ECO 2701H

DEVELOPMENT ECONOMICS I

University of Toronto Department of Economics

Winter 2020 Lectures: Tuesday 3pm-5pm, OI (OISE) 2198

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COURSE DESCRIPTION

This provides a partial survey of current economic issues faced by less developed countries. The focus is on the *application* of econometrics and economic theory, to demonstrate how the analytic techniques used in growth and applied microeconomics can be used to inform economic problems and public policy in these countries.

The material covered draws on (calculus-based) microeconomic theory and econometrics; it is suitable for both M.A. and Ph.D. students. The emphasis of the course is on the *interpretation* and *evaluation* of empirical evidence relevant for the conduct of public policy in developing countries.

OUTLINE OF TOPICS

- 1. Measuring development
- 2. Consumption
- 3. Institutions
- 4. Health
- 5. Returns to schooling
- 6. School quality and demand
- 7. Fertility and household bargaining
- 8. Risk, shocks and openness
- 9. Credit markets and capital
- 10. Firms
- 11. Farms

COURSE WEBSITE

Course materials will be posted on the course website.

EVALUATION

The course requirements are:

1. Four short assignments (14 percent each), due:

January 28th (Week 4) February 11th (Week 6) March 10th (Week 9) March 31st (Week 12)

The short assignments are designed to practice applying the concepts from the readings and lectures, and will involve some combination of data analysis (sometimes using data from the papers assigned) and theory. You are allowed to work in groups but please write up the results in your own words.

2. Referee report and presentation/proposal (20 percent each). The referee report is due <u>February 25th (Week 7</u>, after the reading week), while the presentation will be scheduled during the last week of classes or the week after (e.g. between March 31^{st} -April 10^{th}).

Referee reports are critical evaluation of an academic article and are typically 2-4 double-spaced pages. For your report, please pick a "job market paper" by a PhD job candidate on a Development topic from the last two years. Instructions on how to prepare a good referee report will be posted on the course website, but primarily your goal should be to write a clear and concise summary of the paper, underlining its main contribution, and a critique of theoretical or empirical aspects of the paper that is both accurate and if possible constructive.

The presentation is essentially a 30 minute oral referee report with slides and is based on similar evaluation criteria – similar to a conference discussion but longer to allow for more summary (since we didn't just see the paper presented by the author). You are free to choose any paper on a development topic (if unsure, e-mail me or see me in office hours).

If you are PhD student, you are allowed to and strongly encouraged to submit a research proposal (3-4 pages) instead of the presentation. This is not a completed paper or presentation with results, but you must clearly describe a research question and empirical or theoretical methodology (this includes data, empirical specification and identification strategy) in addition to providing a brief overview of the related literature and where your proposed research would make a contribution. Evaluation will be based on both the quality and feasibility of the research proposal. If you choose this option you are encouraged to meet with me before March. You are also welcome to present your proposal at the end of class to get feedback from peers.

3. Class participation (4 percent)

POLICIES

*Late Assignments will be penalized at 10% per day unless excused in advance.

*To appeal a grade you must meet me in office hours to discuss – you will get a complete re-grade. *Academic misconduct – don't plagiarize. It is acceptable to work together on the short assignments (but not the referee report or presentation) but please write up your answers separately.

SOFTWARE

Although you are free to use any software you want, for the data analysis students are recommended to use STATA, which is widely used by economists and for which I can also provide assistance. STATA is installed on the network computers. You can also purchase your own copy of STATA for use on your personal computer. STATA can be purchased at the Software Licensing Office in the Information Commons of Robarts Library (<u>http://sites.utoronto.ca/ic/software/detail/stata.html</u>). Note that STATA/IC is sufficient for this course.

Техтвоок:

BANERJEE, ABHIJIT AND ESTHER DUFLO. <u>POOR ECONOMICS</u>. PUBLIC AFFAIRS: NEW YORK. 2011.

USEFUL REFERENCES:

Econometrics: Joshua Angrist and Steve Pischke. Mostly Harmless Econometrics. 2008

- Econometrics and data: Angus Deaton, <u>The Analysis of Household Surveys: A Microeconometric</u> <u>Approach to Development Policy</u>. Johns Hopkins University Press: Baltimore, Maryland. 1997.
- Theory: Bardhan, Pranab and Christopher Udry. <u>Development Microeconomics</u>. Oxford University Press: New York. 2000.

The Banerjee and Duflo book is a very readable, non-technical overview of the recent empirical literature (with particular emphasis on RCTs and behavioural economics). The Deaton book is a classic for analyzing cross-sectional data and has a lot on welfare measurement, sampling and survey design, as well as consumer/household behavior. Angrist and Pischke provides a much more in-depth treatment of applied (micro) econometrics including instrumental variables, panel data methods and RD. The Bardhan and Udry book covers classic microeconomic theory models from development economics.

Each week has two starred, required readings (in some cases there is an additional reading required for PhD students). The other papers are optional although they may be discussed in class or on the short assignments. I will post the required (non-textbook) readings on the course web-site for your convenience.

COURSE OUTLINE AND READINGS (LISTED LECTURES APPROXIMATE)

1. Measuring Development Concepts: Logs and levels, variance decomposition

*Hsieh, Chang-Tai and Peter J. Klenow (2010). "Development Accounting", *American Economic Journal: Macroeconomics*, 2:1, 207-223.

*Jones, Charles I. and Peter J. Klenow (2016). "Beyond GDP? Welfare across Countries and Time." *American Economic Review*. 106(9): 2426-2457.

Deaton, Angus (2005). "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)." *Review of Economics and Statistics*, 87(1), 1-19.

2. Consumption

Concepts: consumer surplus and revealed preference

*Poor Economics Chapter 2

*Hausman, Jerry (2003) "Sources of Bias and Solutions to Bias in the Consumer Price Index." *The Journal of Economic Perspectives* 17(1): 23-44.

Atkin, David, and Benjamin Faber and Marco Gonzalez-Navarro (2017). "Retail Globalization and Household Welfare: Evidence from Mexico." *Journal of Political Economy*.

Almås, Ingvild (2012) "International Income Inequality: Measuring PPP Bias by Estimating Engel Curves for Food." *American Economic Review*, 102(2): 1093-1117.

Feenstra, Robert (1994). "New Product Varieties and the Measurement of International Prices." *American Economic Review*. 84(1): 157-177.

3. Institutions

Concepts: Instrumental Variables

- *Acemoglu, Daron, Simon Johnson, and James A. Robinson (2001). "Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review*, 91(5), 1369-1401. [JSTOR]
- *Banerjee, Abhijit, and Lakshmi Iyer (2005). "History, Institutions and Economic Performance: the Legacy of Colonial Land Tenure Systems in India." *American Economic Review*, 95(4), 1190-1213.
- Nunn, Nathan (2008). "The Importance of History for Economic Development", *Annual Review of Economics*, 1(1), 65-92.
- Deaton, Angus (2009). "Instruments of development: Randomization in the tropics, and the search for the elusive keys to economic development."

Poor Economics Chapter 10

4. Human Capital: Health Concepts: Randomized Control Trials

*Poor Economics Chapter 3

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

- Strauss, John and Duncan Thomas (2008). "Health over the Life Course." *Handbook of Development Economics Volume 4*. 3375-3474.
- [*PhD] Duflo, Esther, Rachel Glennerster and Michael Kremer (2008). "Using Randomization in Development Economics Research: A Toolkit." *Handbook of Development Economics Vol. 4*.
- [*PhD] Romano, Joseph P., Azeem M. Shaikh, and Michael Wolf (2010). "Multiple Testing." *The New Palgrave Dictionary of Economics.*

5. Human Capital: Returns to schooling Concepts: Difference-in-difference, measurement error

*Duflo, Esther (2000). "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment", *American Economic Review*, 91(4), 795-813.

*Krueger, Alan and Mikael Lindahl (2001). "Education and growth: Why and for whom?" *Journal of Economic Literature*, 39(4), 1101-1136.

[*PhD] Card, David (2001). "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems." *Econometrica*. Vol. 69(5), 1127-1160.

6. Human Capital 3: School quality and demand Concepts: Regression Discontinuity

*Poor Economics Chapter 4

*Duflo, Esther, Pascaline Dupas, and Michael Kremer (2011). "Peer Effects, Teacher Incentives, and the Impact of Tracking: Evidence from a Randomized Evaluation in Kenya", *American Economic Review* 101(5): 1774.

Bobonis, Gustavo, and Frederico Finan. (2009). "Neighborhood Peer Effects in Secondary School Enrollment Decisions." *Review of Economics and Statistics*. 91(4), 695-716.

[*PhD] Lee, David S. and Thomas Lemieux. (2010). "Regression Discontinuity Designs in Economics." *Journal of Economic Literature*, 48: 281-355.

7. Fertility and household-bargaining Concepts: Standard errors in empirical work

*Poor Economics Chapter 5

- *Jayachandran, Seema and Adriana Lleras-Muney. (2009). "Life Expectancy and Human Capital Investments: Evidence from Maternal Mortality Declines." *Quarterly Journal of Economics*. Vol 124(1), p. 349-397.
- Duflo, Esther. (2012). "Women Empowerment and Economic Development" *Journal of Economic Literature* 50(4): 1051-1079.

8. Risk, shocks and trade Concepts: GE

*Poor Economics Chapter 6

- *Jayachandran, Seema (2006). "Selling Labor Low: Wage Responses to Productivity Shocks in Developing Countries." *Journal of Political Economy*. Vol.114(3), 538-575.
- Jayachandran, Seema, Jesse M. Cunha and Giacomo De Giorgi (2015). "The Price Effects of Cash Versus In-Kind Transfers." *Working Paper*.
- Burgess, Robin and Dave Donaldson (2010): "Can Openness Mitigate the Effects of Weather Shocks? Evidence from India's Famine Era. "American Economic Review 100(2): 449-453.
- Munshi, Kaivan (2003). "Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market", *Quarterly Journal of Economics*, 118:2: 549-597.

9. Physical Capital Concepts: principal agent problems, quantile regression

*Poor Economics Chapter 7 (credit)

*Karlan, Dean, and Jonathan Zinman (2009). "Observing Unobservables: Identifying Information Assymmetries with a Consumer Credit Field Experiment." *Econometrica*, 77(6), 1993-2008.

Poor Economics Chapter 8 (savings)

Banerjee, Abhijit V., and Esther Duflo (2010). "Giving Credit Where It Is Due." *Journal of Economic Perspectives*, 24(3), 61-80 and Appendix.

Banerjee, Abhijit, Dean Karlan and Jonathan Zinman (2015). "Six Randomized Evaluations of Microcredit: Introduction and Further Steps." *American Economic Journal: Applied Economics*, 7(1): 1-21. [Special issue on Micro-credit. See also first paper "Miracle of Microfinance" by Banerjee, Duflo, Glennerster, Kinnan.]

10. Firms Concepts: Misallocation across production units, production function estimation

*Poor Economics Chapter 9

*Restuccia, Diego and Richard Rogerson. (2017) "The Causes and Costs of Misallocation." *Journal* of Economic Perspectives. 31(3): 151-174.

Hsieh, Chang-Tai and Peter Klenow. (2009) "Misallocation and Manufacturing TFP in China and India." *Quarterly Journal of Economics*. 124(4): 1403-1448.

Bloom, Nicholas, Raffaella Sadun and John Van Reenen (2012). "The Organization of Firms Across Countries." *Quarterly Journal of Economics* 127(4): 1663-1705.

Bloom, Nicholas, Benn Eifert, Aprajit Mahajan, David McKenzie and John Roberts. (2013). "Does Management Matter? Evidence from India." *Quarterly Journal of Economics*. 128(1): 1-51.

11. Farms Concepts: Learning models

*Goldstein, Markus and Christopher Udry. (2008) "The Profits of Power: Land Rights and Agricultural Investment in Ghana." *Journal of Political Economy*. 116(6), 981-1022.

*Conley, Timothy, and Christopher Udry (2010). "Learning about a New Technology: Pineapple in Ghana." *American Economic Review*, 100(1), 35-69.

Shaban, Radwan Ali. (1987). "Testing between Competing Models of Sharecropping." *Journal of Political Economy*, Vol. 95(5), 893-920.

Adamopolous, Tasso and Diego Restuccia. (2014). "The Size Distribution of Farms and International Productivity Differences" *American Economic Review*, 104(6): 1667-97.

Lagakos, David, and Michael E. Waugh. (2013). "Selection, Agriculture, and Cross-Country Productivity Differences." *American Economic Review*, 103(2): 948-80.

LaFave, Daniel and Duncan Tomas. (2016). "Farms, Families, and Markets: New Evidence on Completeness of Markets in Agricultural Settings." *Econometrica*, 84(5): 1917-1960.