Debasri Mukherjee

Professor
Department of Economics
Western Michigan University
Kalamazoo, MI 49008

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Education

Ph.D., Economics, University of California, Riverside, 2002.

Work Experience

- Professor, Western Michigan University, Fall 2015 Present.
- Associate Professor, Western Michigan University, 2008 2015.
- Visiting Scientist, Economic Research Unit, Indian Statistical Institute, Fall 2011-Winter 2012.
- Assistant Professor, Western Michigan University, 2002-2008.
- Summer Intern: The World Bank, Washington DC, Summer 2000.
- Teaching/Research Assistant, University of California, Riverside, Fall 1997-2002.

Research Interests

Theoretical and Applied Econometrics

- Machine Learning methods, nonparametric and semiparametric data-mining, panel data techniques.
- Applications of econometric and statistical tools in economic development, international economics, behavioral and public policy issues related to health, environment and education.

Courses Taught at the Western Michigan University

- Advanced Econometrics: econ 670 (Ph.D. level)
- Economics Workshop (Econometrics): econ 699 (Ph.D. level)
- Economic Statistics: econ 622 (MA and Ph.D. level)
- Econometrics I: econ 619 (MA level)
- Topics in Econometrics: econ 609 (MA level)

- Econometrics: econ 409 (undergraduate level)
- Economic Development: econ 384 (undergraduate level)
- Exploring Economic Data: econ 339 (undergraduate level)
- Principles of Macroeconomics: econ 202 (undergraduate level)
- Principles of Microeconomics: econ 201 (undergraduate level)

Selected Publications

- 1. "Decision Trees and Random Forest to Predict Rare Events: Case of Child Health in India", D. Brahma and **D. Mukherjee**. *Data Science for Modeling Managerial and Socioeconomic Problems*. Forthcoming. Edited by F. Hamid and D. Mukherjee. **Springer**. (invited paper).
- 2. "Asymptotic normality of a change plane estimator in fixed dimension with near-optimal rate", D. Mukherjee, M. Banerjee, **D. Mukherjee** and Y. Ritov. *Electronic Journal of Statistics*, 2023, Vol.17(2).
- 3. "Early warning signs: targeting neonatal and infant mortality using machine learning", D. Brahma and **D. Mukherjee**. *Applied Economics*. 2022, Vol. 54 (1).
- 4. "Infant malnutrition, clean-water access and government interventions in India: a machine learning approach towards causal inference," D. Brahma and **D. Mukherjee**. *Applied Economics Letters*, 2021, Vol 28 (16).
- 5. "Policy Complementarities in Achieving Universal Immunization Coverage in India", D. Brahma and **D. Mukherjee**. *Economic and Political Weekly*, 2020, Vol. 55 (38).
- 6. "Nonparametric Estimation of the Marginal Effect in Fixed-effect Panel Data Models," Y. Lee, **D. Mukherjee** and A. Ullah. *Journal of Multivariate Analysis*, 2019, Vol. 171.
- 7. "India's Universal Immunization Program: A lesson from Machine Learning," D. Brahma and **D. Mukherjee**. *Economics Bulletin*, 2019, Vol. 39 (1).

- 8. "India's Mid-Day Meal Program and Schooling: An Evaluation based on Machine Learning," D. Brahma and **D. Mukherjee**. *Applied Econometrics and International Development*, 2018, Vol. 18(1).
- 9. "Agricultural Aid, Agricultural Productivity and its Volatility: A Note" with E. Alvi and J. Squires, *Bulletin of Applied Economics*, 2018, 5(2).
- 10. 'Aid-for-Trade and Export Performance of Developing Countries," S. Ghimire, **D. Mukherjee** and E. Alvi. *Applied Econometrics and International Development*, 2016, Vol. 16(1).
- 11. "Count-data Analysis of Physician Emigration from Developing Countries: A Note," E. Thomas Kizhakethalackal, **D. Mukherjee** and E. Alvi. *Economics Bulletin*, 2015, Vol. 35(2).
- 12. "The Effects of Education-aid on Primary Schooling in Developing Countries" E. Alvi and **D. Mukherjee**. *Handbook of Economics of Foreign-aid*, 2015, *edited by M. Arvin and B. Lew*, **Edward Elgar**. (invited paper).
- 13. "Sectoral Aid-for-Trade and Sectoral Exports: A Seemingly Unrelated Regression Analysis" with S. Ghimire, **D. Mukherjee** and E. Alvi. *Economics Bulletin*, 2013, Vol. 33(4).
- 14. "The Empirics of Health-aid, Education and Infant Mortality: A Semiparametric Study" E. Thomas Kizhakethalackal and **D. Mukherjee.** *Applied Economics*, 2013, Vol. 45(22).
- 15. "Quantile Regression Analysis of Health-aid and Infant Mortality: A Note" with E. Thomas Kizhakethalackal, **D. Mukherjee** and E. Alvi. *Applied Economics Letters*, 2013, Vol. 20 (13).
- 16. "Exchange-Rate Volatility and Trade: A Semiparametric Approach" **D. Mukherjee** and S. Pozo. *Applied Economics*, 2011, Vol. 43 (13).
- 17. "The *J-curve* for the Relationship between Pollution Abatement Expenditure and Income per capita: A New Empirical Investigation from US Regional Data", M. Das and **D. Mukherjee**. *Applied Econometrics and International Development*, 2011, Vol. 11(2).

- 18. "Monopsony in the Market for Nurses? A Semiparametric Note", **D. Mukherjee.** *Regional and Sectoral Economic Studies*, 2011, Vol. 11(2).
- 19. "Semiparametric Binary Regression Models under Shape Constraints with an Application to Indian Schooling Data" M. Banerjee, **D. Mukherjee** and S. Mishra. *Journal of Econometrics*, 2009, Vol. 149 (2).
- 20. "Foreign Aid, Growth, Policy and Reform", E. Alvi, **D. Mukherjee** and E. K. Shukralla. *Economics Bulletin*, 2008, Vol. 15(6).
- 21. "Aid, Policies and Growth in Developing Countries: A New Look at the Empirics", E. Alvi, **D. Mukherjee** and E. K. Shukralla. *Southern Economic Journal*, 2008, Vol. 74(3).
- 22. "Do Patent Protection and Technology Transfer Facilitate R & D in Developed and Emerging Countries? A Semiparametric Study", E. Alvi, A. Eid and **D. Mukherjee**. *Atlantic Economic Journal*, 2007, Vol. 35.
- 23. "Do Income and Education Really Affect HIV and AIDS in India? A Critical Note", **D. Mukherjee**. *Indian Journal of Economics and Business*, 2007, Vol. 6(1).
- 24. "Is the Rate of 'Convergence' Always Constant? Some Empirical Evidence from Sector Level Data in 56 Countries, 1975-99," **D. Mukherjee.** *Regional and Sectoral Economic Studies*, 2006, Vol. 6(2).
- 25. "A Note on Polio Count: Some Empirical Evidence from India", **D. Mukherjee.** *Applied Econometrics and International Development*, 2006, Vol. 6(3).
- 26. "Feasible Estimation of Nonparametric Generalized Random Effect Model: An Application," **D. Mukherjee**. *Journal of Quantitative Economics*, 2006, Vol. 4(1).
- 27. "New Economic Reform and Sector-wise Convergence of Indian States," **D. Mukherjee**. *Indian Journal of Economics and Business*, 2006, Vol. 5(1).

- 28. "Nonparametric Sharpe Ratio", **D. Mukherjee** and A. Ullah. *Journal of Quantitative Economics*, 2004, Vol. 2(2).
- 29. "Consistent Estimation of Regression Coefficients in Replicated Data with Non-Normal Measurement Errors", A. Ullah, Shalabh and **D. Mukherjee.** *Annals of Economics and Finance*, 2001, Vol. 2(1).

Conference and Invited Seminar Presentations and Service as Discussant

- American Economic Association Annual meeting (Session on Machine Learning), San Diego 2020 (presented with co-author).
- Economic Research Unit, Indian Statistical Institute, Kolkata, India 2019 (presented with co-author).
- Allied Social Sciences Association Annual Meeting, Philadelphia 2018 (presented with co-author).
- Economics Department, University of Calcutta, India, 2017 (invited talk)
- Food and Resource Economics Department, University of Florida, 2015 (*invited talk*)
- Krannert School of Management, Purdue University, 2013 (*invited talk*).
- Center for Studies in Social Sciences, Kolkata, India 2011 (*invited talk*).
- Economic Research Unit, Indian Statistical Institute, Kolkata, India, 2011 (*invited talk*).
- European Economic Association and Econometric Society meeting, Barcelona, Spain, 2009.
- Bayesian Interdisciplinary Research Unit, Indian Statistical Institute, Kolkata, India, 2009 (*invited talk*).
- Midwest Econometric Group annual meeting, Kansas City, 2008.
- Conference on Health Economics, W.E. Upjohn Institute for Employment Research, Kalamazoo, 2008 (served as discussant only).
- Economic Research Unit, Indian Statistical Institute Kolkata, India, 2008 (*invited talk*).
- Far Eastern Econometric Society annual meeting, Singapore, 2008 (presented by co-author).
- Facing East Facing West Conference, Western Michigan University, 2007.
- Allied Social Sciences Association Annual Meeting, Chicago, 2007 (presented and also served as a discussant).
- State University of New York, Albany, 2006 (invited talk).

- Central Michigan University, 2006 (*invited talk*).
- Allied Social Sciences Association Annual Meeting, Boston, January 2006 (presented and also served as a discussant).
- Midwest Econometrics Group Annual Meeting, Southern Illinois University, October, 2005 (presented and also chaired a session).
- Allied Social Sciences Association Annual Meeting, Philadelphia, January 2005 (presented and also served as a discussant).
- Allied Social Sciences Association Annual Meeting, San Diego, January 2004 (presented and also served as a discussant).
- Midwest Econometrics Group Annual Meeting, University of Missouri, October 2003.
- Econometric Society Summer Meeting, Northwestern University, June 2003.
- Econometrics Seminar Series, University of California, Riverside, 2001.
- Paper accepted at the International Conference on Development and Future Strategy at the University of Western Australia, Perth, Australia, presented by co-author S. Mukherjee, 1993.

Ph.D. Dissertation Chair/co-Chair

- D. Brahma, Chair (completed, 2019)
- J. Squires, co-Chair (completed, 2016)
- A. R. Houser, Chair (completed, 2015)
- S. Ghimire, co-Chair (completed, 2013).
- E.T. Kizhakethalackal, Chair (completed, 2009).

Ph.D. Dissertation committee member (completed)

Ashraf Eid, Mohamed Elsayed, Yasemin Ulu, Seife Dendir, Elias Shukralla, Alemayehu Ambel, Blen Solomon, Aberra Senbeta, Matyas Meszaros, Rong Ma, Kun Zhao, Diny Ghizini, Chikezie Kenneth Okoli, Megersa Daksa

Other Department Committee Services

Graduate Programs Committee, Executive Committee, Majors and Curriculum Committee, Undergraduate Programs Committee, Instructional Development Committee, Ph.D. Comprehensive Committee, Research, Rotation and Sabbatical Committee, Affirmative Action Committee. Tenure and Promotion Review Committee.

University Committee Services

CAS Dean's Interdisciplinary Committee, "Grade and Program Dismissal Appeal" Committee, Department Representative of the College of Arts and Sciences Gender-Pay-Equity Committee, Office of Faculty Development Mentor Team, Member of the Quality Circle Review Team for Research and Development Award.

Other Professional Services

Refereed for: Econometric Reviews, Economics Letters, Journal of Health Economics, Econometric Theory, Empirical Economics, Economics Bulletin, Journal of International Trade and Economic Development, Indian Journal of Economics and Business, Journal of Quantitative Economics, Letters in Spatial and Resource Sciences, Bulletin of Economic Research.

Served as: External examiner for Ph.D. dissertation, External reviewer for promotion to the rank of full Professor.