Dear Committee,

This is Sixun Tang, a third-year PhD student in the joint program of financial economics at Booth School of Business. I am applying to attend NBER Innovation Research Boot Camp, aligning with my research interests in macroeconomics, growth, and innovation. My primary focus is on understanding the impact of financing frictions on innovation and firm dynamics. My current research delves into the allocation of resources, specifically capital and talent, across firms with diverse innovative capabilities and the aggregate implications of such allocations.

Attending this boot camp would provide me with a valuable opportunity to deepen my understanding of these complex interactions from multiple perspectives. I am eager to learn from esteemed scholars at the frontier of this field and to immerse myself in the cutting-edge research presented at the NBER Summer Institute.

For a more detailed endorsement of my academic capabilities and research interests, please feel free to contact Prof. Amir Sufi for a letter of recommendation. I am looking forward to the possibility of participating in this enriching experience and am excited about the insights I could gain.

Sincerely,

Sixun Tang

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Jan. 29th, 2024

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Booth School of Business, Chicago, IL, 60637

Education

University of Chicago *Sep. 2021- Jun. 2026 (Expected)*

- PhD in Financial Economics
- Courses: Empirical Analysis Sequence(A,A+), Price Theory Sequence(A-,A,A), Theory of Income Sequence(A,A,A+),Asset Pricing Sequence(A-,A), Topics in Information Economics (A), Firm Dynamics and Economic Growth (A).

Department of Finance, School of Economics,Peking University *Sep. 2015- Jul. 2019*

- B.Econ. in Finance. Outstanding Graduate of Beijing Ordinary Colleges and Universities(Top 1% Student). Double Degree: B.S. in Mathematics

Work in Progress

SOEs VS Private Sectors: Talent Misallocation in China Across Sectors *Mar. 2022- Present*
with Professor Emanuele Colonnelli, Professor Tommaso Porzio and Professor Bo Li

- Collect yearbook data and scrape data from online recruiting platforms to establish stylized facts about Chinese labor market.
- Design large scale experiments to elicit preference from respondents, collect demographic information and gauge behavioral biases.

External Financing and Innovation Heterogeneity *Jun. 2023- Present*
second-year paper

- Establish an endogenous growth model incorporating firm financing and innovation heterogeneity.
- Conduct quantitative analysis with the model and show that policy aiming at reducing financial market frictions does not necessarily lead to increasing economic growth.

RA Experience

RA for Prof. Amir Sufi *Nov. 2023- Present*
RA for Prof. Greg Kaplan *Sep. 2023- Present*
Finance Group, Booth School of Business, University of Chicago *Aug. 2019- Jul. 2021*
full time research professional, supervised by Professor Emanuele Colonnelli and Professor Kilian Huber

TA Experience

TA for Prof. George Constantinides *Fall 2022*
BUSN 35001 Introductory Finance
TA for Prof. George Constantinides *Fall 2023*
BUSN 35001 Introductory Finance
TA for Prof. Anil Kashyap *Winter 2024*
BUSN 35200 Corporation Finance

Skills

Programming: STATA, R, Matlab, Python, Latex

Personal Information

- Native speaker of Chinese, fluent in English.
- Former vice president of the PKU string association.
- Former captain of the school basketball and badminton team.
- Leader of the 2017 PKUFS summer education supporting program

Research Interests

The central theme of my research is to understand the allocation of resources across firms with heterogeneous innovative capabilities and the aggregate implications of such allocation. I am primarily interested in two types of resources: capital and talent, which are key inputs for corporate innovation. My goal is to apply microdata to macro models to provide quantitative analyses of innovation-oriented policies and contribution to growth.

As a first step, I develop an endogenous growth model with both equity and debt financing for firms and heterogeneous innovation in my second year paper *External Financing and Innovation Heterogeneity*. This paper seeks to bring standard corporate finance ingredients into traditional endogenous growth model, which typically assumes firms are all-equity firms and have deep pocket. It builds connection with the important notion innovation heterogeneity brought about by Akcigit and Kerr (2018). Specifically, the paper concludes that policies aiming at reducing financial market frictions and providing easier access to credit will encourage firms to pursue riskier but more rewarding radical innovation due to the traditional risk-shifting story, but will unexpectedly lead to more bankruptcy cases in the equilibrium and does not necessarily lead to increase in economic growth. Though this paper lacks empirical counterparts, it is a strong indication of my interests in understanding the interaction of financing and innovation, and more broadly, intangible capital, both theoretically and empirically. The main challenge to tackle this question is to get a full understanding of how innovative investment differs from capital expenditure. Are they substitutes for the firm in the business cycle? What is the special property of intangible capitals theoretically? Crouzet et al. (2022) is one of many works I would like to base my research on.

Talent misallocation and spurring entrepreneurship is another important direction that I will pursue. In my collaborated work with Prof. Emanuele Colonnelli, we collaborate with the leading online job-seeking platform in China to run a large-scale experiment within talented graduates. The respondents are asked to evaluate hypothetical job posts after being exposed to treatment introduction videos, which either talk about the advantage of working in state-owned enterprises, or working in the private sector. We seek to disentangle the underlying preference why talents may choose to work in stagnant SOEs, as opposed to the fast-growing private firms. This talent misallocation might be one of the main drivers of the relatively slow growth in China. We are combining the experimental evidence with macro model to provide quantitative implications on aggregate.

To further tackle my research questions, the NBER innovation research boot camp provides me with a brilliant chance to think deeper about the uniqueness of innovation and required investment. What are the key properties of innovation inputs? What is the most efficient way of combining resources? What is the value distribution of innovation outputs? I am looking forward to gaining insights from top scholars this summer.

Course Names
Macroeconomics with Heterogeneous Households
Advanced Industrial Organization I
Market Design
Portfolio Choice and Asset Pricing
Topics in Asset Pricing
Firm Dynamics and Economic Growth
Topics Information Economics
International Macroeconomics and Trade
Corporate Finance II
Corporate Finance I
Asset Pricing II
Asset Pricing I
Price Theory III
Price Theory II
Price Theory I
The Theory of Income III
The Theory of Income II
Theory of Income I
Empirical Analysis III
Empirical Analysis II
Empirical Analysis I

TABLE 1. List of Completed Courses

From: "Sufi, Amir" <Amir.Sufi@chicagobooth.edu>
To: "maranjian@nber.org" <maranjian@nber.org>
Subject: Sixun Tang: Innovation Boot Camp Recommendation from Sufi

Dear Kevin, Ina, and Kyle:

I am writing to strongly recommend Sixun Tang for the NBER Innovation Boot Camp this summer. Sixun is a third year PhD student at the University of Chicago. Sixun took my second year PhD class in corporate finance, and he has been a research assistant for me for the past three months. He is exceptional. He is incredibly gifted technically. He has been assisting me in understanding the empirical implications of technical papers in industrial organization and endogenous growth. He has been superb. He has amazing technical skills, but he also understands the key points for each of the papers. He has also been helping me replicate the Hottman, Redding, and Weinstein QJE 2016 study, and he has shown a lot of promise doing this type of empirical work. His second year PhD paper was exploring the implications of endogenous growth models for a variety of outcomes. I believe he is a perfect candidate for the Innovation Boot Camp.

Best
Amir

Amir Sufi
Bruce Lindsay Distinguished Service Professor of Economics and Public Policy
University of Chicago Booth School of Business
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