# 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)

This paper examines the effect of venture capital (VC) on scientists' selection into entrepreneurship. I collect a novel historical dataset of U.S. scientists in the 1960s and track their business formation activities. I leverage the reform of the "prudent man" rule under the Employee Retirement Income Security Act (ERISA) as a natural experiment that positively shocks the supply of VC. I use large language models to further exploit the cross-sectional variation in how scientists' work specialties rely on tangible versus intangible capital. I show that scientists' business formation increased by 91% post ERISA. Effects are stronger for those with intangible specialties and those working in the private sector. These scientists were not marginal entrants but had higher wages and were named inventors on patents. I rationalize the results and quantify the effect of VC on alleviating financial constraints through an occupational choice model. I show that the individual-level effects ultimately facilitate the growth of intangible industries at the county level.

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

with Yuchen Chen and Can Huang

This paper examines how technology literacy within venture capital (VC) firms affects investment in deep-tech startups. Using novel data linking PitchBook and Revelio Labs, we show that tech-literate VCs (proxied by share of PhD-trained partners) are scarce, geographically concentrated, and more likely to fund deep-tech ventures. Startups backed by such VCs exhibit lower failure rates and higher IPO probabilities. We develop and calibrate a dynamic matching model with hiring frictions of PhD-trained partners to explain these patterns. Our findings highlight how limited investor expertise contributes to market tightness in deep-tech funding and shapes both the allocation and performance of capital to innovation.

## 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 leverage two shocks—the Space Race and the 1979 ERISA reform—to isolate variation in public R&D spending and the supply of VC. The Space Race created windfall R&D spending in certain regions until 1972, while the ERISA reform significantly expanded the supply of VC in 1979. I find that, after the reform, VC flowed disproportionately to county-industries that had received NASA funding, indicating

a crowd-in effect. Moreover, these county-industries exhibited higher growth. Scientists with space-related specialties were also more likely to start businesses after the reform. These findings highlight the complementarity between public and private R&D investment, suggesting that VC can play 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 (scheduled), SFA (scheduled), BSE Summer Forum, Wharton Innovation Doctoral Symposium, Helsinki Finance Summit, DGF Annual Meeting, RAPS/RCFS Europe Conference, HEC Paris Finance PhD Workshop, Scientific Workshop on Productivity, Cambridge PE, VC and Innovation Conference\*, 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

# 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

<sup>\*</sup> indicates by co-authors

## REFERENCING

- Journal of Empirical Finance

## **MISCELLANEOUS**

- Coding: Python, R, MATLAB, Stata, LATEX
- Languages: Chinese (native), English (fluent), French (intermediate)
- 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

Professor of Finance Imperial College London r.iyer@imperial.ac.uk

## Cláudia Custódio

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## Savitar Sundaresan

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