

# BISHMAY BARIK

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in Bishmay Kumar Barik    🌐 bishmaybarik    🐦 bishmayy

## Education

**Shiv Nadar University, Delhi-NCR - M.Sc. Economics** 2023-2025

*Dean's List, 2025*

- Semester 1: GPA: 8/10 | Semester 2: GPA: 9.4/10 | Semester 3: 9.24/10
- **Subjects:**  
Macroeconomics (I & II) (*Distinction*), Econometrics (I & II), Microeconomics (I & II)  
Economics of Discrimination, Development Economics, Behavioural Economics

**XIM University, Bhubaneswar - B.Sc. Economics (Hons.)**

*with Three consecutive years of Merit Scholarship | Second Ranker*

2020-2023

- CGPA: 9.47/10
- **Subjects:**  
Macroeconomics, Microeconomics, Development Economics, International Economics,  
Game Theory and Behavioural Economics
- **Undergraduate Dissertation:** *Economics of Discrimination: Review of Gary Becker's work and its application on India*

## Research Experience

**1. Research Assistant - A Research Project on Culture and Debt in India**

Aug 2024 - Present

**PIs:** Dr. Satyajit Chatterjee, Dr. Ashwini Deshpande & Dr. Nirupama Kulkarni

- Analyzing emigration patterns and debt holdings across different castes, religions, and social strata using the CMIE-CPHS dataset, with a focus on state-wise and district-wise variations in India.
- Investigating loan-taking behavior among various castes and religions, exploring the influence of cultural norms and traditions on these financial decisions.

**2. Research Assistant**

**"Punishment and Crime: Impact of Death Penalty on Local Crime Rates in India"**

Dec 2024 - Jan 2025

**PIs:** Dr. Ashwini Deshpande & Dr. Anisha Sharma

**3. Research Intern - Center for Advanced Financial Research and Learning (CAFRAL), RBI**

2024

**PIs:** Dr. Gautham Udupa & Dr. Vidhya Soundararajan

- Converting several Stata codes and writing MATLAB equivalents for a project.
- Reviewing RBI circulars and identifying important notifications related to Priority Sector Lending in India.
- Reviewing literature on developmental factors that affect stock market participation and presenting them during the internship at CAFRAL.

## Dissertation and Research Projects

**(Ongoing) Master's Dissertation: Caste Discrimination: From a Macroeconomics Perspective**

2024 - 25

**Supervisor:** Dr. Partha Chatterjee (Internal) & Dr. Pubali Chakraborty (External)

**Nightlight Atlas: Illuminating Economic Disparities in India**

2025

**Software(s) Using:** Python | **Libraries:** Streamlit, Plotly, Tensorflow, Pillow

- Exploring how night-time light intensity correlates with consumption expenditure across Indian regions using SECC and DMSP Nightlights data.
- Using a neural network with TensorFlow & Keras for predictive analysis, with SHAP analysis for model interpretability (collected from SHRUG).

**Tracing Disparities: Educational Spending Before and After Covid-19 Among Social Groups in India**

2024

**Supervisor:** Dr. Gitanjali Sen | **Co-author:** Manya Pahwa

**Software(s) Using:** Python & STATA

- Created a Difference-in-Differences model to estimate pre- and post- Covid 19 educational expenditure trends across different religion and caste groups in India using CMIE-CPHS dataset.
- Explored possible reasons to understand why every social group was affected differently during a pandemic.

**Review on ‘Does Immigration Affect the Long-Term Educational Outcomes of Natives?****Quasi-Experimental Evidence’** by Eric Gould, Victor Lavy, and Daniele Paserman

2024

**Supervisor:** Dr. Gitanjali Sen

- Criticizing the original paper, and identifying potential research gaps, and extending the paper.
- Introducing heterogeneity among the students on the basis of ranks achieved in the class, and analyzing the causal effect of increased concentration of migrants on the heterogeneous Israeli students.

**Does Overconfidence Lead to Procrastination?: A Cognitive Reflection Test Experiment**

2024

**Supervisor:** Dr. Punarjit Roychowdhury

- Tried to build a bridge between overconfidence and procrastination.
- Use of Cognitive Reflection Test to identify overconfident people and studied procrastination behaviour among them.

**An Environmental Kuznet’s Curve (EKC) Analysis: A Case Study on Ganga and Yamuna**

2024

**Software(s) Used:** STATA, R & Excel**Supervisor:** Dr. Ram Ranjan | **Co-author:** Manya Pahwa, Shiv Nadar University, India

- Created Econometric Model to test for EKC in river Ganga and Yamuna.
- Analysed pollution patterns and tried to identify the cause of pollution in these rivers.

**Economics of Discrimination: Review of Gary Becker’s work and its application on India**

2022 - 2023

**Dissertation, B.Sc. Economics, XIM University | Supervisors:** Dr. Bharatee Bhusana Dash & Dr. Pintu Parui

- Criticised Becker (1957) Model of Discrimination
- Applied Becker (1957) Model of discrimination to Indian context, through the lens of caste.

**Gains from Trade: An Intuition behind Why Countries Exchange**

2022

**Supervisor:** Dr. Anwesha Bandyopadhyay | **Co-author:** Sharanya Roy, XIM University, India

- Extended the Ricardian Model using quantitative macroeconomic models

**Teaching****Shiv Nadar University, India**

2023-2024

**Graduate Teaching Assistant | Semester - IV**

- ECO512: Macroeconomics II (Dr. Kurt Horner & Dr. Trishita Ray Barman)

**Graduate Teaching Assistant | Semester - III**

- ECO302: Intermediate Macroeconomics (Dr. Aditi Singh & Dr. Trishita Ray Barman)

**Graduate Teaching Assistant | Semester - II**

- ECO461: International Economics (Dr. Trishita Ray Barman)

**Graduate Teaching Assistant | Semester - I**

- MAT101: Calculus - I (Dr. Niteesh Sahni)

**Course Certifications****Python for Data Science**

2024

Indian Institute of Technology (IIT), Madras

**Introductory course to DSGE Models in Matlab Dynare**

2024

Udemy Online Courses

**Economic Analysis and Data Analytics**

2021

National Association of State Boards of Accountancy

**From Poverty to Prosperity: Understanding Development Economics**

2020

University of Oxford

**Software**STATA | MATLAB | L<sup>A</sup>T<sub>E</sub>X | R | Markdown | Python | Jupyter Notebook | Dynare**References**

Available on request.