Daojing Zhai
165 Whitney Avenue
New Haven, CT 06510
daojing.zhai@yale.edu
(203)-390-8072

January 28, 2023

Dear Committee,

I am writing to apply for the NBER Entrepreneurship Research Boot Camp in July 2023. I am currently a third-year Ph.D. student in financial economics at the Yale School of Management.

With an interest in the intersection of entrepreneurship finance, innovation, and economic growth, the boot camp is a great opportunity for me to gain broader exposure to entrepreneurship economics and form new research ideas at the intersection of these topics. I describe my research interest and motivation for the boot camp in detail in the essay attached.

I enclose in this application the following materials:

1. A current CV
2. A list of current and completed Ph.D. courses
3. An essay describing my research and reasons for wanting to attend the boot camp

Moreover, you should be receiving a recommendation letter for me directly from Song Ma, Associate Professor of Finance at Yale School of Management (song.ma@yale.edu).

Thank you for your consideration.

Sincerely,

Daojing Zhai

Daojing Zhai

Yale School of Management
165 Whiteney Avenue, Ph.D. Suite
New Haven, CT 06511

daojing.zhai@yale.edu
http://daojingzhai.github.io
Phone: (203) 390-8072

Education

Yale University, New Haven, CT, USA
Ph.D. Student in Financial Economics — 2020 to Present

Nanjing University, Nanjing, Jiangsu, China
B.Sc. in Physics, with Highest Honor — 2015 to 2019
Visiting Student at UC Berkeley Physics (fall 2017), Northwestern Kellogg (fall 2018)

Research Interests

Entrepreneurship Finance and Innovation; Corporate Finance Theory; Institutional Investor in Real Estate Market

Research

Works in Progress

Institutional Landlords in the Single-Family Rental Market: Market Power and Welfare Effects
with Zhichun Wang (2023)

Publication on Applied Physics

Daojing Zhai, Rui Zhu, Yogesh Jaluria and Wei Jiang, "Analysis of silicon channel waveguide thermos-optic switches by the image charge method", *IEEE Photon. Technol. Lett*, vol. 31, no. 8, pp 635-638, April 2019

Teaching Experience

Yale University (Teaching Assistant)
Financial Economics I: Stefano Giglio (PhD, Fall 2022)
Corporate Finance: Kelly Shue (Law J.D., Spring 2023)
Financial Markets and Macroeconomic Policy: Alp Simsek (EMBA, Summer 2022)
Capital Markets: Gary Gorton (MBA, Spring 2022)
The Digitalization of Money: Gary Gorton (MBA, Fall 2021)

Awards, Fellowships and Grants

Graduate Student Fellowship, Yale University — 2020 to Present
China National Scholarship, Ministry of Education of the People's Republic of China — 2017

Research Grant (¥8,000), Ministry of Education of the People's Republic of China 2017 to 2018
National College Students' Innovation and Entrepreneurship Training Program
Academic Excellent Scholarship (3x), Nanjing University 2016 to 2018

Previous Research Experience

Research Assistant to Song Ma 2022
Research Associate at Chinese University of Hong Kong, Shenzhen, School of Management and Economics
Supervisors: Wei Xiong and Markus Brunnermeier 2019 to 2020
Research Assistant to Zhengyang Jiang and Konstantin Milbradt 2018

Miscellaneous

Organizer: Yale Student Finance Breakfast (2022 to 2023)
Hobbies and Activities: Soccer, Cycling, Hiking

Updated January 2023

List of current and completed Ph.D. courses

Finance Courses at *Yale School of Management*

Course No.	Course Title	Instructor(s)	Final Grade
MGMT 737	Applied Empirical Method	Paul Goldsmith-Pinkham	H
MGMT 740	Financial Economics I	John Ingersoll Stefano Giglio	H
MGMT 749	Financial Econometrics	Bryan Kelly	H
MGMT 744	Household Finance	James Choi	HP
MGMT 745	Behavior Finance	Nick Barberis	H
MGMT 746	Financial Crisis	Gary Gorton	H
MGMT 762	Macro Finance	Alp Simsek	H
MGMT 741	Financial Economics of Climate and Sustainability	Stefano Giglio	Ongoing

Economics Courses at *Yale Department of Economics*

Course No.	Course Title	Instructor(s)	Final Grade
Econ 500	General Economic Theory: Microeconomics	Larry Samuelson Johannes Horner	HP
Econ 501	General Economic Theory: Microeconomics	Johannes Horner Ryota Lijima	HP
Econ 510	General Economic Theory: Macroeconomics	Fabrizio Zilibotti Zhen Huo	HP
Econ 511	General Economic Theory: Macroeconomics	Giuseppe Moscarini	HP
Econ 525	Advanced Macroeconomics I	Zhen Huo George-Marios Angeletos	H
Econ 531	Mathematical Economics II	Eduardo Davila	H
Econ 550	Econometrics I	Donald Andrews	H
Econ 551	Econometrics II	Timothy Armstrong	H
Econ 724	International Finance	Costas Arkolakis Ana Cecilia Fieler	H
Econ 553	Time Series Econometrics	Timothy Christensen	Audit
Econ 600	Industrial Organization I	Philip Haile Mitsuru Igami	Audit

Final Grade: Honor (H), High Pass (HP), Pass (P), Audit

Statement of Purpose

As a third-year finance Ph.D. student, my research interests lie in the intersection of entrepreneurship finance, innovation, and economic growth. The desire to gain broader exposure to entrepreneurship research and form new research ideas motivates me to apply to the NBER Entrepreneurship Research Boot Camp.

I was fortunate to gain my first exposure to the economics of entrepreneurship and innovation when working as a research assistant for Professor Song Ma. I was immediately attracted by this fascinating interdisciplinary area. Recent decades have witnessed entrepreneurship as a huge driver for productivity growth. This research area tends to uncover how people and capital combine to innovation activities and ultimately contribute to productivity and economic growth. The micro-level studies investigate the dynamics of firm creation and the factors that influence it, such as finance, labor, and strategy. At the macro level, the studies inspect the specific role of entrepreneur and entrepreneurship finance in productivity and growth. Besides, the studies have rich policy implications for start-ups and innovation activities.

I am particularly interested in the impact of financial markets on innovation activities, especially how financial markets influence the *direction*, *diversity*, and *distribution* of innovation activities. On the one hand, the preference of investors determines the capital allocation across projects, while the flaw of the financial market due to friction and irrationality could lead to suboptimal capital allocation. For example, capital misallocations tilt innovation activities towards a limited set of industries or directions that cater to specific demands. Considering that a small group of financial sectors (e.g., venture capital) play increasing roles in incubating ideas in the essential early stage, decisions of those sectors could shape the direction and diversity of innovation activity profoundly. On the other hand, innovation activities normally require continued funding and hence are sensitive to the dynamics of the financial environment. The financial cycle plays an important role in the distribution (e.g., innovation clusters) and quality of innovation activities (e.g., quality improvements or technological revolutions).

Recent decades have witnessed a sharp decline in firms going public and the rise of private equity in newly public firms. I am interested in the role of private and public markets as well as their interactions in this trend. Firms and investors make dual choices across private and public markets. And private and public markets interacted closely

with competition and complementarity. In my future research, I am very interested in studying the market frictions, welfare effects, and regulations in the world of more active privately held firms.

The NBER Entrepreneurship Research Boot Camp provides a great opportunity for students to learn about the foundational ideas, institutions, empirical evidence, and frontier questions in entrepreneurship research. First, it is a great opportunity to gain insights and obtain a broad view of this area from experts in different disciplines, such as entrepreneurship finance, innovation, macro labor, and public finance. Second, the boot camp provides young students a great chance to connect with other students with similar interests in their early career stages. I look forward to learning from students from other institutions with heterogeneous backgrounds. And I believe the boot camp is a great opportunity for me to generate new research ideas at the intersection of entrepreneurship finance, innovation, and economic growth.

Yale SCHOOL OF MANAGEMENT

SONG MA
Associate Professor of Finance

PO Box 208200
New Haven CT 06520-8200
T 203 436-4687
song.ma@yale.edu
som.yale.edu/ma

courier
165 Whitney Avenue, Room 4524
New Haven CT 06511

Re: Recommendation Letter for Daojing Zhai

Dear David and the Admissions Committee,

I am writing to recommend Daojing Zhai for the NBER Entrepreneurship Research Boot Camp. Daojing is a 3rd-year PhD student in finance from Yale School of Management and has strong interests in entrepreneurship and innovation.

Let me cut to the chase: Daojing has my strongest recommendation. Daojing has worked with me as a research assistant (for a paper Ernest Liu and I have on "Innovation networks and R&D allocations"), a teaching fellow (on an undergraduate seminar on Venture Capital and the financing of innovation), and a coauthor (on a paper on financing innovation and technological cycles). During these interactions, I have been constantly impressed by his intellectual curiosity, ability to understand both theory and data, and work ethics.

If I may, please allow me to argue that Daojing is exactly the type of students that the bootcamp should consider admitting—he has a genuine interest in the field of entrepreneurship and innovation; he has a ton of option value and the potential to do interesting work in this field; and he is a great colleague, and people around him like talking about research with him. As a proud boot camper myself, I know I would have enjoyed him being in my class.

The boot camp will for sure teach Daojing valuable lessons ranging from the literature, the appreciation of research questions, among other things. I have no doubt (but will personally monitor to ensure) that Daojing will read all required papers carefully and actively contribute to the discussion in class. I will also work closely with him and give advice as he explores the literature more broadly.

All told, Daojing is an extremely promising PhD student who is eager to learn more about and conduct research in entrepreneurship and

entrepreneurial finance. I hope that you give Daojing serious consideration for a spot in the boot camp this year. Please do not hesitate to contact me for any further questions.

Sincerely yours,

