# Mohit Arora

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## Education

PhD Economics, University of Massachusetts Amherst. Expected: June 2024

Fields: Macroeconomics, Development Economics

Dissertation Title: Essays on Industrial Policy and Applied Macroeconomics

MA Economics, University of Massachusetts Amherst. 2020

MPhil Economics, Centre for Economic Studies and Planning, School of Social Sciences,

Jawaharlal Nehru University, New Delhi, India. 2017

Dissertation Topic: Sovereign Debt Restructuring - A Study of Some Selected Episodes

MA Economics, University of Hyderabad, India. 2014

First Division with Distinction

BA (Honours) Economics, Ramjas College, University of Delhi, India. 2012

First Division

## Research and Teaching Interests

Macroeconomics, Development Economics, Quantitative Methods, International Finance, Economic History

### Research

### Working Papers

Job Market Paper: Revisiting the Nehru-Mahalanobis Industrial Policy: India's State-Led Heavy Industry Drive

Influenced by Soviet industrialization and the post-World War II emphasis on state-led development, India sought to shift production towards capital goods sectors. To what extent did the Nehru-Mahalanobis focus on heavy industries during India's Second Five-Year Plan (1956–61) foster their growth? To answer this question, I compile a unique dataset tracking large-scale industries from 1951–1965, roughly spanning the first three Five-Year Plans. This dataset harmonizes industrial production, prices, and input-output data from pre-digital data books. Previous studies showed positive effects, but my analysis, which adjusts for an industrial classification change using detailed annual data, does not find a statistically significant impact of the policy on the development of targeted heavy industries. I discuss this episode within the context of development theory from the 1950s and 1960s. I find no learning-by-doing effects emanating from this heavy industry push to targeted industries, highlighting the importance of the quality of state intervention. Weak production linkages between targeted and non-targeted sectors restricted spillover opportunities for broader industrial development.

Diagonalizability of Singular Matrices: Some Theory and An Application to Input-Output Tables (with Deepankar Basu)

Recent developments in the theory of production networks offer interesting applications and revival of input-output analysis. Some recent papers have studied the propagation of a temporary, negative shock

through an input-output network. Such analyses of shock propagation rely on the eigendecomposition of relevant input-output matrices. Only diagonalizable matrices can be eigendecomposed. In this paper, we provide necessary and sufficient conditions for diagonalizability of any singular matrix using its rank and eigenvalues. We apply our results to 5 historical (Germany, India and Japan) and 670 contemporary IO matrices (15 annual IO matrices for 43 countries from the 2016 release of the World Input-Output Database and 25 annual IO matrices for the U.S. economy) and find that some IO matrices are not diagonalizable.

### Work in Progress

Endogenous Business Cycles and Instability

## **Book Chapters**

"Changing rules of the Game of Global Finance: Glimpses from Argentina's Sovereign Debt Restructuring" in *The Political Economy of International Finance in an Age of Inequality*, edited by Gerald Epstein, Edward Elgar, November 30, 2018.

"The 'Odious' Route to a Sovereign Debt Crisis in the Democratic Republic of Congo" in *Elgar Encyclopedia* of Financial Crises, edited by Sara Hsu, forthcoming, Edward Elgar, December 1, 2023.

### **Book Reviews**

Review of Macroeconomics by Alex M. Thomas in *Developing Economics* (blog), August 22, 2021.

## Awards and Fellowships

Mentee, Association for Mentoring and Inclusion in Economics, 2023-24.

Political Economy Research Institute (PERI) Dissertation Fellowship (\$12,410.80), University of Massachusetts Amherst, Fall 2023.

Economics Department and College of Social & Behavioral Sciences Dean's Summer Research Fellowship (\$4000), University of Massachusetts Amherst, Summer 2023.

Distinction in the Doctoral Comprehensive Exam in Development Economics, University of Massachusetts Amherst, August 2019.

Summer Travel Grant (\$700) by the Department of Economics, University of Massachusetts Amherst to attend the XIX Trento Summer School in Trento, Italy, 2018.

Junior Research Fellowship of the University Grants Commission, India 2015-2017.

Rai Kedar Nath Gold Medal for the Best Student of Social Sciences (Economics and Commerce) at the Undergraduate level, Ramjas College, University of Delhi, 2012.

## Teaching Experience

## University of Massachusetts Amherst

#### Instructor

Economic Development (Undergraduate). Spring 2023. Syllabus

Introduction to Political Economy (Undergraduate, Online Course). Summer 2022.

Introduction to Microeconomics (Undergraduate, Online Course). Summer 2021.

Introduction to Macroeconomics (Undergraduate, Online Course). Summer 2020.

### Teaching Assistant (Graduate Course)

Mathematical Methods in Economics for First Year PhD Students. Fall 2022.

### Teaching Assistant (Undergraduate Courses)

Intermediate Macroeconomic Theory. Spring 2022, Fall 2021, Spring 2021, Spring 2020, Fall 2019, Spring 2019, Spring 2018.

Economic Development (Grader). Fall 2020, Spring 2020.

Introduction to Macroeconomics. Spring 2022, Fall 2017.

Intermediate Microeconomics. Fall 2018.

# Centre for Economic Studies and Planning, Jawaharlal Nehru University, New Delhi, India

### Teaching Assistant (Graduate Course)

Macroeconomics (Master's First Year). Monsoon 2015.

## Mentoring Experience

# Assistant to the Economics Undergraduate Research Assistantships (EURA) Program, 2020-22, University of Massachusetts Amherst

Mentored 10 undergraduate students in each semester between Fall 2020 and Spring 2022 who were working with faculty supervisors on individual research projects. Organized a poster presentation session for these students to display their research work at the end of each semester.

## Research Experience

# Business History Research Intern, Indian Institute of Management, Ahmedabad, India, July-August 2019

Some Aspects of the Evolution of Corporate India 1928-1952: Created a panel dataset for 339 listed firms divided across 7 industrial sectors in early 20<sup>th</sup> century India by hand-collecting data from archival material at the Institute on various financial and other variables. This dataset allows a study of the working of big business in pre-independence India.

## Conferences and Workshops

#### Presentations

### Revisiting the Nehru-Mahalanobis Industrial Policy: India's State-Led Heavy Industry Drive

Advanced Graduate Workshop, Azim Premji University, Bengaluru, India, July 13, 2023

Graduate Student Colloquium, University of Massachusetts Amherst, April 7, 2023

Panel on "Structural Change and Economic History", 49th Annual Meeting of the Eastern Economic Association, New York City, February 24, 2023

# Changing Rules of the Game of Global Finance: Glimpses from Argentina's Sovereign Debt Restructuring

Book Panel organized by Professor Gerald Epstein, 45th Annual Meeting of the Eastern Economic Association, New York City, March 2, 2019

## Workshop Participation

Advanced Graduate Workshop on Poverty, Development and Globalization, Azim Premji University, Bengaluru, India, July 2-14, 2023.

Workshop on Advanced Macroeconomics, Azim Premji University, Bengaluru, India, August 23-24, 2018.

XIX Trento Summer School on "Macroeconomics after the Financial Crisis: Looking Ahead", Trento, Italy, June 4-15, 2018.

XVIII Trento Summer School on "New Thinking on the Firm: Bringing Together Law, Economics, Organization and History", Trento, Italy, June 5-17, 2017.

Winter School on "Modern Finance and Macroeconomics: A Multidisciplinary Approach", International Centre for Theoretical Sciences, Tata Institute of Fundamental Research, Bengaluru, India, December 22 - January 02, 2016.

## Service

Member, Graduate Studies Committee, 2019-21, Department of Economics, University of Massachusetts Amherst

Member, Student Paper Workshop Committee, Department of Economics, University of Massachusetts Amherst

## Miscellaneous

Computer Skills R, LATEX, MATLAB

**Languages** English (fluent), Hindi (fluent)

Citizenship Indian

### References

### Deepankar Basu

Professor,
Department of Economics,
University of Massachusetts Amherst
dbasu@econs.umass.edu

### Christopher Boone

Assistant Professor, Department of Economics, University of Massachusetts Amherst cboone@umass.edu

#### Peter Skott

Professor Emeritus, Department of Economics, University of Massachusetts Amherst pskott@econs.umass.edu