

ECON 70572: Microeconomic Development II: Market Failures in Developing Countries

Professor A. Nilesh Fernando
Fall 2020

Class Time: Tuesday and Thursday, 9.35am -10.50am

Office Hours: Wednesdays 3-5 pm, sign up here. Feel free to book up to 2 slots (i.e. 40 mins). You can also email me (nilesh.fernando@nd.edu) to schedule an appointment at a different time.

Office Hours Location: JNH 3081

The goals of the class are:

- To have a good grasp of the theoretical models and empirical techniques used to answer questions in development economics.
- To train you to evaluate the quality and significance of research through active discussions in class and writing referee reports
- To practice professional academic skills such as paper presentations and doing a literature review.
- To have a detailed proposal for a paper in development economics by the end of the semester. This is the most important component, and the ideal situation is that you have a proposal good enough to be able to write the paper over the summer. This can be used as your third year paper, or as a chapter in your thesis.

COURSE MATERIALS

Classes will be mainly based on academic journal articles. Required readings are available on Sakai Resources. All other readings can be easily obtained via the library. You must read the required articles before coming to class and be prepared to actively engage in class discussion.

COURSE REQUIREMENTS

A. Class participation (20%)

Everyone is expected to read the required papers prior to class, and come to class prepared to discuss the papers and/or ask questions about them. A key part of being a professional economist is the ability to ask good questions in seminars (or otherwise) and be able to “think on your feet” and answer questions.

B. Paper presentations (20%)

You are required to present a paper in class over the course of the semester. Think of this exercise as both a practice for your own research presentations, and as a way to clearly communicate the findings of a paper to your classmates. You may pick any of the readings highlighted in yellow. You should let me know by the second class (Oct 1) which paper you would like to present.

Each presentation will last roughly 20 minutes. It should address: 1) the paper’s motivation and, potentially, its links to other papers we have discussed 2) data used, 3) research design (identification strategy), 4) results, and 5) constructive critique of the study (identifying limitations and proposing

extensions or improvements). If you are using slides, plan on at most 10 slides for a 20-minute time slot.

C. Referee reports (30%)

You are required to write a referee report. You should begin with a one or two-paragraph summary of the main contribution of the paper, and highlight the key strengths of the paper. You should then critique the paper, starting with fundamental concerns and concluding with more minor comments. You should include constructive and realistic recommendations for improvement. Each report should be 1-2 single-spaced pages.

Please pick a paper any paper on the reading list that is not a required reading AND is not a summary paper or literature review.

The report is due by Oct 20th.

D. Paper proposal (40%)

The goal is to get you to formulate a clear research project that can potentially serve as a third-year paper and/or a thesis chapter. The proposal should have the following components:

- (a) What is the question?
- (b) Why is this question important? Ideally it should be interesting to all economists, not just people in the development subfield. Also include a short literature review describing what we know about this question so far.
- (c) Methodological approach
 - Justify your approach, and distinguish it from prior literature.
 - If theory: what will be your key building blocks, in what contexts are your assumptions justified.
 - If empirical, what data are available to answer this question, what will be your dependent and independent variables and your identification strategy.
- (d) Initial progress
 - Theory: show that at least a “baby model” can be constructed to illustrate the intuition (e.g. by making specific functional form assumptions etc).
 - Empirical: get the data, provide summary statistics and run at least one regression
- (e) Outline the path towards making this proposal into a full-fledged paper.

Please limit the final proposal to a maximum of **10 pages**.

For this half-course, you will continue working on the proposal from Prof. Iyer’s class, and be graded on steps (d) and (e). Here are some interim deadlines for the second half of the semester:

Here are some interim deadlines to facilitate progress towards the paper proposal:

- Oct 15: Provide a full literature review for the paper proposal (1-2 pages).
- Oct 29: Proposal interim draft (e.g. data and summary statistics for an empirical paper, <= 5 pages)
- Nov 12: Paper proposal presentation (<= 10 slides) + final submission (<=10 pages)

HONOR CODE

You are expected to adhere to the Academic Code of Honor Pledge: *“As a member of the Notre Dame community, I will not participate in or tolerate academic dishonesty.”* The full Code and a Student Guide to the Academic code of Honor are available at: <http://honorcode.nd.edu>.

SCHEDULE

Date	Topic	Due dates
Lecture	Section Overview	
Sept 29	Course Overview	
Oct 1, 6	Household Structure Chapter 1 & 2 in Bardhan & Udry (1999), Udry (1996), Ashraf, Field, & Lee (2014)	
Oct 8, 13, 15	Labor (a) Gollin, Lagakos, and Waugh (2014), Fernando (2020) (b) Beaman & Magruder (2012), Abel, Burger, & Piraino (2020) (c) Bergquist & Dinerstein (2020)	Full literature review due by Oct 15th
Oct 20, 22	Capital (a) Banerjee & Duflo (2005); De Mel, McKenzie & Woodruff (2008); Shapiro & Hausohofer (2016) (b) Bryan, Chowdhury & Mobarak (2014); Karlan, Osei, Osei-Akoto, Udry (2014)	Referee Report due Oct 20th
Oct 27	Technology Adoption Udry & Conley (2010), Cole & Fernando (2020)	Proposal interim draft due on Oct 29th
Oct 29	Education Andrabi, Das, Khwaja, Ozyurt & Singh (2020), Duflo (2001)	
Nov 3rd	Data + Methods Anderson (2008), Duflo (2018)	
Nov 5	Public Finance and Development (a) Pomeranz (2015), Brockmeyer, Estefan, Ramirez, Serrato (2020)	
Nov 10, 12	Proposal presentations	Proposal due by Nov 12th

READING LIST

Required readings are indicated with a *. Papers for referee reports are indicated with a †.

1. Household Structure

*Bardhan and Udry (1999). *Development Microeconomics (Ch 1 & Ch 2)*

*Udry, Christopher. 1996. "Gender, Agricultural Productivity and the Theory of the Household." *JPE*.

*Ashraf, Nava, Erica Field, and Jean Lee. "Household Bargaining and Excess Fertility: An Experimental Study in Zambia." *American Economic Review* 104, no. 7 (July 2014).

Calvi, Rosella (2020): "Why Are Old Women Missing in India? The Age Profile of Bargaining Power and Poverty"

LaFave, D., & Thomas, D. (2018). "Farms, Families, and Markets: New Evidence on Agricultural Labor Markets" *Econometrica*. <https://ipl.econ.duke.edu/dthomas/docs/ppr/16May-FarmHH.pdf>

Hanna, Rema, Esther Duflo, and Michael Greenstone. *Up in smoke: the influence of household behavior on the long-run impact of improved cooking stoves*. National Bureau of Economic Research, 2012.

Duflo, Esther (2003), "Grandmothers and Granddaughters: Old Age Pension and Intra-household Allocation in South Africa," *World Bank Economic Review* , Vol. 17 (1), pp. 1-25.

Duflo, Esther and Chris Udry. 2003. "Intrahousehold Resource Allocation in Côte d'Ivoire: Social Norms, Separate Accounts and Consumption Choices"

Rangel, Marcos and Duncan Thomas. 2019. "Decision-Making in Complex Households."

2. Labor Markets

a. Sources of Misallocation

* Gollin, D., Lagakos, D., & Waugh, M. E. (2014). The agricultural productivity gap. *The Quarterly Journal of Economics*, 129(2), 939-993.

*Fernando, A. Nilesh. 2020. "Shackled to the Soil: Inherited Land, Cultural Norms and Labor Mobility." *Journal of Human Resources*

Gollin, Douglas and Christopher Udry. 2018. "Heterogeneity, Measurement Error, and Misallocation: Evidence from African Agriculture"

Erica Field. 2007. Entitled to Work: Urban Tenure Security and the Labor Supply in Peru, *Quarterly Journal of Economics* 4(122): 1561-1602.

Chari, A.V., Elaine Liu, Shing-Yi Wang and Yongxiang Wang. 2017. "Property Rights, Land Misallocation and Agricultural Efficiency in China." Working paper.

Hornbeck, Richard, and Suresh Naidu. 2014. "When the Levee Breaks: Black Migration and Economic Development in the American South". *American Economic Review* 104(3): 963-990.

de Janvry, Alain, Marco Gonzalez-Navarro, Kyle Emerick, and Elisabeth Sadoulet. 2015. "Delinking land rights from land use: Certification and migration in Mexico." *American Economic Review*, 105(10): 3125-49

Hornbeck, Richard. 2010. "Barbed Wire: Property Rights and Agricultural Development". *Quarterly Journal of Economics* 125(2): 767-810.

b. Search and Hiring Frictions

*Abel, M, R. Burger and P Piraino (2020): "The Value of Reference Letters: Experimental Evidence from South Africa" *American Economic Journal: Applied Economics* 12 (3), 40-71

*Beaman, L and J. Magruder (2012): Who gets the Job Referral? Evidence from a Social Networks Experiment, *The American Economic Review*

Alfonsi, Livia, Oriana Bandiera, Vittorio Bassi, Robin Burgess, Imran Rasul, Munshi Sulaiman and Anna Vitali. 2017. "Tackling Youth Unemployment: Evidence from a Labour Market Experiment in Uganda." Working Paper.

Abebe, G., S. Caria, M. Fafchamps, P. Falco, S. Franklin & S. Quinn: "Anonymity or Distance? Job Search and Labour Market Exclusion in a Growing African City, Forthcoming, *Review of Economic Studies*.

Franklin, S (2018): "Location, Search Costs and Youth Unemployment: Experimental Evidence from Transport Subsidies". *Economic Journal* 128 (614), 2353-2379.

c. Intermediaries

*Bergquist, L. & M. Dinerstein (2020): "Competition and Entry in Agricultural Markets: Experimental Evidence from Kenya,, *Forthcoming, American Economic Review*

Autor, David (2008): "The economics of labor market intermediation." *NBER Working Paper No 14348* (2008)

Fernando A. N. & N. Singh (2020): "Regulation by Reputation? Quality Revelation of Labor Intermediaries in International Migration", *Mimeo*

Casaburi, L. & T. Reed (2020): “Interlinked Transactions and Competition: Experimental Evidence from Cocoa Markets”, *Mimeo*

Startz, M. & M. Grant (2020): “Cutting out the middleman: The structure of chains of intermediation”, *Mimeo*

Aker, Jenny. “Information from Markets Near and Far: Mobile Phones and Agricultural Markets in Niger.” *American Economic Journal: Applied Economics*. 2(July 2010): 46-59.

3. Capital

a. Credit Constraints

*de Mel, McKenzie, and Woodruff. "Returns to Capital in Microenterprises: Evidence from a Field Experiment," *Quarterly Journal of Economics*, 123 (2007): 1329-1372

*Haushofer, Johannes, and Jeremy Shapiro. 2016. “The Short-Term Impact of Unconditional Cash Transfers to the Poor: Experimental Evidence from Kenya.” *The Quarterly Journal of Economics*. 131(4): 1973-2042.

*Banerjee, A. V., & Duflo, E. (2005). Growth theory through the lens of development economics. *Handbook of economic growth*, 1, 473-552.

Kaboski, J. P., & Townsend, R. M. (2011). A structural evaluation of a large-scale quasi-experimental microfinance initiative. *Econometrica*, 79(5), 1357-1406.

Karlan, Dean and Jonathan Zinman. 2009. “Observing Unobservables: Identifying Information Asymmetries With A Consumer Credit Field Experiment.” *Econometrica* 77(6): 1993-2008.

Rosenzweig, Mark and Christopher Udry (forthcoming) “External Validity in a Stochastic World”. *Review of Economic Studies*

Stiglitz, J. and A. Weiss (1981). “Credit Rationing in Markets with Imperfect Information,” *American Economic Review* 71, 393–410.

Banerjee, Abhijit and Andrew Newman. 1993. “Occupational Choice and the Process of Development.” *Journal of Political Economy* 101(2): 274-298.

M. Eswaran and A Kotwal, “Access to Capital and Agrarian Production Organization,” *Economic Journal* 1986, 96, 482-498.

M. Ghatak and T. Guinnane, “The Economics of Lending with Joint Liability: Theory and Practice,” *Journal of Development Economics* 1999, 60, 1-34.

T. Besley and S. Coate, "Group Lending, Repayment Incentives and Social Collateral," *Journal of Development Economics* 1995, 46, 1-18.

Parker, Susan W., and Petra E. Todd. 2017. "Conditional Cash Transfers: The Case of Progresa/Oportunidades." *Journal of Economic Literature*, 55(3): 866-915.

Baird, Sarah and Craig McIntosh and Berk Ozler. "Cash or Condition? Evidence from a Cash Transfer Experiment." *Quarterly Journal of Economics* 126 (2011).

Banerjee, Karlan, and Zinman. 2015. "Six Randomized Evaluations of Microcredit: Introduction and Further Steps." *American Economic Journal: Applied Economics*, 7: 1-21.

Burgess, Robin and Rohini Pande. 2005. "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment." *American Economic Review* 95(3): 780-795.

b. Risk

*Karlan, Dean, Robert Osei, Isaac Osei-Akoto, Christopher Udry. 2014. "Agricultural Decisions after Relaxing Credit and Risk Constraints." *The Quarterly Journal of Economics* 129(2): 597-652.

*G. Bryan, S. Chowdhury and A. M. Mobarak. 2014. "Under-Investment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh," *Econometrica*, 82(5): 1671-1748.

Morten, M. (2019). Temporary Migration and Endogenous Risk Sharing in Village India. *Journal of Political Economy*

Munshi, Kaivan, and Mark Rosenzweig. 2016. "Networks and Misallocation: Insurance, Migration, and the Rural-Urban Wage Gap." *American Economic Review*, 106(1): 46-98.

Casaburi, Lorenzo, and Jack Willis. "Time versus state in insurance: Experimental evidence from contract farming in Kenya." *American Economic Review* 108.12 (2018): 3778-3813.

Cole, Shawn A., Xavier Gine, Jeremy Tobacman, Petia Topalova, Robert M. Townsend, and James Vickery. 2013. "Barriers to Household Risk Management: Evidence from India." *American Economic Journal: Applied Economics* 5(1): 104-135.

R. Townsend, "Risk and Insurance in Village India," *Econometrica*, 1994

4. Technology Adoption

a. Social Learning

*Conley, Timothy and Chris Udry. 2010. “Learning About a New Technology: Pineapple in Ghana.” *American Economic Review*

BenYishay, Ariel, and A. Mushfiq Mobarak. 2018. Social learning and Incentives for Experimentation and Communication. *Review of Economic Studies*.

Munshi, Kaivan, “Social learning in a heterogeneous population: technology diffusion in the Indian Green Revolution,” *Journal of development Economics*, 2004, 73 (1), 185–213. .

Foster, A. and M. Rosenzweig, “Microeconomics of Technology Adoption,” *Annual Reviews of Economics*, 2010.

Oster, Emily and Rebecca Thornton, “Determinants of technology adoption: Peer effects in menstrual cup take-up,” *Journal of the European Economic Association*, 2012, 10 (6), 1263–1293.

Bandiera, Oriana and Imran Rasul, “Social networks and technology adoption in northern Mozambique,” *The Economic Journal*, 2006, 116 (514), 869–902.

Bursztyn, L., Ederer, F., Ferman, B., & Yuchtman, N. (2014). Understanding mechanisms underlying peer effects: Evidence from a field experiment on financial decisions. *Econometrica*, 82(4), 1273-1301.

b. Markets for Information

*Cole, Shawn and Niles Fernando. 2020. “‘Mobile’izing Agricultural Advice: Technology Adoption, Diffusion and Sustainability.” Forthcoming, *Economic Journal*

Jensen, Robert T. (2007). “The Digital Divide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector,” *Quarterly Journal of Economics*, 122(3), p. 879 – 92.

Foster, A. and M. Rosenzweig, “Microeconomics of Technology Adoption,” *Annual Reviews of Economics*, 2010.

Hanna, Rema, Sendhil Mullainathan, and Joshua Schwartzstein. 2014. *Learning through noticing: theory and experimental evidence in farming*. QJE.

Foster, Andrew, Mark Rosenzweig. 1995. "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture." *Journal of Political Economy*.

Aker, Jenny. "Information from Markets Near and Far: Mobile Phones and Agricultural Markets in Niger." *American Economic Journal: Applied Economics*. 2(July 2010): 46-59.

Bloom, Eifert, Mackenzie, Mahajan and Roberts. "Does Management Matter? Evidence from India," *Quarterly Journal of Economics* 127 (2012):1351-1408

Jack, K., "Market Inefficiencies and the Adoption of Agricultural Technologies in Developing Countries," ATAI, 2011.

5. Education

a. Impact and Externalities

*Duflo, Esther. 2001. "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment." *American Economic Review*, 91(4): 795-813.

Miguel, Edward and Michael Kremer. 2004. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." *Econometrica* 72(1): 159–217.

Baird, Sarah, Joan Hamory Hicks, Michael Kremer, and Edward Miguel. 2016. "Worms at Work: Long-Run Impacts of a Child Health investment." *Quarterly Journal of Economics* 131 (4): 1637-1680.

Chong, Alberto, Isabelle Cohen, Erica Field, Eduardo Nakasone, and Maximo Torero. Iron Deficiency and Schooling Attainment in Peru. *American Economic Journal: Applied Economics*, forthcoming.

Duflo, Esther, Pascaline Dupas and Michael Kremer. 2015. "Education, HIV and Early Fertility: Experimental Evidence from Kenya." *American Economic Review* 105(9).

Pritchett, Lant. 2001. "Where Has All the Education Gone?" *The World Bank Economic Review* 15 (3): 367-391.

Muralidharan, Karthik and Venkatesh Sundararaman. 2011. "Teacher Performance Pay: Experimental Evidence from India." *Journal of Political Economy* 119(1): 39-77.

Schoellman, Todd. 2012. "Education Quality and Development Accounting." *Review of Economic Studies* 79(1): 388-417.

b. Markets for Education

*Andrabi, T., Das, J., Khwaja, A. I., Ozyurt, S., & Singh, N. (2020). Upping the Ante: The Equilibrium Effects of Unconditional Grants to Private Schools, forthcoming, *American Economic Review*

Andrabi, T., Das, J., & Khwaja, A. I. (2017). Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets. *American Economic Review*, 107(6), 1535-63.

6. Methods

a. General

Very useful resource for a variety of topics:

https://blogs.worldbank.org/impactevaluations/curated-list-our-postings-technical-topics-your-one-stop-shop-methodology?cid=SHR_BlogSiteShare_XX_EXT

b. Regression Discontinuity Designs

Cattaneo, Idrobo, and Titiunik : *A Practical Introduction to Regression Discontinuity Designs: Extensions, Cambridge Elements: Quantitative and Computational Methods for Social Science*, Cambridge University Press, available here: https://cattaneo.princeton.edu/books/Cattaneo-Idrobo-Titiunik_2018_CUP-Vol2.pdf

A Practical Introduction to Regression Discontinuity Designs: Foundations, with Nicolas Idrobo and Rocio Titiunik *Cambridge Elements: Quantitative and Computational Methods for Social Science*, Cambridge University Press, February 2020: https://cattaneo.princeton.edu/books/Cattaneo-Idrobo-Titiunik_2019_CUP-Vol1.pdf

c. Difference-in-Differences

McKenzie, D (2012): “Beyond baseline and follow-up: The case for more T in experiments” *Journal of Development Economics*

Bacon, A (2019): “Differences-in-Differences with Variation in Treatment Timing” , available from: https://cdn.vanderbilt.edu/vu-my/wp-content/uploads/sites/2318/2019/07/29170757/ddtiming_7_29_2019.pdf

d. Bartik Instruments

Goldsmith-Pinkham, P., Sorkin, I., & Swift, H. Bartik Instruments: What, When, Why, and How, forthcoming, *American Economic Review*.

e. Machine Learning

*Duflo, Esther (2018): “Machinistas Meet Randomistas” , see:
<https://www.nber.org/programs/dev/slides/18Duflo.pdf>

Belloni, A., Chernozhukov, V., & Hansen, C. (2014). Inference on treatment effects after selection among high-dimensional controls. *The Review of Economic Studies*, 81(2), 608-650.

f. Multiple Hypothesis Testing

*Anderson, M. L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects. *Journal of the American statistical Association*, 103(484), 1481-1495.

g. Misc.

Muralidharan, K, M. Romero, and K. Wuthrich (2020): “Factorial designs, model selection, and (incorrect) inference in randomized experiments” , available from:
[https://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/CrossCuts%20\(Current%20WP\).pdf](https://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/CrossCuts%20(Current%20WP).pdf)

7. Public Finance and Development

*A. Brockmeyer, A. Estefan, K. Ramirez, and J. Serrato (2020): Optimal Property Taxation in Developing Countries: Theory and Evidence from Mexico

*Pomeranz, D. (2015): “No Taxation Without Information: Deterrence and Self-Enforcement in the Value-Added Tax,” *American Economic Review*, 105 (8).

Naritomi, J. (2018): “Consumers as Tax Auditors,” *American Economic Review*.

Best, M., A. Brockmeyer, H. Kleven, J. Spinnewijn, M. Waseem (2015): “Production vs Revenue Efficiency with Limited Tax Capacity: Theory and Evidence from Pakistan,” *Journal of Political Economy*, 123 (6)

Balan, P, A. Bergeron, G. Tourek, and J. Weigel (2020): Local Elites as State Capacity: How City Chiefs Use Local Information to Increase Tax Compliance in the D.R. Congo, *Mimeo*, available [here](#).