Political Economy

Yale-NUS - EC4308

January 16, 2020



Political Economy Yale-NUS - EC4308

Remarks

## **Today**

- Kahoot Let's play!
- Quiz (link here)
- Oversubscribed
- Extra econometrics next week?



Political Economy Yale-NUS - EC4308 Week 1 Lecture 1 - Introduction

Long run impact of institutions

Intro

- Kahoot Let's play!
- Quiz (link here)
- Oversubscribed
- Extra econometrics next week?
- Concepts
- Discussion of reading by Acemoglu
- Brief intro to IVs
- Long run effects of institutions



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### Next day (1): Key concepts (2 people for each one)

How do economists define them? Do other disciplines use different definitions? How can we measure them?

Instrumental Variables

- Institutions
- Regimes & regime types
- Welfare
- Economic development & political development
- Social capital
- Ethnographic Atlas (by Murdock, 1967) and similar databases.



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- Informal formal rules
- They structure social interactions
- Stable and predictable actions (sociology)
- Comparing actual behavior to what rules say



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# Regime

- Institution
- Bounded to a political agenda
- Behaviors derived



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## Economic dvp and political dvp

- Increase in economic level
- In poli sci, aim to improve levels of wellbeing
- They don't necessarily imply each other



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- Utility gain from material goods & services
- Welfare plans: income support plans
- Prosperity
- GDP, etc.



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## Social capital

- Social: informal networks
- Capital: stock of resource that is useful for an individual
- What do individuals and society want it?
- Measuring



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Concepts

- Reading 1: \*\*Acemoglu, Daron. "Why Nations Fail?." The Pakistan Development Review 54, no. 4 (2015): 301-312.
  - What's one key takeaway you got from this reading?
  - What do they mean by extractive vs. inclusive institutions?
  - What do they mean by creative destruction?
  - Why did the Spanish colonizers prefer densely populated, hierarchical societies (like the Guarani) rather than sparsely populated, non-hierarchical societies (like the charruas)?
  - Why is the Virginia Company relevant? What can we learn from it?
  - Can you analyse your own country using their framework?
     What lessons are there?
  - Is there any point he makes you find particularly weak, or that you disagree with?

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## Do ↓ economic conditions ↑ likelihood of conflict?

- Do conflicts hamper growth?
- Do worsened economic conditions increase likelihood of conflict? (and by how much?)
- Latter: not easy
  - Political Instability ⇒ Economic growth ↓
  - Economic growth ↓ ⇒ Political Instability



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### Do ↓ economic conditions ↑ likelihood of conflict?

- Do conflicts hamper growth?
- Do worsened economic conditions increase likelihood of conflict?
- Latter: not easy
  - Political Instability ⇒ Economic growth ↓
    - Investments ↓
      - Public investments ↓
    - Confidence J.
  - Economic growth ↓ ⇒ Political Instability
    - Unequal access to resources (grievances ↑)
    - Weakened institutions (budgets ↓)
    - Lower opportunity costs of engaging in conflict
- → Problem 1: Simultaneity



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    - Unequal access to resources
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- ⇒ Problem 1: Simultaneity



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### Do ↓ economic conditions ↑ likelihood of conflict?

- Problem 1: Simultaneity
- Problem 2: Omitted Variable Bias

Gov. institutional 
$$\longrightarrow \longrightarrow \longrightarrow$$
 Conflict quality  $\downarrow$  Economy  $\downarrow$ 

Omitting institutional quality may exacerbate the impact of the economy

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### Solution? Instrumental Variables

- "Something" that...
  - ... affects the economy
  - ... does not directly affect the prob. of conflict
  - ... can affect prob. of conflict only through economic stagnation ("exclusion restriction")



Long run impact of institutions

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### Solution? Instrumental Variables

- "Something" that...
  - ... affects the economy
  - ... does <u>not</u> directly affect the prob. of conflict
  - ... can affect prob. of conflict only through economic stagnation ("exclusion restriction")
- One candidate?



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Concepts

### Solution? Instrumental Variables

- "Something" that...
  - ... affects the economy
  - ... does <u>not</u> directly affect the prob. of conflict
  - ... can affect prob. of conflict only through economic stagnation ("exclusion restriction")
- One candidate? Rainfall (droughts) in Africa



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# Why is rainfall a good IV in Africa today

Intro

# Why is rainfall a good IV in Africa today?

- Affects the economy?
  - ∄ extensive irrigation systems ∄ heavily industrialization



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15 / 31

Long run impact of institutions

Intro

# Why is rainfall a good IV in Africa today?

- Affects the economy?
  - ∄ extensive irrigation systems ∄ heavily industrialization
- Does not directly affect the prob. of conflict?
  - Floods may increase if infrastructures affected (but not droughts!)



Political Economy Yale-NUS - EC4308 Week 1 Lecture 1 - Introduction 15/31

# Why is rainfall a good IV in Africa today

Intro

# Why is rainfall a good IV in Africa today?

- Affects the economy?
- Does not directly affect the prob. of conflict?
  - Floods may increase if infrastructures affected (but not droughts!)
- Can affect prob. of conflict <u>only through</u> economic stagnation?
  - Looks like √



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Week 1 Lecture 1 – Introduction 15 / 31

Long run impact of institutions

Intro

$$Conflict_i = \alpha + \beta \Delta GDP_i + X_i \gamma + \varepsilon_i \tag{1}$$

roughly becomes

Conflict<sub>it</sub> = 
$$\alpha + \beta \Delta \text{rainfall}_{it} + X_i \gamma + \delta_t + \varepsilon_i$$
 (2)

(Technically, it's a bit more complicated. Again, I refer to the more technical notes on Instrumental variables here)



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If  $\beta$  significant, the effect can only come through the economy. Bingo!



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### Some results

- Miguel et al. (2004): "Economic Shocks and Civil Conflict: An Instrumental Variables Approach"
- Data from Africa, 1981-1999
- A five-percentage-point drop in annual economic growth increases the likelihood of a civil conflict in the following year by over 12 percentage points

(but how to measure civil conflict)?



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### And the mechanism?

Concepts

- Lower opportunity cost<sup>1</sup>
- Increased political grievances
- Weaker militaries and worse infrastructure (⇒ weaker repression)
- 1. See Efraim Benmelech, Claude Berrebi and Esteban F. Klor, "Economic Conditions and the Quality of Suicide

Terrorism". The Journal of Politics, Vol. 74, No. 1 (Jan., 2012), pp. 113-128



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## How about the big question?

- Do good institutions cause economic growth, or does economic growth cause good institutions?
- Acemoglu and Robinson (2001): "The Colonial Origins of Comparative Development: An Empirical Investigation"



Long run impact of institutions

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Remarks

- 1/1.5 page or series of tweets (PPS accepted) or imaginary interview
- Take any paper not discussed in class yet that uses IV (Week 2 papers not valid)
- Explain their strategy carefully
- Note: I do not want a summary of the paper. Critical is to explain the question addressed, the need for IVs, and how/why the chosen variables are justifiable (i.e., 3 characteristics above mentioned). You may report results, but this is not critical. Details here.



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Remarks







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Alcoa

Check Assignment's page on CANVAS for a new assignment for Week 5.

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Long run impact of institutions

- Why do some societies prefer women confinement in the house?
- Why do others prefer them to take part in the job market and public sphere as men do?

Alesina, Alberto, Paola Giuliano, and Nathan Nunn. "On the origins of gender roles: Women and the plough." The Quarterly Journal of Economics 128, no. 2 (2013): 469-530.



Political Economy Yale-NUS - EC4308 Week 1 Lecture 1 - Introduction 23 / 31 Concepts

Intro



Ester Boserup (1910-1999), Danish & French economist

Boserup's Hypothesis: gender roles may originate in the form of agriculture traditionally practiced

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### Boserup's hypothesis





**Shifting cultivation** 

Labour intensive

Handheld tools: hoe, digging stick,...





### Plough cultivation

Capital intensive

Requires significant upper body strength,

grip, power, ...



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## Boserup's hypothesis



Concepts



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Gendered specialization



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### Boserup's hypothesis





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Gendered specialization



Eventual formation of social norms

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Shifting cultivation

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### Plough cultivation

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grip, power, ...

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Gendered specialization



Eventual formation of social norms



Natural place for women is within the home

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### Boserup's hypothesis



Concepts



Shifting cultivation





Plough cultivation



Gendered specialization

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# Boserup's hypothesis





**Shifting cultivation** 





Plough cultivation



Gendered specialization



Eventual formation of social norms



Intro

### Boserup's hypothesis





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Plough cultivation



Gendered specialization



Eventual formation of social norms



Natural place for women is within the home



Remarks





Shifting cultivation





Plough cultivation



Gendered specialization



Eventual formation of social norms



Natural place for women is within the home



Attitudes persist even if society industrializes



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# Testing

- Standard OLS details here
- Instruments → details here
- Survey data from the US details here



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#### Remarks

- Concepts
- IV variables
  - Can you assess when one is needed?
  - Can you assess whether the chosen candidate is adequate?
- Long run effect of institutions (cultural persistence)
  - Theoretical mechanism
  - Identification strategy



Remarks

Intro

#### Tell me your topics for 15-20min presentations

- More on origins of institutions
- A bit on cooperation and conflict
- Reading: \*Boix (2015): Introduction and Chapter 3.
  - Summarize the story & present situation of your country using his framework of analysis:
  - Be ready to make a 2min. delivery in class. Also bring a 1/2page summary (or thread)
    - When did the first state-like society appear. Who shaped it? Who were the bandits and who were the producers?
    - How about nowadays?



Concepts

# Next Monday

- Reading: \*Boix (2015): Introduction and Chapter 3.
  - How does he define a state?
  - What is a critical characteristic of state-less societies?
  - What was the main consequence of the Neolithic agricultural revolution around 6,000-7,000 years ago?
  - What are bandits and producers?
  - According to the author, what was the key to determine the shape of political order (and also growth, and inequality)?
  - What are the two key strategies that economic agents may take? Which is the dominant in primitive societies?
  - What is a key condition for cooperation?
  - Why is technological change unlikely in stateless societies?



Intro

### Next Thursday

- \*\*Becker, Anke. "On the Economic Origins of Constraints on Women's Sexuality." (2019). Unpublished manuscript.
- Check Assignments page for more details



Long run impact of institutions

### OLS: linking historical plough use to current outcomes

- Goal: Assess correlation btw past plough agriculture and today's
  - Female Labor Participation
  - % firms that have females among major owners
  - % MPs that are women in Parliament
- How to do that at the country level?



## Visualization (Ethiopia)



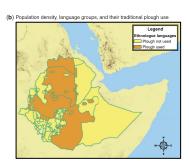
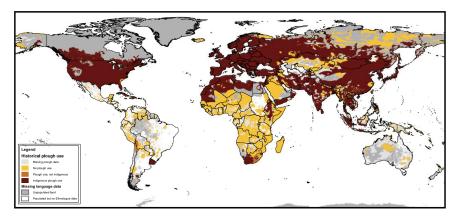


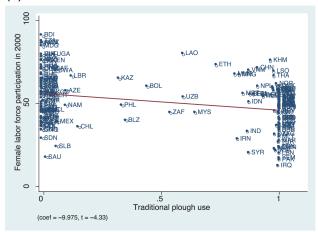
FIGURE I Populations, Language Groups, and Historical Plough Use within Ethiopia

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 $\label{eq:figure} F_{\text{IGURE II}}$  Traditional Plough Use among the Ethnic/Language Groups Globally

#### (a) Female labor force participation in 2000



back to slides



#### What if reverse causality? $\Rightarrow$ Instruments

- Maybe (just maybe) gender attitudes ⇒ plough use
- How can we check for robustness of results?
- Need instrument. Requirements:



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4 D > 4 P > 4 E > 4 E > E | E | 9 Q P

#### Instruments: Land type & crops

- "Old" independent variable: plough use (yes/no)
- New independent variable:
  - % of suitable land suitable for plough-positive crops

▶ details of construction



### Instruments: findings

- Land type predicts plough use
- Land type predicts female participation today
  - Plough suitability ⇒ Less gender-neutral roles today

▶ back to slides



- "Are you working or looking for a job?" (females only)
- "When jobs are scarce, men should have more right to a job than women." Strongly agree / agree / etc.

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- Sample: US & EU born citizens whose parents are immigrants

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- All controls, including husband's ethnicity
- Caveats (2):



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- Sample: US & EU born citizens whose parents are immigrants
- Differences <u>must</u> come through transmission of norms
- All controls, including husband's ethnicity
- Caveats (2): self-selected sample; possibility of "ghettos" where informal institutions arise

▶ back to slides



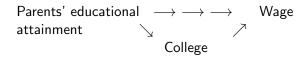
#### Construction of instrument

- Take centroid of ethnic group
- Area analyzed: circle (200km diameter)
- Asses suitability of each plot, using
  - Use location's precipitation, frequency of wet days, mean temperature, daily temperature range, vapor pressure, cloud cover, sunshine, ground-frost frequency, wind speed, soil slope, and soil characteristics.
- $\bullet \Rightarrow \%$  of pop. today whose ancestors lived in each type of land/climate



#### Do ↓ economic conditions ↑ likelihood of conflict?

- Problem 1: Simultaneity
- Problem 2: Omitted Variable Bias



▶ (back to slides)

Omitting parents' education may exacerbate the impact of college

4 D > 4 A > 4 B > 4 B > B | B | 9 Q C

#### Instruments: Land type & crops

- "Plough positive" crops
  - Large tracts of land to be prepared in a short period of time
  - Not shallow, not sloped, not rocky
  - e.g. Wheat, barley, rye, wet rice, teff
- "Plough negative" crops
  - e.g. Sorghum, foxtail millet, pearl millet, maize, root and tree crops
- Why focus on cereals?



#### Instruments: Land type & crops

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- "Plough negative" crops
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- Why focus on cereals?
- Similar caloric value, historical use, meals prepared, similar annual yields

▶ back to slides

