## ECO 2701H

## **DEVELOPMENT ECONOMICS I**

# **University of Toronto Department of Economics**

## **Winter 2018**

Lectures: Tuesday 3pm-5pm, GE100

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Office hours: TBA

### **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 (IV)
- 4. Human Capital 1 (RCT)
- 5. Human Capital 2 (DiD)
- 6. Human Capital 3 (s.e.)
- 7. Externalities (RD)
- 8. Risk, shocks and openness
- 9. Capital
- 10. Firms
- 11. Farms

### **COURSE WEBSITE**

Course materials will be posted on the Blackboard course website.

### **EVALUATION**

The course requirements are:

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

January 23<sup>rd</sup> (Week 3) February 13<sup>th</sup> (Week 6) March 13<sup>th</sup> (Week 9) April 3<sup>rd</sup> (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 (20 percent each)**. The referee report is due <u>February 27th</u> (<u>Week 7</u>, just after the reading week), while the presentation will be scheduled during the last week of classes or the week after (e,g, between April 3<sup>rd</sup>-April 13<sup>th</sup>).

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.

## 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 (<a href="http://sites.utoronto.ca/ic/software/detail/stata.html">http://sites.utoronto.ca/ic/software/detail/stata.html</a>). 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 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 non-textbook readings on the Blackboard site as necessary but all should be available electronically through the library or author web-sites.

## 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: 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.

## 5. Human Capital: Health

**Concepts: Randomized Control Trials, Peer effects** 

\*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*.

## 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: Hidden information/action models, commitment problems

\*Poor Economics Chapter 7 (credit)

\*Poor Economics Chapter 8 (savings)

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

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

### 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.