Course Goals

This is a course in the application of causal inference methods for research on the political economy of development. In this course you will learn how to:

1. Analyze primary and secondary data using a range of causal inference methodologies;
2. Explain the development paths of different societies;
3. Read, understand and critique political economy research;
4. Articulate compelling causal research questions;
5. Produce automated, reproducible analyses.

The course is intended to complement the following other courses:

- FLS 6397 - This class provides the core introduction to software tools and programming which we will use;
- FLS 5028 & 6183 - the quantitative methods courses provide the statistical tools while the focus here is on the application of those tools for causal inference;
- FLS 6363 - game theory provides powerful tools for theorizing behaviour and some of the papers we discuss will use these tools to understand development processes;
- FLS 6387 - a comparative/international political economy class that takes a more ‘macro’ approach. In this class we focus more on the ‘micro’ mechanisms of political change and causal methodology.

Prerequisites - students are required to have taken at least one of FLS 6397, FLS 5028 or FLS 6183 to ensure they are familiar with the basic tools for the class.

What is Causal Inference?

All good political science research projects are causal - they do not just describe the world but seek to explain it. But explanation is hard because societies are extremely complex - even more so than the natural world. We simply do not know what the alternative outcome would have been if JFK had not been assassinated, or if the price of oil had not collapsed in 2015. Even if we throw huge amounts of data into a regression we might not be able to understand the effects of these events.
Instead, we have to carefully design research that can extract the true effect from the chaos. Causal inference is this practice of extracting an explanation from messy data. It involves both theory - understanding the range of possible explanations - and practice - research design and statistical tools to isolate compelling explanations. The aim of this class is to enable you to be precise about what a dataset allows us to explain, and with how much confidence. Rather than being concerned with the amount of data (Large-N or Small-N) or how data is recorded (qualitative or quantitative), the emphasis is on what the data are convincingly able to explain - on causal inference.

What is the Political Economy of Development?

Economics is about the mechanics of how resources are produced and distributed. Politics is about how societies make decisions over economics, or more generally about “who gets what”. Political Economy links political choices to economic distributions. Explaining processes of development - by which we mean both reduced poverty and greater political freedom and accountability - relies on both political and economic processes. For example, if we want to explain why some societies choose policies which reduce poverty while others do not, we need to understand both the distributive consequences of those policies on people’s incomes (economics) and the motivations that encourage the introduction of those policies (politics). Because the political effects of policies may be different from their economic effects, it is only by understanding both aspects that we are able to explain when development does or does not occur.

Course Structure

The course will proceed with a parallel structure, each week discussing one substantive topic in the political economy of development and one methodological topic in causal inference. Each week will include a brief lecture on each track, and a class discussion about the key issues you encountered in your reading. We will discuss the methods used to tackle these questions and the conclusions we are able (and not able) to draw. The best way of learning is by doing, so the second half of the class will be in a workshop format where we will jointly practice implementing the methodology on code.

Part I focuses on experimental approaches to studying the effects of institutions, where we as researchers are able to manipulate the rules of political competition and directly measure the consequences.

Part II focuses on natural experiments, taking advantage of convenient features of existing policies that are conducive to causal inference. We use these techniques to understand how political actors exercise power within fixed institutional rules.

Part III also focuses on the exercise of power within institutions, but considers observational studies where the data were not generated from an experimental setting. The challenge is to avoid introducing bias to our results when our data is influenced by many factors.

Part IV illustrates how causal inference techniques can be applied where we only have a small number of cases. These are particularly informative for questions not of institutional effects, but of the causes of institutional change.

Expectations

The best way to learn political economy is through exposure to papers that apply these methods. It is therefore essential that students read and understand the weekly readings. Readings highlighted in blue are absolutely essential and students should read them thoroughly. Other readings are also important but should be read more rapidly, focusing on the main argument, evidence and conclusions. Students are expected to participate fully in class discussions of the papers, and this will count for 20% of the final course grade.
Each week, the two halves of the course will be unified by a focus on one paper that addresses the political economy topic for the week using the causal inference methodology for that week. The main homework will be to replicate the key findings of this paper using the available replication data. The core skills required for this replication will be practised in class.

Each week, there are three deliverables that students are required to email to jonnyphillips@gmail.com by midnight on Wednesday (the day before the class):

1. **A one-page (maximum) summary of the political economy readings (20% of final course grade).**
   The aim is to help you structure your thoughts about the literature. This should focus on very efficiently explaining the big questions addressed by the literature, the arguments made by each author, the causal inference methods they use and the evidence they present. Note any major criticisms you have of the readings and end by summarising what we ‘know’ about that week’s topic and what we still do not know. (You can refer to the causal inference readings, but focus your writing on the political economy readings).

2. **A reproducible data analysis (40% of final course grade)** produced in Rmarkdown that documents your analysis of the available data and efforts to replicate the key findings of the focal paper. Your analysis should combine a text explanation of the technique you are using and your conclusions with any relevant tables or charts. Please submit both your Rmarkdown file and a PDF version of the final analysis. Note that the emphasis is not on using precisely the same specification or reproducing identical standard errors, but implementing the core methodology to produce clear results.

3. **A commented file of another student’s analysis (20% of final course grade)** from the preceding week. The aim is to improve your ability to read, interpret and improve code. Comments should be provided in the rMarkdown file itself, with in-line comments marked `#'***`. Your comments should note whether the code runs without error and should always be constructive, not just identifying errors or inefficiencies but proposing alternatives. Do not spend too long on this.

The software to be used in this class is all open source: R (and Rstudio) for data analysis, and Rmarkdown (via latex) for generating reproducible analyses into PDF documents. We will help you setup your computer to run this software if necessary.

All your work should be your own. You may discuss with someone else to resolve specific challenges or coding problems, but cannot submit joint analyses or copy another person’s work - all the ideas and implementation must be your own.
Outline

Political Economy of Development
1. Week 1 - Introduction
2. Week 2 - Fundamentals

PART I - Effects of Institutions
1. Week 3 - Effects of Democratic Institutions
2. Week 4 - Effects of Social Organization

PART II - Exercising Power within Institutions
1. Week 5 - Electoral Accountability
2. Week 6 - Social Accountability, Information & Media
3. Week 7 - Incumbency Power

PART III - Exercising Power within Institutions
1. Week 8 - Violence
2. Week 9 - Patronage & Clientelism
3. Week 10 - [Various]

PART IV - Causes of Institutional Change
1. Week 11 - Collective Action
2. Week 12 - Gradual Institutional Change

Causal Inference
1. Week 1 - Introduction
2. Week 2 - Fundamentals

PART I - Controlled Experiments
1. Week 3 - Field Experiments
2. Week 4 - Survey & Lab Experiments

PART II - Natural Experiments
1. Week 5 - Randomized Natural Experiments
2. Week 6 - Instrumental Variables
3. Week 7 - Discontinuities

PART III - Observational Studies
1. Week 8 - Difference-in-Differences
2. Week 9 - Controlling for Confounding
3. Week 10 - Matching

PART IV - Small-N Studies
1. Week 11 - Comparative Cases
2. Week 12 - Process Tracing
In the first week, we will discuss the scope and expectations for the course. We will also review the fundamentals from FLS 6397 on how to generate Rmarkdown documents, how to code data analysis in R and how to generate reproducible research documents.

Useful links for learning R:
1. R for Data Science
2. R Cheat Sheet
3. DataCamp R Tutorial
4. EdX R Course
5. Coursera R Course

Useful links for learning R Markdown:
1. RMarkdown Cheat Sheet
2. RMarkdown Documentation
3. Datacamp
4. Coding Club - RMarkdown
Overview - Political Economy of Development
What are the major questions of political economy? How do we think about the role of institutions in shaping political processes and economic outcomes? But do institutions work independently of their social context and the distribution of political power? Can we transplant institutions to new societies? We discuss the scope of the literature.


Overview - Causal Inference
We discuss causation, potential outcomes and the fundamental problem of causal inference. Estimators of causal effects are presented and compared.

Effects of Democratic Institutions
Do the rules of democracy improve policy decisions, reduce corruption and lead to better public services? Or are elite-led authoritarian institution better at making decision? We examine the evidence by analyzing the data of Olken (2010).


Controlled Field Experiments
A controlled field experiment is the simplest and cleanest design that can be analyzed. It provides maximum causal leverage and requires minimal modelling assumptions. However, is a field experiment really that simple? We discuss how to implement, analyze and generalize from field experiments.


PART I - Experimenting with Institutions: Class 4 - 14/09/17

Effects of Social Organization

Society is not a blank slate, but is organized into socially-constructed groups with their own histories and practices. Do the groups, cultures and norms that people are exposed to alter political and economic outcomes?


Controlled Survey and Lab Experiments

When we cannot intervene in the real world, one option is to create a controlled environment, manipulate a related variable and observe how people respond. While sharing the desirable properties of an experiment, how much can lab and survey experiments tell us about the real world?


Electoral Accountability
The most salient institution in democracies is an election. But to what extent can elections achieve their primary goal of holding the government accountable? When can citizens induce their representatives to change their behaviour?


Randomized Natural Experiments
Governments have more ethical and logistical authority to randomize policies than researchers. That provides additional opportunities for implementing the experimental method. But are these results more or less informative than a controlled experiment?


Social Accountability, Information and Media

Citizens can alter political and economic outcomes even outside of elections, using the ‘short route’ of ‘social’ accountability to pressure local bureaucrats and politicians. When are citizens able to ensure better outcomes?


Natural Experiments: Instrumental Variables

When policies are not randomized, it is still possible that there is variation that is not systematically biased. Where ‘treatment’ is affected by some idiosyncratic process we can use this to estimate the effects of treatment using instrumental variables methods. But are there any truly valid instruments?


Incumbency Power
Whether they stick to the formal rules or not, political elites in government have more resources and a higher profile to draw on than challengers. How does this imbalance affect political competition?

   - REPLICATION

Natural Experiments: Discontinuities
When policies are not randomized but are triggered by discontinuous jumps in some underlying variable, the sharp jump can sometimes be used to estimate causal effects. But are these results reliable and useful, or do they just represent special cases?

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<th>Violence</th>
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PART III - Observational Studies of Political Power: Class 9 - 26/10/17

Patronage and Clientelism


Controlling for Confounding


Part IV - Small-N Studies of Institutional Change: Class 11 - 16/11/17

Collective Action


Small-N Studies: Comparative Cases


PART IV - Small-N Studies of Institutional Change: Class 12 -
23/11/17

Gradual Institutional Change


Small-N Studies: Process Tracing


