# XUELAI LI

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#### **EDUCATION**

Imperial College London

2020 - present (expected March 2026)

Ph.D. in Finance

MRes in Business Research

Peking University 2016 - 2020

B.Econ. in Finance (Distinction)

Stanford University 2019

Visiting Research Student

#### RESEARCH INTERESTS

Entrepreneurial Finance, Innovation, Public Finance, Financial Intermediation

#### WORKING PAPERS

## Venture Capital and Scientists' Selection into Entrepreneurship (Job Market Paper)

Using a newly digitized historical dataset of over 450,000 U.S. scientists, this paper examines whether venture capital (VC) facilitates the commercialization of innovative ideas through new business formation. I exploit the reform of the "prudent man" rule as a quasi-natural experiment that positively shocks the supply of VC funding. Across the full sample, scientists with intangible work specialties—who would ex ante be more likely to benefit from VC—experienced a 6% increase in business formation relative to those with tangible specialties, an effect that was concentrated in counties with VC presence. Among the subsamples of scientists employed in the private sector, earning higher wages, and named as inventors on patents, the relative increase was as high as 26%. I rationalize the results through an occupational choice model in which VC funding alleviates financial constraints for those with higher productivity. These individual-level effects contributed to the growth of intangible industries at the county level and persisted through the end of my sample period.

## Technology Literacy and Deep Tech Investment: Evidence from VC Industry

with Yuchen Chen and Can Huang

This paper examines how the technology literacy of venture capital (VC) firms influences investment in deep-tech startups. Using novel matched data from PitchBook and Revelio Labs, we show that techliterate VCs, proxied by the share of Ph.D.-trained partners, are scarce, geographically concentrated, and more likely to fund deep-tech ventures. Startups backed by these VCs experience lower failure rates and higher IPO probabilities. Based on these findings, we develop and calibrate a dynamic matching model with hiring frictions for Ph.D.-trained partners. The model reveals that lowering the cost for Ph.D.s to become VC partners does not necessarily raise their equilibrium share, providing a potential explanation for the persistently low and recently declining presence of Ph.D. partners in the industry.

## Complementarity in R&D Investment: Evidence from the Space Race

This paper examines whether venture capital (VC) can complement the public R&D investment. I exploit two historical shocks to isolate variation in public R&D spending and the supply of VC: the Space Race and the 1979 reform of the "prudent man" rule. The Space Race generated windfall R&D spending across certain county-industries until 1972, while the "prudent man" rule reform substantially

increased the supply of VC in 1979. Following the reform, VC flowed disproportionately to county-industries that had previously received NASA funding, indicating a crowd-in effect. These county-industries also experienced stronger subsequent growth. At the individual level, scientists with space-related specialties became more likely to start businesses after the reform. Together, these findings underscore the complementarity between public and private R&D investment and suggest that VC plays a critical role in translating scientific capabilities into entrepreneurial outcomes.

#### WORK IN PROGRESS

#### Path Dependence in Venture Capital Financing

with Jamie Coen, Patrick Coen, Ramana Nanda, and Savitar Sundaresan

#### CONFERENCES & WORKSHOPS

- 2026: AFA (presentation, scheduled)
- 2025: FMA, SFA, Wharton Innovation Doctoral Symposium, BSE Summer Forum, RAPS/RCFS Europe Conference, Helsinki Finance Summit, HEC Paris Finance PhD Workshop, Scientific Workshop on Productivity, Cambridge PE, VC and Innovation Conference\*, DGF Annual Meeting, FMA Europe, DRUID Academy, Imperial UK Women in Finance, Wabash River Finance Conference\*
- 2024: Luiss Institute for European Analysis and Policy, International Conference on the Science of Science and Innovation
- 2023: NBER Entrepreneurship Research Boot Camp
  - \* indicates by co-authors

### AWARDS, GRANTS, & SCHOLARSHIPS

- European Finance Association Travel Grant, 2025
- Graduate Teaching Assistant Scholarship, Imperial College London, 2020-2026
- Google Cloud Research Credits, 2023-2024
- Shouren Chen Scholarship (\$3,000 for Overseas Research), Peking University, 2019
- China's National Scholarship (Top 1% GPA), Ministry of Education of China, 2018
- Fung Scholarship (Global Leadership Award), The University of Hong Kong, 2018
- Merit Student (Top 5% GPA), Peking University, 2018
- Founder Group Scholarship (Top 5% GPA), Peking University, 2017
- Award for Academic Excellence (Top 5% GPA), Peking University, 2017

#### **TEACHING**

- Entrepreneurial Finance (MBA, MSc), Imperial College London, 2023-2025 Summer
- Market Microstructure: Trading and Liquidity (MSc), Imperial College London, 2023 Summer
- Natural Language Processing Seminar (BSc), Peking University, 2018 Fall

#### REFEREE WORK

- Journal of Empirical Finance

## **MISCELLANEOUS**

- Coding: Python, R, MATLAB, Stata, LATEX
- Languages: Chinese (native), English (fluent), French (basic)
- Hobbies: Triathlon (Olympic distance PB 2:50), Marathon (PB 3:58)

#### BIO

Chinese citizen. Female. Married.

#### REFERENCES

#### Ramana Nanda

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## Rajkamal Iyer

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## Cláudia Custódio

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#### Savitar Sundaresan

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