0.77)	-1.00 (1.16)	-1.28 (0.80)
Environmental VC	-6.00*** (1.93)	-8.00*** (2.52)	-7.00*** (2.06)	-4.00*** (1.60)	-4.00*** (1.32)	-2.00 (1.27)	-3.00*** (0.84)	-1.00 (1.38)	0.00 (1.27)	-3.47*** (0.98)
Social VC	1.00 (2.26)	1.00 (4.03)	1.00 (1.49)	3.00** (1.48)	4.00*** (1.21)	3.00*** (1.00)	2.00** (0.80)	1.00 (0.86)	0.00 (1.27)	1.64* (0.89)
Governance VC	-2.00 (1.90)	-5.00* (2.84)	-3.00 (1.97)	1.00 (1.75)	3.00** (1.18)	1.00 (0.91)	1.00 (0.92)	2.00* (1.16)	1.00 (1.16)	-0.15 (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

Panel C. Profitability Evaluations (i.e., Q_1) of “Purchasing Founders”

	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
ESG VC	-4.00* (2.37)	-2.00 (3.54)	-1.00 (1.60)	-3.00* (1.74)	-0.00 (1.09)	-1.00 (0.92)	-1.00 (0.82)	-2.00* (1.10)	-2.00* (1.17)	-1.61 (1.13)
Environmental VC	-10.00***	-12.00***	-3.00	-5.00**	0.00	-1.00	-1.00	-1.00	0.00	-3.46***
Social VC	(3.21)	(3.64)	(2.19)	(2.40)	(1.58)	(1.08)	(1.12)	(1.83)	(0.86)	(1.45)
	-0.00	-0.00	3.00	2.00	3.00**	2.00*	1.00	1.00	0.00	1.18
Governance VC	(3.26)	(3.28)	(2.58)	(1.74)	(1.38)	(1.06)	(1.02)	(1.37)	(0.77)	(1.34)
	-5.00	-4.00	-2.00	-4.00**	0.00	0.00	0.00	1.00	1.00	-1.45
	(3.38)	(4.31)	(1.70)	(1.83)	(1.55)	(1.15)	(1.04)	(1.60)	(0.75)	(1.27)
Mean of Dep. Var.	20	41	52	63	70	76	81	88	96	63.93
Observations	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040

Panel D. Contact Interest Ratings (i.e., Q_4) of “Purchasing Founders”

	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
ESG	-7.00*** (2.23)	-5.00 (3.43)	-0.00 (1.66)	-2.00 (1.76)	-1.00 (1.85)	-0.00 (1.08)	-0.00 (0.87)	-2.00* (1.04)	-1.00 (0.80)	-1.84 (1.14)
Environment	-10.00***	-10.00***	-8.00**	-6.00**	-7.00***	-3.00*	-2.00	1.00	-1.00	-4.65***
Social	(2.12)	(3.46)	(3.60)	(2.61)	(2.46)	(1.68)	(1.52)	(1.72)	(0.94)	(1.51)
	5.00	8.00***	7.00***	6.00***	5.00***	4.00***	2.00*	2.00	1.00	3.89***
Governance	(3.13)	(2.54)	(2.43)	(2.05)	(1.61)	(1.31)	(1.07)	(1.50)	(0.87)	(1.34)
	-4.00 -	6.00*	-4.00	1.00	1.00	1.00	1.00	1.00	2.00**	-0.39
	(2.53)	(3.23)	(3.23)	(3.03)	(1.61)	(1.36)	(1.26)	(1.61)	(0.83)	(1.40)
Mean of Dep. Var.	17	35	50	60	69	75	81	88	97	62.36
Observations	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040

Table A10: Quantile-Regressions for Startups' Evaluations on Investors' Quality (Controlling for Rating Levels)

This table reports the effects of investors' ESG characteristics on the conditional quantiles and the conditional mean of startups' provided evaluations after controlling for startup founders' rating levels in the main experiment. Panels A and B use evaluations from all recruited startup founders, while Panels C and D focus on "purchasing founders" who purchase the recommendation service and highly value the provided "matching incentives." The dependent variable in Panels A and C is investors' received profitability ratings (Q_1). The dependent variable in Panels B and D is investors' received contact interest ratings (Q_4). In each of Columns (1)–(9), the reported coefficient stands for the effect of each independent variable on the k th conditional percentile ($k \in 10, 20, \dots, 90$) of investors' received profitability ratings (i.e., Q_1) in Panels A and C, and contact interest ratings (i.e., Q_4) in Panels B and D. "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. In Panels A and C (B and D), the "Leave-one-out Median of Investor's Q_1 (Q_4)" is generated for each VC profile j , which is evaluated by each startup founder i . This leave-one-out median of Q_1 (Q_4) is calculated after dropping Q_{1ij} (Q_{4ij}) for each VC profile j evaluated by startup founder i . Standard errors in parentheses are clustered at the startup founder level. $*p < 0.10, **p < 0.05, ***p < 0.01$

Panel A. Profitability Evaluations (i.e., Q_1)										
	10th	20th	30th	40th	50th	60th	70th	80th	90th	Mean
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
ESG VC	-4.96*** (1.84)	-1.00 (1.06)	-1.00 (0.66)	-2.00*** (0.53)	-0.35 (0.46)	-0.25 (0.51)	-0.00 (0.46)	0.00 (0.48)	-1.13** (0.55)	-0.51 (0.59)
Environmental VC	-10.18*** (2.35)	-5.00*** (1.50)	-3.00*** (0.97)	-3.00*** (0.91)	-0.94* (0.57)	-1.38** (0.60)	-0.75 (0.69)	0.00 (0.60)	-0.93 (0.67)	-1.86*** (0.76)
Social VC	-1.84 (1.60)	-1.00 (1.53)	-1.00 (0.84)	-0.00 (0.52)	0.03 (0.52)	-0.00 (0.58)	0.75 (0.64)	1.00* (0.58)	0.42 (0.64)	1.09* (0.65)
Governance VC	-5.20*** (1.86)	-1.00 (1.37)	-1.00 (0.97)	-1.00 (0.61)	-0.35 (0.53)	-0.00 (0.61)	-0.00 (0.57)	0.17 (0.62)	0.84 (0.68)	-0.85 (0.73)
Leave One Out Q_1 Median	0.80*** (0.06)	1.00*** (0.04)	1.00*** (0.02)	1.00*** (0.01)	0.97*** (0.01)	0.87*** (0.01)	0.75*** (0.02)	0.58*** (0.02)	0.38*** (0.02)	-3.57*** (0.64)
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. Contact Interest Ratings (i.e., Q_4)										
	10th	20th	30th	40th	50th	60th	70th	80th	90th	Mean
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
ESG VC	-4.27** (1.83)	-2.38* (1.26)	-1.14 (0.86)	-0.37 (0.55)	-0.29 (0.44)	0.10 (0.53)	0.00 (0.55)	-0.00 (0.59)	-0.57 (0.60)	-0.83 (0.63)
Environmental VC	-7.82*** (1.79)	-6.16*** (1.66)	-3.00** (1.22)	-2.00** (0.78)	-1.49** (0.60)	-0.90 (0.70)	-1.00 (0.70)	-0.58 (0.84)	-0.43 (0.79)	-2.71*** (0.80)
Social VC	0.91 (1.95)	1.78 (1.45)	1.39* (0.84)	0.46 (0.71)	0.57 (0.63)	1.00 (0.72)	1.54** (0.65)	0.94 (0.76)	0.67 (0.73)	1.15 (0.72)
Governance VC	-4.82** (2.36)	-1.44 (2.05)	1.07 (1.24)	1.29** (0.64)	0.86 (0.58)	0.80 (0.69)	1.15* (0.62)	0.15 (0.64)	0.16 (0.76)	-0.59 (0.76)
Leave One Out Q_4 Median	0.64*** (0.06)	0.91*** (0.04)	0.96*** (0.02)	0.98*** (0.01)	0.97*** (0.01)	0.90*** (0.02)	0.77*** (0.02)	0.59*** (0.03)	0.37*** (0.03)	-4.23*** (0.34)
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 C. Profitability Evaluations (i.e., Q_1) of “Purchasing Founders”

	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
ESG VC	-2.50 (1.88)	-1.42 (2.05)	-2.00* (1.04)	-1.31 (0.94)	-0.37 (0.80)	0.08 (0.79)	-1.12 (0.74)	-0.50 (1.02)	-1.18 (0.95)	-0.52 (0.88)
Environmental VC	-10.80*** (3.39)	-5.46* (3.10)	-3.00** (1.50)	-2.77** (1.27)	-2.38** (1.11)	-1.35 (1.17)	-1.15 (1.14)	0.00 (1.04)	-0.89 (1.09)	-1.46 (1.12)
Social VC	-0.50 (2.33)	0.37 (3.28)	-0.00 (1.37)	1.15 (1.07)	0.63 (0.99)	1.27 (1.10)	1.68 (1.06)	1.50 (1.26)	-0.00 (1.00)	1.87* (1.05)
Governance VC	-3.30 (2.22)	-1.00 (2.29)	-2.00 (1.49)	-1.00 (1.13)	-0.56 (0.93)	-0.35 (0.93)	-0.29 (1.08)	0.00 (1.11)	1.14 (1.01)	-1.46 (1.06)
Leave One Out Q_1 Median	0.70*** (0.08)	0.96*** (0.07)	1.00*** (0.03)	0.96*** (0.02)	0.94*** (0.02)	0.81*** (0.04)	0.63*** (0.04)	0.50*** (0.04)	0.30*** (0.04)	-3.04*** (0.60)
Mean of Dep. Var.	20	41	52	63	70	76	81	88	96	63.93
Observations	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040

Panel D. Contact Interest Ratings (i.e., Q_4) of “Purchasing Founders”

	10th [1]	20th [2]	30th [3]	40th [4]	50th [5]	60th [6]	70th [7]	80th [8]	90th [9]	Mean [10]
ESG VC	-7.33*** (2.68)	-2.47 (2.10)	-2.13 (1.45)	-0.64 (0.93)	-0.49 (0.71)	-0.06 (0.76)	0.00 (0.76)	0.00 (0.82)	-1.33* (0.77)	-1.25 (0.96)
Environmental VC	-13.33*** (4.83)	-10.18*** (2.24)	-7.31*** (2.72)	-2.94* (1.66)	-1.94* (1.03)	-1.00 (1.14)	-1.25 (1.19)	0.00 (1.20)	0.33 (1.00)	-3.49*** (1.32)
Social VC	3.11 (2.50)	6.06** (2.57)	3.59*** (1.28)	2.91*** (1.00)	2.00** (0.97)	2.03** (1.03)	2.90*** (1.00)	2.46** (0.98)	1.67* (0.96)	2.39** (1.10)
Governance VC	-7.44*** (2.64)	-3.94 (3.00)	-0.00 (2.45)	1.64* (0.88)	0.91 (0.84)	0.36 (1.13)	0.86 (0.86)	0.38 (0.92)	1.00 (0.86)	-0.86 (1.20)
Leave One Out Q_4 Median	0.56*** (0.07)	0.88*** (0.07)	0.97*** (0.04)	0.97*** (0.01)	0.96*** (0.01)	0.86*** (0.03)	0.73*** (0.03)	0.54*** (0.04)	0.33*** (0.04)	-4.07*** (0.45)
Mean of Dep. Var.	17	35	50	60	69	75	81	88	97	62.36
Observations	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040	4,040

Table A11: Willingness to Pay for ESG Investors (Payment Game, Replication Experiment)

This table tests the existence of startup founders' taste-driven preferences towards ESG investors in the replication experiment. Panel A examines the behaviors of all recruited founders in the replication experiment. Panel B concentrates on solely profit-driven founders in the replication experiment. The dependent variable is an indicator which equals one if the startup founder 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) and (2) report OLS regression results. Columns (3) and (4) report Probit regression results. "Treatment1 (Gender)" is equal to one if the subject is assigned to the Treatment 1 group (i.e., conditional on the same matching quality, the founder will receive more female investors' contact information), and zero otherwise. "Treatment2 (ESG)" is equal to one if the subject is assigned to the Treatment 2 group in the payment game (i.e., conditional on the same matching quality, the founder will receive 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 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<0.01, ** p<0.05, * p<0.1

Dependent Variable:	$\mathbf{1}\{\text{Pay for Recommendation List}\}$			
	OLS (1)	OLS (2)	Probit (3)	Probit (4)
<i>Panel A: Full Sample (Replication Experiment)</i>				
Treatment1 (Gender)	0.08 (0.13)	0.04 (0.13)	0.27 (0.45)	0.17 (0.50)
Treatment2 (ESG)	0.21* (0.12)	0.21* (0.12)	1.08** (0.51)	1.19** (0.51)
Reliable Algorithm	0.00** (0.00)	0.00** (0.00)	0.02** (0.01)	0.03** (0.01)
Control	No	Yes	No	Yes
Observations	65	65	65	60
R-squared	0.10	0.16	0.12	0.19
<i>Panel B: Solely Profit-driven Startup Founders (Replication Experiment)</i>				
Treatment1 (Gender)	0.12 (0.15)	0.18 (0.16)	0.41 (0.52)	1.04 (0.69)
Treatment2 (ESG)	0.26* (0.14)	0.32** (0.14)	1.22** (0.56)	2.16** (0.77)
Reliable Algorithm	0.00* (0.00)	0.01** (0.00)	0.02** (0.01)	0.05** (0.02)
Control	No	Yes	No	Yes
Observations	49	49	49	48
R-squared	0.11	0.25	0.13	0.35

Table A12: Willingness to Pay Based on Discrete Choice Model (Payment Game)

This table estimates startup founders' additional willingness to pay for extra ESG investors' information based on a discrete choice model. Panel A includes samples from the main experiment, while Panel B includes samples from the replication experiment. 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. Control variables include the startup founder's 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. $*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

Dependent Variable:	1{Pay for Recommendation List}	
	(1)	(2)
<i>Panel A. Sample from the Main Experiment</i>		
Treatment1 (Gender)	0.30 (0.25)	0.27 (0.28)
Treatment2 (ESG)	0.56** (0.25)	0.71** (0.31)
Price	-0.00 (0.01)	-0.01 (0.01)
Reliable Algorithm	0.02*** (0.00)	0.03*** (0.01)
Control	No	Yes
Observations	409	409
<i>Panel B. Sample from the Replication Experiment</i>		
Treatment1 (Gender)	0.55 (0.88)	0.33 (1.03)
Treatment2 (ESG)	2.12** (0.91)	2.33** (0.93)
Price	-0.04 (0.02)	-0.04 (0.02)
Reliable Algorithm	0.04** (0.02)	0.05** (0.02)
Control	No	Yes
Observations	65	60

Table A13: Correlations Between Attitudes towards ESG VCs and ESG Donation Behaviors

This table presents regression results exploring the relationship between startup founders’ attitudes towards VCs’ ESG characteristics and their anonymous donation behaviors in the donation game. The sample includes participants from both the main experiment and the replication experiment. The dependent variable $\mathbf{1}\{\text{Donate to ESG NGO}\}$ is an indicator of whether founders donate to ESG NGOs. In Panel A, “Attitude towards ESG VCs” is the coefficients β_{4i} of the following regression, which uses each founder i ’s contact interest ratings Q_4 for VC profile j : $Q_{4ij} = \beta_{0i} + \beta_{1i}\text{Environmental VC}_{ij} + \beta_{2i}\text{Social VC}_{ij} + \beta_{3i}\text{Governance VC}_{ij} + \beta_{4i}\text{ESG VC}_{ij} + \epsilon_{ij}$. It stands for the effect of “ESG VCs” on the startup founder’s contact interest ratings (i.e., Q_4). In Panel B, “Attitude towards Combined ESG VCs” is the coefficients β_{1i} of the following regression: $Q_{4ij} = \beta_{0i} + \beta_{1i}\text{Combined ESG VC}_{ij} + \epsilon_{ij}$ where “Combined ESG VC” equals one if the VC aims for E, S, G, or ESG, and zero if the VC is solely profit-driven. In Panel A, $\mathbf{1}(\text{Prefer ESG VCs})$ equals one if the startup founder’s “Attitude towards ESG VCs” is above the median of the corresponding distribution of the sample’s attitudes, and zero otherwise. In Panel B, $\mathbf{1}(\text{Prefer Combined ESG VCs})$ equals one if the startup founder’s “Attitude towards Combined ESG VCs” is above the median of the corresponding distribution of the sample’s attitudes, and zero otherwise. OLS regressions are used in Columns (1) and (3), and Probit regressions are used in Columns (2) and (4). R-squared reports R-squared for OLS regressions and Pseudo R2 for Probit regressions. Standard errors in parentheses are robust standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	$\mathbf{1}\{\text{Donate to ESG NGO}\}$			
	OLS (1)	Probit (2)	OLS (3)	Probit (4)
<i>Panel A. Only ESG VCs</i>				
Attitude towards ESG VCs	0.002** (0.001)	0.010** (0.005)		
$\mathbf{1}(\text{Prefer ESG VCs})$			0.084*** (0.031)	0.407*** (0.150)
Observations	474	474	474	474
R-squared	0.014	0.016	0.016	0.021
<i>Panel B. Combine E, S, and G Together</i>				
Attitude towards Combined ESG VCs	0.003* (0.001)	0.010* (0.006)		
$\mathbf{1}(\text{Prefer Combined ESG VCs})$			0.065** (0.031)	0.312** (0.148)
Observations	474	474	474	474
R-squared	0.012	0.013	0.009	0.012

Table A14: Correlations Between Attitudes towards ESG VCs and Signaling Propensity

This table presents regression results exploring the relationship between startup founders' attitudes towards investors' ESG characteristics and their propensity to discuss their fundraising strategies with friends. The sample includes participants from both the main experiment and the replication experiment. The dependent variable $\mathbf{1}\{\text{More Likely to Signal to Friends}\}$ is an indicator that equals one if the founder's signaling strength is greater than or equal to the sample's median level of signaling. In Panel A, "Attitude towards ESG VCs" is the coefficients β_{4i} of the following regression, which uses each founder i 's contact interest ratings Q_4 for VC profile j : $Q_{4ij} = \beta_{0i} + \beta_{1i}\text{Environmental VC}_{ij} + \beta_{2i}\text{Social VC}_{ij} + \beta_{3i}\text{Governance VC}_{ij} + \beta_{4i}\text{ESG VC}_{ij} + \epsilon_{ij}$. It stands for the effect of "ESG VC" on the startup founder's contact interest ratings (i.e., Q_4). In Panel B, "Attitude towards Combined ESG VCs" is the coefficients β_{1i} of the following regression: $Q_{4ij} = \beta_{0i} + \beta_{1i}\text{Combined ESG VC}_{ij} + \epsilon_{ij}$ where "Combined ESG VC" equals one if the VC aims for E, S, G, or ESG, and zero if the VC is solely profit-driven. In Panel A, $\mathbf{1}(\text{Prefer ESG VCs})$ equals one if the startup founder's "Attitude towards ESG VCs" is above the median of the corresponding distribution of the sample's attitudes, and zero otherwise. In Panel B, $\mathbf{1}(\text{Prefer Combined ESG VCs})$ equals one if the startup founder's "Attitude towards Combined ESG VCs" is above the median of the corresponding distribution of the sample's attitudes, and zero otherwise. OLS regressions are used in Columns (1) and (3), and Probit regressions are used in Columns (2) and (4). R-squared reports R-squared for OLS regressions and Pseudo R2 for Probit regressions. Standard errors in parentheses are robust standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	$\mathbf{1}\{\text{More Likely to Signal to Friends}\}$			
	OLS (1)	Probit (2)	OLS (3)	Probit (4)
<i>Panel A. Only ESG VCs</i>				
Attitude towards ESG VCs	-0.001 (0.001)	-0.004 (0.003)		
$\mathbf{1}(\text{Prefer ESG VCs})$			0.034 (0.046)	0.085 (0.115)
Observations	474	474	474	474
R-squared	0.002	0.002	0.001	0.001
<i>Panel B. Combine E, S, and G Together</i>				
Attitude towards Combined ESG VCs	-0.001 (0.002)	-0.003 (0.004)		
$\mathbf{1}(\text{Prefer Combined ESG VCs})$			-0.016 (0.046)	-0.041 (0.115)
Observations	474	474	474	474
R-squared	0.001	0.000	0.001	0.000

Table A15: Heterogeneous Effects Based on Startups' E and S Missions

This table examines the investor evaluations from startups that mainly aim for environmental impact and social impact, respectively. In Panel A, the dependent variable is the startup founder's contact interest ratings (i.e., Q_4) in Columns (1) and (2), and is the intended fundraising amount (i.e., Q_3) in Columns (3) and (4). In Panel B, the dependent variable is the startup founder's profitability ratings (i.e., Q_1) in Columns (1) and (2), and is the availability ratings (i.e., Q_2) in Columns (3) and (4). In both Panels, Columns (1) and (3) focus on evaluations from "E-startups" which mainly aim for environmental impact. As startups' "environmental missions" are not directly observable in the experiment, this paper categorizes startups as "E-startups" based on the following criteria: 1) startups that claim to aim for ESG impact but not social impact, such as gender diversity issues; or 2) startups in clean technology or energy industry; or 3) startups' business models can generate positive environmental impact if the founders' identity is observable. In both Panels, Columns (2) and (4) focus on evaluations from "S-startups" which claim that they care about social impact, such as diversity issues. "E Fund" and "S Fund" are indicators that equal one if the investor works in an ESG VC fund that only focuses on positive "environmental" impact and only focuses on positive "social" impact, respectively. All regressions add subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Panel A: Decision Outcomes				
Dependent Variable:	Contact Interest Ratings Q_4		Intended Fundraising Amount Q_3	
	E Startups (1)	S Startups (2)	E Startups (3)	S Startups (4)
E Fund	1.78 (1.65)	-2.85** (1.25)	1.02 (2.43)	-1.48 (1.86)
S Fund	2.05 (1.60)	3.53*** (1.15)	0.60 (1.94)	2.10 (1.59)
Subject FE	Yes	Yes	Yes	Yes
Observations	2,020	4,840	2,020	4,840
R-squared	0.48	0.44	0.68	0.61

Panel B: Mechanism Outcomes				
Dependent Variable:	Profitability Ratings Q_1		Availability Ratings Q_2	
	E Startups (1)	S Startups (2)	E Startups (3)	S Startups (4)
E Fund	0.15 (1.70)	-2.27* (1.15)	1.20 (1.60)	-2.69** (1.12)
S Fund	0.80 (1.39)	1.94* (1.01)	2.03 (1.34)	2.90*** (1.02)
Subject FE	Yes	Yes	Yes	Yes
Observations	2,020	4,840	2,020	4,840
R-squared	0.50	0.44	0.56	0.49

Table A16: Correlations Between Reported Startup Missions and Donation Behaviors

This table examines the correlations between self-reported missions of startup founders and their donation behaviors. The sample includes participants from both the main experiment and the replication experiment. Panel A checks the correlations between startups' ESG missions and founders' donations to ESG-related NGOs. Panel B checks the correlations between startups' Diversity missions and founders' donations to gender-related NGOs. Columns (1) and (3) report OLS regression results. Columns (2) and (4) report Probit regression results. $\mathbf{1}\{\text{ESG Mission}\}$ is equal to one if the startup aims for a positive ESG impact, and zero otherwise. $\mathbf{1}\{\text{Diversity Mission}\}$ is equal to one if the startup promotes diversity in the entrepreneurial community, and zero otherwise. $\mathbf{1}\{\text{Donate to ESG NGOs}\}$ and $\mathbf{1}\{\text{Donate to Gender-related NGOs}\}$ are one if the startup founder donates to ESG NGOs and gender-related NGOs, respectively, and zero otherwise. $\mathbf{1}\{\text{Donate Above Medium Level}\}$ is equal to one if the startup founder's donation to ESG-related (or gender-related) NGOs is above the median level compared to all participants in Panel A (B), and zero otherwise. Control variables include startups' industry background and stage information. Standard errors in parentheses are robust standard errors. R-squared reports R^2 for OLS models and Pseudo R^2 for probit models. $***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Panel A: ESG Missions and Donation to ESG-related NGOs				
Dependent Variable:	$\mathbf{1}\{\text{Donate to ESG NGOs}\}$		$\mathbf{1}\{\text{Donate Above Medium Level}\}$	
	OLS (1)	Probit (2)	OLS (3)	Probit (4)
$\mathbf{1}\{\text{ESG Mission}\}$	0.21*** (0.05)	0.21*** (0.05)	0.76*** (0.15)	0.72*** (0.16)
Control	No	Yes	No	Yes
Observations	474	474	474	474
R-squared	0.05	0.06	0.07	0.12

Panel B: Diversity Missions and Donation to Gender-related NGOs				
Dependent Variable:	$\mathbf{1}\{\text{Donate to Gender-related NGOs}\}$		$\mathbf{1}\{\text{Donate Above Medium Level}\}$	
	OLS (1)	Probit (2)	OLS (3)	Probit (4)
$\mathbf{1}\{\text{Diversity Mission}\}$	0.15*** (0.05)	0.15*** (0.05)	0.45*** (0.15)	0.45*** (0.15)
Control	No	Yes	No	Yes
Observations	474	474	474	474
R-squared	0.02	0.06	0.03	0.05

Table A17: ESG Attitudes of Startup Founders Across Industries

This table describes startup founders' ESG attitudes across industries. Coefficients of "ESG VC", Coefficients of "Environmental VC", Coefficients of "Social VCs", and Coefficients of "Governance VC" are calculated based on contact interest ratings Q_4 . They are the coefficients β_{1i} , β_{2i} , β_{3i} , and β_{4i} of the following regression, which uses startup founder i 's contact interest ratings to VC j : $Q_{4ij} = \beta_{0i} + \beta_{1i}\text{ESG VC}_{ij} + \beta_{2i}\text{Environmental VC}_{ij} + \beta_{3i}\text{Social VC}_{ij} + \beta_{4i}\text{Governance VC}_{ij} + \alpha_i + \epsilon_{ij}$. They stand for the effects of "ESG VC", "Environmental VC", "Social VC", and "Governance VC" on startup founders' contact interest ratings (i.e., Q_4). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Rank	Industry	Coefficients of "ESG VC"	Rank	Industry	Coefficients of "Environmental VC"
1	Education	10.39***	1	Clean Technology	2.72
2	Clean Technology	4.47**	2	Life Sciences	-0.31
3	Others	1.99	3	Information Technology	-0.92
4	Life Sciences	0.97	4	Finance	-2.66
5	Information Technology	0.89	5	Others	-2.84
6	Energy	-1.35	6	Healthcare	-2.88
7	Finance	-1.45	7	Manufacture & Construction	-2.89
8	Manufacture & Construction	-2.2	8	Energy	-3.02
9	Media	-3.21	9	Education	-3.11
10	Consumers	-3.42**	10	Media	-4.98
11	Healthcare	-3.84	11	Consumers	-5.25**
12	Transportation & Logistics	-4.5	12	Transportation & Logistics	-10.28

Rank	Industry	Coefficients of "Social VC"	Rank	Industry	Coefficients of "Governance VC"
1	Education	14.24**	1	Clean Technology	3.58
2	Clean Technology	7.72*	2	Healthcare	3.44
3	Energy	6.38**	3	Others	2.19
4	Others	4.94*	4	Information Technology	1.51
5	Information Technology	2.79*	5	Life Sciences	1.06
6	Consumers	1.67	6	Education	-0.08
7	Manufacture & Construction	1.18	7	Finance	-0.64
8	Finance	0.62	8	Consumers	-1.09
9	Healthcare	0.58	9	Manufacture & Construction	-3.73
10	Media	-1.69	10	Energy	-4.87*
11	Transportation & Logistics	-1.8	11	Transportation & Logistics	-8.39
12	Life Sciences	-4.25	12	Media	-9.35*

Table A18: Evaluations From Female Startup Founders and Male Startup Founders

This table tests whether female startup founders and male startup founders evaluate VCs' ESG characteristics differently. The sample includes evaluations of founders from both the main experiment and the replication experiment. The dependent variable is startup founders' profitability ratings (i.e., Q_1) in Column (1), availability ratings (i.e., Q_2) in Column (2), informativeness ratings (i.e., Q_5) in Column (3), fundraising plan (i.e., Q_3 relative amount of funding to be raised) in Columns (4) and (5), and contact interest ratings (i.e., Q_4) in Columns (6) and (7). "Female Founder" is an indicate that equals one if the startup founder is female, and zero otherwise. "ESG VC", "Environmental VC", "Social VC", and "Governance VC" are the corresponding indicators. All regressions add subject fixed effects. Standard errors in parentheses are clustered at the startup founder level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Dependent Variable	Q1 Profitability (1)	Q2 Availability (2)	Q5 Informativeness (3)	Q3 Fundraising Plan (4)	Q3 Fundraising Plan (5)	Q4 Contact (6)	Q4 Contact (7)
ESG VC	-2.47** (0.95)	-2.66** (1.00)	-0.46 (0.79)	-3.32** (1.31)	-0.86 (0.88)	-2.43** (1.02)	-0.31 (0.44)
Environmental VC	-4.06*** (1.19)	-4.14*** (1.17)	-1.80* (0.96)	-3.15* (1.68)	1.11 (1.12)	-4.07*** (1.20)	-0.39 (0.53)
Social VC	-3.26** (1.07)	-2.96** (1.01)	-1.16 (0.89)	-3.76** (1.36)	-0.60 (1.04)	-2.62** (1.09)	0.09 (0.57)
Governance VC	-4.47*** (1.19)	-5.85*** (1.19)	-1.85* (0.98)	-4.98** (1.63)	0.25 (1.13)	-5.45*** (1.23)	-0.88* (0.52)
ESG VC × Female Founder	1.62 (1.54)	2.19 (1.56)	0.78 (1.22)	3.74 (2.31)	1.78 (1.58)	1.87 (1.71)	0.15 (0.74)
Environmental VC × Female Founder	-0.79 (1.90)	-1.35 (1.83)	0.24 (1.43)	-3.03 (2.62)	-2.14 (1.78)	-1.69 (2.06)	-0.90 (0.97)
Social VC × Female Founder	5.98*** (1.66)	6.31*** (1.69)	3.38** (1.40)	7.10** (2.41)	0.50 (1.66)	6.42** (1.96)	0.73 (0.97)
Governance VC × Female Founder	5.64** (1.82)	8.92*** (1.82)	3.14** (1.54)	6.37** (2.72)	-1.17 (1.84)	8.78*** (2.00)	2.14** (0.89)
Q1					0.45*** (0.04)		0.34*** (0.02)
Q2					0.45*** (0.04)		0.43*** (0.03)
Q5					0.31*** (0.04)		0.27*** (0.02)
Mean of Dep. Var.	60.96	57.00	66.13	86.48	86.48	58.45	58.45
Subject FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9480	9480	9480	9480	9480	9480	9480
R-squared	0.46	0.52	0.56	0.63	0.80	0.47	0.84

3. Derek Roberts

Investment Experience:

Years of experience: 26

Number of deals involved: 76

Education:

BA, Harvard University

MBA, University of California, Berkeley (Haas)

Entrepreneurial Experience:

Yes. Derek Roberts was a successful entrepreneur earlier on in his career, cofounding 2 successful startups.

Currently, he focuses on startup investment to promote more innovation in the world.

Fund Type:

Impact Fund

Investment Philosophy

We support companies from start-up to scale-up with a special focus on positive environmental impact.

Previous Fund Performance: Investment style:

Internal rate of return: First-time venture-(Value added strategy) concentrate towards startups with good fund, no available historical information prospects and add value to them

Fund Size (relatively large):

AUM: \$647M; Dry Powder (also known as available

capital): \$175M

Location:

U.S.

Notes:

AUM: assets under management; Dry Powder: available cash for new investments

Figure A1: Example of an Investor Profile

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

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

Probability of helping you succeed (Click on the bar)

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

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

Probability of showing interest

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

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

percentage

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

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

Probability of contact

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 Derek Roberts as a prospective collaborator?


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

Informativeness

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Figure A2: Sample Evaluation Questions of the IRR Experiment

 **NANO-SEARCH FINANCING TOOL**
Finding Investors. Your Way

9. We will provide a **lottery opportunity** and randomly pick 2 participants as the lottery winners. The lottery winners have the following two options.

Option 1: receive \$500



Option 2: receive a full investor recommendation list containing 200 most matched venture capitalists' information.


If you win the lottery, which option would you like to choose?

Note:
Your answers will not affect your chance of winning the lottery.

Option 1

Option 2

12:29  

 **NANO-SEARCH FINANCING TOOL**
Finding Investors. Your Way

9. We will provide a **lottery opportunity** and randomly pick 2 participants as the lottery winners. The lottery winners have the following two options.

Option 1: receive \$500

Option 2: receive a full investor recommendation list containing 200 most matched venture capitalists' information.

If you win the lottery, which option would you like to choose?

Note:
Your answers will not affect your chance of winning the lottery.



Option 1

10. How likely do you believe that the algorithm will recommend a satisfactory list of matched investors for you?

0 10 20 30 40 50 60 70 80 90 100

Likelihood of generating matched investors

0

12:29  

10. How likely do you believe that the algorithm will recommend a satisfactory list of matched investors for you?

0 10 20 30 40 50 60 70 80 90 100

Likelihood of generating matched investors

Figure A3: Payment Game Control Group

9. We will provide a **lottery opportunity** and randomly pick 2 participants as the lottery winners. The lottery winners have the following two options.

Option 1: receive \$500

Option 2: receive a full investor recommendation list containing 200 most matched venture capitalists' information. (To promote gender equality, we would prefer to recommend female investors conditional on the same matching quality based on your indicated beliefs.)

If you win the lottery, which option would you like to choose?

Note:

Your answers will not affect your chance of winning the lottery.

Option 1

Option 2

10. How likely do you believe that the algorithm will recommend a satisfactory list of matched investors for you?

0 10 20 30 40 50 60 70 80 90 100

Likelihood of generating matched investors

0

Next

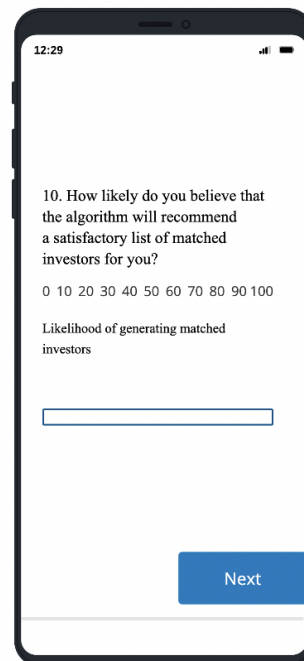
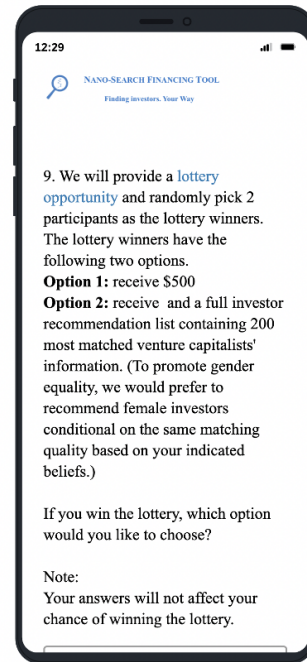


Figure A4: Payment Game Treatment Group 1

9. We will provide a **lottery opportunity** and randomly pick 2 participants as the lottery winners. The lottery winners have the following two options.

Option 1: receive \$500

Option 2: receive a full investor recommendation list containing 200 most matched venture capitalists' information. (To promote the social responsibility campaign in the entrepreneurial community, we would prefer to recommend impact investors conditional on the same matching quality based on your indicated beliefs.)

If you win the lottery, which option would you like to choose?

Note:

Your answers will not affect your chance of winning the lottery.

Option 1

Option 2

10. How likely do you believe that the algorithm will recommend a satisfactory list of matched investors for you?

0 10 20 30 40 50 60 70 80 90 100

Likelihood of generating matched investors

0

Next

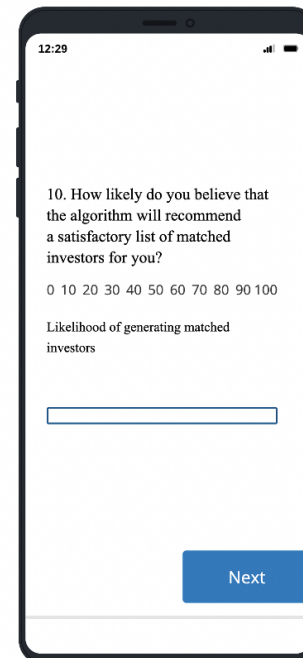
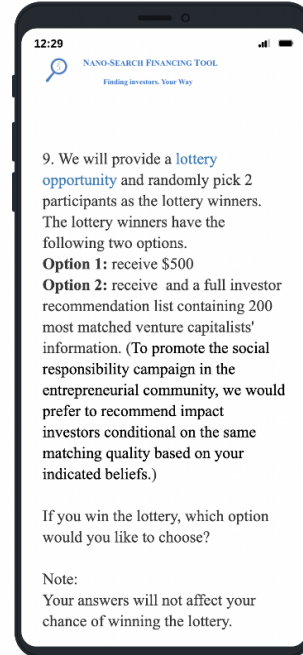


Figure A5: Payment Game Treatment Group 2

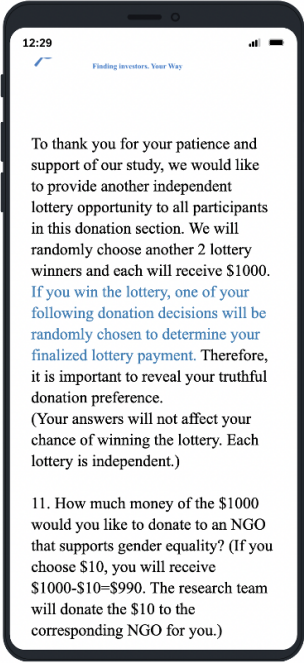


To thank you for your patience and support of our study, we would like to provide another independent lottery opportunity to all participants in this donation section. We will randomly choose another 2 lottery winners and each will receive \$1000. *If you win the lottery, one of your following donation decisions will be randomly chosen to determine your finalized lottery payment.* Therefore, it is important to reveal your truthful donation preference. (Your answers will not affect your chance of winning the lottery. Each lottery is independent.)

11. How much money of the \$1000 would you like to donate to an NGO that supports gender equality? (If you choose \$10, you will receive \$1000-\$10=\$990. The research team will donate the \$10 to the corresponding NGO for you.)

\$0	\$5	\$10	\$15	\$20	\$25	\$30	Other Amounts
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next



If you choose "Other Amounts", please indicate the detailed amount below (\$).

12. How much money of the \$1000 would you like to donate to an NGO that aims for generating positive environmental, social and governance (ESG) impact on the entrepreneurial community? (If you choose \$10, you will receive \$1000-\$10=\$990. The research team will donate the \$10 to the corresponding NGO for you.)

\$0	\$5	\$10	\$15	\$20	\$25	\$30	Other Amounts
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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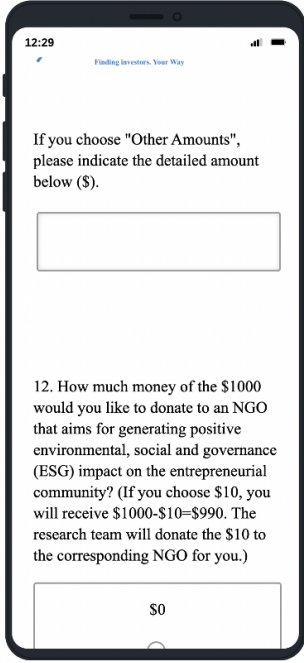
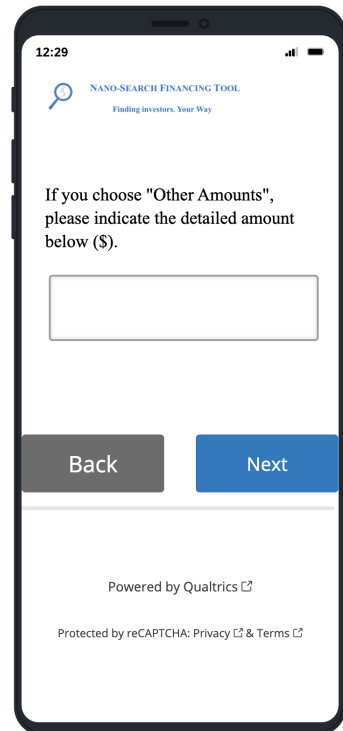


Figure A6: Social Preference Elicitation Section (Donation Game)

If you choose "Other Amounts", please indicate the detailed amount below (\$).

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Social Preference Elicitation Section (Donation Game)

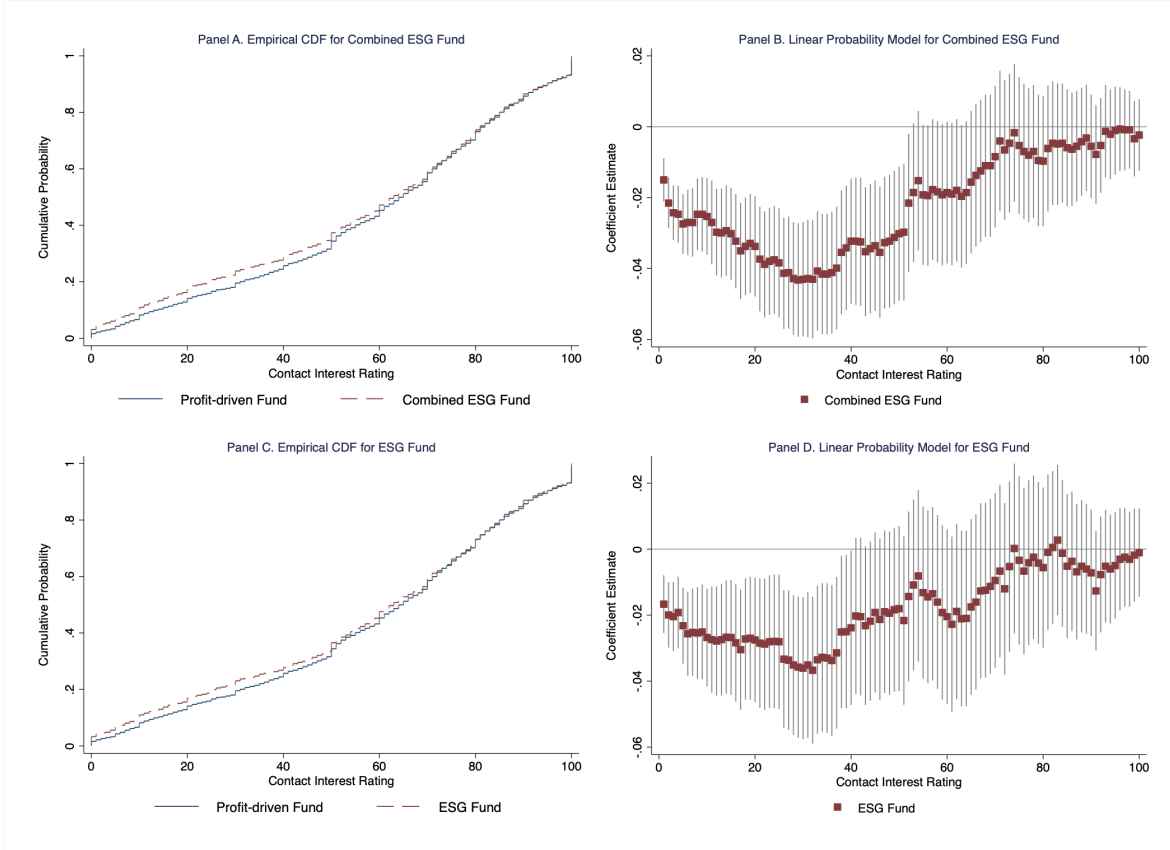


Figure A7: Distributional Effect of ESG VCs Across Founders' Contact Interest Ratings

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

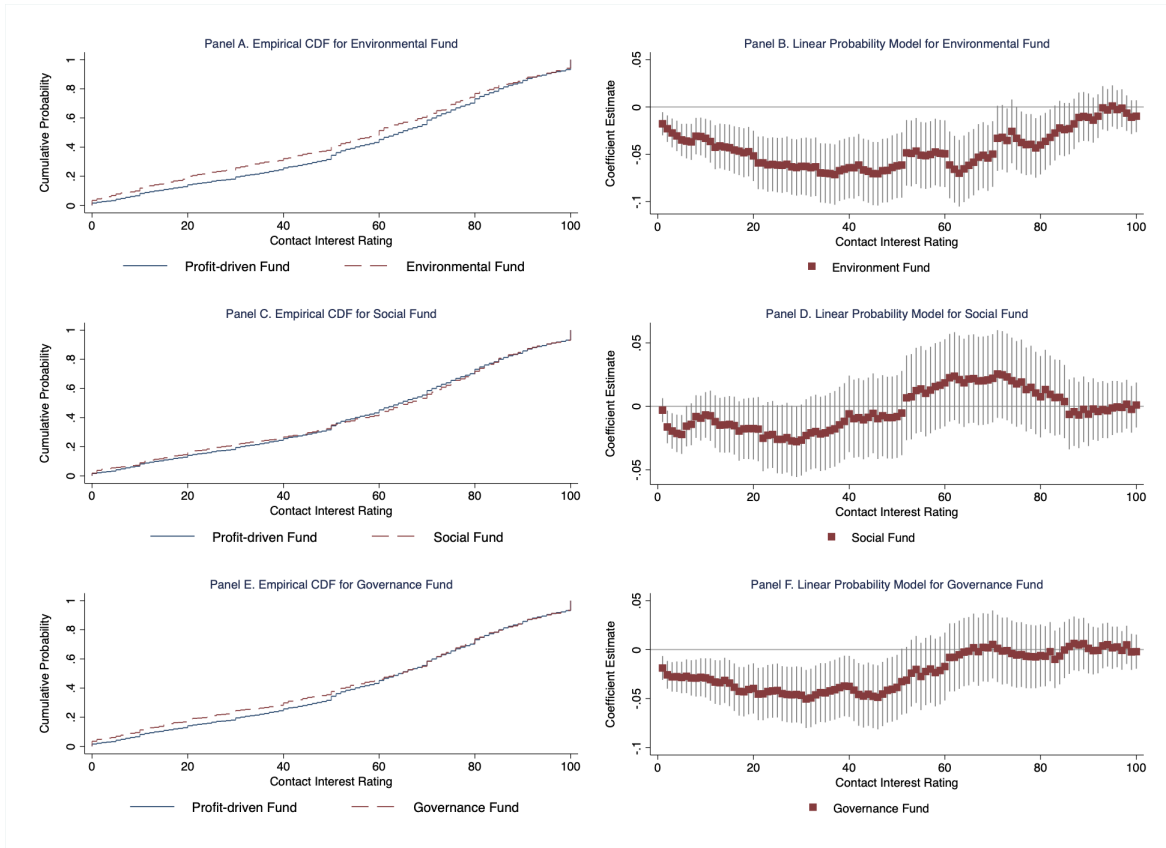


Figure A8: Distributional Effect of Different ESG VCs Across Founders' Contact Interest Ratings

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

A. Investor Matching Algorithm

Following [Kessler et al. \(2019\)](#), the machine learning-based matching algorithm uses Ridge regressions to provide each participant with the contact information (e.g., email, telephone number) and other publicly available details (including job title, VC company, etc.) of the matched investors. To ensure the quality of recommendations, the research team manually reviews the recommended investors, addressing any issues that the algorithm may overlook (e.g., whether the investor has previously invested in competitors of the startup). In the main experiment, participants received their recommendation lists within two months by assessing a shared Dropbox folder whose link is provided at the end of the experiment. To protect the confidentiality, each recommendation list is encrypted with a unique password that is automatically generated by the Qualtrics system, and its access is granted only to the corresponding participant. In the replication experiment, the research team sent each recommendation list to participants' email addresses. Additionally, to mitigate potential issues related to gender and race discrimination in the recommendation process, the algorithm does not use the demographic information about gender and race.

To be more specific, the research team first selected a subset of investors for each participant whose preferred industry and stage match the participant's backgrounds. We then ran individual ridge regression of the participants' responses to each of the five evaluation questions onto ten matching variables, including management style, purpose, IRR, AUM, dry powder, location, female fraction, investment experience, years of experience, and education. Education is a dummy variable which equals one if the investor attended a top university or graduate school. This step provided us with five sets of slope coefficients for each participant. We then plugged in the estimates to form out-of-sample forecasts for each participant using profiles of the real investors who are in the selected subset in the first step. Then for each participant, we obtained five predicted scores corresponding to the five questions in our survey for each real investor in the subset. Aggregating the scores by taking simple average, we recommend the top 10 investors with the highest scores to the participant. We adopted ridge regression since each participant only evaluates 20 profiles while the number of matching variable is large (10) compared to it. We followed [Kessler et al. \(2019\)](#) to pool all the participants together and used cross-validation to find the optimal penalty coefficient for each question. Specifically, for each question, we randomly selected 2/3 of the pooled data and

Algorithm 1: Matching Algorithm

```
for each participant do
    Find the subset of real investors that match industry and stage;
    for each evaluation question do
        Response question  $\xrightarrow{\text{ridge}}$  matching variables. (Penalty coefficient obtained by
        pooled cross-validation);
        Compute fitted value using the matching variables of the real investors in the
        subset;
    end
    Aggregate the 5 scores by simple average and obtain the top 10 investor profiles.
end
```

ran 5-fold cross-validation¹⁸ to obtain the best penalty coefficient for this question and this subset of data. We repeated this process for 1000 times, took average of the 1000 best penalty coefficients, and treated it as the optimal penalty for this question. Algorithm 1 summarizes these steps.

B. Noise Reduction Techniques

To mitigate the impact of noisy participants in the main experiment, the research team employs the following pre-registered noise reduction techniques commonly used in survey studies.

a. Attention Check Questions. The matching tool inserts one attention check question. Failing the attention check question results in immediate termination of the evaluation process by the Qualtrics system and participants become unqualified for this study.

b. Minimum Evaluation Time. Only evaluation results from participants meeting the following time criteria are included in the formal data analysis: 1) spending at least 15 minutes on the study.¹⁹ 2) spending at least 50 seconds on evaluating the first profile and 15 seconds on the second profile.

c. Reasonable Rating Variations. If participants' evaluations have almost no variations in either Q_1 (i.e., profitability ratings) or Q_4 (i.e., likelihood of contacting the investor), their re-

¹⁸ k -fold cross-validation refers to the following procedure: Randomly divide the data into k groups. For each group, treat it as the test data set and use the remaining $(k - 1)$ groups to fit the model for all candidate penalty coefficients. Then form out-of-sample predictions using the test data set and obtain the mean squared error (MSE). Repeat this procedure for all the groups and take average of the MSE for each candidate penalty coefficient. The best penalty coefficients is the one yielding the smallest average MSE.

¹⁹In a soft launch study, the research team observed that only 10% of participants spent less than 15 minutes on the study. These participants also tended to provide sloppy evaluations and preferred monetary compensation over higher-quality investor recommendation lists in the payment game. Consequently, we chose to exclude them from the formal study.

sponses are excluded from the formal data analysis. To identify such cases, the research team uses the following three measures for each participant i based on their evaluation ratings Y_{ij}^k (i.e., evaluations of the k^{th} question in the j^{th} investor 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 these three measures for subject i falls below the 5th percentile of the corresponding measures in the full sample, the evaluation results of subject i are excluded. This criterion is not applied to Q_2 (i.e., likelihood of being invested), Q_3 (i.e., amount of funding to be raised), or Q_5 (i.e., informativeness) because it is reasonable that participants provided similar evaluations for these questions. This can happen if participants find it challenging to predict investors' decisions, have a fixed funding target, or believe that each profile has provided sufficient information.

If participants' evaluation results have little variations across Q_1 , Q_2 , Q_4 , and Q_5 within the same profile, their responses are also removed. This can happen if participants provide the same rating for all the questions. To quantify this situation, 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 number of profiles with "small sample variance" is more than eight, their evaluations are excluded "Small sample variance" is defined as $Var_{ij}^* \leq 5$.

d. Reasonable Answers to Text Entry Questions. The matching tool contains several background questions that require participants to manually enter their answers (e.g., detailed industry background, general comments about the study, etc.). If participants enter irrelevant/invalid answers, their responses are also excluded from the formal data analysis. For example, if the question asks for detailed industry background information about their startups, and a participant enters "1000" or gibberish, their response is invalid and the participant is excluded from the formal sample.

e. Other Criteria. Besides the criteria mentioned above, the research team also considers the following subsidiary factors when identifying "noisy participants." These factors include i) reasonable funding amounts; ii) time spent on profile evaluations (measured by "Timing - Last Click," "Timing - Page Submit," "Duration (in seconds)"); iii) distribution of rating variations; iv) a

list of low-quality responses flagged by Qualtrics based on their designed “data scrub” algorithms.²⁰

It should be noted that these methods can’t completely eliminate all the noise, which may bias the discovered results towards null results. However, these noise reduction techniques generally work well in practice, helping to enhance the experimental power and detect invalid responses effectively. All the data filtering processes have been specified in the pre-registration plan.

C. Complementary Survey

Recruitment and Sample Selection The complementary survey was conducted between 06/2023 and 07/2023. The recruitment procedure for this survey is similar to that of the main experiment. Collaborating with the same recruitment company, the research team compensates each founder with \$20 upon survey completion. In total, 281 founders participate in the survey, and their background information is summarized in Table A19. Among these founders, 31.32% are female, and 18.51% belong to minority groups. Similar to the founders who participate in the experiments, the majority of these respondents (62.99%) are in the seed stage. In terms of political affiliation, 38.79% identify themselves as Democrats, while 45.20% are the Republicans. The recruited founders represent a wide range of industries commonly targeted by VC firms, with 12.81% in Information Technology, 25.27% in the Consumer sector, 13.88% in Clean Technology, and 4.98% in Healthcare. Furthermore, 79.72% of the founders are primarily motivated by financial gains.

Survey Design After reading the consent form, participants are asked to provide several ratings. Firstly, they need to indicate their preference for collaborating with “environmental VCs” compared to “profit-driven VCs.” The rating scale ranges from 0 to 100, with 0 indicating a preference for “working with profit-driven VCs,” 50 indicating indifference between these funds, and 100 indicating a preference for “working with environmental VCs.” Secondly, founders need to rate how they perceive collaborating with “environmental VCs” would impact their startups’ future profitability. This rating also uses a scale from 0 to 100, with 0 indicating that environmental VCs

²⁰Unreasonable funding amounts include extreme values like “25” or “8799977776555566432.” “Timing - Last Click” measures the duration from entering a profile to the last click on the profile. “Timing - Page Submit” measures the time spent on each profile until participants submit their evaluations. “Duration (in seconds)” measures the total time spent on this study.

would “decrease their future profitability,” 50 indicating “similar effects between these funds,” and 100 indicating that environmental VCs would “improve their future profitability.”

To examine what drives founders’ “profitability concerns” when considering collaboration with “environmental VCs,” founders also need to answer additional questions regarding some mechanisms. Firstly, they need to rate whether mandates imposed by “environmental VCs” are more or less costly compared to mandates from “profit-driven VCs.” This cost rating ranges from 0 to 100, with 0 indicating that environmental VCs’ mandates are more costly, 50 indicating that the mandates are equally costly between these two types of funds, and 100 indicating that environmental VCs’ mandates are less costly. Secondly, founders need to evaluate whether environmental VCs are more or less capable of helping startups achieve higher profitability. This capability rating also ranges from 0 to 100, with 0 indicating that environmental VCs are less capable, 50 indicating equal capability between these two types of investors, and 100 indicating that environmental VCs are more capable. Detailed survey questions are provided in Figure A9.

Since potential concerns about investor greenwashing might also drive lower capability ratings assigned to investors in environmental VCs, participants also need to answer an “impression” question. Based on a typical description of environmental VCs’ goals, participants are asked to assess whether these environmental VCs are generating a positive environmental impact, solely pursuing profits, or aiming for both positive environmental impact and profits. The order of each answer option is randomized to mitigate the “position effect.” This “impression” question is provided in Figure A10.

In addition to these ratings, recruited startup founders also provide their basic background information, including gender, race, entrepreneurial experience, political affiliations, industry background, whether their startups are carbon-intensive, stage background, and their startups’ goals (i.e., profit-driven startups or ESG-oriented startups). Moreover, the survey also asks founders whether factors other than those mentioned in the IRR experiment influence their fundraising decisions. This additional “factor” question is provided in Figure A11.

Empirical results Table A20 reports the summary statistics for startup founders’ contact interest ratings, profitability ratings, cost ratings, and capability ratings. Notably, all these ratings are significantly below 50, suggesting that founders prefer profit-driven VCs and perceive collabo-

ration with environmental VCs as detrimental to their future profitability. Furthermore, founders also consider environmental VCs' mandates to be more costly and view investors in environmental VCs as less capable of enhancing startup profitability. Table A21 further examines the cost ratings and capability ratings provided by founders whose profitability ratings fall below 50. Results show that their cost ratings decrease to 36.13, and their capability ratings drop to 34.54. This implies that both the perceived cost of "environmental mandates" and doubts about environmental VCs' ability to increase profitability contribute to founders' "profitability concerns."

Table A22 further examines whether concerns about VC greenwashing might explain the lower capability ratings assigned to environmental VCs. When compared to founders who perceive environmental VCs as aiming for only environmental impact or both impact and profits (i.e., impact funds), founders who perceive environmental VCs as solely pursuing profits are more likely to have "greenwashing concerns." They might question about whether these funds can generate a positive impact and walk the talk. As documented in Liang, Sun and Teo (2021), greenwashers underperform genuine ESG investors in terms of financial performance and face more agency problems. Consequently, these founders are more likely to assign lower capability ratings to environmental VCs if they mainly view environmental VCs as greenwashers. However, as shown in Columns (1)-(3), the average capability ratings of these founders are 47.25 and not significantly below 50. Moreover, the average capability ratings assigned by founders who view environmental VCs as generating a positive environmental impact are 46.03, even lower than 47.25. Thus, the complementary survey does not find evidence supporting the "greenwashing concern."

Venture capital funds that aim to generate positive environmental impact, address climate change, and tackle other environmental challenges are referred to as "environmental VC funds".

In this part, you will compare solely profit-driven VC funds and environmental VC funds.

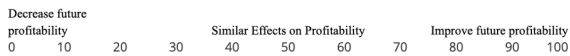
1. Compared to "profit-driven VC funds", would you prefer to collaborate with "environmental VC funds"?



Likelihood of Working with "Environmental VC Funds"



Compared with collaborating with "profit-driven VC funds", how would collaborating with "environmental VC funds" affect your startup's future profitability?



How "Environmental Funds" Affect Profitability



2. Compared to the mandates imposed by "environmental VC funds", how costly are mandates imposed by "profit-driven VC funds" to your business?



Cost of "Profit-driven Funds" Mandates



3. Compared to venture capitalists working in "profit-driven VC funds", how capable are venture capitalists working in "environmental VC funds" in supporting startups to achieve higher profitability? (please consider investors' expertise and networks when providing your evaluations.)



Ability of Investors in "Environmental Funds"



4. If a VC fund's website mentions, "We invest in breakthrough venture companies developing solutions addressing our global environmental challenges.", which of the following categories do you believe the VC fund mostly belongs to?

- The VC fund only aims for positive environmental impact
- The VC fund aims for both profits and positive environmental impact
- The VC fund only aims for profits as it might perceive startups that address environmental challenges are more profitable
- None of the above

Figure A9: Evaluation Questions of the Complementary Survey



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4. If a VC fund's website mentions, "We invest in breakthrough venture companies developing solutions addressing our global environmental challenges and generates positive environmental impact", which of the following categories do you believe the VC fund mostly belongs to?

The VC fund only aims for positive environmental impact	<input type="radio"/>
The VC fund aims for both profits and positive environmental impact	<input type="radio"/>
The VC fund only aims for profits	<input type="radio"/>
None of the above	<input type="radio"/>

Figure A10: Impression Question in the Complementary Survey



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8. In addition to a venture capitalist's likelihood of helping your startup generate higher profitability, the likelihood of investing in your startup, and your own preference, are there other factors that also influence your fundraising decisions? (If there are no other factors, please just choose "none" below).

Yes

None

If you choose "Yes", please list other factors that also influence your fundraising decisions.

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Figure A11: Factor Question in the Complementary Survey

Table A19: Summary Statistics of Startup Founders (Complementary Survey)

This table reports descriptive statistics for the 281 US startup founders who participate in the complementary survey. 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 startup founder is Asian, Hispanic, Middle Eastern, Native American, Pacific Islander, or African Americans, and zero otherwise. “Serial Founder” is equal to one if the founder is a serial startup founder, and zero otherwise. Panel A also reports participants’ educational backgrounds and political attitudes. Panel B reports the background information of participants’ startups. Founders can select multiple industries as their industry backgrounds. “Others” includes HR tech, Property tech, infrastructure, etc. Moreover, founders also report whether their startups are in a carbon-intensive industry or not. “*Stage*” reports the stage distribution of participants’ startups, where each founder can only choose one unique stage. “*Startup Goals*” provides the startups’ goals, which contain whether they aim for any financial gains, positive environmental impact, or positive social impact. Founders can choose multiple startup goals.

Panel A: Founder Demographic Information

Demographic Information	N	Fraction (%)
Female Founder	88	31.32%
Minority Founder	52	18.51%
Serial Founder	117	41.64%
<i>Educational Background</i>		
High school graduate, diploma or the equivalent	51	18.15%
Bachelor’s degree	60	21.35%
Master’s degree	98	34.88%
Doctorate degree	23	8.19%
Professional degree	34	12.10%
Other	15	5.34%
<i>Political Attitudes</i>		
Democratic	109	38.79%
Republican	127	45.20%
Other Party	26	9.25%
I do not want to say	19	6.76%

Panel B: Startup Background Information

Detailed Category	N	Fraction (%)
Information technology	36	12.81%
Consumers	71	25.27%
Healthcare	17	4.98%
Clean technology	6	2.14%
Finance	39	13.88%
Media	21	7.47%
Energy	13	4.63%
Education	12	4.27%
Life sciences	16	5.69%

Continued

Detailed Category	N	Fraction (%)
Transportation & Logistics	13	4.63%
Manufacture & Construction	49	17.44%
Others	26	9.25%
Carbon Intensive Industry	103	36.65%
Not Carbon Intensive Industry	143	50.89%
Not Sure about Carbon Intensity	35	12.46%
<i>Stage</i>		
Seed Stage (No Revenue)	18	6.41%
Seed Stage (Positive Revenue)	159	56.58%
Series A	46	16.37%
Series B	33	11.74%
Series C or later stages	19	6.76%
Others	6	2.14%
<i>Startup Goals</i>		
Financial Gains	224	79.72%
Promote Positive Environmental Impact	222	79.00%
Promote Positive Social Impact	202	71.89%

Table A20: Summary Statistics of Startup Founders' Ratings

This table presents summary statistics for startup founders' contact interest ratings, profitability ratings, cost ratings, and capability ratings. Column (2) reports the mean values of these ratings, Column (3) reports t-statistics that test whether their ratings are statistically different from 50 (i.e., the neutral point between profit-driven VCs and environmental VCs). Column (4) reports the corresponding p-values based on these t-statistics.

	Obs	Mean	t-stat	p-value	S.D.	Min	Max	Percentile		
								10	50	90
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Contact Interest Ratings	281	47.23	-2.04	0.02	22.73	0	100	17	48	80
Profitability Ratings	281	46.41	-2.71	0.00	22.22	0	96	17	49	77
Cost Ratings	281	44.35	-4.59	0.00	20.66	0	93	19	44	72
Capability Ratings	281	46.42	-2.79	0.00	21.54	2	96	18	48	75

Table A21: Reasons Explaining Founders' "Profitability Concerns"

This table tests whether founder who prefer profit-driven VCs perceive environmental mandates as more costly to their startups and consider environmental VCs to be less capable of improving their startups' profitability. In Columns (1) - (3), "Founders Preferring Profit-driven VCs" are defined as founders whose contact interest ratings are below 50 (i.e., indicating a preference for profit-driven VCs over environmental VCs). In Columns (4) - (6), "Founders Preferring Profit-driven VCs" are defined as founders whose profitability ratings fall below 50 (indicating an expectation that collaborating with environmental VCs will reduce startup profitability compared to collaborating with profit-driven VCs). Columns (1) and (4) report the mean of cost ratings and capability ratings provided by founders who prefer profit-driven VCs. Columns (2) and (5) report the t-statistics testing whether cost ratings and capability ratings are statistically different from 50 (i.e., the neutral point between profit-driven VCs and environmental VCs). Columns (3) and (6) report the corresponding p-values based on these t-statistics. *** p<0.01, ** p<0.05, * p<0.1 if the mean is statistically different from 50.

	Founders Preferring Profit-driven VCs (Collaboration Interest Ratings < 50)			Founders Preferring Profit-driven VCs (Profitability Ratings < 50)		
	Mean (1)	t-stat (2)	p-value (3)	Mean (4)	t-stat (5)	p-value (6)
Cost Ratings	36.13***	-10.50	0.00	33.36***	-15.62	0.00
Capability Ratings	35.98***	-9.80	0.00	34.54***	-10.18	0.00
Observation	149			146		

Table A22: Does Concerns About Greenwashing Explain the Lower Capability Ratings?

This table tests whether concerns about greenwashing explain the lower capability ratings assigned to environmental VCs. Columns (1) - (3) test capability ratings from founders who perceive environmental VCs as solely pursuing profits. Columns (4) - (6) test capability ratings from founders who perceive environmental VCs as either aiming only for a positive environmental impact or aiming for both impact and profits (i.e., impact funds). Columns (7) - (9) test capability ratings from founders who select “None of the Above.” Columns (1), (4), and (7) report the mean of capability ratings. Columns (2), (5), and (8) report the t-statistics testing whether capability ratings are statistically different from 50 (i.e., the neutral point between profit-driven VCs and environmental VCs). Columns (3), (6) and (9) report the corresponding p-values based on these t-statistics. *** p<0.01, ** p<0.05, * p<0.1 if the mean is statistically different from 50.

	Solely Aiming for Profits			Aiming for Impact or Both			None of the Above		
	Mean	t-stat	p-value	Mean	t-stat	p-value	Mean	t-stat	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Capability Ratings	47.25	-0.86	0.20	46.03***	-2.62	0.00	47.08	-0.82	0.21
Observation	59			186			36		