PolEcCon Summer School 2021 Lecture: Group biases and ethnic conflicts

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Outline

• Ethnicity and conflict

- ► Theory and facts (Esteban, Mayoral, and Ray, 2012)
- Ethnic fractionalization
- Ethnic polarization

• Parochial altruism and in-group/out-group bias

- Definitions
- Group-biases: Methods and evidence
- Evolution-based? Methods

• Triggers of (revealed) group biases

- Social environment: Peer behavior (Bauer et al. 2018)
- Scapegoating for threats facing in-group (Bauer et al. 2021)
- Hardship: Covid-19 pandemic (Bartos et al. 2021)

• Esteban, Joan, Laura Mayoral, and Debraj Ray (2012), "Ethnicity and Conflict: Theory and Facts," Science 336 (6083): 858–65.

Civil/intrastate conflicts

Definition of civil conflict

It is an armed conflicts between the government of a state and one or more internal opposition group(s) that cause at least 25 battle-related deaths within a year (UCDP/PRIO)

(if > 1,000 deaths \Rightarrow civil war)

Ethnicity and conflict: Introduction Esteban et al. (2012)

• Number of armed conflicts by type, 1946-2017 (PRIO, 2018)



- Internal conflicts often appear to be ethnic in nature
 - More than half of the civil conflicts since WWII have been classified as ethnic or religious

Ethnicity and conflict: Introduction Esteban et al. (2012)

• Class conflict:

- Not much empirical support: "weak, barely significant relationship between inequality and political violence"
- Resentment, but poor little means to riot & low conflict gains for rich

Ethnic conflict:

- Both sides will be economically similar (rich and poor)
 - Once evident economic gains from such conflict for both sides: The losing group can be excluded from the sector in which it directly competes with the winners
 - 2 Rich provide capital, poor provide fighters
- Suggests an interesting interaction between inequality and ethnicity
 - Ethnic groups with a higher degree of within-group inequality will be more effective in conflict

Ethnicity and conflict: Introduction Esteban et al. (2012)

Questions:

- How do we conceptualize ethnic divisions?
- Do "ethnic divisions" predict conflict within countries?
- If it is indeed true that ethnic cleavages and conflicts are related, how do we interpret such a result?
 - ★ "Primordial" ancestral ethnic hatreds
 - "Rational" antagonism instrumental use of ethnicity to achieve political power or economic gain

Ethnicity and conflict: Fractionalization Esteban et al. (2012)

Measures of "ethnic divisions"?

• 1) Fractionalization

- Best-known measure
- Introduced in 1964 (Soviet Atlas Narodov Mira) to measure ethnolinguistic fragmentation
- "The probability that two individuals drawn at random from the society will belong to two different groups"
 - ★ Reflects the degree of ethnic diversity
 - \star When groups are of equal size, F increases with the number of groups
 - ★ It reaches a maximum when everyone belongs to a different group
- ► Not a stable significant relationship with conflict (Fearon & Laitin, 2003; Collier, 2004, Sambanis, 2004)

Ethnicity and conflict: Polarization Esteban et al. (2012)

Measures of "ethnic division"?

- 2) Polarization
 - Esteban & Ray (1994); Duclos, Esteban & Ray (2004)
 - Measure social antagonism
 - * "Alienation" felt between members of different groups (intergroup distances)
 - ★ Sense of "identification" with one's own group
 - Aggregation of all interpersonal antagonisms
 - ▶ With 3+ groups polarization behaves differently from fractionalization
 - ★ Polarization declines with the continued splintering of groups
 - Polarization is globally maximized for a bimodal distribution of population

Ethnicity and conflict: Polarization Esteban et al. (2012)

• Fractionalization vs. Polarization and the number of groups

▶ Here: groups are of equal size and intergroup distances are equal to 1



Fig. 2. Polarization, fractionalization, and the number of groups. In this illustration, all groups are of equal size, and intergroup distances are set equal to 1.

Theory; Esteban et al. (2012)

• Idea behind the theory:

When should polarization (P) matter?

- * When there is a public prize (joint benefit to everybody in the group)
- * E.g. the winning group might impose its preferred norms or culture (a religious state, the abolition of certain rights or privileges or parties)
- ★ Payoff does not diminish with group size
- ★ Identity of the winner matters intergroup distance is relevant

When should fractionalization (F) matter?

- * When there is a private prize (narrow economic gains)
- ★ E.g. specific tax breaks, directed subsidies, bias in the allocation of public expenditure and infrastructures, access to rents from natural resources, or just plain loot.
- ★ Group size dilutes individual benefits
- \star If you are in a losing group, the identity of the winner does not matter
- Stronger group cohesion (sense of group identity) enhances the effect of both P and F
- For details on the theory, see Esteban & Ray (2011)

Taking the theory to the data; Esteban et al. (2012)

• Need data on (implications from the theory):

Conflict intensity:

- * 138 countries, 1960-2008 in 5-year periods (1125 observations)
- * UCDP/PRIO conflict incidence, Index of Social Conflict

2 Polarization, Fractionalization (defined as described above)

- ★ Demographic information on groups in 60 countries (Fearon, 2003)
- Intergroup distances: use linguistic distance between two groups as a proxy for group "cultural" distances
- Relative publicness of the prize
 - $\star\,$ Value of the public prize: degree of power of those in office as a proxy
 - ★ (↑ democratic $\Rightarrow \downarrow$ power $\Rightarrow \downarrow$ public payoff to conflict)
 - $\star\,$ Value of the private prize: value of oil reserves per capita as a proxy

Group cohesion

- * Proxy = answers to a set of questions in the 2005 World Values Survey
- Additional standard correlates of conflict
 - Population size, GDP per capita, natural resources, mountainous, noncontinuity of the territory, extent of democracy, lagged conflict
 - Connect explanatory variables to conflict as prescribed by the theory

Taking the theory to the data; Esteban et al. (2012)

• Estimation in 3 steps:

- A cross-sectional regression of conflict on P and F
- Independently compute a degree of relative publicness of payoffs (A) for each country and include this in the regression.
- Solution (A) Add separate proxies of group cohesion (A) for all the countries.
 - Progressively closer to the equation predicted by the theory vs. more proxies needed

Ethnicity and conflict: Theory and facts What the data say; Esteban et al. (2012)

Results:

Variable	1 PRIO-C	2 ISC	3 PRIO-C	4 ISC	5 PRIO-C	6 ISC
Р	***5.16	***19.50	-1.48	-16.33	-1.47	-23.80
	(0.001)	(0.002)	(0.606)	(0.227)	(0.701)	(0.212)
F	*0.93	*3.56	0.76	0.31	0.87	-0.16
	(0.070)	(0.061)	(0.196)	(0.878)	(0.403)	(0.710)
$P\Lambda$			***11.174	***61.89		
			(0.003)	(0.001)		
$F(1 - \Lambda)$			*1.19	***10.40		
			(0.097)	(0.000)		
ΡΛ Α					*12.65	***90.32
					(0.087)	(0.010)
$F(1 - \Lambda)A$					2.54	**13.15
					(0.164)	(0.018)

Taking the theory to the data; Esteban et al. (2012)

• Results:

- Polarization is highly significant and positively related to conflict.
- After controlling for P, fractionalization also has a positive and significant coefficient.
- ▶ Step 2+3: Interaction terms significant in the way predicted by theory
- Step 2+3: Levels no longer significant (as predicted)
 - $\star\,$ P should have no effect when there are no public goods at stake.
 - ★ Suggests that primordial factors such as pure ethnic differences per se have little to do with ethnic conflict.

 \Rightarrow Both polarization and fractionalization predict conflict in the way suggested by the theory.

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- Definitions
- Group-biases: Methods and evidence
- Evolution-based? Methods

• Triggers of (revealed) group biases

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Parochial altruism and in-group bias

Altruism

- "Benefiting fellow group members at a cost to oneself"
- Evolutionary perspective: behavior that reduces individual's fitness (ability to survive and reproduce), but increases the fitness of somebody else in the population

Parochialism

- Weak sense: "Preferences for favouring the members of one's own social (ethnic, religious, language...) group" (Bernhard et al., 2006)
 - $\star\,$ Often called rather "in-group bias"
- Strong sense (more common): "Hostility toward individuals not of one's own ethnic, racial, or other group" (Choi and Bowles, 2007)
- Parochial altruism \equiv in-group love and out-group hate
 - Choi and Bowles (2007)

In-group bias

• Is there evidence for group-based behavior?

- Compare behavior towards in-group vs. out-group
- Experimental methods (lab and field)
- Recent surveys: Charness, G. & Chen, Y. (2020), Shayo, M. (2020), Chowdhury (2021)
- Yes, group biases replicated in many settings
 - Induced identity (artificial, "minimal groups")
 - * Social identity research in psychology (Tajfel & Turner, 1979, 1986)
 - * Economics: Charness G, Rigotti L, Rustichini A (2007); Chen Y, Li SX (2009)

Real/natural groups

- ★ E.g. Bernhard et al. (2006): Third-party punishment experiment with non-hostile indigenous groups in Papua New Guinea
- Real randomly assigned groups
 - ★ E.g. Goette L, Huffman D, Meier S (2006): Cooperation (PD) in Swiss army platoons

In-group bias

• Is in-group bias/parochialism evolution-based?

Reminder: "Primordialist" view - ethnic differences are ancestral, deep, and irreconcilable and therefore invariably salient

Range of methods:

- Research (experiments) in small-scale societies
 - Henrich J, et al. (2001) In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies. Am Econ Rev 91(2):73–78.
 - ★ Bernhard et al. (2006)
- Experiments with small children
 - * E.g. Video 1, Video 2 (min 2:10)
- Experiments with animals
 - ★ E.g. Video 1, Video 2
- Agent-based modeling
 - * Choi and Bowles, 2007

Coevolution of Parochial Altruism and War Choi and Bowles (2007)

- Game-theoretic analysis and agent-based simulations
- **Parochial altruism** could have evolved if parochialism promoted intergroup hostilities and the combination of altruism and parochialism contributed to success in these conflicts.

Model

- Evolution of genetically transmitted behavioral types in a population
- Individuals may be altruistic (or not) and parochial (or not)
- Within-group selection: Favors tolerant non-altruists (most selfish)
- Between-group selection: May favor parochial altruists despite the fact that they risk death (PA=fighters)
- In each generation: B/w-group interaction (hostile? war? win?), within-group interaction (PGG), reproduction, parental generation dies, migration

Coevolution of Parochial Altruism and War Choi and Bowles (2007)

Results of the simulation - Fraction altruists/parochials

Fig. 2. Parochial altruist and tolerant nonaltruist outcomes occur with high frequency. The parameter values are as in Table 1 and Fig. 1. (A) Each vector represents the expected change at each state, based on a transition matrix recovered from the underlying perturbed Markov process on the basis of 5 million observations from 10 runs of 5000 generations starting at each of the 100 states as described in (19). Longer arrows reflect a higher net transition probability from each state. Stable states (i.e., states at which the population will spend the most time under the dv-



namic given by our model) occur where both frequencies are ~15% (point a) and both ~85% (point b). Point c is a saddle (unstable critical point). (B) The height of the bars gives the long run fraction of time in which we observe the indicated pair of population-level frequencies of altruists and parochials in the population.

Coevolution of Parochial Altruism and War Choi and Bowles (2007)

Agent-based simulations:

- Parameters calibrated to conditions from about 7,000 years ago
- Simulated population spends most of the time one of in two states:
 - ▶ 1) Many parochial altruists and few of the other three types
 - * High levels of parochialism promote frequent conflicts
 - ★ Victors are groups with many parochial altruists

> 2) Many tolerant nonaltruists and few of the other three types

- ★ Hostilities are rare
- * Benefits of cooperative between-group interactions are substantial
- ★ Within-group selection pressures against parochials and altruists therefore predominate
- Neither parochialism nor altruism would have been viable singly, but by promoting group conflict, they could have evolved jointly.

 \Rightarrow Explains how Homo Sapiens could have become a warlike yet altruistic species.

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 - ★ Choi and Bowles (2007)

• Triggers of (revealed) group biases

- ▶ Social environment: Peer behavior (Bauer et al. 2018)
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- ► Hardship: Covid-19 pandemic (Bartos et al. 2021)

Triggers of group-biases and group conflict

"[It] is not uncommon to see communities sharing some historical animosities coexisting peacefully [...] for generations (Serbs, Croats and Muslims in the former Yugoslavia, for example) and then something snaps and inter-community violence erupts." (Bardhan, 2005, p. 169) Triggers of group-biases and group conflict

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- Aggressive behavior against ethnic minorities, often arise unexpectedly and spread quickly even in previously peaceful communities
 - Fearon and Laitin 2000; Bardhan 2005; Esteban and Ray 2008
- Q: What triggers changes in (revealed) out-group biases?

Triggers of group-biases and group conflict

• Three of my papers focusing on:

- Social environment: Contagion of out-group hostility among peers
 - * Bauer et al. (2018)
- Scapegoating for threats (wrongdoing/hardship) facing in-group
 - * Bauer et al. (2021)
- Hardship: Covid-19 pandemic
 - * Bartos et al. (2021)
- Some other triggers: inter-group contacts (Rao, 2019; Mousa, 2020), exposure to violent elections (Hjort, 2014) or violent inter-group conflict (Shayo and Zussman, 2011; Bauer et al., 2014)

Social contagion of ethnic hostility

 Bauer, Michal, Jana Cahlikova, Julie Chytilova, Tomas Zelinsky (2018), "Social Contagion of Ethnic Hostility," Proceedings of the National Academy of Sciences 115(19), 4881-4886.

- Research questions:
 - Do actions of peers influence individual willingness to do harm to others?
 - Is ethnic hostility particularly contagious?

- Setting
 - Eastern Slovakia (Fall 2013), behavior towards Roma minority
 - 13 schools in small towns with Roma settlements within 5 km
 - 327 adolescents from majority population, age 13-15
- Tasks: Joy of Destruction game (and a Prisoner's dilemma game)
- Manipulating ethnic identity of the counterpart (treatments)
 - SAME condition: Name list contained 20 majority-sounding names
 - OTHER condition: Name list contained 20 Roma-sounding names

Manipulating social environment (treatments)

- randomly in groups of three, deciding in a random order
 - ★ NO PEERS: deciding 1st
 - ★ DESTRUCTIVE PEER: deciding 2nd, first person destructive, or deciding 3rd and both peers destructive
 - ★ PEACEFUL PEER: observed at least one non-destructive peer prior to deciding
- INDIVIDUAL : deciding individually in isolation from others



• Joy of Destruction Game

- Elicits unambiguously hostile behavior (Abbink and Herrmann 2011; Abbink and Sadrieh 2009)
 - Anti-social preferences (spitefulness or aggressive competitiveness)
 - Pre-emptive action triggered by beliefs about destructive behavior of the counterpart + negative reciprocity

• Results: Prevalence of destructive behavior



• Results: Prevalence of destructive behavior



• Results:

- Subjects do not discriminate when making choice in isolation or in an environment with peaceful peers
- Hostile behavior towards Roma is twice as contagious as hostile behavior towards co-ethnics
- Discrimination emerges among subjects who observe hostile peers
- Social norms as a plausible mechanism:
 - Second experiment on social norms (Spring 2016, N=204)
 - Norms regulating destructive behavior towards Roma seem to be more context-dependent

Policy implications

- Importance of early diagnoses for ethnic hostilities
- Hate-crime laws

Scapegoating

 Bauer, Michal, Jana Cahlikova, Julie Chytilova, Gerard Roland, and Tomas Zelinsky (2021), "Shifting Punishment on Minorities: Experimental Evidence of Scapegoating," Working Paper of the Max Planck Institute for Tax Law and Public Finance No. 2021-11.

Scapegoating: Motivation

Bauer et al. (2021)

- **Scapegoating:** Punishment of innocent individuals (Scapegoats) for actions of somebody else.
- Evidence of Scapegoating:
 - Reports: pogroms, genocides, witch-hunts, ?
 - Allport (1954): "[i]t is chiefly the historical method that helps us to understand [scapegoating] "

• Aim: Provide a clean experimental test of scapegoating

- Q1: Does scapegoating exist?
- Q2: Does the group identity of the Scapegoat matter?
 - ★ in-group Scapegoat vs. out-group Scapegoat (Roma)
- ▶ Q3: WHY? Collective punishment vs. scapegoating of minorities

 \Rightarrow Lab-in-field experiments, interactions between the majority population and Roma minority (Eastern Slovakia), N=821

Scapegoating: Design Bauer et al. (2021)

• Punishing the Scapegoat Game:



• Punishing the Wrongdoer Game (Third-party punishment)

Scapegoating: Design Bauer et al. (2021)

• Punishing the Scapegoat Game:

- PUNISHER: Decisions for harm { EUR 0, 2, 4, 6, 8 }, strategy method, costly
 - ★ (i) no personal benefits from punishment
 - * (ii) no uncertainty about Scapegoat's innocence
 - ★ (iii) no scope for instrumental punishment
- Treatments: 2x2 group identity of the Scapegoat and Wrongdoer (SAME=Majority, OTHER=Roma); between-subjects

Scapegoating: Design Bauer et al. (2021)



Scapegoating: Results

Bauer et al. (2021)



Scapegoating exists:

- Payoff of the Scapegoat depends on Wrongdoer's misbehavior
- Identity matters x ONLY when Wrongdoer was nasty:
 - OTHER (Roma) Scapegoats are punished twice as much

• Not collective punishment:

Stronger when the Wrongdoer is of majority ethnicity

Covid-19 and Hostility against out-groups

 Bartos, Vojtech, Michal Bauer, Jana Cahlikova, and Julie Chytilova (2021), "Covid-19 and Hostility against Foreigners," European Economic Review, Volume 137, August 2021.

Covid-19 and Hostility against Out-groups: Motivation Bartos et al. (2021)

- **COVID-19 crisis**: most severe health and economic shock since WWII (Baldwin and Weder di Mauro 2020)
- Fernand de Varennes, the UN Special Rapporteur, warns that "COVID-19 is not just a health issue; it can also be a virus that exacerbates xenophobia, hate and exclusion."



Covid-19 and Hostility against Out-groups: Motivation Bartos et al. (2021)

- Aggressive behavior against out-group members often rises during the periods of hardship (economic/health) (Anderson, Johnson, and Koyama 2017; Grosfeld, Sakalli, and Zhuravskaya 2019; Miguel, Shanker, and Sergenti 2004)
- Channels:
 - Shifting anger onto innocent scapegoats (Doob et al. 1939; Allport 1954; Marcus-Newhall, Pedersen, and Carlson 2000)
 - Protection from contagious pathogens (Murray and Schaller 2016; O'Shea et al. 2020)
 - Politico-economic mechanism (Grosfeld, Sakalli, and Zhuravskaya 2019)

Covid-19 and Hostility against Out-groups: Goal Bartos et al. (2021)

- **Goal:** Identify the causal effects of Covid-19 on hostility towards out-groups
 - Foreigners
 - Domestic out-groups
- Empirical challenges:
 - Hostile behavior:
 - * Not motivated by personal material gain
 - $\star\,$ Avoiding certain groups can be a rational protection strategy
 - Exogenous variation in the identity of the victim, also in-group victims (not hostility in general)
 - Causal effect: we need random variation in Covid-19 exposure or worries

 \Rightarrow Large-scale online experiment during the first wave of Covid-19 in the Czech Republic (representative sample, N=2,186)

Covid-19 and Hostility against Out-groups: Design Bartos et al. (2021)

Help-or-Harm task

- Increase or decrease rewards to a set of people with different characteristics, at no monetary costs to the decision maker (DM)
- Default CZK 100 (4 EUR) to each person, can allocate between CZK 0-200
 - Hostile decision: actively reduced the allocation below the default
 - Basic prosocial decision: actively increased the allocation above the default
- Choices incentivized: 30 participants randomly selected and one of their choices implemented
- Had to make an active choice

Covid-19 and Hostility against Out-groups: Design Bartos et al. (2021)

Identity of the Recipients

- Within-subject, order randomized
- Nation-based divisions and hostility against foreigners
 - Person living in the Czech Republic, in the EU, in the USA, in Asia, and in Africa
 - Not specific countries (experimenter demand effect)

• Domestic divisions and hostility against domestic out-groups

- All live in the Czech Republic, either share a group atribute with the DM (in-group) or not (out-group)
- Region, political orientation, ethnicity (majority vs. Roma vs. immigrant), and religion

Covid-19 and Hostility against Out-groups: Design Bartos et al. (2021)

Experimental conditions

- Priming technique
 - Randomized into the conditions on an individual level, randomization successful

• CONTROL condition (N=1,044)

The Help-or-Harm task was at the beginning of the survey

• COVID-19 condition (N=1,142)

- ► The Help-or-Harm task was at the end of the survey
- After answering series of questions on the Covid-19 crisis (median=13 min)
 - Knowing anybody with Covid-19, illness symptoms, being tested for the coronavirus, preventive health behavior, social distancing, economic situation, psychological well-being
- = complex set of thoughts and concerns
- Greater intensity of Covid-related thoughts, not the overall effect of Covid-19

Covid-19 and Hostility against Out-groups: Results

Lower allocations to foreigners in the COVID-19 condition



Covid-19 and Hostility against Out-groups: Results Effect of COVID-19 condition on behavior towards domestic out-groups



Covid-19 and Hostility against Out-groups: Conclusion Bartos et al. (2021)

- Causal evidence on how concerns triggered by Covid-19 shape hostility towards out-group members
 - Making people more prone to financially harm foreigners (from EU, USA and Asia)
 - Does not amplify biases against domestic out-groups (minorities, migrants, people from different regions, political orientation)
 - Does not increase in-group cohesion

Policy implications

- Placing blame as a political strategy can create or tap into elevated anti-foreigner sentiments
- Risk of unravelling of international collaborations and increased risk of conflicts
- Rebuilding initiatives may need to go beyond purely economic reconstruction: increase trust and rebuild social ties

Thank you!

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