

17.830

Empirical Methods in Political Economy

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Fall 2015. E53-485.
Tues 9:00am–11:00am.

COURSE DESCRIPTION

This course surveys recent quantitative work in political economy. Unlike a typical graduate-level course in political science, we will focus on a limited number of readings each week, with the goal of understanding and evaluating in detail all the analytical decisions made by the authors of each study. Topics range from the link between institutions and political development in poor societies to the operation of legislatures in rich democracies. Methodological topics that will be covered include panel methods, the use of behavioral measures in experiments, statistical learning models, measurement models, estimating spillover effects, and text analysis. Topics may change based on the interests of the enrolled students.

The bulk of each class will be devoted to discussion of the assigned reading, though in some weeks the instructor will lecture for 20-30 minutes on more advanced methodological topics in order to provide necessary background.

I assume a working knowledge of the materials covered in the first two courses of the methods sequence in the MIT Political Science Department. For those of you without this background, I suggest that you either wait to take the class or take a substantial amount of time to familiarize yourself with that material.

REQUIREMENTS

1. *Class Participation* (30% of the grade). To facilitate discussion, each week each student will write a short memo based on the assigned reading. This memo should be no more than one or two paragraphs, and it should address one or more of the following questions: (i) Are the claims in the text believable? (ii) Is the evidence presented in the article fully consistent with the main argument of the paper? (iii) If you do not find the claims fully convincing, what pieces of evidence would have you convinced you? (iv) What questions do the readings raise but not adequately address? (v) What do the readings suggest about promising directions for further research? The memos will not be graded, but they will be circulated to all participants so everyone can read them before class.

Please post the memos on to the “Forum” section of the Stellar class website under the appropriate discussion thread by 5:00pm Monday. The URL for this forum is: <https://stellar.mit.edu/stellar-forums/phpbb/viewforum.php?f=14317>

2. *Replication Exercise or Research Design* (70% of the Grade). The “default” main assignment for the course is a replication exercise. If, however, you are working on a more developed project or have a promising idea for a research paper, you may instead submit a detailed research proposal (with instructor permission).

For the replication exercise, please choose a quality (in consultation with the instructor) social scientific study with replication data available and where a meaningful extension of the study is possible. You will conduct a pre-registered replication study, where you will check both the mechanical producibility (does the code generate the advertised results?) and the robustness of the findings to plausible alternative specifications and out of sample data. Especially welcome are studies that replicate the original analysis with new data from a different setting or time period to evaluate generalizability of the original results. The goal is not to undermine the original study but rather learn about its strengths and weaknesses.

This replication study should be *pre-specified* in that you should not examine the complete original dataset prior to formulating your intended robustness checks. One partial exception is that you can inspect the data with either the outcome or treatment variable stripped out (or permuted) so that you might understand the basic features of data before committing to your replication analysis.

For advice on writing a pre-analysis plan, see: <http://blogs.worldbank.org/impac-tevaluations/a-pre-analysis-plan-checklist>

Before starting on the replication project, you may want to read: <http://gking.harvard.edu/papers>

You need to choose the paper you will replicate and notify the instructor of your choice by 10/20. Before finalizing your replication plan, we will discuss a draft of your pre-analysis plan on 10/27. To provide sufficient time for participants to read the draft before class, please circulate a draft by 5:00pm on 10/25. After receiving feedback from your classmates, you should “register” your plan with the instructor. Results of the analysis will be presented on 12/8. A write up and a replication package of your replication is due 12/21.

The writeup of your replication results should be short, with minimal space devoted to motivation and theory. You are welcome to engage in analyses that you did not pre-register, but clearly identify these deviations in your writeup.

INTRODUCTION TO THE COURSE (9/15)

EFFECTS OF DEMOCRACY (9/22)

Methods topics: panel models, semi-parametric difference-in-differences

- Daron Acemoglu et al. 2014. *Democracy Does Cause Growth*. Working Paper, Working Paper Series 20004. National Bureau of Economic Research, March. doi:10.3386/w20004. <http://www.nber.org/papers/w20004>
- Robin Burgess et al. 2015. “The Value of Democracy: Evidence from Road Building in Kenya.” *American Economic Review* 105 (6): 1817–51. doi:10.1257/aer.20131031. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.20131031>

Additional Methods Readings: Abadie (2005), Angrist and Kuersteiner (2011)

LOCAL INSTITUTIONS AND DEVELOPMENT (9/29)

Methods topics: multiple testing adjustments, pre-analysis plans

- Katherine Casey, Rachel Glennerster, and Edward Miguel. 2012. “Reshaping Institutions: Evidence on Aid Impacts Using a Preanalysis Plan*.” *The Quarterly Journal of Economics* 127 (4): 1755–1812. <http://qje.oxfordjournals.org/content/127/4/1755.full.pdf+html>
- Siwan Anderson, Patrick Francois, and Ashok Kotwal. 2015. “Clientelism in Indian Villages.” *American Economic Review* 105 (6): 1780–1816. doi:10.1257/aer.20130623. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.20130623>

Additional Methods Readings: Westfall and Young (1993), Anderson (2008)

GENDER AND ELECTORAL POLITICS (10/6)

Methods topics: behavioral measures (i.e. Implicit Association Tests), panel methods

- Lori Beaman et al. 2009. “Powerful Women: Does Exposure Reduce Bias?” *The Quarterly Journal of Economics* 124 (4): 1497–1540. doi:10.1162/qjec.2009.124.4.1497
- Grant Miller. 2008. “Women’s suffrage, political responsiveness, and child survival in American history.” *The Quarterly Journal of Economics* 123 (3): 1287. <http://qje.oxfordjournals.org/content/123/3/1287.full.pdf>

Additional Methods Readings: Fazio and Olson (2003)

STATE REPRESSION (10/20)

Methods topics: Statistical learning, Random Forests, measurement models, endorsement experiments

- Daniel Hill and Zachary Jones. 2014. “An Empirical Evaluation of Explanations for State Repression.” *American Political Science Review* 108 (03): 661–687. http://journals.cambridge.org/download.php?file=/PSR/PSR108_03/S0003055414000306a.pdf&code=c11ca22f12879d0b0244640216120c97
- Jason Lyall, Graeme Blair, and Kosuke Imai. 2013. “Explaining Support for Combatants during Wartime: A Survey Experiment in Afghanistan.” *American Political Science Review* 107 (04): 679–705. <http://imai.princeton.edu/research/files/afghan.pdf>

Additional methods readings: Bullock, Imai, and Shapiro (2011), Breiman (2001)

Note: Meet with the instructor by this date to discuss the article that you will replicate.

DISCUSSION OF PRE-ANALYSIS PLANS (10/27)

By 5pm on 10/25, please circulate a draft of your pre-analysis plan with students in the course.

CIVIL CONFLICT (II/3)

Methods topics: text analysis, survey methods, panel methods

- Thiemo Fetzer. 2015. “Social Insurance and Conflict: Evidence from India.” Working Paper. <http://www.trfetzner.com/wp-content/uploads/JMP.pdf>
- Raúl Sánchez de la Sierra. 2015. “On the Origin of States: Stationary Bandits and Taxation in Eastern Congo.” Working Paper. <https://raulsanchezdelasierra.files.wordpress.com/2013/09/0-paper-1.pdf>

POLITICAL REPRESENTATION I (II/10)

Methods topics: Elite experiments, estimating spillover effects

- Daniel M Butler, David W Nickerson, et al. 2011. “Can learning constituency opinion affect how legislators vote? Results from a field experiment.” *Quarterly Journal of Political Science* 6 (1): 55–83. https://www3.nd.edu/~dnickers/files/papers/Butler_Nickerson.QJPS11.pdf
- Alexander Coppock. 2014. “Information Spillovers: Another Look at Experimental Estimates of Legislator Responsiveness.” *Journal of Experimental Political Science* 1 (02): 159–169. <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9503655&fileId=S2052263014000098>

Additional methods readings: Bowers, Fredrickson, and Panagopoulos (2013), Hudgens and Halloran (2012), Aronow and Samii (2013), chapter 8 in Gerber and Green (2012)

POLITICAL REPRESENTATION II (II/17)

Methods topics: measurement models, panel models

- James M. Snyder Jr. and David Strömberg. 2010. “Press Coverage and Political Accountability.” *Journal of Political Economy* 118 (2): <http://eds.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=fb704a2e-5717-4cf1-b5d0-eb3e49d9528d@sessionmgr4001&vid=1&hid=4203>
- Devin Caughey, Chris Warshaw, and Yiqing Xu. 2015. “The Policy Effects of the Partisan Composition of State Government.” MIT Working Paper. <http://caughey.mit.edu/sites/default/files/documents/PartyCompos150719.pdf>

Additional methods readings: Quinn (2004), Caughey and Warshaw (2014)

MEDIA AND POLITICS (11/24)

Methods topics: text methods, instrumental variables

- Matthew Gentzkow and Jesse M. Shapiro. 2010. “What Drives Media Slant? Evidence From U.S. Daily Newspapers.” *Econometrica* 78 (1): 35–71. <http://www.nber.org/papers/w12707.pdf>
- Gregory J. Martin and Ali Yurukoglu. 2014. *Bias in Cable News: Real Effects and Polarization*. Working Paper, Working Paper Series 20798. National Bureau of Economic Research, December. <http://www.nber.org/papers/w20798>

GEOGRAPHY (12/01)

- Luke J Keele and Rocio Titiunik. 2014. “Geographic boundaries as regression discontinuities.” *Political Analysis*: mpu014. <http://pan.oxfordjournals.org/content/23/1/127>
- Raj Chetty and Nathaniel Hendren. 2015. “The Impacts of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects and County-Level Estimates.” NBER Working Paper. http://scholar.harvard.edu/files/hendren/files/nbhds_paper.pdf
- Melissa Dell. 2010. “The persistent effects of Peru’s mining mita.” *Econometrica* 78 (6): 1863–1903. <http://onlinelibrary.wiley.com/doi/10.3982/ECTA8121/abstract>

STUDENT PRESENTATIONS OF REPLICATION RESULTS (12/8)

Please prepare a 10 minute presentation of your replication results for the course.

References

- Abadie, Alberto. 2005. “Semiparametric difference-in-differences estimators.” *The Review of Economic Studies* 72 (1): 1–19.

- Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. 2014. *Democracy Does Cause Growth*. Working Paper, Working Paper Series 20004. National Bureau of Economic Research, March. doi:10.3386/w20004. <http://www.nber.org/papers/w20004>.
- Anderson, Michael 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).
- Anderson, Siwan, Patrick Francois, and Ashok Kotwal. 2015. "Clientelism in Indian Villages." *American Economic Review* 105 (6): 1780–1816. doi:10.1257/aer.20130623. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.20130623>.
- Angrist, Joshua D, and Guido M Kuersteiner. 2011. "Causal effects of monetary shocks: Semiparametric conditional independence tests with a multinomial propensity score." *Review of Economics and Statistics* 93 (3): 725–747.
- Aronow, Peter M, and Cyrus Samii. 2013. "Estimating average causal effects under interference between units." *arXiv preprint arXiv:1305.6156*.
- Beaman, Lori, Raghavendra Chattopadhyay, Esther Duflo, Rohini Pande, and Petia Topalova. 2009. "Powerful Women: Does Exposure Reduce Bias?" *The Quarterly Journal of Economics* 124 (4): 1497–1540. doi:10.1162/qjec.2009.124.4.1497.
- Bowers, Jake, Mark M. Fredrickson, and Costas Panagopoulos. 2013. "Reasoning about Interference Between Units: A General Framework." *Political Analysis* 21 (1): 97–124. <http://pan.oxfordjournals.org/content/21/1/97.short>.
- Breiman, Leo. 2001. "Random forests." *Machine learning* 45 (1): 5–32.
- Bullock, Will, Kosuke Imai, and Jacob N Shapiro. 2011. "Statistical analysis of endorsement experiments: Measuring support for militant groups in Pakistan." *Political Analysis* 19 (4): 363–384.
- Burgess, Robin, Remi Jedwab, Edward Miguel, Ameet Morjaria, and Gerard Padró i Miquel. 2015. "The Value of Democracy: Evidence from Road Building in Kenya." *American Economic Review* 105 (6): 1817–51. doi:10.1257/aer.20131031. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.20131031>.
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- Casey, Katherine, Rachel Glennerster, and Edward Miguel. 2012. "Reshaping Institutions: Evidence on Aid Impacts Using a Preanalysis Plan*." *The Quarterly Journal of Economics* 127 (4): 1755–1812. <http://qje.oxfordjournals.org/content/127/4/1755.full.pdf+html>.
- Caughey, Devin, Chris Warshaw, and Yiqing Xu. 2015. "The Policy Effects of the Partisan Composition of State Government." MIT Working Paper. <http://caughey.mit.edu/sites/default/files/documents/PartyCompos150719.pdf>.
- Caughey, Devin, and Christopher Warshaw. 2014. "The Dynamics of State Policy Liberalism, 1936–2012." MIT Working Paper.
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- Coppock, Alexander. 2014. "Information Spillovers: Another Look at Experimental Estimates of Legislator Responsiveness." *Journal of Experimental Political Science* 1 (02): 159–169. <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9503655&fileId=S2052263014000098>.
- Dell, Melissa. 2010. "The persistent effects of Peru's mining mita." *Econometrica* 78 (6): 1863–1903. <http://onlinelibrary.wiley.com/doi/10.3982/ECTA8121/abstract>.
- Fazio, Russell H, and Michael A Olson. 2003. "Implicit measures in social cognition research: Their meaning and use." *Annual review of psychology* 54 (1): 297–327.
- Fetzer, Thiemo. 2015. "Social Insurance and Conflict: Evidence from India." Working Paper. <http://www.trfetzer.com/wp-content/uploads/JMP.pdf>.
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- Gerber, Alan S, and Donald P Green. 2012. *Field experiments: Design, analysis, and interpretation*. WW Norton.
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- Hudgens, Michael G, and M Elizabeth Halloran. 2012. "Toward causal inference with interference." *Journal of the American Statistical Association*.
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- Quinn, Kevin M. 2004. "Bayesian factor analysis for mixed ordinal and continuous responses." *Political Analysis* 12 (4): 338–353.
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- Westfall, Peter H, and S Stanley Young. 1993. *Resampling-based multiple testing: Examples and methods for p-value adjustment*. Vol. 279. John Wiley & Sons.