ARANYA CHAKRABORTY

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PLACEMENT DIRECTORS

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EDUCATION

Ph.D.   Economics, McGill University, expected May 2023
M.Sc.   Economics, University of Calcutta, 2016
B.Sc.   Economics (Honours), R.K.M.R College Narendrapur, 2014

FIELDS OF SPECIALIZATION

Primary: Development Economics, Information Economics
Secondary: Applied Microeconomics

DISSERTATION

Learning and Technology Adoption in Developing Countries
Committee: Prof. Sonia Laszlo (Chair), Prof. Matthieu Chemin, Prof. Francesco Amodio

JOB MARKET PAPER

"Network-Based Targeting with Heterogeneous Agents for Improving Technology Adoption"

Can we use social ties to improve technology adoption? I examine this question when the benefits from a new technology vary in the population, with such heterogeneity affecting the diffusion process. I develop a theoretical framework of information diffusion in a network where initially uninformed agents engage in DeGroot learning to decide whether or not to get fully informed about a new technology. Conditional on being fully informed, they then decide whether or not to adopt the technology. The model exhibits the possibility of low information equilibria where nobody adopts the new technology, even if it is the efficient choice for some of them. The result highlights the need for network-based targeting for information diffusion. My simulations suggest that the optimal targeting strategy in such a scenario relies on the underlying heterogeneity in the population. If heterogeneity is low in the benefits of the technology, targeting based on centrality works well. However, if the population is highly heterogeneous, centrality-based targeting fails in reaching the population of interest. In such a scenario, targeting based on the probability of adoption works better if the network is highly assortative in terms of characteristics determining the heterogeneity. I test these predictions using data from Malawi and provide evidence supporting my theoretical model. My results suggest that population heterogeneity in benefits from a technology matters for the success or failure of alternative targeting strategies that promote that technology.

OTHER RESEARCH PAPERS

"The Role of Experience in Learning for Index Insurance Products: Evidence from Rural Kenya," Submitted, September 2022.

"The Role of Active Discussion in Learning about Uncertain Technologies," Work in Progress, with Jim Engle-Warnick, Javier Escobal, and Sonia Laszlo.

"Microinsurance for the Poor: Long-Term Follow Up," Work in Progress, with Matthieu Chemin.

"Assessing the Impact of Judicial Independence in Developing Countries: Evidence from Rural Bangladesh," Work in Progress, with Matthieu Chemin.

"[Food Insecurity, Price Volatility and Trade: A Panel Data Analysis in Developing Countries](#)," published as Chapter-10 in *Indian Agriculture under Multilateral and Regional Trade Agreements - Competitiveness and Food Security*, Sharma and Bathla (eds.), CWS in association with Bookwell, Delhi, 2017, 177-194, with Panchanan Das and Swayambhu Mukherjee.

"Industrial Performance in West Bengal: Analysis of Technical Efficiency with ASI Data," Working Paper, August 2016, with Panchanan Das and Swayambhu Mukherjee.

TEACHING EXPERIENCE

Teaching Assistant, Labor Markets and Wages, McGill University, Fall 2022
Teaching Assistant, Economic Development 1, McGill University, Winter 2021-22 & Fall 2021
Teaching Assistant, Economic Development 2, McGill University, Winter 2019-20 & Winter 2022
Teaching Assistant, Topics in Economic Development 2, McGill University, Winter 2021
Teaching Assistant, Income Distribution, McGill University, Winter 2021 & Fall 2021
Teaching Assistant, Industrial Organization, McGill University, Fall 2019
Teaching Assistant, Microeconomic Theory, McGill University, Fall 2018
Teaching Assistant, Economic Statistics, McGill University, Winter 2018
Teaching Assistant, Intro to Behavioral Economics, McGill University, Fall 2017 & Fall 2020

RESEARCH AND RELEVANT WORK EXPERIENCE

Research Assistant, Prof. Sonia Laszlo, Summer 2020 – Fall 2022
Research Assistant, Prof. Matthieu Chemin, Winter 2018 – Fall 2022

GRANTS AND AWARDS

Graduate Excellence Award, McGill University, 2017-2021
Doctoral Fellowship, McGill University, 2018-2021
McCall MacBain Fellowship, McGill University, 2019
Prof. D. Datta Memorial Prize for First Class (First Position) in Economic Honours, R.K.M.R College Narendrapur, 2014

CONFERENCE AND SEMINAR PRESENTATIONS

McGill CPD Social Statistics and Population Dynamics Seminar (scheduled), 2022
Annual Meeting of the Canadian Economic Association, 2022
17th CIREQ PhD Students' Conference, 2022
CIREQ Lunch Seminars, 2022
Conference on WTO, Trade and Agriculture organized by CWS-IIFT, 2015

PROFESSIONAL SERVICES

Organizer of Applied Micro Breakfast, Dept. of Economics, McGill University, 2020-2021
Chair for the session on Technology, Development, and Inequality in CEA-CDESG Annual Meeting, 2022

LANGUAGES

Bengali (native), Hindi (native), English (fluent)

COMPUTATIONAL SKILLS

Stata, R, Python, EViews, Matlab

REFERENCES

Prof. Sonia Laszlo	McGill University	sonia.laszlo@mcgill.ca	(514) 398-2102
Prof. Matthieu Chemin	McGill University	matthieu.chemin@mcgill.ca	(514) 398-5077
Prof. Francesco Amodio	McGill University	francesco.amodio@mcgill.ca	(514) 398-2184