

# Amrutha Manjunath

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## EDUCATION

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Ph.D. in Economics, Pennsylvania State University, 2019-2025 (expected)

*Dissertation Committee:* Fernando Parro (Chair), Kala Krishna, James Tybout, Jingting Fan

B.A. (Honours) in Economics and Mathematics, Ashoka University, 2015-2019

## RESEARCH INTERESTS

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International Economics, Labor Economics, Development Economics

## WORKING PAPERS

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### [1] [Language Barriers, Internal Migration, and Labor Markets in General Equilibrium \(JMP\)](#)

*Abstract:* This paper studies how language barriers impact internal migration, inequality between skilled and unskilled workers, and welfare using rich microdata from India applied to a static spatial general equilibrium framework. I document that (1) consistent with lower incentives, workers migrate less often to locations where they face high language barriers, (2) consistent with comparative advantage, migrants with language barriers are employed in speaking-intensive occupations less often, (3) consistent with selection, migrants with language barriers get a wage premium, and (4) these patterns are strongest for unskilled workers. To explain these facts, I develop and estimate a quantitative model. Through the lens of the model, I show that removing language barriers would increase internal migration by 6.2 percentage points, decrease inequality between skilled and unskilled workers by 1.9 percentage points, and increase welfare by 1.2 percent. As economies shift towards services, language barriers increasingly impede aggregate gains due to the rising prevalence of speaking-intensive occupations. In the absence of language barriers—relative to observed changes—structural change would have increased internal migration by 7.2 percentage points, decreased inequality between skilled and unskilled workers by 3.4 percentage points, and increased welfare by 1.9 percent. Finally, I argue that welfare benefits of implementing language programs outweigh costs.

*Presentations:* [2024] Federal Reserve Bank of Philadelphia Brownbag, Federal Reserve Bank of Atlanta Brownbag, 13<sup>th</sup> European Meeting of the Urban Economics Association (Copenhagen, Denmark), Trade and Development Brownbag (PSU); [2023] Federal Reserve Bank of Philadelphia PFMAP Brownbag, European Trade Study Group (Surrey, UK), Canadian Economics Association (Winnipeg, Canada), Midwest Economics Association (Cleveland), Trade and Development Brownbag (PSU), Applied Microeconomics Brownbag (PSU)

### [2] [Criminal Politicians, Political Parties, and Selection](#)

*Presentations:* [2023] International Economic Association World Congress (Medellin, Colombia); [2022] Annual Conference on Economic Growth and Development (ISI Delhi, India), Midwest Political Science Association Conference (Chicago), Trade and Development Brownbag (PSU), Applied Microeconomics Brownbag (PSU)

## RESEARCH ACTIVITIES

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- Co-authored work with Kala Krishna and research team (2023-present) to create the first Indian firm-level international trade transaction data by matching Bill of Lading to Prowess. Future projects in progress.
- CSWEP-AEA Summer Economics Fellowship, Federal Reserve Bank of Atlanta, 2024
- Philadelphia Fed Mentoring & Advancing PhDs Program, Federal Reserve Bank of Philadelphia, 2023
- Research Assistant, Pennsylvania State University
  - Fernando Parro, 2023; Shoumitro Chatterjee, 2021; Joris Pinkse, 2020

## WORK IN PROGRESS

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### [3] **Climate Uncertainty and Temporary Migration**, with Tim Dobermann and Yinong Tan

*Abstract:* Using district-to-district migration data from the Indian Census, we demonstrate that locations with higher mean and variance of adverse climate conditions experience increased out-migration. Among out-migrating households, temporary migration and household splits are common, with female members typically remaining behind. To explain these patterns, we develop a dynamic spatial general equilibrium model of migration incorporating agricultural productivity uncertainty, migration costs, and concave household utility functions. The model predicts that, controlling for mean income, greater agricultural income uncertainty increases rural out-migration. It also suggests that moderate uncertainty leads to more household splits, as location diversification aids risk sharing, while high uncertainty promotes whole-household migration. Using the estimated model, we quantify the impact of climate variability on migration patterns, determining thresholds of uncertainty that trigger different household responses. Our analysis of household splitting behavior provides crucial insights for guiding mitigation policies in developing countries. We argue that migration may serve as an effective strategy to combat climate-induced agricultural productivity losses, and inform targeted climate adaptation measures.

## HONORS AND AWARDS

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- Graduate Economics Scholarship, Pennsylvania State University 2019-2025
- RGSO Dissertation Award (\$5000), Pennsylvania State University, 2023
- Dean's List, Ashoka University, 2015–2019
- Rhodes Scholarship Finalist, India, 2018

## TEACHING EXPERIENCE

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- Lecturer, Pennsylvania State University
  - Introductory Microeconomic Analysis and Policy, 2022
- Teaching Assistant, Pennsylvania State University
  - Migration and Development, 2022-2024
  - Political Economy, 2022
  - Introductory & Intermediate Microeconomic Analysis, 2019-2021
  - Statistical Foundations for Econometrics, 2020

## SOFTWARE AND LANGUAGE SKILLS

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*Software:* Stata, R, MATLAB

*Languages:* English (native), Kannada (native), Hindi (advanced)

## REFERENCES

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### **Fernando Parro (Chair)**

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