Public Policy 750.310: Applied Methods for Development

Winter, 2019

Professor Eduardo Montero

Class Meetings: Tuesdays, 4 p.m. – 6 p.m. in Weill 1210
Office Hours: Wednesdays, 3 p.m. – 5 p.m. in Weill 4219

Course Description:

The pace and extent of economic development in a country depends on many factors. The type and scope of corruption, the rule of law and the protection of property rights, the levels of trust in a society can all influence the success of reforms and the extent to which different sectors of society will benefit. Can these factors be changed with specific economic policies? If so, what are they and how are they best implemented? Are there country-specific characteristics such as history and culture that determine economic fate? We will consider these questions and more in this class.

This class will have three goals. First, students will be introduced to the most recent research on the aforementioned topics in development economics and political economy. Second, students will learn to use quasi-experimental methods - such as regression discontinuity designs and difference-in-difference designs - to analyze non-experimental data that are often used to generate causal policy evidence for topics that are difficult to study with experimental methods. Finally, students will learn basic R programming skills so that they can analyze data sets, create data visualizations, and apply these quasi-experimental methods. No prior knowledge of R is required.

The course is aimed at MPP, MAE, and other masters' or Ph.D. students who are interested in economic development, or who may wish to use these tools in program design or evaluation. PP 639: Program Evaluation or familiarity with similar techniques is highly recommended. Assignments will alternate between short memos discussing assigned development economics papers and short R assignments aimed at developing simple programming skills and analyzing development datasets.

Grading:

1. Class participation   20%

    Students are required to read the required readings before class, and to actively participate in class discussions. Only students that are able and willing to do the readings before class and actively participate in the lectures should enroll in the course.

2. Reading Responses   (2.5% each)   30%

    To develop skills for reading and critiquing development economics research, students will be required prior to the beginning of each class (i.e., every Tuesday), to write a short summary of *one* of the required readings for that day and upload the summary to the course website. The summary should also cover (i) the empirical methodology used, (ii) why the paper is important, and (iii) what you liked – or did not like – about the paper, with a focus on the empirical design. Because this is a two-unit course, students will only be required to read the introduction of the paper and the tables/figures in-depth.

3. R Assignments   (10% each)   50%

    One of the goals of the course is for students to develop basic programming skills for R to implement the empirical methods learned in the course. Thus, the course will have five assignments that have students work through basic R programming exercises related to the topics and programming skills covered in the lectures. The assignments are meant to not be overly time consuming and instead provide hands-on experience with programming in R. Students will be asked to turn in both an R script and the associated R output.

Recommended Textbooks:

Development economics research articles will constitute the core readings of the course. However, the following textbooks are recommended for the empirical methods topics and R programming topics of lectures:

    1.) Angrist, Joshua and Jörn-Steffen Pischke. 2014. Mastering Metrics. Princeton: Princeton University Press and/or Angrist, Joshua and Jörn-Steffen Pischke. 2009. Mostly Harmless Econometrics. Princeton: Princeton University Press. (Note: The former book is more accessible for a wider audience while the latter book is more technical, but both are great resources.)

    2.) Hadley Wickham and Garrett Grolemund. 2017. R for Data Science. O'Reilly Media.

Software:

The assignments will require the use of statistical software. The software for the class is R. R is an open-source, free software used widely in data science work (economics, statistics, political science, etc.). The course will use RStudio as the main interface for programming in R and is available for free as well. R is available to for download at: https://www.r-project.org/ and RStudio is available for download at: https://www.rstudio.com/products/rstudio/download/.

The University of Michigan also provides R resources here: https://its.umich.edu/academics-research/research/scs/statistics-programs/r and help with software and walk-in programming consultations here: https://cscar.research.umich.edu/

Course Schedule and Reading List:

(Note: Readings marked with a * are required)
There is a Canvas website for this course. Lecture notes, and all other course-related materials will be posted in the Files section of the website. I will also post course announcements (and any changes to office hours) on the web page.

Section I: Introduction

Introduction to Economic Development and the Political Economy of Development (Jan 15th):

(Note: No reading assigned before first class.)

Do Leaders Matter for Economic Development (Jan 22nd):

*Jones, Ben and Benjamin Olken. (2005). "Do Leaders Matter? National Leadership and Growth since World War II," *Quarterly Journal of Economics*, 120(3): 835-864.

Duflo, Esther and Raghabendra Chattopadhyay. (2004). "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India," *Econometrica* 72(5): 1409-1443.

The Role of Governments and Institutions (Jan 29th):

*Acemoglu, Daron, Simon Johnson, and James Robinson. (2001). "Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review*, 91(5): 1369-1401.

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

Assignment 1 Handed Out: Introduction to R, R scripts, and RStudio

The Role of Culture for Development and Development Policy I: Short-Run (Feb 5th):

*Fisman, Raymond and Edward Miguel. (2008). "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets," *Journal of Political Economy*, 115(6): 1020-1048.

Henrich, Joseph, Robert Boyd, Sam Bowles, Colin Camerer, Herbert Gintis, Richard McElreath and Ernst Fehr. (2001). "In search of Homo Economicus: Experiments in 15 Small-Scale Societies," *American Economic Review*, 91(2): 73-79.

The Role of Culture for Development and Development Policy II: Long-Run (Feb 12th):

*Alesina, Alberto, Paola Giuliano and Nathan Nunn. (2013). "On the Origins of Gender Roles: Women and the Plough," *Quarterly Journal of Economics*, 128 (2): 469-530.

Lowes, Sara, and Eduardo Montero. (2018). "The Legacy of Colonial Medicine in Central Africa," Working Paper.

Nunn, Nathan, and Leonard Wantchekon. 2011. "The Slave Trade and the Origins of Mistrust in Africa." *American Economic Review*, 101 (7): 3221-52.

Assignment 2 Handed Out: IV Regressions in R + Data Visualization Exercises

Section II: Development Through Foreign Intervention

Development Through Foreign Aid? (Feb. 19th):

*Nunn, Nathan and Nancy Qian. (2014). "U.S. Food Aid and Civil Conflict," *American Economic Review*, 104 (6): 1630-1666.

Crost, Benjamin, Joseph Felter, and Patrick B. Johnston. (2014). "Aid Under Fire: Development Projects and Civil Conflict," *American Economic Review*, 104 (6): 1833-1856.

Galiani. Sebastian, Stephen Knack, Lixin Colin Xu and Ben Zou. (2017). "The Effect of Aid on Growth: Evidence from a Quasi-Experiment," *Journal of Economic Growth*, 22 (1):1-33

Development and External Influence (Feb 26th):

*Kuziemko, Ilyana and Eric Werker. (2006). "How Much is a Seat on the UN Security Council Worth?" *Journal of Political Economy*, 114: 905-930.

Easterly, William, Daniel Berger, Nathan Nunn and Shanker Satyanath. (2013). "Commercial Imperialism? CIA Interventions and Trade during the Cold War," *American Economic Review*, 103 (2): 863-896.

Trade and Industrial Policy (Mar 12th):

> *Edmonds, Eric, Nina Pavcnik and Petia Topalova. (2010). "Trade Adjustment and Human Capital Investments: Evidence from Indian Tariff Reform," American Economic Journal: Applied Economics, 2 (4): 42-75.*

> *Nunn, Nathan and Daniel Trefler. (2010). "The Structure of Tariffs and Long-Term Growth," American Economic Journal: Macroeconomics, 2 (4): 158-194.*

> **Assignment 3 Handed Out:** Diff-in-Diff Methods and ggplot Visualization Exercises

Improving Monitoring and Collective Action (Mar 19th):

> Björkman, Martina, and Jakob Svensson. (2009). "Power to the People: Evidence from a Randomized Experiment of a Citizen Report Card Project in Uganda," *Quarterly Journal of Economics,* 124 (2): 735-769.

> *Olken, Benjamin. (2007). "Monitoring Corruption: Evidence from a Field Experiment in Indonesia," *Journal of Political Economy,* 115 (2): 200–49.

Section III: Conflict, Crime and Corruption in Developing Countries

Crime (Mar 26th):

> *Dell, Melissa. (2015). "Trafficking Networks and the Mexican Drug War," *American Economic Review*, 105 (6): 1738-1779

> Sviatschi, Maria Micaela. (2018). "Making a Narco: Childhood Exposure to Illegal Labor Markets and Criminal Life Paths," Working Paper

Conflict (Apr 2th):

> Dube, Oeindrila and Juan F. Vargas. (2010). "Commodity Price Shocks and Civil Conflict: Evidence from Colombia," *Review of Economic Studies,* 80 (4):1384-1421.

> *Miguel, Edward, Shanker Satyanath, and Ernest Sergenti. (2004). "Economic Shocks and Civil Conflict: An Instrumental Variables Approach," *Journal of Political Economy,* 112 (4): 725–53.

> Dell, Melissa, and Pablo Querubin. (2018). "Nation Building Through Foreign Intervention: Evidence from Discontinuities in Military Strategies," *Quarterly Journal of Economics*, 133 (2): 701-764.

> **Assignment 4 Handed Out:** Regressions Discontinuity Designs and Plots + Plotting Regression Coefficients

Corruption I: Is Corruption Inefficient? Balancing Risks, Rents, and Incentives (Apr 9th):

*Bertrand, Marianne, Simeon Djankov, Rema Hanna and Sendhil Mullainathan. (2007). "Obtaining a Driver's License in India: An Experimental Approach to Studying Corruption," *The Quarterly Journal of Economics,* 122 (4): 1639–76.

Hsieh, Chang Tai, and Enrico Moretti. (2006). "Did Iraq Cheat the United Nations? Underpricing, Bribes, and the Oil for Food Program," *The Quarterly Journal of Economics,* 121 (4): 1211–48.

Sanchez de la Sierra, Raul. (2018). "Corrupt Hierarchies," Working Paper.

Corruption II: Politicians and Firms (April 16th):

Fisman, Ray. (2001). "Estimating the Value of Political Connections*," American Economic Review,* 91 (4)*: 1095–102.*

*Khwaja, Asim Ijaz, and Atif Mian. (2005). "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market," *Quarterly Journal of Economics*, 121 (4): 1371–411.

Assignment 5 Handed Out: Replication Exercise
(Note: This assignment will ask you to replicate a table or figure in R from a pre-specified set of development economics papers related to topics covered in class. Most published economics papers post their data and Stata code; this assignment will take the data and replicate parts of the paper in R instead.)

Conclusion + Topic TBD (Apr 23rd):

FORD SCHOOL OF PUBLIC POLICY INCLUSIVITY STATEMENT

Members of the Ford School community represent a rich variety of backgrounds and perspectives. We are committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:
- share their unique experiences, values and beliefs
- be open to the views of others
- honor the uniqueness of their colleagues
- appreciate the opportunity that we have to learn from each other in this community
- value one another's opinions and communicate in a respectful manner
- keep confidential discussions that the community has of a personal (or professional) nature
- use this opportunity together to discuss ways in which we can create an inclusive environment in Ford classes and across the UM community

Accommodations for Students with Disabilities: If you believe you need an accommodation for a disability, please let your instructor know at your earliest

convenience. Some aspects of courses may be modified to facilitate your participation and progress. As soon as you make your instructor aware of your needs, they can work with the Services for Students with Disabilities (SSD) office to help determine appropriate academic accommodations. Any information you provide will be treated as private and confidential.

Student Mental Health and Well-Being Resources: The University of Michigan is committed to advancing the mental health and wellbeing of its students. We acknowledge that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impacts students' academic performance. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) and/or University Health Service (UHS). For a listing of other mental health resources available on and off campus, visit: http://umich.edu/~mhealth/

Please review additional information and policies regarding academic expectations and resources at the Ford School of Public Policy at this link:

http://fordschool.umich.edu/academics/expectations