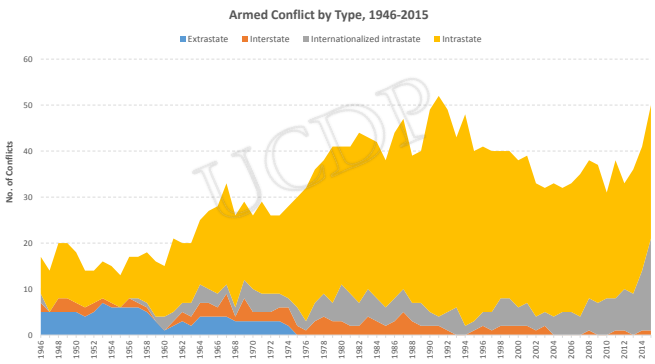
EC9AA Term 3: Lectures on Economic Inequality

Debraj Ray, University of Warwick, Summer 2022

- **Summary Slides**: Ethnic Similarity, Economic Difference and Conflict

  Please consult Slides 5 and 6 for more detail

Within-Country Conflict



- WWII $\longrightarrow$ 2000: 240 *intrastate* armed conflicts:
- Deaths 5–10m (3–8 m for interstate)
- Not counting 25m civilian deaths
- 29 ongoing in 2015 UCDP/PRIO definition: 25+ yearly deaths.

Majority of Within-Country Conflicts are Ethnic

- 1945–1998, 100 of 700 ethnic groups in anti-State rebellion Fearon 2006
- (On "ethnicity," see Fearon 2003 and Chandra 2006)
- "[T]he eclipse of the left-right ideological axis." Brubaker and Laitin (1998)
- It's not that Marx is entirely irrelevant, but still …

Economic Similarity, Ethnic Difference?

- One of the great questions of political economy:
- Economic similarity:
- Conflict over *directly contested resources*;
- land, jobs, business resources, government quotas …

Economic Similarity, Ethnic Difference?

- Implications of direct contestation:
  - Markers to accentuate ethnic difference
  - Instrumentalism as opposed to primordialism (Huntington, Lewis)
- The two notions have parallels …
  - e.g., ethnic differences matter.
- …but also distinct features:
  - economic forces should have "systematic" effects.

Three Points of Discussion

- I frame this talk around three themes:

I. economic inequality and conflict

II. ethnic differences and conflict

III. interaction between ethnic and economic factors.

I. Economic Differences and Conflict

- Lichbach 1989 survey: 43 papers, some "best forgotten":

"[T]ypical finding of a weak, barely significant relationship between inequality and political violence . . . rarely is there a robust relationship" Midlarsky 1988

I. Economic Differences and Conflict

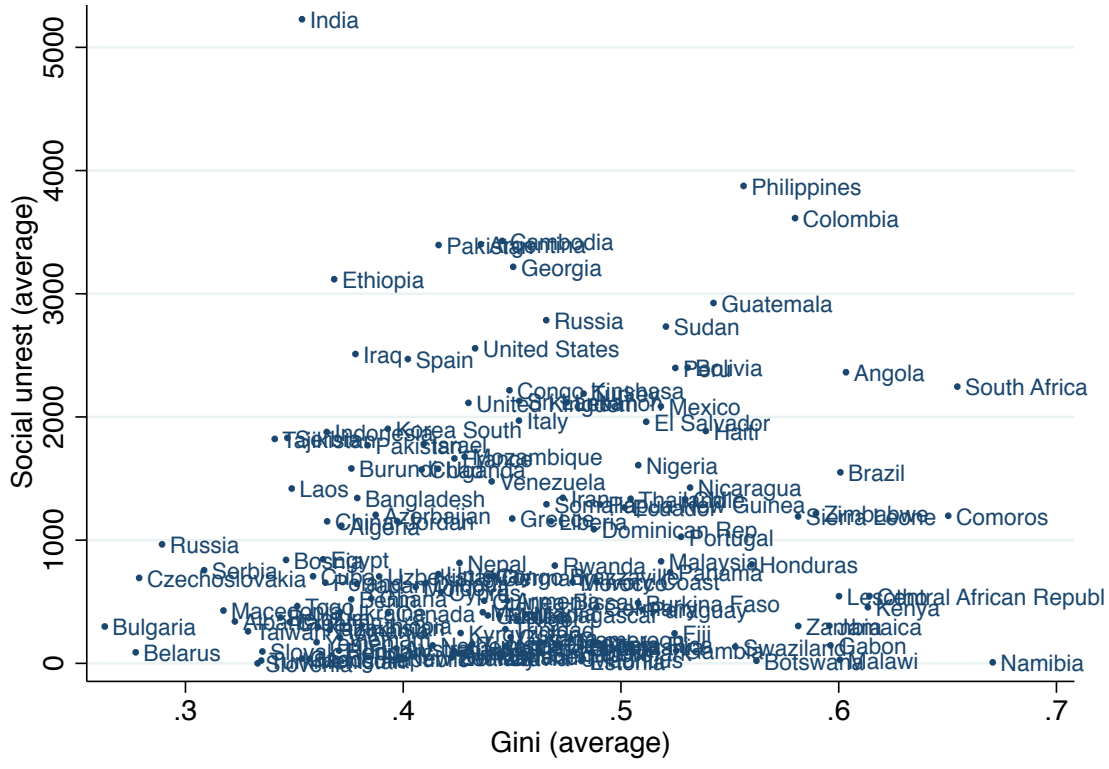
Variable	PRIO25	PRIO25	PRIO1000	PRIO1000	PRIOINT	PRIOINT
Gini	**- 0.01 (0.042)	**- 0.01 (0.014)	0.01 (0.131)	**- 0.01 (0.054)	**- 0.02 (0.026)	***- 0.02 (0.004)
GDP	0.05 (0.488)	-	- 0.03 (0.533)	-	0.02 (0.871)	-
GDPGR	-	***- 0.00 (0.001)	-	***- 0.00 (0.001)	-	***- 0.01 (0.000)
POP	0.05 (0.709)	- 0.08 (0.472)	0.14 (0.140)	0.10 (0.214)	0.18 (0.300)	0.02 (0.871)
OIL/DIAM	*** 0.00 (0.037)	*** 0.00 (0.018)	0.00 (0.112)	0.00 (0.124)	** 0.00 (0.022)	** 0.00 (0.010)
DEMOC	0.07 (0.301)	* 0.11 (0.093)	- 0.02 (0.668)	- 0.06 (0.283)	0.05 (0.614)	0.06 (0.525)

I. Economic Differences and Conflict

(from Esteban-Mayoral-Ray, in prep.)

- Cross National Time Series dataset on 170 countries, 1960–2005.
- *Social Unrest*: Weighted conflict measure based on assassinations, strikes, guerrilla warfare, government crises, purges, riots, revolutions, and anti-government demonstrations.

I. Economic Differences and Conflict



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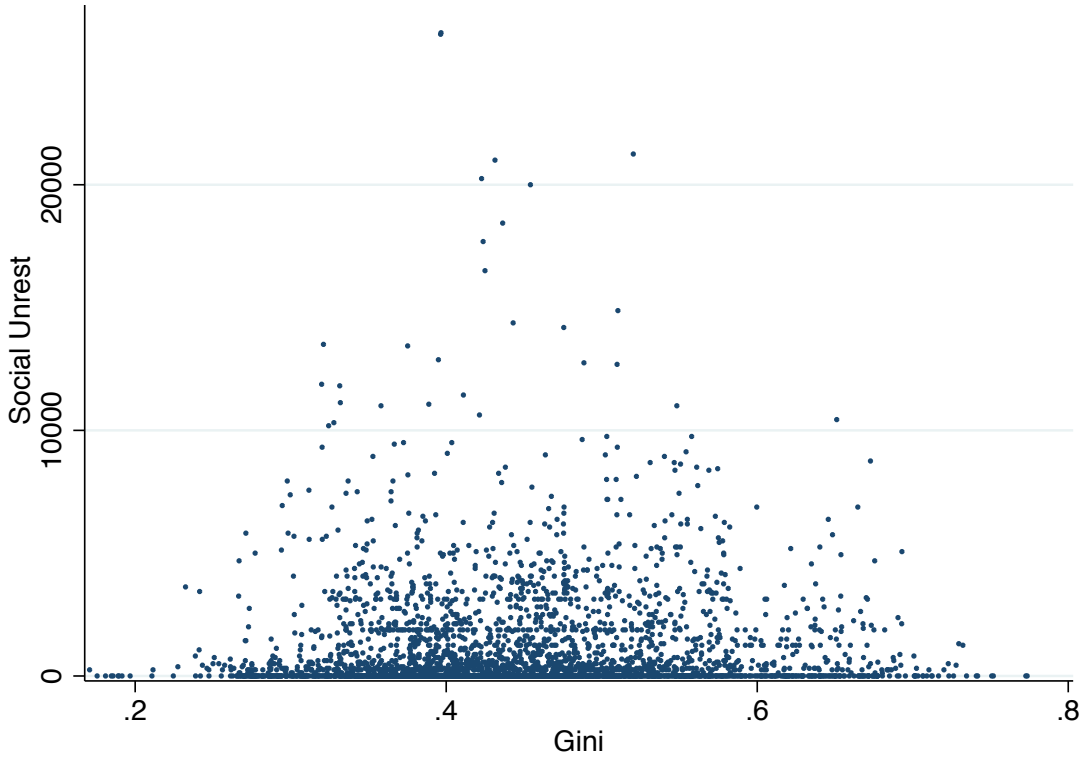


	Social Unrest, 1960–2005			
	[1]	[2]	[3]	[4]
GINI	-1369*	0.223	***10363	*11.981
	(0.066)	(0.849)	(0.005)	(0.068)
GINI^2			***-12181	*-12.372
			(0.003)	(0.067)
GDP	3.710	-0.422	65.731	-0.341
	(0.982)	(0.262)	(0.701)	(0.365)
POP	532.583	0.669	556.606	0.699
	(0.162)	(0.375)	(0.134)	(0.340)
DEMOC [POLITY2]	-8.127	-0.012	-10.019	-0.013
	(0.415)	(0.385)	(0.312)	(0.336)
LAG	***0.420	***0.000	***0.416	***0.000
	(0.000)	(0.000)	(0.000)	(0.000)
C	-4481	2.101	-8024	-1.784
	(0.407)	(0.850)	(0.150)	(0.871)
Estimation	OLS	Neg. Bin	OLS	Neg. Bin

Coefficient Magnitude

- 1st → 25th Gini %-tile:

social unrest ↑ 34%

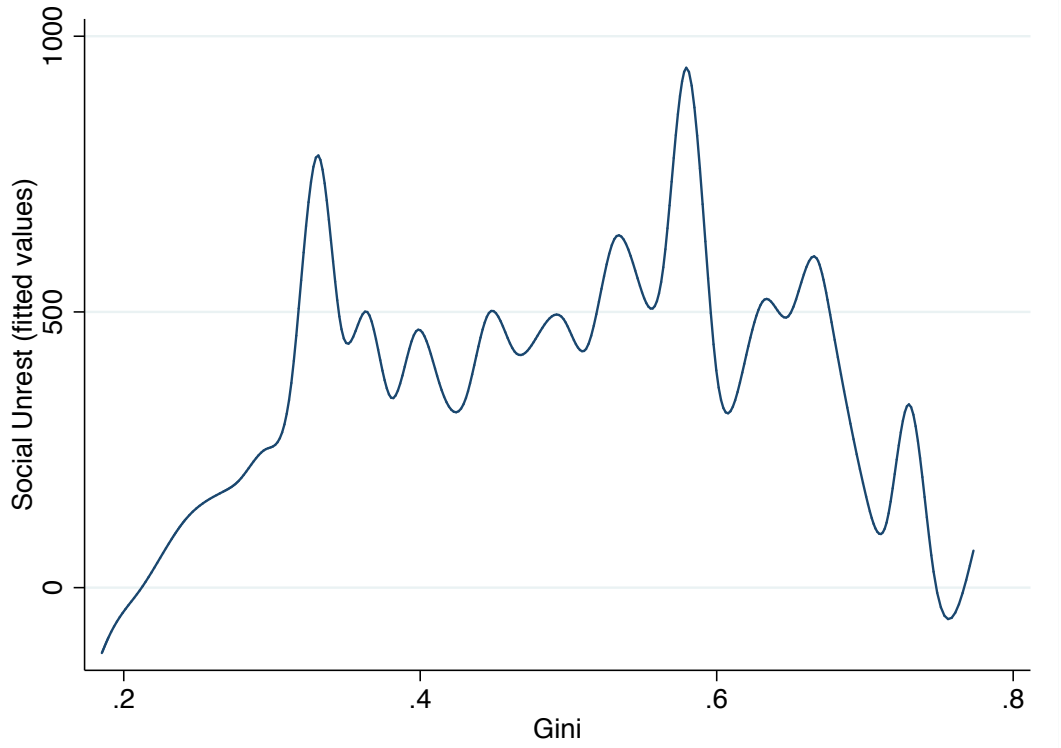
- 75th → 99th Gini %-tile:

social unrest ↓ 72%

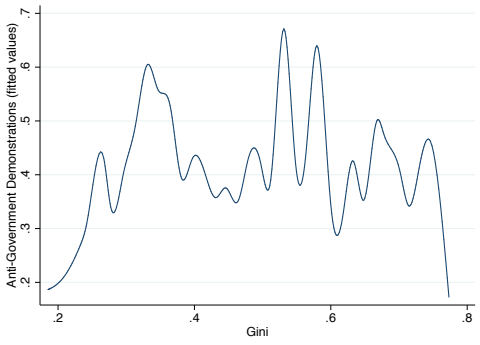
Components of Social Unrest, 1960–2005

	[1] Guerrilla	[2] Riots	[3] Revolutions	[4] Demos
GINI	**2.992	**8.602	1.456	*7.336
	(0.022)	(0.014)	(0.141)	(0.093)
GINI^2	**-3.759	**-8.234	*-1.822	*-7.971
	(0.010)	(0.013)	(0.097)	(0.062)
GDP	-0.036	-0.012	-0.006	0.239
	(0.543)	(0.951)	(0.904)	(0.292)
POP	-0.129	0.610	0.087	***1.114
	(0.360)	(0.125)	(0.387)	(0.001)
DEMOC [POLITY2]	-0.004	-0.006	-0.002	***-0.043
	(0.384)	(0.515)	(0.447)	(0.002)
Lag	✓	✓	✓	✓
C	1.618	-6.942	-1.275	**-9.647
	(0.399)	(0.279)	(0.384)	(0.041)
Country FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
R^2	0.296	0.405	0.341	0.365
Obs	3360	3360	3358	3274

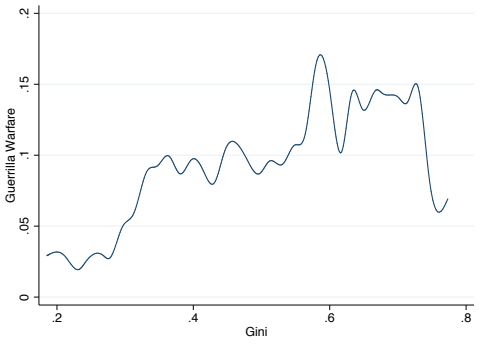
SOCIAL UNREST



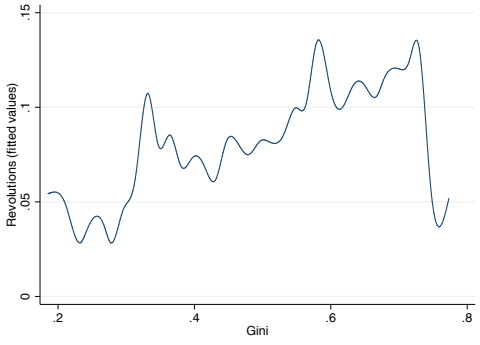
DEMONSTRATIONS



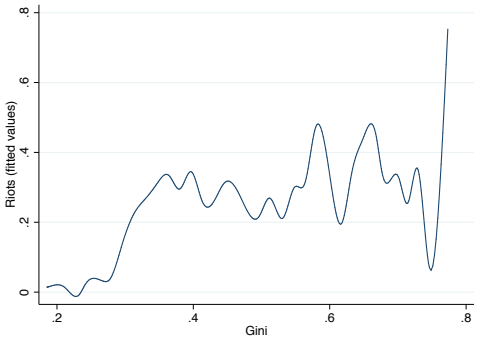
GUERRILLA WARFARE



REVOLUTIONS



RIOTS



Summary: It's Complicated

- Motive Versus Means Esteban-Ray 2008, 2011, Huber-Mayoral 2014
  - The class marker is a two-edged sword.
- Orthogonal Responses to Inequality Genicot-Ray 2019
  - High inequality $\Rightarrow$ shift to secondary goals (e.g. religious dominance)
- Who Attacks? The Ambiguity of Inequality Mitra-Ray 2014, 2018
  - A deprived group can catch up, resulting in attacks *on* them.

II. Ethnic Differences and Conflict

(Esteban-Ray 1994, 2011, Esteban-Mayoral-Ray 2012a, 2012b)

- Regress conflict on "ethnic divisions."
  - Standard off-the-shelf measure: ethnic fractionalization

$$F = \sum_i n_i(1 - n_i)$$

  - Collier-Hoeffler 1998, Fearon-Laitin 2003, Miguel-Satyanath-Sergenti 2004, Alesina et al 2003
- The bad news: "[t]he estimates ... are substantively and statistically insignificant ... The empirical pattern is thus inconsistent with ... the common expectation that ethnic diversity is a major and direct cause of civil violence."

Fearon and Laitin 2003

II. Ethnic Differences and Conflict

- But unclear that F is conceptually correct:

"A centrally focused system [with few groupings] possesses fewer cleavages than a dispersed system, but those it possesses run through the whole society and are of greater magnitude." (Horowitz 1985)

II. Ethnic Differences and Conflict

- Deep cleavages and a measure of polarization:
  - Society is divided into "groups" (economic, social, religious, spatial...)

    Identity. There is "homogeneity" *within* each group.

    Alienation. There is "heterogeneity" *across* groups.

"We begin with the obvious question: why are we interested in polarization? It is our contention that the phenomenon of polarization is closely linked to the generation of tensions, to the possibilities of articulated rebellion and revolt, and to the existence of social unrest in general ..." Esteban and Ray (1994)

Measuring Polarization

Space of unnormalized densities $n(x)$ on income, political opinion, etc.

- A person located at x feels
- Identification with "similar" x ($i = n(x)$)
- Alienation from "dissimilar" y ($a = |x - y|$)
- Effective Antagonism of x towards y:

$$T(i, a)$$

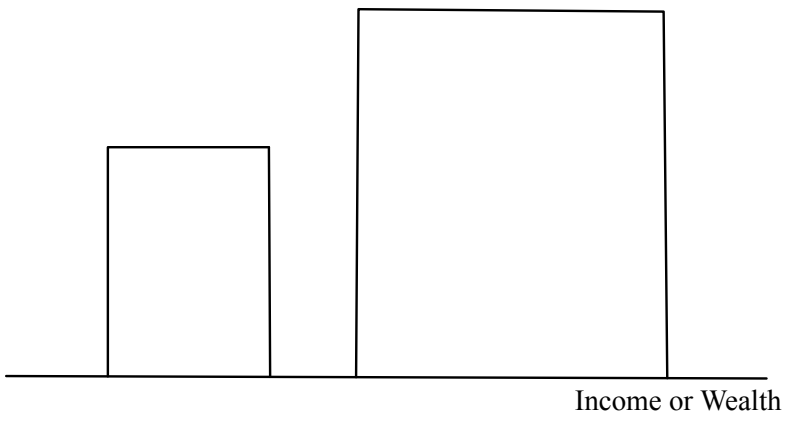
- View polarization as the "sum" of all such antagonisms

$$P(f) = \int \int T\left(n(x), |x - y|\right) n(x) n(y) dx dy$$

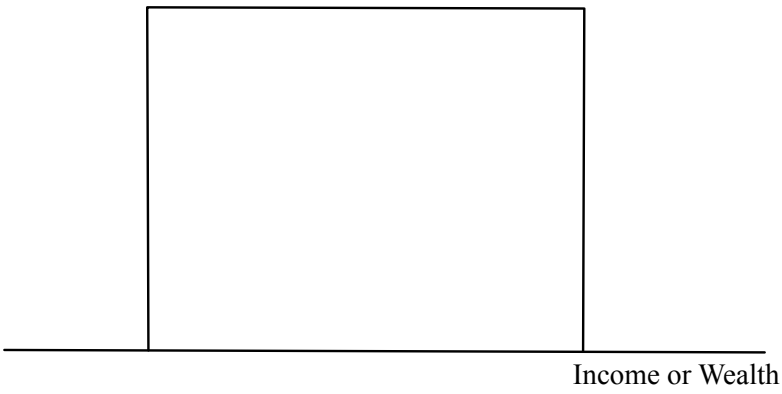
Measuring Polarization

$$P(f) = \int \int T\left(n(x), |x - y|\right) n(x) n(y) dx dy$$

Axioms to narrow down P: distributions built from uniform kernels.



- Axiom 1. “Global compression” of one uniform kernel cannot increase polarization.



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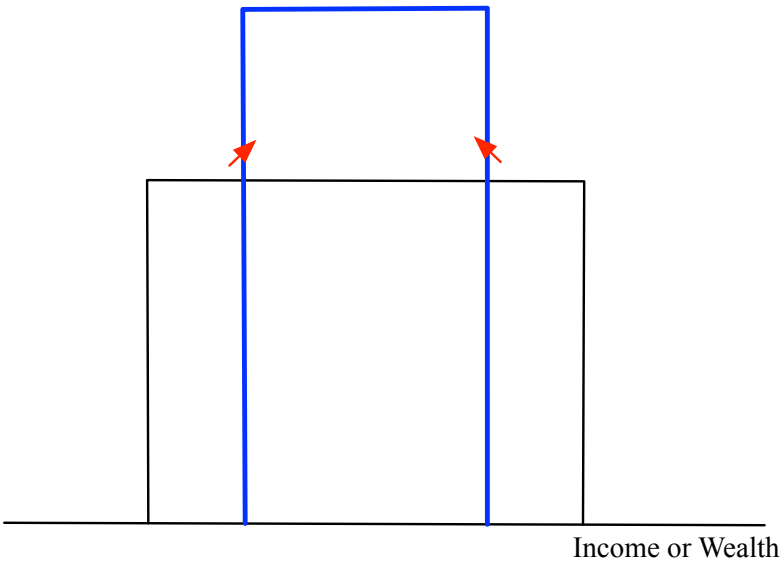
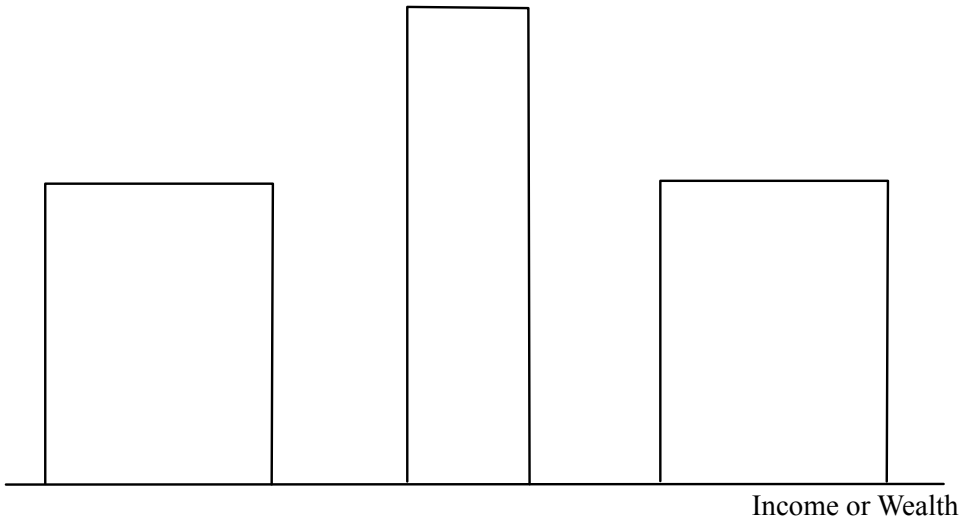


- Axiom 2. If a symmetric distribution is composed of three uniform kernels, then a compression of the side kernels cannot reduce polarization.



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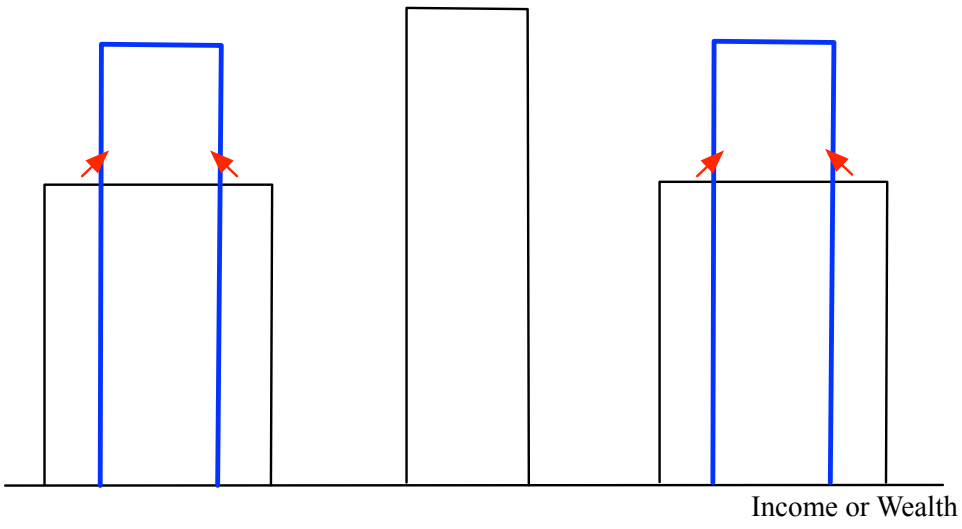
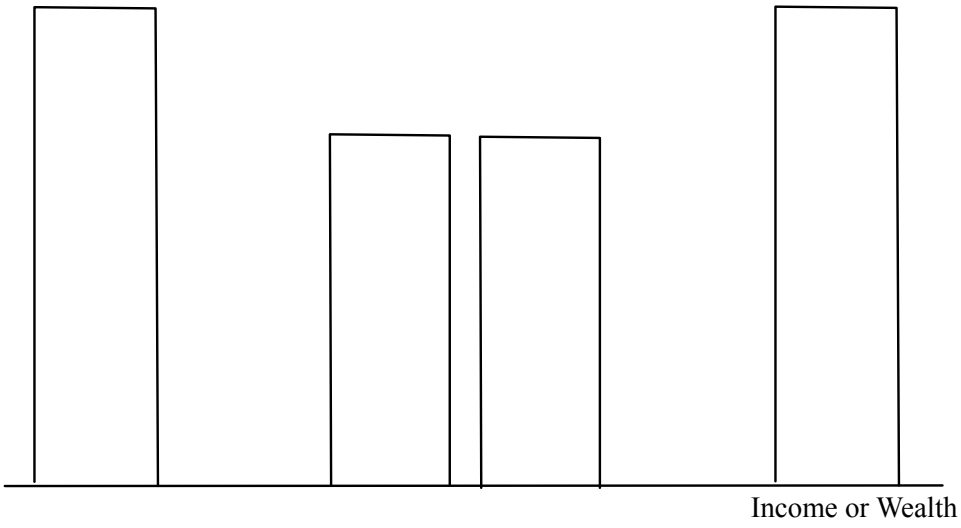


- Axiom 3. If a symmetric distribution is composed of four uniform kernels, then a symmetric slide of the two middle kernels away from each other must increase polarization.



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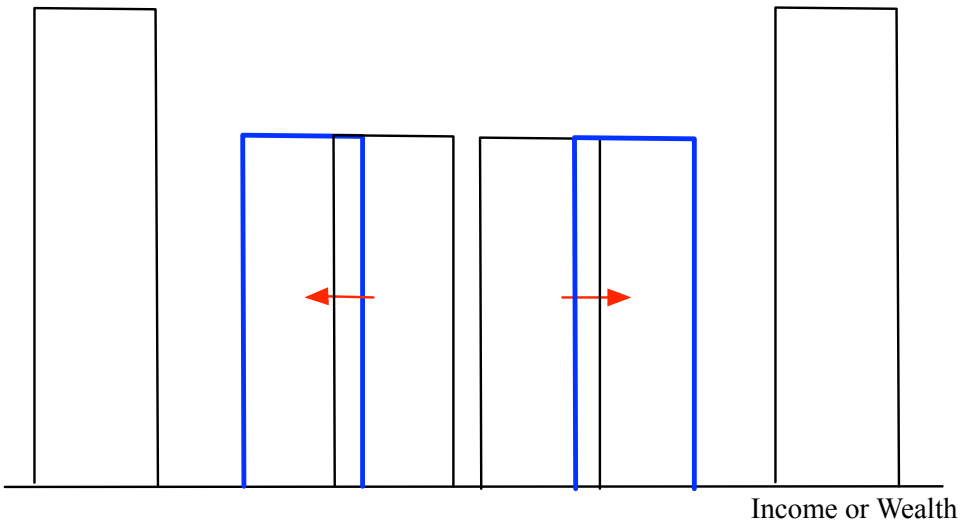


- Axiom 4. [Population Neutrality.] Polarization comparisons are unchanged if both populations are scaled up or down by the same percentage.

Proposition 1

A polarization measure satisfies Axioms 1–4 if and only if it is proportional to

$$\int \int n(x)^{1+\alpha} n(y)|y-x|dydx,$$

where $\alpha \in [0.25, 1]$.

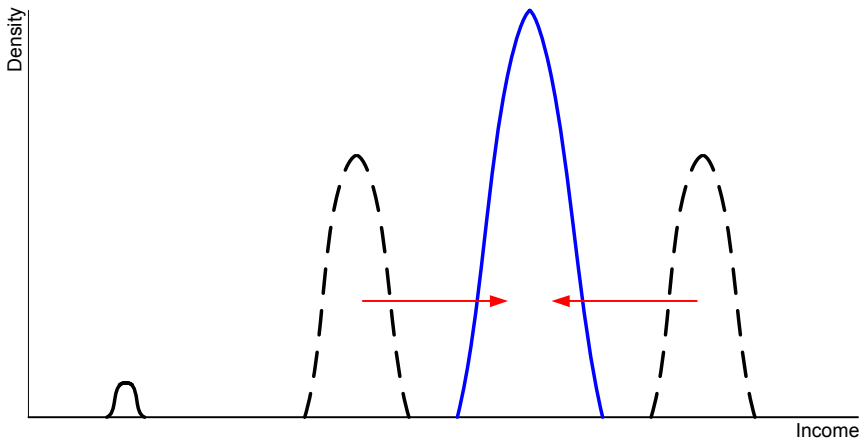
- Compare with the Gini coefficient / fractionalization index:

$$\text{Gini } = \int \int n(x)n(y)|y-x|dydx.$$

- It's α that makes all the difference.

Some Properties

- 1. Not Inequality. See Axiom 2.
- 2. Bimodal. Polarization maximal for bimodal distributions.
- 3. Contextual. Same movement can have different implications.



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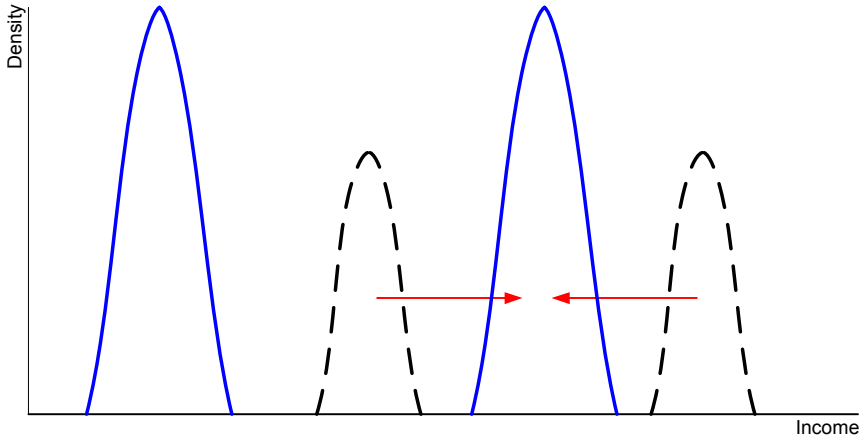
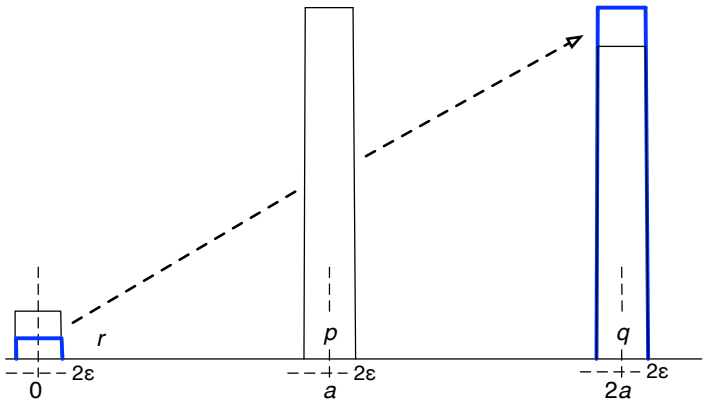


More on α

$$\text{Pol} = \int \int n(x)^{1+\alpha} n(y) |y - x| dy dx, \qquad \alpha \in [0.25, 1].$$

- Axiom 5. If $p > q$ but $p - q$ is small and so is r, a small shift of mass from r to q cannot reduce polarization.



Proposition 2

Under the additional Axiom 5, $\alpha = 1$*, so*

$$Pol = \int \int n(x)^2 n(y)|y - x|dydx.$$

- Easily applicable to ethnolinguistic or religious groupings.
- Say m "social groups", n_j is population proportion in group j.
- If all inter-group distances are binary, then

$$Pol = \sum_{j=1}^{M} \sum_{k=1}^{M} n_j^2 n_k = \sum_{j=1}^{M} n_j^2 (1 - n_j).$$

- Compare with $F = \sum_{j=1}^{M} n_j(1 - n_j)$ [use uniform distributions]

Polarization and Conflict

- Axioms suggest (but don't establish) link between polarization and conflict.
- Two approaches:
- Theoretical. A "natural" model to link conflict with these measures.
- Empirical. Take the measures to the data .

Polarization and Fractionalization

- Polarization measure:

$$P = \sum_i \sum_j n_i^2 n_j d_{ij},$$

  where d_{ij} measures inter-group "distance."

- Ambiguous correlation with fractionalization:

$$F = \sum_i n_i(1 - n_i).$$

- Theoretical connections in Esteban and Ray (1999, 2011).

A Theory of Multilateral Conflict

- m groups
- $\sum_{i=1}^{m} n_i = 1$ population shares

Combine public and private prizes:

- Public: payoff matrix (u_{ij}) per unit of prize.
- Private: $1/n_i$ per unit of prize.
- Per-capita payoff to group i is

$$\Psi_i = \Psi \left[\sum_{j=1}^{m} p_j u_{ij} \right] + (1 - \Psi) \left[p_i \frac{1}{n_i} \right] - c(r_i)$$

public private cost

A Theory of Multilateral Conflict

- Per-capita payoff to group i is

$$\Psi_i = \Psi \left[\sum_{j=1}^{m} p_j u_{ij} \right] + (1 - \Psi) \left[p_i \frac{1}{n_i} \right] - c(r_i)$$

- Conflict determined in Nash equilibrium across groups.

Proposition. Define $d_{ij} \equiv u_{ii} - u_{ij}$. Then

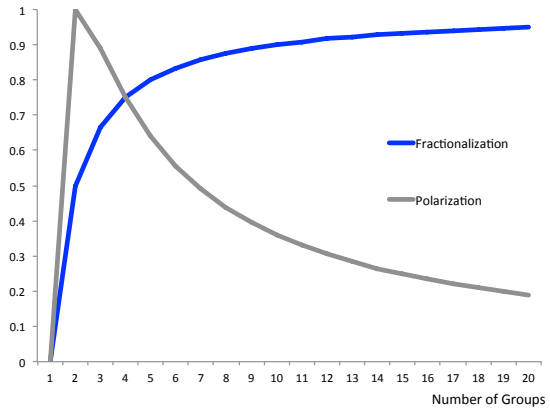
$$\boxed{Rc'(R) \simeq \Psi P + (1 - \Psi) F}, \text{ where:}$$

- $P = \sum_i \sum_j n_i^2 n_j d_{ij}$ is squared polarization (Esteban and Ray 1994)
- $F = \sum_i n_i(1 - n_i) = \sum_i \sum_{j \neq i} n_i n_j$ is fractionalization (ANM 1964)

A Theory of Multilateral Conflict

Polarization favors deep cleavages, fractionalization favors diversity.

- Example. m groups with population share $1/m$ in each group, d_{ij} binary.
- $P = \sum_i \sum_j n_i^2 n_j d_{ij}$ is maximal when $m = 2$, declines thereafter.
- $F = \sum_i n_i(1 - n_i)$ rises monotonically with m.



Empirical Implementation

Esteban-Mayoral-Ray 2012a, b

- 138 countries over 1960–2008 (pooled cross-section).
- Fearon database on groups: "culturally distinct" groups in 160 countries.
- Linguistic distances on language trees.

- Baseline: prio25, Fearon groupings, max likelihood logit

Var	[1]	[2]	[3]	[4]	[5]	[6]
P	*** 6.07 (0.002)	*** 6.90 (0.000)	*** 6.96 (0.001)	*** 7.38 (0.001)	*** 7.39 (0.001)	*** 6.50 (0.004)
F	*** 1.86 (0.000)	** 1.13 (0.029)	** 1.09 (0.042)	** 1.30 (0.012)	** 1.30 (0.012)	** 1.25 (0.020)
Pop	** 0.19 (0.014)	** 0.23 (0.012)	** 0.22 (0.012)	0.13 (0.141)	0.13 (0.141)	0.14 (0.131)
Gdppc	-	***- 0.40 (0.001)	***- 0.41 (0.002)	***- 0.47 (0.001)	***- 0.47 (0.001)	**- 0.38 (0.011)
oil/diam	-	-	0.06 (0.777)	0.04 (0.858)	0.04 (0.870)	- 0.10 (0.643)
Mount	-	-	-	0.01 (0.134)	0.01 (0.136)	0.01 (0.145)
Ncont	-	-	-	** 0.84 (0.019)	** 0.85 (0.018)	*** 0.90 (0.011)
Democ	-	-	-	-	- 0.02 (0.944)	0.02 (0.944)
Excons	-	-	-	-	-	- 0.13 (0.741)
Autocr	-	-	-	-	-	0.14 (0.609)
Rights	-	-	-	-	-	0.17 (0.614)
civlib	-	-	-	-	-	0.16 (0.666)
Lag	*** 2.91 (0.000)	*** 2.81 (0.000)	*** 2.80 (0.000)	*** 2.73 (0.000)	*** 2.73 (0.000)	*** 2.79 (0.000)

Coefficient Magnitude

- $\mathbf{P}(20 \rightarrow 80)$

Pri025 13% $\rightarrow$ 29%

- $\mathbf{F}(20 \rightarrow 80)$

Pri025 12% $\rightarrow$ 25%

Variations

- Alternative definitions of conflict (e.g., social unrest as before)
- Alternative definition of groups: *Ethnologue*
- Binary versus language-based distances
- Conflict onset
- Interactions constructed with measures of relative publicness
- Region and time effects
- Other ways of estimating the baseline model

Summary So Far

- Economic inequality matters in complex ways [earlier]
- Ethnic divisions matter strongly, if we use measures that emphasize deep divisions.

III. Interaction of Ethnicity and Economics

- Channels:

A. The Immediacy of Gains: raw exclusion vs. redistribution.

B. Orthogonal Responses to Economic Inequality: High inequality $\Rightarrow$ secondary investments (e.g. in religious dominance), may not show in data

C. Within-Group Inequality: Finance and bodies in the conflict function.

D. Who Attacks? The Ambiguity of Cross-Group Inequality:

- An increase in rival income increases violence directed against rival group.
- An increase in own income reduces violence directed against rival group.

Cross-Group Inequality: Hindu-Muslim Violence

(Mitra and Ray 2014, 2019)

- Recurrent episodes of violence
- Partition era of the 1940s, and earlier
- Continuing through the second half of the twentieth century.
- Indian history, and the relative size of Hindu population, suggest:
- Religion is a highly salient cleavage
- Hindu groups generally dominant in propagating conflict
- The parallels to Trump's America and contemporary Europe are unsettling.

Cross-Group Inequality: Hindu-Muslim Violence

- Hindu-Muslim income ratios (NSS exp data):

State	Exp.								
		1983			1987-8			1993-4	
	H/M	Min	Max	H/M	Min	Max	H/M	Min	Max
Andhra Pradesh	0.99	0.96	1.09	0.99	0.92	1.17	0.99	0.84	1.16
Bihar	0.98	0.88	1.12	1.07	1.02	1.12	1.03	0.93	1.16
Gujarat	1.02	0.89	1.19	0.98	0.78	1.14	1.06	0.88	1.13
Haryana	1.2	1.07	1.53	0.96	0.85	1.05	1.60	1.39	1.93
Karnataka	0.98	0.84	1.19	1.00	0.83	1.07	1.01	0.69	1.15
Kerala	1.10	1.07	1.19	1.15	1.15	1.16	1.01	0.92	1.16
Madhya Pradesh	0.92	0.78	1.38	0.86	0.71	1.04	0.88	0.62	1.16
Maharashtra	1.04	0.97	1.25	1.04	0.74	1.29	1.12	0.87	1.42
Orissa	0.69	0.36	1.04	0.85	0.58	0.93	0.96	0.73	1.13
Punjab	0.86	0.75	1.15	1.21	1.19	1.22	1.18	1.08	1.34
Rajasthan	0.97	0.43	1.18	1.02	0.46	1.19	1.22	1.06	1.35
Tamil Nadu	1.06	0.82	1.44	0.88	0.80	0.94	0.98	0.85	1.05
Uttar Pradesh	1.12	1.01	1.23	1.11	0.95	1.54	1.08	0.93	1.31
West Bengal	1.18	1.05	1.26	1.21	1.05	1.31	1.25	1.07	1.38

Hindu-Muslim Violence: Some Ethnographic Literature

- Bombay riots [land] (Thakore 1993)
- Calcutta riots [land] (Das 2000)
- Bhiwandi and Meerut riots [textiles] (Rajgopal 1987, Khan 1992)
- Jabbalpur, Kanpur, Moradabad riots [*bidis*, brassware] (Engineer 1994, Khan 1991)
- Varanasi riots [sari dealers] (Upadhyaya 1992)
- Varanasi riots [wholesale silk] (Wilkinson 2004)
- Ahmedabad [housing] (Field et al 2009)

- And yet…
- Wilkinson (2004):

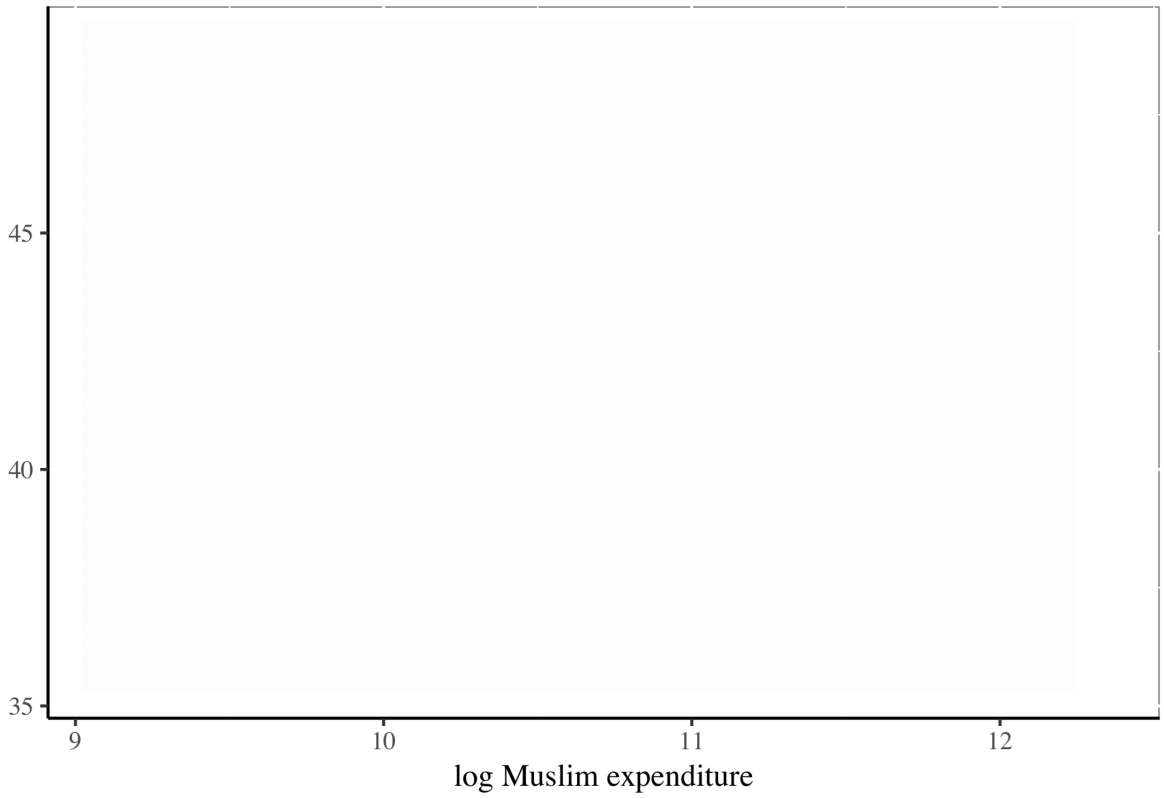
"Despite the disparate impact of riots on Hindus and Muslims, however, little hard evidence suggests that Hindu merchants and financial interests are fomenting anti-Muslim riots for economic gain…"

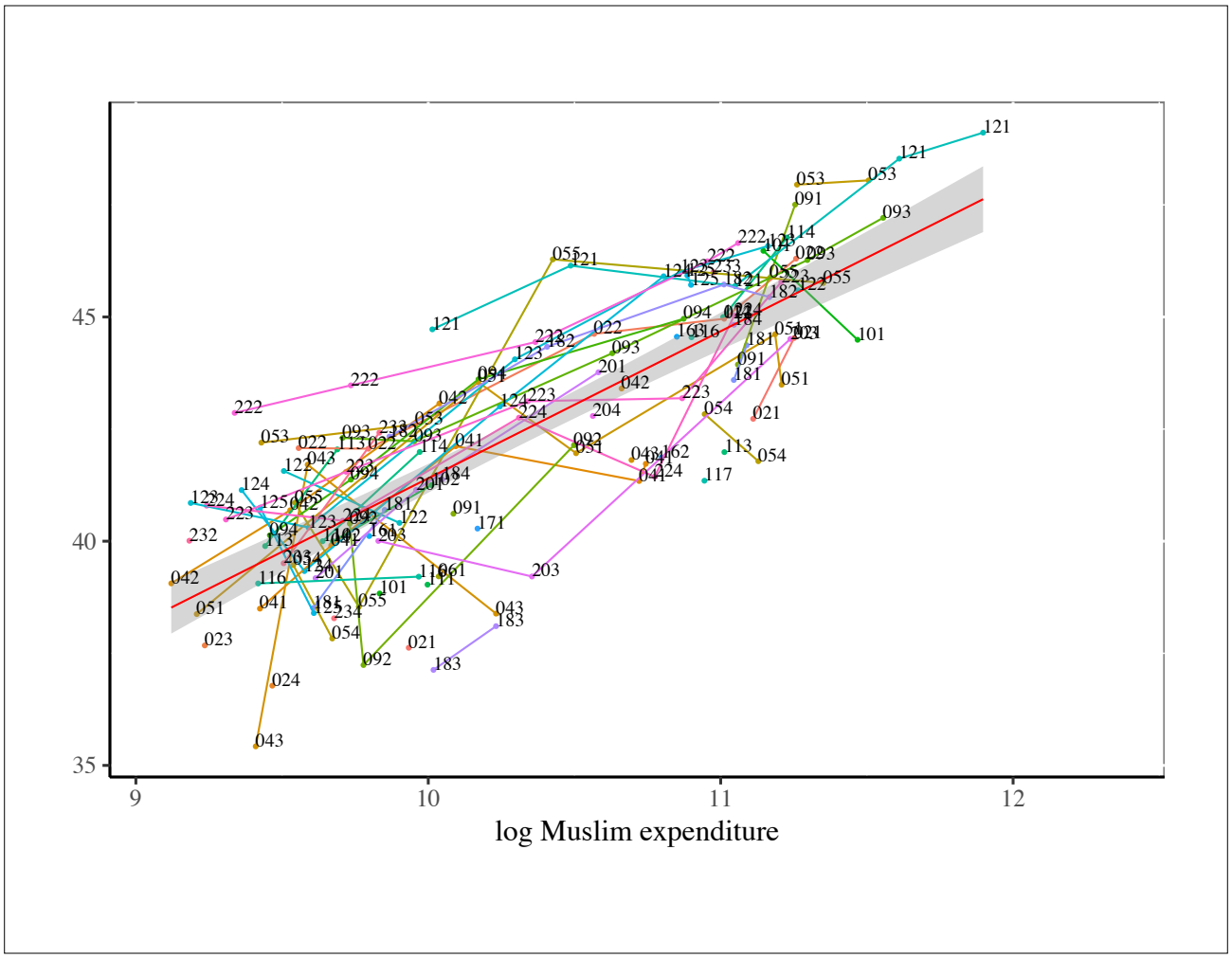
- Horowitz (2001, p. 211):

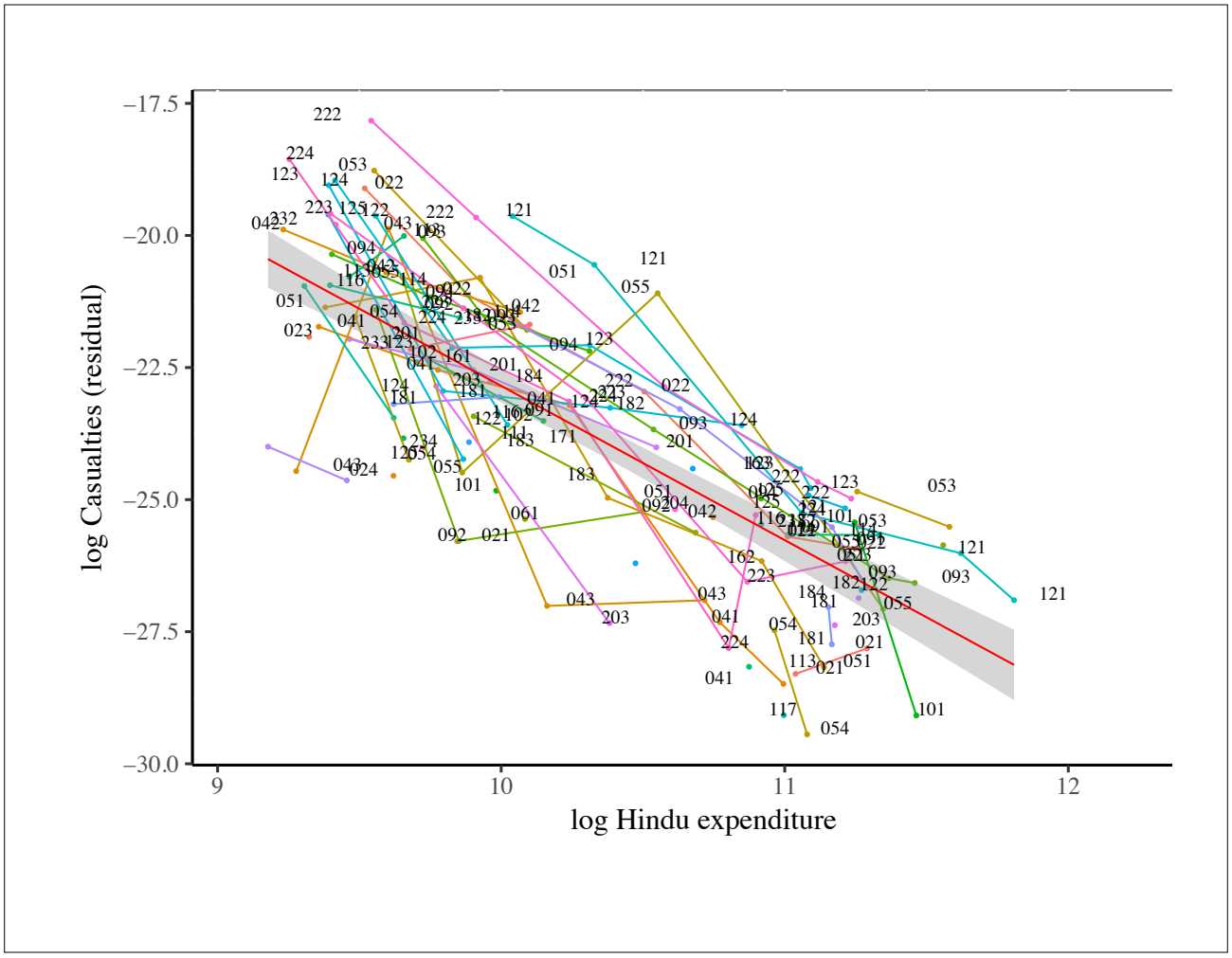
"The role that commercial competition is said to play is said to be a covert, behind-the-scenes role, which makes proof or disproof very difficult."

Data

- Conflict data. Varshney-Wilkinson (TOI 1950-1995)
  - our extension (TOI 1996-2000).
  - extension by Iyer et al (TOI 2001-2010)
- Income data. NSS consumer expenditure data.
  - Rounds 38 (1983), 43 (1987-8), 50 (1993-94), 55 (1999-2000), 61 (2004-2005).
- Five-period panel at the regional level; 55 regions.
  - Poisson, negative binomial, OLS.




45
40
35
9
10
11
12
log Muslim expenditure


−17.5
−20.0
−22.5
−25.0
−27.5
−30.0
9
10
11
12
log Casualties (residual)
log Hindu expenditure

- Casualties, 5-Year Average Starting Just After:

	[Poiss]	[Poiss]	[NegBin]	[NegBin]	[OLS]	[OLS]
H Exp	***-7.87	***-6.82	**-2.79	-3.31	**-9.15	*-8.46
	(0.005)	(0.003)	(0.093)	(0.131)	(0.033)	(0.085)
M Exp	***5.10	***4.67	**2.64	**3.87	***6.89	*** 9.52
	(0.000)	(0.001)	(0.040)	(0.023)	(0.006)	(0.009)
Pop	4.28	3.91	0.62	0.74	-3.87	-1.23
	(0.468)	(0.496)	(0.149)	(0.132)	(0.614)	(0.877)
RelPol	*5.55	*5.57	0.72	1.09	6.00	6.86
	(0.054)	(0.056)	(0.763)	(0.715)	(0.470)	(0.408)
Gini H		-5.426		4.121		-14.473
		(0.317)		(0.521)		(0.342)
Gini M		3.399		-5.952		-11.073
		(0.497)		(0.362)		(0.451)
Lit, Urb	Y	Y	Y	Y	Y	Y

- Muslim exp ↑ 1% ⇒ Cas ↑ 3–5%.
  Hindu exp ↑ 1% ⇒ Cas ↓ -7– -3%.

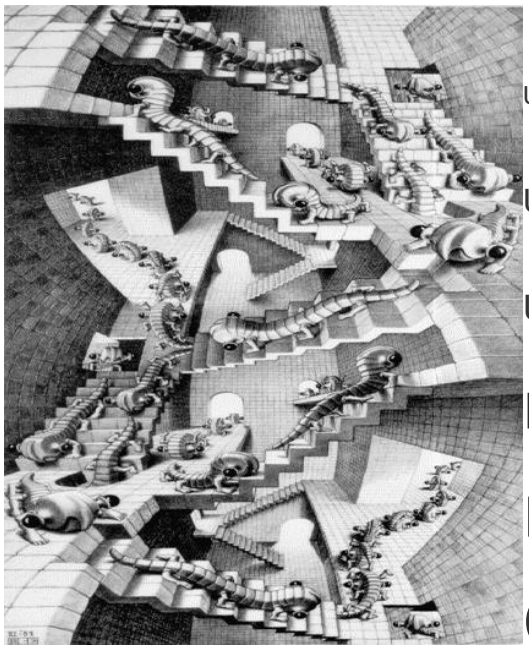
Variations

- Other measures of conflict (number of riots, killed)
- Three-period, five-period panel
- Urban alone, Ahmedabad included or excluded
- The use of Hindu-Muslim expenditure *ratios*.
- Examination of the lag structure.
- Political controls
- Endogeneity (instrument H-M exp ratio by national returns to occupations)
- Ruling out other interpretations; e.g., funding.
- Different specifications: Poisson, neg binomial, …

The Frustrations of Difference

- There are many ways of approaching these phenomena:
- None in itself fully satisfactory.
- My interest: the failure of aspirations.

The Development Treadmill



Netherlands, 1350-1800, **350**

United Kingdom, 1700-1870, **150**

United States, mid-19th c, **47**

United States, mid-20th c, **35**

Brazil, mid-1960s, **18**

Korea, late 1960s, **11**

China, 1980→, **7–9**

and Uneven

- To that ever-tilting treadmill, add uneven growth:

  Structural transformation, technical progress, globalization

Social Basis for Individual Preferences

- Individual preferences fundamentally dependent on the lives of others:
- Absurd to think about inequality, unrest, conflict, etc. without this.
- Unclear if such exposure leads to betterment or to despair

"The French found their position all the more intolerable as it became better."

de Tocqueville, 1856

Aspirations

Ray (1998, 2006), Appadurai (2004), Genicot-Ray (2017)

- Multidimensional aspiration or reference point:

$$\mathbf{a} = \Psi(\mathbf{y}, F),$$

  $\mathbf{y}$ = personal outcomes, F = social distribution over outcomes.

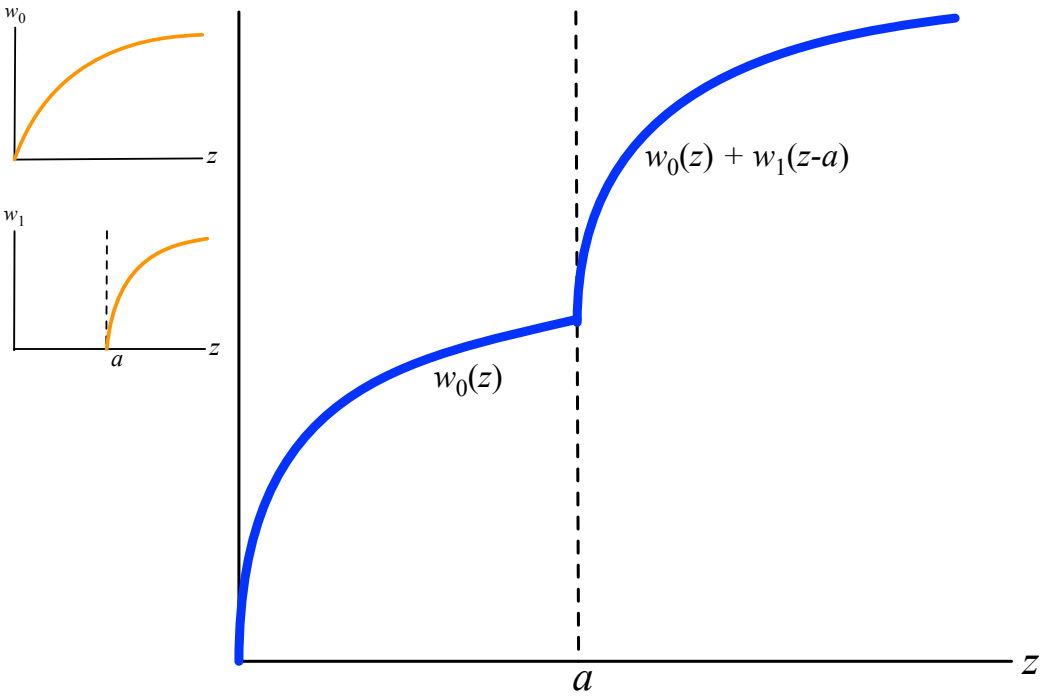
- Aspirations anchor the payoff function:

$$u(\mathbf{c}) + w_0(\mathbf{z}) + w_1(\mathbf{e}),$$

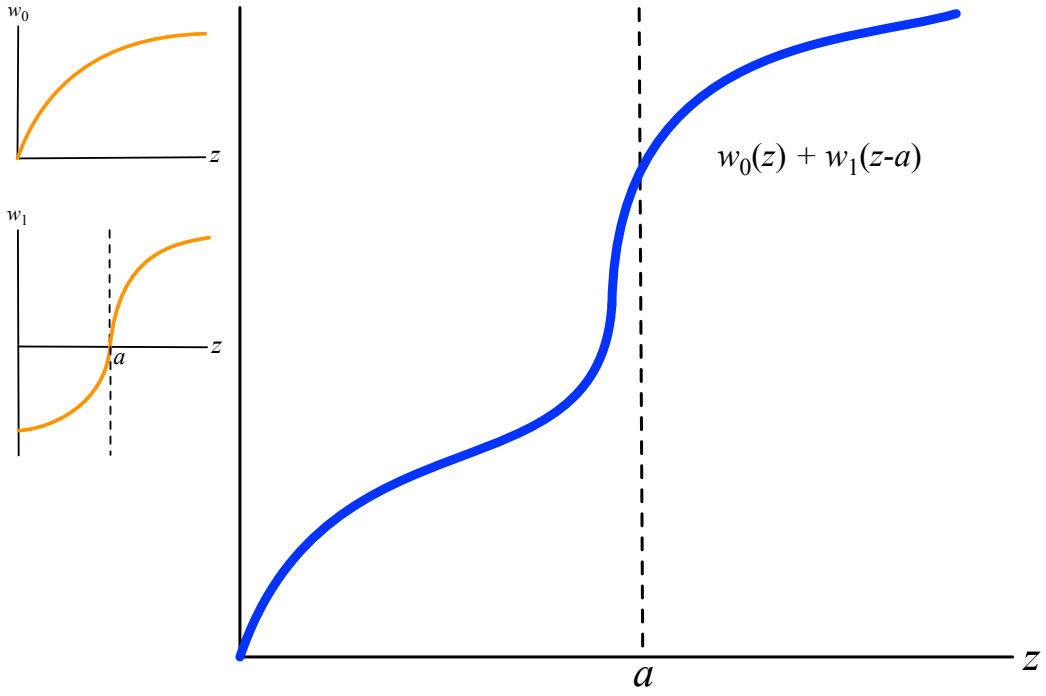
  - where $\mathbf{z}$ is future outcome and $e_k = \max\{z_k - a_k, 0\}$.

- 2-way: aspirations $\longrightarrow$ outcomes $\longrightarrow$ aspirations.

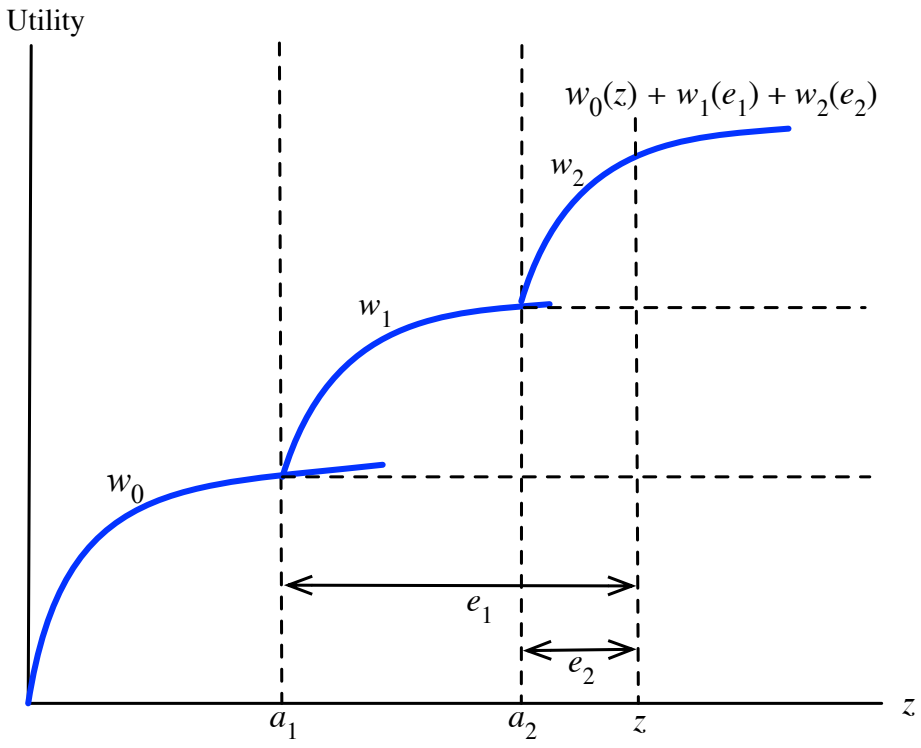
Aspirations as Milestones



Aspirations as Milestones



Aspirations as Milestones



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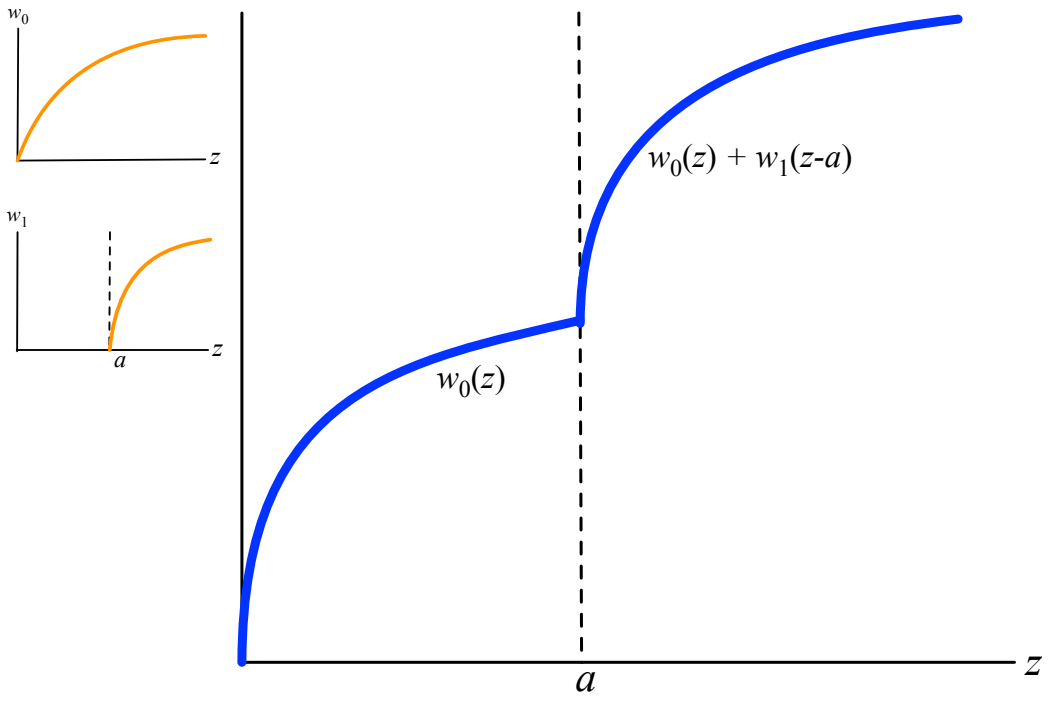

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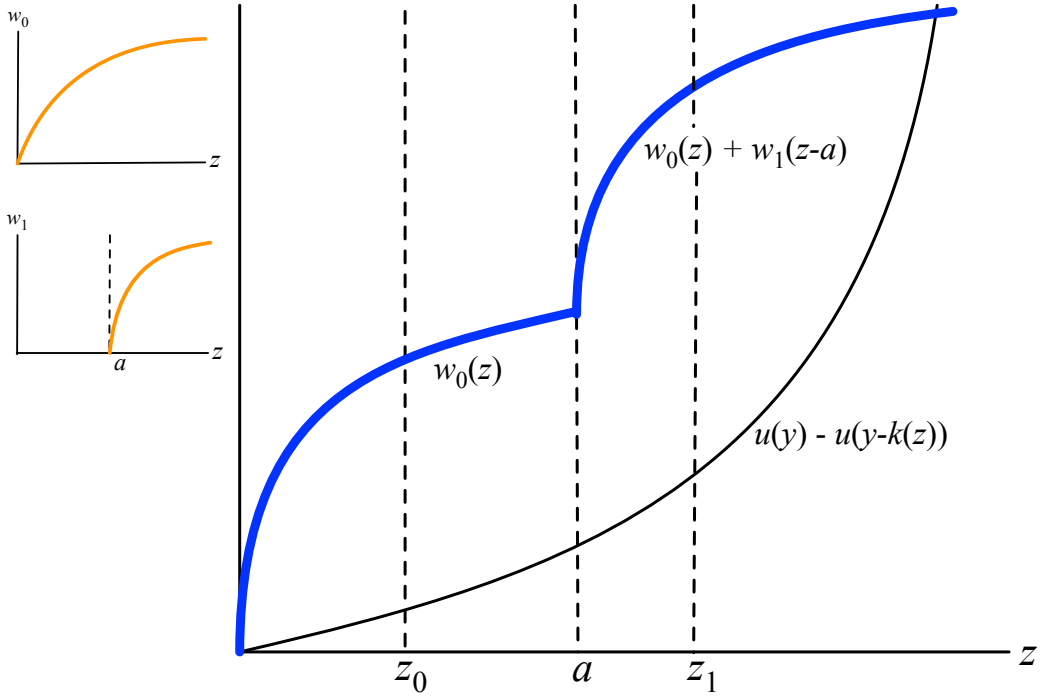
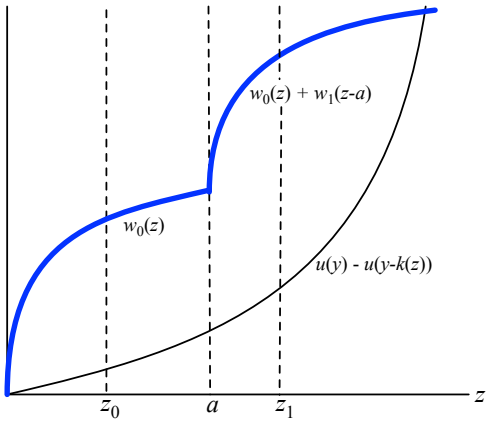


Aspirations, Inspiration and Frustration

- The milestone nature of aspirations generates sudden tip-overs.



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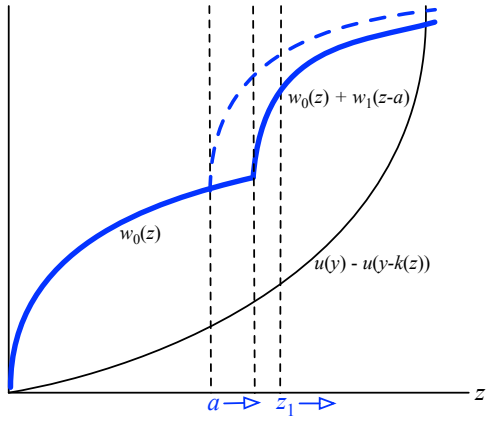

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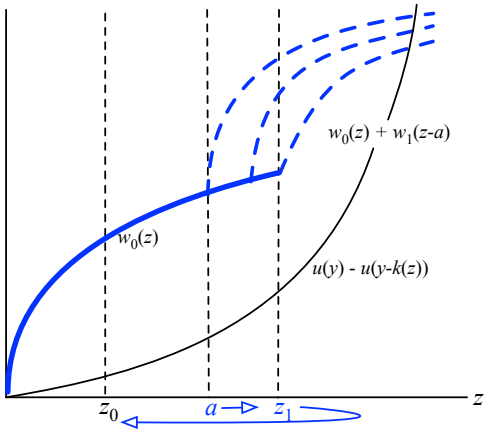

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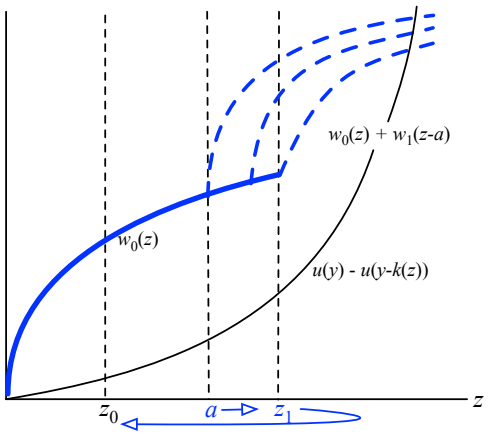
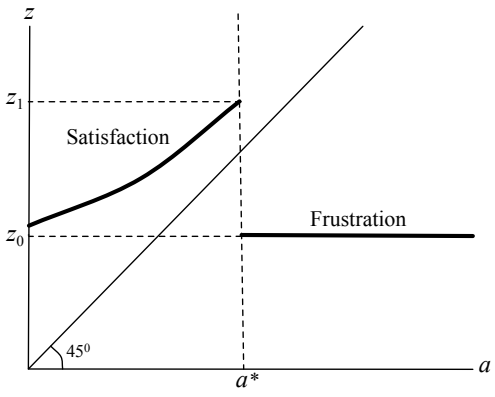




Proposition 3

For every wealth w, there is a threshold $a(w)$ below which aspirations are met, and above which frustrated. When met, investment grows with aspirations. But once frustrated, investment jump discontinuously downward and thereafter remain insensitive to or decline with aspirations.

- More generally, aspirations are multidimensional.
  - [individual]: income, health, education, housing
  - [collective]: public goods, power, religious/cultural/ethnic dominance.
- ... and a research program can be built around this framework:
  - poverty traps (Appadurai 2004, Dalton et al 2016, Ray 1998, 2006)
  - growth and inequality (Bogliacino and Ortoleva 2016, Genicot and Ray 2017)
  - socio-economic mobility (Esteban et al 2016)
  - risk-taking (Bondi and Ray, in prep.)
  - doubling-down in the face of bad shocks (Genicot and Ray, in prep.)
  - "appropriate goal-setting" (Schwenkenberg 2010, Kearney 2016, Besley 2017, Goux 2017)

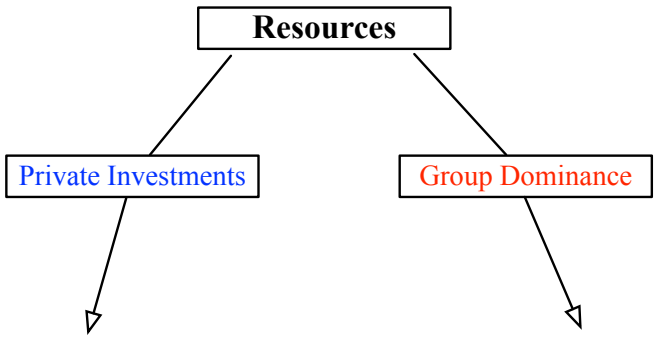
Frustrated Aspirations and Conflict

- Frustrated aspirations and discontent with growing inequality:
  - Are frustrations directed at growth beneficiaries, or against a third party?
  - Are political leaders who are unable (or unwilling) to control high and rising economic inequality, able to create "second-best" release valves by directing animosities in "orthogonal directions"?

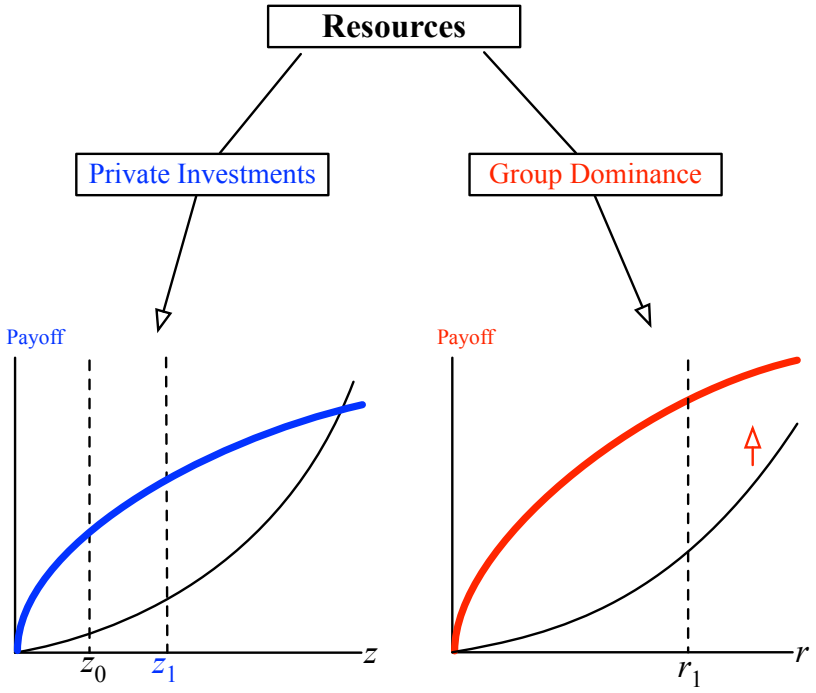
Consolation Prizes: Orthogonal Responses to Economic Inequality

- Two-dimensional aspirations (Genicot-Ray 2019):
- 1: economic investments, typically private.
- 2: cultural/religious/nationalistic investments, often group-based.

Consolation Prizes: Orthogonal Responses to Economic Inequality



Consolation Prizes: Orthogonal Responses to Economic Inequality



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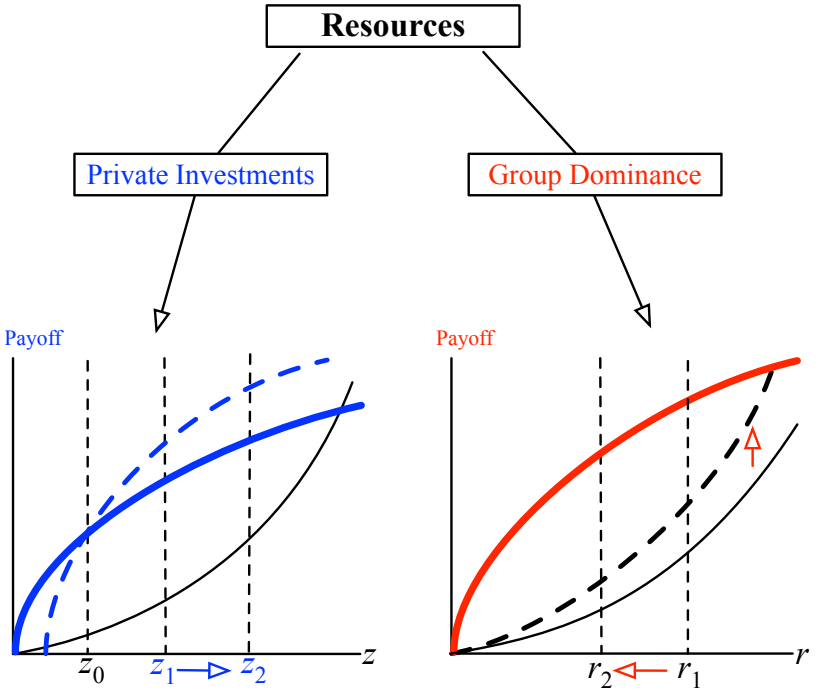

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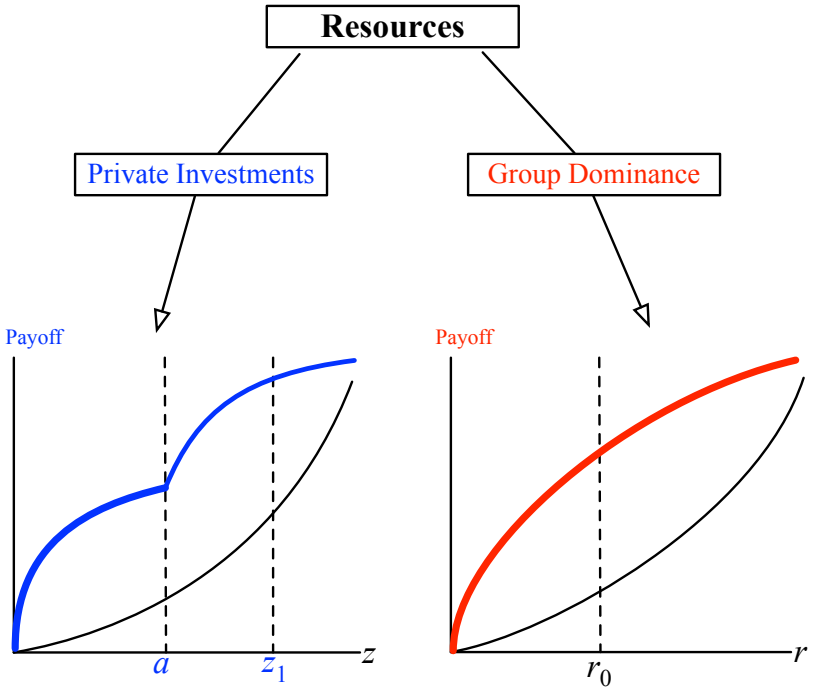

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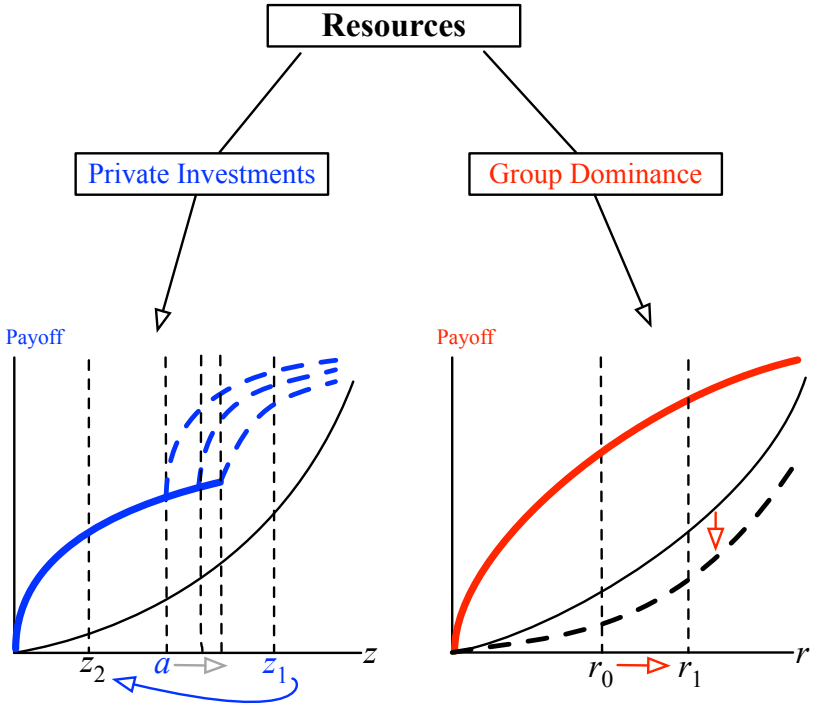
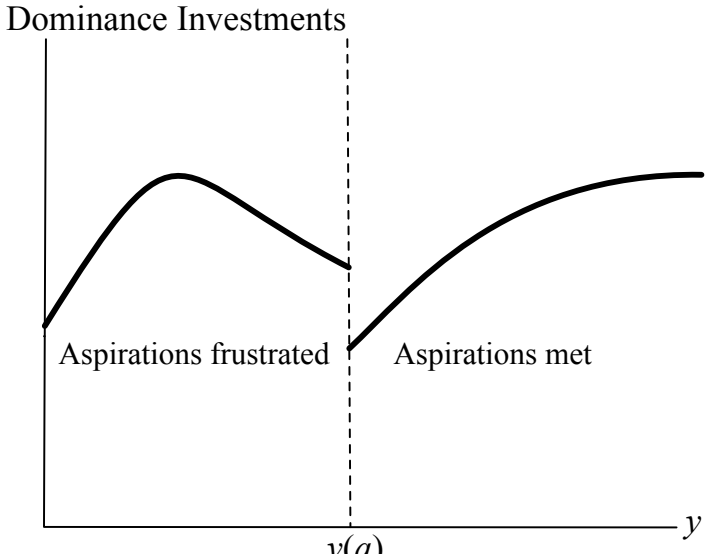


Consolation Prizes: Orthogonal Responses to Economic Inequality

Proposition 4

Over the income cross-section, dominance investments initially fall, dropping discontinuously as aspirations switch from failure to success; then rise again.

With high economic inequality, aggregate dominance investments rise.



Similarity, Difference and Conflict: A Summary

- Three related empirical observations:
  - The nonlinearity of the inequality-conflict relationship
  - The salience of ethnic conflict
  - The complex response of conflict to economic change
- Aspirations and conflict:
  - response to high inequality

Three Final Remarks

- Ethnic versus Class Conflict (Esteban, Mayoral and Ray, in progress)
  - Explicit modeling of conflict technology to include labor and finance.
- Multiple Threats.
  - Institutional sluggishness versus speed of marker formation.
- The Diversity of Identity.
  - Sen's argument.
  - Ideologies and cultures versus resource-grabbing.