

Muhammad Bin Khalid

muhammad-binkhalid.github.io

Research Interests: Development Economics, Environment, Political Economy, Behavioral Economics.

EDUCATION

Yale-NUS College

Major in Economics, Minor in Mathematical, Statistical, and Computational Sciences

Singapore

2019 – 2023

- **Cumulative GPA:** 4.86/5.00; Awarded *Magna-Cum Laude*.
- **GRE General Test:** 170/170 Quantitative, 163/170 Verbal.
- **TOEFL IBT:** 118/120
- **Notable Coursework:** Real Analysis, Stochastic Processes and Models, Ordinary and Partial Differential Equations, Proof, Probability Theory, Statistical Inference, Multivariable Calculus, Advanced Econometrics.
- **Ph.D Courses Audited:** Advanced Mathematics for Economists (Measure theory and Dynamic Programming) at NUS, and Environmental Economics at MIT.
- **Prizes:**
 - **Outstanding Capstone Project in Economics (2023)** - Awarded for the best senior honors thesis.
 - **NUS Outstanding Undergraduate Researcher Award (2022)** - University-wide award given to one student/group for the best research publication; recognized for work on Small States.
 - **Yale-NUS Study Award** - Scholarship covering full tuition and residential fees for four years.

Yale University

Exchange Student

New Haven

Spring 2022

- **Notable Coursework:** Linear Algebra, Social Networks and Development (Ph.D elective).

INDEPENDENT RESEARCH

Senior Honors Thesis: Effect of Disaster Relief on Climate Adaptation: Evidence from Floods in Pakistan, conditionally accepted at *Journal of Development Economics*. [Draft](#)
Supervisor and later co-author: Martin Mattsson

- Investigated the effect of 2010 flood relief program in Pakistan on household adaptation behavior.
- Developed thesis into a co-authored paper with Martin Mattsson.
- Digitized hand-drawn *patwari* (revenue-official) maps of 6,000 villages and historical census records spanning seven decades, creating the most granular geospatial administrative dataset on Pakistan.
- Created a dashboard to present the data: [Link](#)

The Blessings of Scarcity: The Cold War Origins of Smaller States' Prosperity, *Perspectives on Politics*, 2025. [Draft](#)
Co-author: Steve L. Monroe

- Investigated the effect of state size in early years of independence on long run development using an instrumental variable estimation, mediation analysis, and a comparative case study.

Household Shocks and Children's Time Allocation: Evidence from Pakistan (ongoing)

Co-authors: Asim Khwaja and Jishnu Das

- Analyzed LEAPS longitudinal data to study the effects of income and birth shocks on children's daily activities and long-term welfare outcomes.

RESEARCH EXPERIENCE

Research Fellow (Pre-doc)

Harvard University, with Prof. Asim Khwaja

Cambridge (US)

Aug 2024 – July 2026

- Assisted on 4 RCTs on state capacity, public finance, and education, evaluating interventions to improve dispute resolution, encourage tax compliance, increase political engagement, and reduce school closures.
- Led data collection and analysis, produced publication-ready tables and figures, and prepared replication packages.

Research Assistant (Pre-doc)

National University of Singapore, with Prof. Martin Mattsson and Prof. Yogita Shamdasani

Singapore

Aug 2023 – July 2024

- Conducted analysis on a project evaluating effects of temperature on fertility using census data in Kenya.
- Developed a theoretical model of monopolistic price-discrimination and derived proofs for a project understanding the role of information in bureaucrat-firm interactions.

Research Assistant

Yale University, with Prof. Mushfiq Mobarak

New Haven, Singapore

Jan 2022 – May 2023

- Conducted a literature review, did data analysis, assisted in writing paper, and produced replication package for RCT evaluating effects of Village Courts in Bangladesh.
- Designed chatbot survey and performed high-frequency checks for RCT on Migration Mentorship in Nepal.

WORK EXPERIENCE

Consultant (part-time)

World Bank Disaster Risk Management Unit

Islamabad (Pak)

July – Dec 2023

- Assisted in conducting impact evaluation for 2022 flood relief program in Pakistan.

Research Intern

Institute for South Asian Studies, Singapore

Singapore

Jan – August 2020

- Wrote policy briefs on effects of Covid-19 pandemic and Pakistan's balance of payment and debt crisis.

Field Intern

Akhuwat Microfinance

Rawalpindi (Pak)

May – Aug 2017

- Conducted interviews of loan recipients to understand impact of loans and assisted in daily operations.

Vice-President

Yale-NUS Muslim Student's Association

Aug 2021 – May 2023

- Organized community events, prayers, fundraisers, and inter-faith dialogue.

INVITED PRESENTATIONS

Midwest Political Science Conference, Chicago, 2022; **Asian Polmeth Conference**, Singapore, 2023

"Blessings of Scarcity: The Cold War Origins of Small State Prosperity."

Pathways to Development Conference, Lahore University of Management Sciences, 2023 & 2024;

Applied Development Economics Conference, Lahore School of Economics, 2023 & 2024.

"Effect of Disaster Relief on Climate Adaptation: Evidence from Floods in Pakistan."

LEAPS Conference, Washington DC, 2025

"Household Shocks and Children's Time Allocation: Evidence from Pakistan."

SKILLS

Technical: Stata, Latex, R, Python, QGIS, MS Suite;

Languages: English, Urdu, German (basic)