2025 NBER Entrepreneurship Boot Camp Application

Applicant Information

Name: Hao Zhang
Contact Information: hao.zhang3@unsw.edu.au
School: UNSW Business School, Sydney, Australia
Area of Interest: Private Equity, Venture Capital, Entrepreneurship, Innovations, Corporate Governance, ESG
Entry into PhD Program: Sep 2021
Expected Year of Completion: Nov 2025
Faculty Member Supplying Recommendation Letter: Professor Jason Zein

Curriculum Vitae

EDUCATION

Ph.D. in Finance Sep 2021 – Nov 2025 (Expected)
University of New South Wales

Master of Pre-Doctoral Studies in Finance Jun 2020 – Aug 2021
University of New South Wales

Bachelor of Commerce (with Honours in Finance) Feb 2016 – Nov 2019
University of New South Wales

RESEARCH INTERESTS

Private Equity, Venture Capital, Entrepreneurship, Innovations, Corporate Governance, ESG

WORK-IN-PROGRESS

"**Can ESG Performance be Attributed to Managerial Styles?**" with Tianyu Cai, Leo Liu and Jason Zein, *Under Review*

"**The Power of Power Law**" with Peter Pham, David Robinson, Roham Rezaei and Jason Zein

"**The Buy and Build Strategy in Private Equity Buyouts: Value Creation or Window Dressing?**" with Ludovic Phalippou and Jason Zein

"**Falling Forwards: What Corporate Venture Capital Can Learn From Those "Bumps" in Their Investment Journey?**" Solo Authored

CONFERENCE AND SEMINAR PRESENTATION

2024: AFA*, New Zealand Finance Meeting

2023: FIRN Corporate Finance Meeting, AFAANZ Conference*

2022: International Conference on Asia-Pacific Financial Market (CAFM), Australasian Finance & Banking Conference (AFBC), FMA Asia-Pacific Conference*

OTHER ACADEMIC ACTIVITIES

Student Representative of HDR Program Committee Feb 2023 - Nov 2024
Research Assistant for Ronald W. Masulis Jun 2020 - Feb 2021

TEACHING

University of New South Wales

Lecturer, FINS5530 Financial Institution Management (evaluation: 5.39/6.0) Feb 2024 - May 2024

Tutor, FINS2624 Portfolio Management; FINS3630 Bank Financial Management (evaluation: 5.64/6.0) Jun 2022 – Now

Teaching Assistant Feb 2021 – Now

- Int'l Corporate Finance (Postgraduate); Portfolio Management (Undergraduate); Bank Financial Management (Undergraduate); Financial Institution Management (Postgraduate)

SCHOLARSHIPS, HONORS, AND AWARDS

2024: New Zealand Finance Meeting (NZFM) Runner-up Paper Award; NSW Development and Research Training Grant

2023: Three Minute Thesis (3MT) Finalist, UNSW Business School

2021: Australian Government Research Training Program Scholarship (RTP)

2020: UNSW Tuition Fee Scholarship

2019: UNSW Business School Honours Scholarship; UNSW Business School Dean's List for Academic Excellence—Stage 3

2018: UNSW Business School Summer Research Scholarships; UNSW Business School Dean's List for Academic Excellence—Stage 2

2017: UNSW Business School Dean's List for Academic Excellence—Stage 1

INDUSTRIAL EXPERIENCES

Essence Securities Research Center Nov 2018 - Jan 2019

UNSW Accounting and Assurance Center Nov 2017 - Jul 2018

ADDITIONAL INFORMATION

Technical Skills: Proficient in Python, STATA, SAS, LATEX
Activities: Volunteer English Teacher
Languages: Fluent in English and Mandarin Chinese

Research Summary

Venture capital (VC) is one of the most critical financing channels for entrepreneurship, playing a pivotal role in fostering innovation and economic growth. By 2020, corporate venture capital (CVC) has accounted for 45% of all VC investments. Different from independent venture capital (IVC), which prioritizes financial return, CVCs often pursue strategic goals, such as information acquisition from start-ups. While existing literature predominantly focuses on positive signals derived from successful exits, failure is central to the VC investment model. According to Hall and Woodward (2010), approximately 50% of VC-backed startups result in zero-value exits. My solo-authored paper provides direct evidence that CVCs willingly accept lower financial returns than IVCs, often paying higher prices for investments regardless of their ultimate outcomes. However, these failed ventures still serve as valuable experiments, expanding the innovation pool of the CVC parent firm and facilitating corporate exploration into new business areas. Additionally, this project highlights the implications of CVC investment from the start-up perspective, demonstrating that inventors from failed startups are more likely to transition to the CVC parent. Understanding these strategic trade-offs is essential, given their broader impact on entrepreneurial finance. The boot camp's focus on venture capital and innovation will help me refine my theoretical framework and empirical methodology, strengthening my contribution to this area.

Furthermore, investment managers' skill—particularly that of general partners (GPs) in VC—is crucial in directing capital efficiently to drive innovation and entrepreneurship development. A key question in the literature is whether managers exhibit persistent outperformance, often seen as an indicator of skill. However, performance persistence may also be driven by noise (i.e., luck). In my coauthored paper "*The Power of Power Law*", we explore this issue within VC, where returns are highly skewed. Sahlman (2010) finds that 85% of VC returns come from just 10% of investments, illustrating the dominance of outlier successes. While these "home-run" deals can significantly drive fund returns, they may also obscure a general partner's (GP) true investment skill. Our research moves beyond traditional performance measures, such as internal rate of return (IRR), by considering the role of skewness in deal return distributions. We find that higher skewness is associated with weaker future fund performance, suggesting that reliance on outlier successes may indicate luck rather than skill. Understanding how skewness distorts performance assessments is crucial for more informed investment decisions.

I also plan to examine the relationship between ESG and startup valuations, particularly in relation to green innovation. This research has significant implications for entrepreneurial finance, as ESG considerations increasingly influence investment decisions and firm performance. This Research Boot Camp offers a unique opportunity to engage with leading scholars in the field. The intensive lectures and discussions with fellow Ph.D. candidates will not only refine my current research questions but also inspire new research ideas, further advancing my contributions to the study of entrepreneurial finance.

15th February 2025

To Whom it May Concern:

I am writing to strongly recommend my PhD student, Hao Zhang, for participation in the NBER Entrepreneurship Research Boot Camp. Hao is an exceptionally hardworking and dedicated student whose research addresses underexplored questions in the field of venture capital, corporate innovation, and private equity.

Hao's research focuses on two novel topics. The first (his solo authored job market research) examines the interaction between corporate venture capital (CVC) investments and startup experimentation. His work shows how the human capital and intellectual of CVC funded startups tends to be transferred into the CVC's corporate parent, even when startups fail. This line of research has the potential to shed light on how corporations strategically use venture investments to access and develop emerging technologies.

The second project seeks to disentangle skill from luck in venture capital investments, leveraging new deal-level data to empirically assess whether outlying return observations can tell us anything about VC skill. This work provides valuable insights into the mechanisms that differentiate skilled VCs from those benefiting from favorable but random outcomes.

Both topics have significant potential to contribute to the literature by addressing fundamental questions about innovation and performance evaluation in venture capital markets.

Hao has demonstrated strong analytical skills, methodological rigor, and an impressive ability to work with complex data. Hao is also an engaged and collaborative scholar, consistently contributing thoughtful insights in academic discussions. His commitment to academic excellence, coupled with a strong work ethic, makes him an excellent candidate for the NBER entrepreneurship research workshop. I am confident that participating in this workshop will provide Hao with a valuable opportunity to receive feedback from leading scholars and further refine his research contributions.

UNSW AUSTRALIA | UNSW SYDNEY NSW 2052 AUSTRALIA
T +61 (2) 9385 5875 | F +61 (2) 9385 6347
ABN 57 195 873 179 | CRICOS Provider Code 00098G

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I highly recommend Hao for this opportunity without reservation. Please feel free to contact me if you require any additional information.
Sincerely,

Yours Sincerely,



Professor Jason Zein
School of Banking and Finance
University of New South Wales
j.zein@unsw.edu.au
Tel: +61 413 386 760