SUMMARY DOCUMENT

Name	Shounak Chakraborty
Contact Information	NUS Business School, 15 Kent Ridge Drive Singapore 119245 shounak@u.nus.edu +65 8655 1752
School	National University of Singapore (NUS) Business School
Department	Finance
Area of Interest	Financial Markets and Entrepreneurship, Innovation Rent and Systemic Inequality
Year of Entry into PhD	2025
Expected Year of Completion	2030
Faculty Reference	Dr. Arkodipta Sarkar Assistant Professor, Finance NUS Business School sarkar21@nus.edu.sg +65 6516 5991

This document is an official summary of PhD candidacy for Shounak Chakraborty.

Shounak Chakraborty

Doctoral student (Finance), National University of Singapore, Singapore
shounak@u.nus.edu — +65 86551752 — https://shounak0409.github.io/shounak/

EDUCATION

National University of Singapore, Singapore, Aug 2025 — Present
Doctor of Philosophy (Finance)

Indian Institute of Management, Ahmedabad Mar 2020
Master of Business Administration

- Elected to the **Student Administrative Council (SAC)**, the student-run governing body at IIM Ahmedabad
- Served as **Media Secretary**; facilitated and oversaw interactions between student community and media outlets

Indian Institute of Technology, Kharagpur Jul 2016
Bachelor of Technology: Electronics and Electrical Communications Engineering

- Elected as **Governor, Technology Literary Society**, the official student-run publication at IIT Kharagpur
- Served as **Chief Editor** of monthly campus newsletters and annual student magazine

WORKING PAPERS

Local catastrophes and size anomaly in the price of US banking stocks

- The research aims to explain a size anomaly in the pricing of US bank stocks during local catastrophes and presents a model for investor-led bank runs

Natural disasters and a model for risk spillover in a banking network

- The research aims to build a dynamic model for risk spillover in a national banking network across geographical regions after natural disasters, using financial data from 38 Indian banks between 2005 and 2022

Benchmarking the spot price of gold in India using a Hidden Markov Model approach

- The research uses a Hidden Markov Model (HMM) approach to quantify the role of speculative price-setting in an oligopolistic market for gold

Research Assistant

A post-war analysis of gendered rhetoric in corporate communications

- Research project under Arkodipta Sarkar *(NUS Business School)*, Harsha Dutta *(Imperial Business School)*, and Shikhar Singla *(University of Texas, Austin)*

COURSES TAKEN

- Advanced Topics in Monetary Economics
- Microeconomic Analysis
- Econometric Analysis
- Applied Econometrics
- Empirical Asset Pricing and Microstructure
- Corporate Finance

TEACHING ASSISTANT

- Financial Management
- Foundations of Investment
- Entrepreneurial Finance
- Investment Analysis and Portfolio Management

RESEARCH EXPERIENCES

Misra Centre for Financial Markets and Economy Ahmedabad
Associate Researcher Jan 2023 — Jun 2025

Policy Papers

- Macroprudential policies and household credit: Comparative analysis across BRICS and Developed Economies
- Future of Employment in India: Realising the Demographic Dividend in Industry 4.0
- The role of Global Financial Centres in the growth of NDF markets: A Case Study

Project-based Research

- **Ease of Doing Business in Indian states**
  - Mapped and analyzed data on 1.6 million Indian firms from nearly 20 databases
  - Designed survey of approx. 50,000 firms to gauge perception of administrative and regulatory environment across 9 parameters

Additional Research Activity

- Reviewer for the **Journal of Quantitative Economics**

G. S. Sanyal School of Telecommunications Kharagpur
Undergraduate Researcher Jan 2015 — Dec 2015

- Research paper on "Maximum Likelihood Estimation (MLE) of Carrier Frequency Offset in 5G GFDM Systems"
- Design and Implementation of Free Space Optical Communication Link for Onboard Data Handling (OBDH) in satellites

PROFESSIONAL EXPERIENCES

Associate, Global Markets Structuring, Nomura International Hong Kong May 2020 — Jun 2022

- Structured hybrid products and quant indices for clients across APAC and managed a trading book worth $200M
- Designed a portfolio invested across MSCI single factor indices based on a Business Cycle predictor using HMM
- Led the business of auto-callables and structured derivatives linked to ESG funds and indices with revenue worth $3M
- Reduced turnaround time by 70% by building a chatbot for Korea and South-East Asia sales team that enabled quick browsing and indicative pricing of structured products.
- Built a global framework for real-time live pricing of callable bonds across APAC and EMEA to assist traders with risk management of global bond issuances

Spring Intern, Nomura Singapore Limited Apr 2019— May 2019

- Interned with the Fixed Income derivates desk and was awared the Pre-Placement Offer for exemplary performance
- Developed a model to estimate the yield curve of Indonesian government bonds using Nelson-Siegel model
- Devised and implemented Foreign exchange (Fx) derivative trading strategy using market sentiment analysis

Senior Associate, Commercial Banking, Capital One Financial Services Feb 2016 — Mar 2018

- Worked in Commercial Banking in a Business Strategy and Risk function covering US markets
- Built a Random Forest algorithm on transaction data of 3.4 million US consumers that reduced 90% false flags in SARs
- Awarded the Best performer award in Q3, 2016, Q1, 2017 and Q3, 2017

Summer Intern, Deutsche Bank CIB May 2012 — Jul 2012

- Designed an allocation strategy across a portfolio of corporate bonds based on market risk estimation of Central and Eastern European, Middle-Eastern and African markets

SCHOLASTIC ACHIEVEMENTS

- Achieved **100-percentile** in Common Admission Test (CAT) among 170,000 applicants for admission into the top business schools in India (IIMs) Jan 2016
- All-India Rank of **565** in Joint Entrance Examination (IIT-JEE) among 500,000 applicants for admission into the top engineering schools in India (IITs) May 2009
- Awarded the **KVPY** scholarship by Government of India in 2009; national scholarship for top 1% of Senior Secondary School students in India granted through a national examination Mar 2009
- Awarded the **NTSE** scholarship by Government of India in 2007; national scholarship for the top 0.2% of Secondary School students in India granted through state-level and national examinations Jul 2007

PUBLICATIONS

- Co-authored the first edition of "Indian Art and Culture" by Nitin Singhania, published by McGraw-Hill, 2016

GRE & ENGLISH PROFICIENCY TESTS

GRE General Test: 335/340

Quant: 170/170 — Verbal: 165/170
Analytical writing: 4.5/6
Test date: Novemeber 2022

TOEFL (internet-based Test: 109/120)

Listening: 30/30 — Reading: 29/30
Speaking: 22/30 — Writing: 28/30
Test date: November 2023

Statement of Purpose:
NBER Entrepreneurship Research Boot Camp 2026

Shounak Chakraborty

As a doctoral student in the Department of Finance at NUS Business School, my research interest focuses on the macroeconomic implications of Innovation rent and how concentration of the rents contribute to structural vulnerabilities in the overall economy. Inspired by the work of Prof. Scott Stern, I am interested in modelling innovation rents under different market structures, and how an exogenous shock to the system presents the risk of fragility in financial networks. This is a particularly salient research question in the current cycle of AI investments, where valuations are increasingly decoupled from productivity gains. I hypothesize that any resultant deleveraging triggered by a shock, especially in firms with highly collateralised intangible assets, has the potential to trigger contagion across a banking network.

Additionally, I am currently working on a research project under the guidance of Dr. Arkodipta Sarkar (NUS), Dr. Harsha Dutta (Imperial Business School, London), and Dr. Shikhar Singla (UT, Austin) where we are employing high-dimensional textual analysis to investigate gender bias in corporate communication in the post-war period. We want to quantify how linguistic archetypes function as non-tariff barriers in executive labor markets, and how an exogenous shock, such as forced shifts in gender participation in the domsetic workforce, impacts the long-run persistence of these barriers. This work aligns with the works of Prof. Hochberg's research on systemic gaps in entrepreneurial finance, specifically how institutional frictions impact marginalised groups and distort allocation of human capital.

My motivation to attend the NBER Entrepreneurship Research Boot Camp is to refine the identification strategies necessary to isolate the systemic effects of rent-seeking from productive innovation. Engaging with faculty such as Prof. Stern and Prof. Hochberg will provide me with the insights required to bridge my experience in macro-financial stability with the theory of innovation in enterpreneurial finance. I am particularly interested in discussing the econometrics of "intangible-heavy" balance sheets and their implications for future regulatory frameworks.

Although I am in my first year of doctoral studies, I have completed substantial coursework in empirical corporate finance. I have also worked as a teaching assistant in a course on entrepreneurial finance, where I was part of discussions on capital structure decisions in early-stage ventures and the valuation dynamics of intangible assets. My academic background and professional experiences have also been defined by a rigorous focus on high-dimensional data and quantitative modelling, as can be evidenced by a 170/170 score in GRE and a 100-percentile score in the national Common Admission Test. I have worked with state-space models, including Hidden Markov Models, both in research and industry professional capacities. I hope that these distinct aspects of my overall candidature would convince you to overlook any relative lack of academic seniority.

Attending the NBER Boot Camp at this stage of my research carerr will be foundational for my future dissertation and help me get an early feedback necessary to build a robust model. I am confident that my quantitative aptitude, exposure to the literature, and commitment to rigour will enable me to be a meaningful contributor to the research discussions at the bootcamp.

To whom it may concern:

I am pleased to recommend Shounak Chakraborty for the 19th Annual NBER Entrepreneurship Research Boot Camp. I know Shounak in two capacities: he serves as a Teaching Assistant for my Investment Analysis and Portfolio Management course at NUS Business School, and we have had several conversations about his research interests and ongoing work. He is a first-year doctoral student, still working through his core coursework, and I want to be upfront about that context — because what makes Shounak stand out is precisely how unusual his research maturity is for someone at this stage.

Most first-year PhD students are still finding their footing — learning the literature, developing their econometric toolkit, and only beginning to think about what questions they might eventually want to pursue. Shounak is navigating that same process, but with a meaningful head start. He arrives at the doctoral program having spent nearly five years working at the sharp end of financial markets: structuring hybrid derivatives and quantitative indices at Nomura International in Hong Kong, and building risk models on large consumer datasets at Capital One. That experience has given him something that coursework alone cannot, an intuitive feel for where theory and practice diverge, and a genuine curiosity about the mechanisms behind phenomena he has observed first-hand. When we talk about research, he does not yet have all the answers about where his work will go, but he asks the right questions and engages with ideas in a way that is already more sophisticated than one typically sees at this stage.

The projects he is exploring reflect this advantage. His work on local catastrophes and the size anomaly in U.S. banking stocks combines a sharp empirical observation with a theoretical model for investor-led bank runs — the kind of question that tends to occur to someone who has watched financial markets behave unexpectedly, not just read about them. His related project on risk spillover in banking networks after natural disasters similarly draws on an intuition about how disruptions to financial infrastructure propagate to firm-level credit access. These projects are at an early stage, as one would expect from a first-year, and Shounak is still very much in the process of shaping them. But the curiosity driving them is evident, and his industry background gives him a head start in understanding the economic context that makes these questions matter.

In his role as Teaching Assistant, Shounak has been dependable, well-prepared, and good with students — he handles the practical demands of the course with care and without needing much direction. Separately, in the conversations we have had about research, what strikes me is how naturally he engages with ideas at a level beyond what his formal training to date would predict. He is genuinely curious, listens carefully, and follows arguments with a sharpness that typically takes doctoral students considerably longer to develop. I expect he would be an active and thoughtful participant in the Boot Camp's sessions.

For precisely these reasons, I think the timing of this Boot Camp is ideal for Shounak. He has the foundational instincts and the motivation; what he would gain from sustained exposure to leading scholars in entrepreneurial finance is the deeper familiarity with the literature and the research community that would help him shape and sharpen his agenda as he moves into his second year and beyond. I recommend him with genuine enthusiasm and hope the committee will give his application strong consideration.

Please feel free to contact me at asarkar@nus.edu.sg if you would like to discuss Shounak's candidacy further.

Sincerely,

Arkodipta Sarkar

Arkodipta Sarkar
Assistant Professor
Department of Finance
National University of Singapore
Email: asarkar@nus.edu.sg
https://sites.google.com/view/arkodiptasarkar/home