Beyond the Market: Economic Disparities and Conflict[†]

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[†]Thanks to Joan Esteban, Laura Mayoral and Anirban Mitra for letting me freely draw on our joint work.

Beyond the Market

"The total input capacity of a region may find an outlet in two directions, one leading to a larger global output of goods and services, another towards securing a larger share in the total."

Trygve Haavelmo, A *Study in the Theory of Economic Evolution*, Amsterdam: North-Holland 1954 (p.92).

(See also discussion by Moene and Rødseth, Journal of Economic Perspectives 1991.)

Everything in our talk today shares this basic insight.

Reactions to Uneven Economic Change:

Occupational choice versus political economy

Within-Country Conflict

- Sustained, organized violence across groups
- or between some "group" and the State
- Precise definition (e.g., PRIO 25 battle deaths p.a.) useful but not central
- Low-level "simmering" violence just as important.

Within-Country Violence

Low-level persistent violence; e.g.,

- Hindu-Muslim
- Naxalite, ETA
- Racial unrest in the US
- Anti-immigrant sentiment

Open conflicts, such as:

- Ethiopia, Syria, Myanmar, Yemen ...
- Historical conflicts: Rwanda, Bosnia, Wars of Religion

Outline:

- Three (mis?)-perceptions concerning conflict
- A simple but general structure that connects economics and conflict
- Some applications of that structure
- Some research questions

I. Aggregate Growth Will Take Care of Conflict

Collier-Hoeffler 1998, 2004; Fearon-Laitin 2003, Miguel-Satyanath-Sergent 2004

Grabbing versus opportunity cost:

oil revenues (Dube-Vargas 2013); Hindu-Muslim violence (Mitra-Ray 2014)

Frustrated aspirations

"The French found their position all the more intolerable as it became better." de Tocqueville 1856

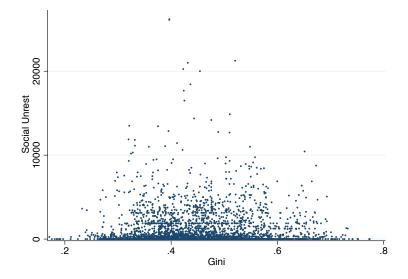
The Indian General Elections of 2014.

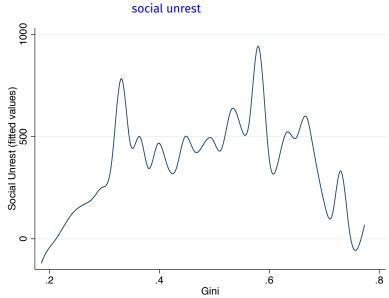
Growth could well be conflictual.

II. Economic Inequality Provokes Open Conflict

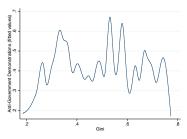
- "The relation between inequality and rebellion is indeed a close one." Sen (1973)
- Unclear. Lichbach 1989 survey:
- "[T]ypical finding of a weak, barely significant relationship between inequality and political violence . . . rarely robust" Midlarsky 1988

II. Economic Inequality is Openly Conflictual (?) Banks CNTS dataset

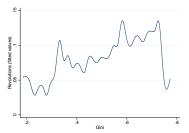




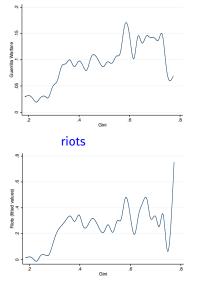
demonstrations







guerrilla warfare



| | Components of Social Unrest, 1960–2005 | | | |
|-----------------|--|--------------|--------------|--------------|
| | [1] | [2] | [3] | [4] |
| | Guerrilla | Riots | Revolutions | 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 | \checkmark | \checkmark | \checkmark | \checkmark |
| С | 1.618 | -6.942 | -1.275 | **-9.647 |
| | (0.399) | (0.279) | (0.384) | (0.041) |
| Country FE | \checkmark | \checkmark | \checkmark | \checkmark |
| Year FE | \checkmark | \checkmark | \checkmark | \checkmark |
| R^2 | 0.296 | 0.405 | 0.341 | 0.365 |
| Obs | 3360 | 3360 | 3358 | 3274 |

III. Conflict Occurs Along Class Lines

- **1945–1998, 100/700 ethnic groups active in rebellion** Fearon 2006
- "[E]clipse of the left-right ideological axis." Brubaker and Laitin (1998)

One of the great questions of political economy:

Similarity vs. difference.

Conflict is often over directly contested resources:

land, jobs, business resources, government quotas, religious space ...

The implications of direct contestation:

- Ethnic markers.
- Instrumentalism v. primordialism (Huntington, Lewis)

Theoretical Framework

Framework

- A set of potential allocations $x \in X$ over individuals:
- Could be market outcomes or constrained by horizontal equity
- Allowable coalitions $S \in \mathcal{S}$:
- demarcated by class, geography, ethnicity, occupation, ...
- with preferences over allocations
- Costly conflict technology:
- could use labor or finances or both
- opportunity cost, as in Haavelmo

Framework

Peace

- Search for $x \in X$
- Constraints: horizontal equity, market forces

Conflict

- $S \text{ forms} \to \text{conflict}$
- Stochastic allocation $\{x'\}$, conflict cost c_S

Blocking

• $x \in X$ is blocked by $S \in \mathcal{S}$ if

$$\{\{x'\}, c_S\} \succ_S x$$

where $\succ_S =$ **coalitional preferences**: e.g., group-utilitarian or group-Pareto

Framework

Good for understanding:

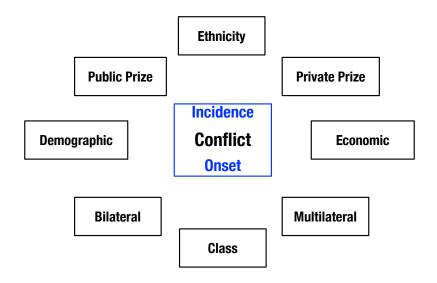
- What it takes to avoid conflict;
- Conflict patterns conditional on conflict taking place.

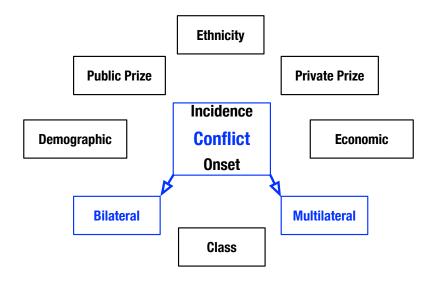
Needs extra work to understand:

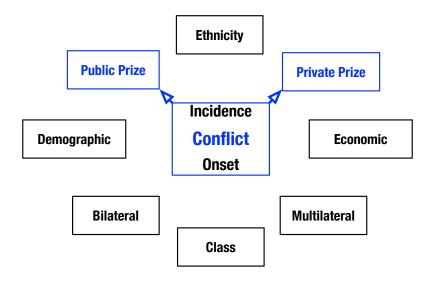
- Which conflicts will emerge if several are possible;
- We return to this more difficult theme later (if time).

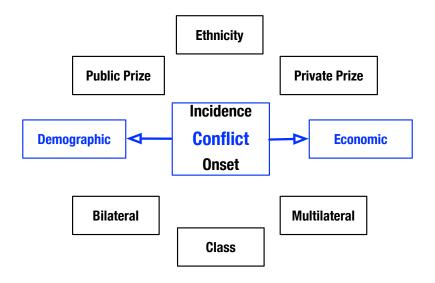
Familar extensions:

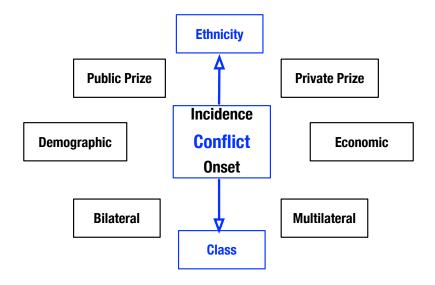
- Incomplete information, no-commitment, etc.
- Fearon (1995), Powell (2006), Esteban-Ray (2001), Baliga-Sjostrom (2012)

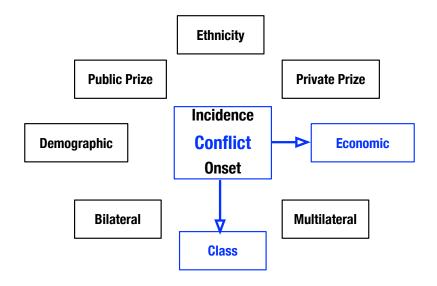












- Blocking coalition, population share *n*.
- Per capita resources supplied to conflict = r
- Cost c(r), total: nr
- Defending coalition: \bar{r} per capita, total: $(1-n)\bar{r}$
- Winning probability for blocking coalition: $p = \frac{nr}{nr + (1-n)\bar{r}}$.

Illustration I: Income and Conflict

Expected per-capita payoff
$$= p\pi - c(r) = \left[\frac{nr}{nr + (1-n)\bar{r}}\right]\pi - c(r)$$

- likewise for Defender
- Maximize payoff to get:

$$\pi p \left(1 - p \right) = rc'(r)$$

This is a balancing of gains and losses that recalls Haavelmo: "The total input capacity of a region may find an outlet in two directions, one leading to a larger global output of goods and services, another towards securing a larger share in the total."

Illustration I: Income and Conflict

Grabbing v. Opportunity Cost

$$\pi p \left(1 - p \right) = rc'(r)$$

- An increase in income:
- increases π if related to rival wealth \Rightarrow conflict \uparrow
- increases cost of violence if r in labor units \Rightarrow conflict \downarrow
- decreases cost of violence if r is financial contributions \Rightarrow conflict \uparrow
- For poor societies, in which labor is the main input into conflict:
- These two effects work in opposite directions
- Coffee vs oil in Dube-Vargas (2013)

- **Religious violence in India** (Mitra and Ray 2014, 2019)
- Partition era of the 1940s, and earlier
- Continuing to the present day.
- Indian history + relative size of Hindu population \Rightarrow
- Religion highly salient, and
- Hindu groups generally dominant
- The parallels to Trump's America and contemporary Europe are unsettling.

A "clash of civilizations," or instrumental?

- 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)

Engineer (1987) on Meerut riots:

"If [religious zeal] is coupled with economic prosperity, as has happened in Meerut, it has a multiplying effect on the Hindu psyche. The ferocity with which business establishments have been destroyed in Meerut bears testimony to this observation. Entire rows of shops belonging to Muslims ...were reduced to ashes."

Das (2000) on Calcutta riots:

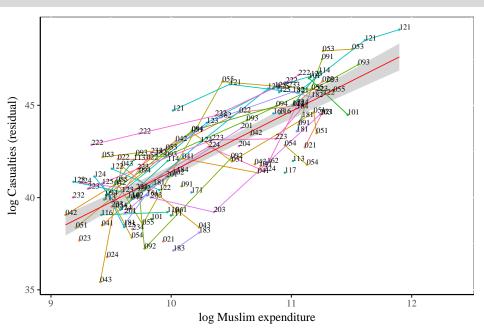
"[I]t appears that that 'promoters' played a crucial role in inflaming the riot whose victims ...were slum-dwellers. Their obvious aim was to clear the *bustees* [or slums] for construction projects...What actually took place in 1992 was a land-grabbing riot under a communal garb."

- 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."



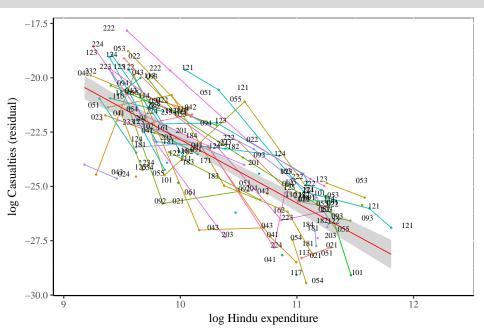


Illustration II: Public and Private Prizes

Public "Budget" B:

- culture, religion, quotas ...
- Share *s* : 1 − *s*
- per capita: sB, (1 s)B.

Conflict: $\pi = \bar{\pi} = B$.

- $Bp(1-p) = rc'(r) = \bar{r}c'(\bar{r})$
- Groups equally intense.
- Majority conflicts dominate.

Private "Budget" B:

- oil, land, transfers ...
- Share s : 1 − s
- per capita sB/n, (1-s)B/(1-n).

Conflict:
$$\pi = B/n$$
, $\bar{\pi} = B/(1-n)$.

- $Bp(1-p) = nrc'(r) = (1-n)\bar{r}c'(\bar{r}).$
- Smaller groups more intense.
- Minority conflicts dominate.

Conflict onset:

• Conflict payoffs $\pi \left[kp + (1-k)p^2 \right] >$ peace payoffs, where $k = \frac{\epsilon - 1}{\epsilon}$ and $\epsilon = \frac{rc'(r)}{c(r)}$.

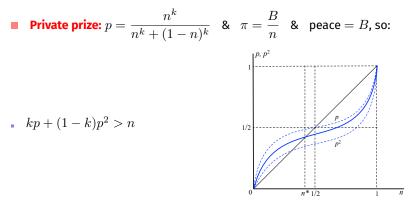
Public prize: p = n, $\pi = B$, peace = B/2, so:

.
$$kn+(1-k)n^2>1/2$$
 ($n>rac{1}{\sqrt{2}}\simeq 70\%$ is sufficient).

Large groups block equitable peace when prize is public.

Conflict onset:

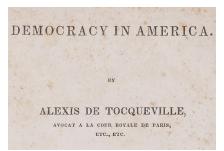
• Conflict payoffs $\pi \left[kp + (1-k)p^2 \right] >$ peace payoffs, where $k = \frac{\epsilon - 1}{\epsilon}$ and $\epsilon = \frac{rc'(r)}{c(r)}$.



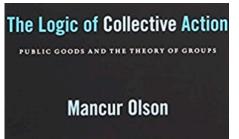
Small groups block equitable peace when prize is private.

Illustration II: Public and Private Prizes

Summary: Two Tyrannies



Tyranny of the majority (Tocqueville 1835, Mill 1959) "Society ... practices a social tyranny more formidable than many kinds of political oppression ...[imposing] its own ideas and practices as rules of conduct on those who dissent from them ..." Mill 1859



Tyranny of the minority (Pareto 1927, Olson 1965): "[A] protectionist measure provides large benefits to a small number of people, and causes a very great number of consumers a slight loss. This circumstance makes it easier to put a protection measure into practice." Pareto 1927

Illustration II: Public and Private Prizes

(Mayoral (r) Ray 2021)

Geo-referenced ethnic groups (GREG); Weidman, Rod and Cederman 2010.

digitized version of Atlas Narodov Mira 1964.

- 145 countries, 929 ethnic groups, 1475 country/ethnic groups 1955–2006
- **Group-level conflict data from** Cederman, Buhaug and Rod 2009.
- PRIO25 definitions of incidence and onset.
- Prizes:
- Private: oil, minerals, land ...
- Public: lack of rights from Polity IV and Freedom House.

Illustration II: Public and Private Prizes

| | Conflict Incidence Regressed on SIZE×PRIVATE | | | | | | | | |
|------------------------------------|--|------------|-----------|----------|-----------|-----------|--|--|--|
| | [1] | [2] | [3] | [4] | [5] | [6] | | | |
| SIZE | 0.028 | 0.060*** | 0.071*** | 0.054* | 0.132*** | 0.063*** | | | |
| | (0.144) | (0.001) | (0.000) | (0.060) | (0.009) | (0.005) | | | |
| OIL | 0.659*** | 0.806*** | | 0.564** | 0.404* | | | | |
| | (0.007) | (0.002) | | (0.045) | (0.062) | | | | |
| SIZE 	imes OIL | -12.625*** | -14.099*** | | | | | | | |
| | (0.001) | (0.000) | | | | | | | |
| $SIZE \times OIL_{0-25}$ | | | 0.039 | | | | | | |
| | | | (0.628) | | | | | | |
| $SIZE \times OIL_{25-50}$ | | | -0.040 | | | | | | |
| | | | (0.387) | | | | | | |
| ${ m SIZE} 	imes { m OIL}_{50-75}$ | | | -0.144*** | | | | | | |
| | | | (0.001) | | | | | | |
| ${ m SIZE} 	imes { m OIL}_{>75}$ | | | -0.115*** | | | | | | |
| | | | (0.000) | | | | | | |
| size 	imes mines | | | | -0.015** | | | | | |
| | | | | (0.018) | | | | | |
| size 	imes home | | | | | -0.397*** | | | | |
| | | | | | (0.000) | | | | |
| size 	imes privindex | | | | | | -0.052*** | | | |
| | | | | | | (0.000) | | | |
| UN-INTERACTED VARIABLES | | | у | У | У | У | | | |
| OTHER CONTROLS | n | У | ý | y | у | У | | | |
| COUNTRY-YEAR FE | У | У | У | У | У | У | | | |
| R^2 | 0.809 | 0.809 | 0.809 | 0.802 | 0.811 | 0.811 | | | |
| Obs | 64414 | 64414 | 64414 | 37495 | 62336 | 62336 | | | |

Illustration II: Public and Private Prizes

| | Conflict Incidence Regressed on SIZE×PUBLIC | | | | | | | | | | |
|---------------------------|---|---------|---------|---------|----------|----------|---------|---------|--|--|--|
| | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | | | |
| SIZE | -0.068** | -0.044 | -0.043 | -0.042 | -0.039 | -0.022 | -0.047* | 0.040 | | | |
| | (0.014) | (0.147) | (0.169) | (0.150) | (0.169) | (0.411) | (0.096) | (0.172) | | | |
| OIL | 0.587 | 0.709* | 0.706* | 0.713* | 0.704** | 0.553** | 0.685* | 0.492 | | | |
| | (0.108) | (0.065) | (0.067) | (0.064) | (0.045) | (0.028) | (0.056) | (0.207) | | | |
| $SIZE \times LACK RIGHTS$ | 0.091** | 0.100** | | | | | | | | | |
| | (0.036) | (0.018) | | | | | | | | | |
| SIZE 	imes LACK CIVIL | | | 0.105** | | | | | | | | |
| | | | (0.026) | | | | | | | | |
| $SIZE \times LACK POL.$ | | | | 0.090** | | | | | | | |
| | | | | (0.012) | | | | | | | |
| SIZE 	imes AUTOC | | | | | 0.116*** | | | | | | |
| | | | | | (0.007) | | | | | | |
| SIZE× EXCLUDED | | | | | | 0.111*** | | | | | |
| | | | | | | (0.006) | | | | | |
| SIZE× PUBLIC INDEX | | | | | | | | 0.035** | | | |
| | | | | | | | | (0.026) | | | |
| EXCLUDED | | | | | | 0.002 | | | | | |
| | | | | | | (0.506) | | | | | |
| PUBLIC INDEX | | | | | | | | 0.071 | | | |
| | | | | | | | | (0.566) | | | |
| OTHER CONTROLS | n | у | У | у | У | у | У | у | | | |
| COUNTRY-YEAR FE | У | У | У | У | У | У | У | У | | | |
| R^2 | 0.817 | 0.817 | 0.817 | 0.817 | 0.810 | 0.811 | 0.809 | 0.820 | | | |
| Obs | 41255 | 41255 | 41255 | 41255 | 44149 | 51190 | 41065 | 34528 | | | |

Multilateral conflict:

- m groups
- $\sum_{i=1}^{m} n_i = 1$ population shares
- Possibly co-existing public and private prizes:
- **Public Prize:** payoff matrix (u_{ij}) per unit of prize.
- Private Prize: $1/n_i$ per unit of prize.
- Per-capita payoff to group i is

$$\Psi_{i} = \Psi\left[\sum_{j=1}^{m} p_{j} u_{ij}\right] + (1 - \Psi)\left[p_{i} \frac{1}{n_{i}}\right] - c\left(r_{i}\right)$$
public private cost

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

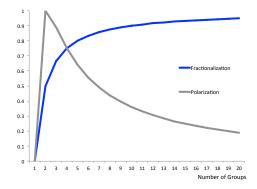
$$\left| {\it Rc}'(R) \simeq \Psi P + (1-\Psi) F$$
 , where:

• $P = \sum_{i} \sum_{j} n_{i}^{2} n_{j} d_{ij}$ is squared polarization (Esteban and Ray 1994)

• $F = \sum_i n_i (1-n_i) = \sum_i \sum_{j
eq i} n_i n_j$ is fractionalization (ANM 1964)

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.



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.

Var [1][2][3][4][5][6]P*** 6.90 *** 7.38 *** 6.07 *** 6.96 *** 7.39 *** 6.50 (0.002)(0.000)(0.001)(0.001)(0.001)(0.004)F*** 1.86 ** 1.13 ** 1.09 ** 1.30 ** 1.30 ** 1.25 (0.000)(0.029)(0.042)(0.012)(0.012)(0.020)** 0.19 ** 0.23 ** 0.22 0.13Рор 0.130.14(0.141)(0.141)(0.131)(0.014)(0.012)(0.012)Gdppc ***- 0.40 ***- 0.41 ***- 0.47 ***- 0.47 **- 0.38 (0.001)(0.002)(0.001)(0.001)(0.011)oil/diam 0.060.040.04 -0.10-(0.777)(0.858)(0.870)(0.643)0.010.01 0.01 Mount -(0.134)(0.136)(0.145)** 0.84 ** 0.85 *** 0.90 Ncont _ (0.019)(0.018)(0.011)-0.020.02Democ (0.944)(0.944)-0.13Excons ---(0.741)Autocr 0.14_ _ (0.609)Rights 0.17--_ (0.614)civlib 0.16(0.666)2.732.912.81*** 2.80*** 2.732.79Lag *** (0.000)(0.000)(0.000)(0.000)(0.000)(0.000)

Prio25, Fearon groupings, max likelihood logit

Coefficient Magnitude:

- $\mathbf{P}(\mathbf{20}
 ightarrow \mathbf{80})$, prio25 13% ightarrow 29%
- $\mathbf{F}(\mathbf{20}
 ightarrow \mathbf{80})$, prio25 12% ightarrow 25%

Illustration IV: High Inequality and Latent Conflict

Variations on Esteban and Ray 2008, 2011

Political economy of equilibrium tax rates

- Classical model: voting. Here: the threat of conflict
- Progressive taxation:

Disposable income =
$$\underbrace{(1 - \tau)y}_{\text{post-tax income}} + \underbrace{\tau\mu}_{\text{transfer}}$$

- Everyone below mean income wants au = 1.
- Everyone above mean income wants $\tau = 0$.
- Under conflict, the prize is control over the post-conflict tax rate.
- What is the set of "unblocked" peacetime tax rates?

Illustration IV: High Inequality and Latent Conflict

The Technology of Conflict:

- Person asked to give contribute money or time.
- Money used for non-labor resources *K* or mercenaries.
- Labor resources L = contributed time + mercenaries.
- R = f(K, L); f is the technology of conflict.

Victory and Defeat

Probability of win for i = LEFT, RIGHT:

$$p_i = \frac{R_i}{R_{\text{left}} + R_{\text{right}}}$$

Unblocked Tax Rates

- For any distribution of income F, define
- $\tau_{\text{LEFT}}(F)$ as the smallest tax rate that the Left will tolerate:

 $\mathsf{Peacetime_Payoff}_{\scriptscriptstyle \mathsf{LEFT}}(F,\tau_{\scriptscriptstyle \mathsf{LEFT}}(F)) \equiv \mathsf{Conflict_Payoff}_{\scriptscriptstyle \mathsf{LEFT}}(F)$

• $\tau_{\text{RIGHT}}(F)$ as the *largest* tax rate that the Right will tolerate.

 $\mathsf{Peacetime_Payoff}_{\mathsf{\tiny RIGHT}}(F,\tau_{\mathsf{\tiny RIGHT}}(F)) \equiv \mathsf{Conflict_Payoff}_{\mathsf{\tiny RIGHT}}(F)$

Because conflict is inefficient, $\tau_{\text{\tiny LEFT}}(F) < \tau_{\text{\tiny RIGHT}}(F)$.

Proposition. Consider any sequence of distributions $\{F^z\}$ with ever-increasing inequality in the sense of Lorenz-domination.

Then $\tau_{\text{\tiny LEFT}}(F^z) \leq \tau_{\text{\tiny RIGHT}}(F^z) \to 0 \text{ as } z \to \infty.$

- **Rising inequality** \Rightarrow one side gets the bodies; the other the money.
- But money can buy bodies at increasingly superior terms of trade as inequality worsens.
- "Actually, there's been class warfare going on for the last 20 years, and my class has won." Warren Buffett, CNN interview, September 30, 2011

Latent conflict

- Conflict battlestage is the market, not direct violence.
- Related to the "Coase theorem" (without uncertainty or incomplete information).
- Conflict suppressed by choice of $\tau \in [\tau_{\text{RIGHT}}, \tau_{\text{LEFT}}]$.
- Very high inequality makes it easier to suppress: so $\tau \to 0$.

What if other channels of conflict are potentially available?

"[T]he Marxian prophecy has had an ethnic fulfillment." Horowitz 1985

- **Class:** income distribution.
- Fight over tax rates au as before.
- **Religion:** a majority (H) and a minority (M) group.
- Similar class characteristics
- Religious budget:
- Shared s: 1 s across majority and minority.

Four potential groups:

- Rich-H, Poor-H, Rich-M, Poor-M
- Leaders can propose group alliances ...
- e.g., [Rich-H + Poor-H], or [Poor-H + Poor-M] (conflictual)
- or [Rich-H + Poor-H + Rich-M + Poor-M] (non-conflictual)
- ... as well as tax rates au and sharing rules s.
- If alliance agreed, it forms; otherwise proposals continue.





- Single-dimensional appeasement:
- $s \in [s_*, s^*]$ avoids religious conflict, $\tau \in [\tau_*, \tau^*]$ avoids class conflict.
- Acceptable to all, with possible exception of rich majoritarian group *H*.
- They can propose an ethnic alliance with Poor-H,
- trading off percentage gains in tax rates for conflict funding.

Proposition. If majority group is large enough, then for any sequence of distributions $\{F^m\}$ with increasing inequality, the only equilibrium allocations involve active ethnic conflict for large m. In such cases, τ^m is **even lower** than the lowest appeasement tax for the Left.

- Class and ethnic identities interact:
- Ethnic salience for the poor triggered by difficulty of class conflict

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- The organization and funding of ethnic conflict (by the rich)
- Can push tax rates down in exchange for funded ethnic conflict.

Research Questions

- What follows is a summary via research questions..
- Some of them mentioned in this talk.

A Research Agenda for Conflict

I. Which economic changes lead to greater conflict?

Negative shocks:

- Grosfeld-Sakalli-Zhuravskaya (2019): pogroms under negative shocks + political turmoil
- Miguel (2015) on rainfall shocks and "witch-killing."

Positive shocks:

- Resources: Iraq, Syria, South Sudan, the Ukraine ...
- Dube-Vargas (2013) on positive oil shocks in Colombia
- Indian elections of 2014, the French Revolution ...
- The economics of Hindu-Muslim violence (Mitra and Ray 2014)

II. Is similarity more conducive to conflict than difference?

- Minorities in same occupation become targets of violence (Bates 1974, Horowitz 1985)
- Racial violence in the United States (Spilerman 1976, Olzak and Shanahan 1996)
- German anti-semitism where Protestants entered moneylending (Becker-Pascali 2019)
- Complements vs substitutes in economic arrangements (Jha 2013)

III. Can high economic inequality lead to cross-group violence?

- Aspirations failure ightarrow orthogonal spillovers (Genicot and Ray 2020)
- Land grab in Rwanda under seemingly primordial violence (André-Platteau 1998)
- Educated unemployment and Tamil-Sinhala violence (Tambiah 1986)

IV. Is the presence of ethnic groupings conflictual?

- Fractionalization and conflict (Fearon-Laitin 2003, Collier-Hoffler 2004)
- Polarization and conflict (Montalvo and Reynal-Querol 2005, Esteban-Mayoral-Ray 2012)

V. Is ethnic conflict primordial or instrumental?

- Samuel Huntington's Clash of Civilizations (Huntington 1996)
- Medieval origins of anti-Semitic outbreaks in Germany (Voth-Voigtlander 2012)
- Land grab in Rwanda under seemingly primordial violence (André-Platteau 1998)
- Educated unemployment and Tamil-Sinhala violence (Tambiah 1986)

A Research Agenda for Conflict

VI. To what extent is ethnic conflict organized conflict?

- Coordinated conflict (Esteban and Ray 2008)
- Alternative source of self-esteem or domination (Genicot and Ray 2020)
- Rise of populism (Funke, Schularick, and Trebesch 2016, Guriev and Papaioannou 2020)

VII. Is within-group inequality conflictual across groups?

- Yes: strongly predicts incidence, unlike cross-ethnic inequality (Huber-Mayoral 2019)
- See also Kuhn and Weidmann (2015) on within-group inequality and conflict onset.

VIII. Do rich and poor collude in ethnic conflict?

- Dalit participation in 2002 Gujarat violence
- Low caste Hindu stance in recent West Bengal state elections

IX. Do post-colonial fiscal institutions promote ethnic violence?

- Inherited fiscal institutions guard against class conflict; e.g., progressive taxation
- But door is left open to other forms of conflict

X. Do multiple overlapping identities promote peace?

- Promotes tolerance and understanding across cultures (Sen 2006)
- Multiple overlapping threats make it harder to buy everyone off (Ray 2010)