

Discrimination in the Venture Capital Industry: Evidence from Two Randomized Controlled Trials*

Ye Zhang [†]

October 25, 2020

Abstract

This paper examines discrimination based on startup founders' gender, race, and age by early-stage investors, using two randomized controlled trials with real venture capitalists. The first experiment invites U.S. investors to evaluate multiple randomly generated startup profiles, which they know to be hypothetical, in order to be matched with real, high-quality startups from collaborating incubators. Investors can also donate money to randomly displayed startup teams to show their anonymous support during the COVID-19 pandemic. The second experiment sends hypothetical pitch emails with randomized startups' information to global venture capitalists and compares their email responses by utilizing a new email technology that tracks investors' detailed information acquisition behaviors. I find three main results: (i) Investors are biased towards female, Asian, and older founders in lower-stake situations; while biased against female, Asian, and older founders in higher-stake situations. (ii) These two experiments identify multiple coexisting sources of bias. Specifically, statistical discrimination is an important reason for "anti-minority" investors' contact and investment decisions, which was proved by a newly developed consistent decision-based heterogeneous effect estimator. (iii) There was a temporary, stronger bias against Asian founders during the COVID-19 outbreak, which started to fade in April 2020.

Key Words: Venture Capital, Entrepreneurship, Discrimination, Field Experiments

JEL Classification: C93, D83, G24, G40, J15, J16, J71

*I would like to express my deepest appreciation to Jack Willis, Harrison Hong, and Wei Jiang for their guidance, support, and profound belief in the value of my work. I am also grateful to Donald Green, Sandra Black, Mark Dean, Alessandra Casella, Matthieu Gomez, Jose Scheinkman, Eric Verhoogen, Jushan Bai, Junlong Feng, Michael Best, Bentley MacLeod, Bernard Salenie, Corinne Low, Shi Gu, Andrew Prat, Xavier Giroud, Johannes Stroebel, Olivier Toubia, and Patrick Bolton for their valuable comments. I thank the participants at the PhD Colloquiums at Columbia University and the investors who participated in these experiments. They provided extremely valuable feedback on how to improve the experimental methods. Special thanks go to Corinne Low, Colin Sullivan, and Judd Kessler for sharing their IRR Qualtrics code package. This project was supported by PER funding from the Columbia University Economics Department, by the Columbia University Eugene Lung Entrepreneurship Center Fellowship, and by the Columbia CELSS Seed Grant. The project is registered at AEA RCT Registry (AEARCTR-0004982). All errors are my own. Please email the author for code examples.

[†]Columbia University Economics Department. Email: yz2865@columbia.edu.