

Uneven Growth and the Social Backlash

Invernizzi Lectures in honor of Eliana La Ferrara



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An Untroubled View of Economic Development

- Convergence, a traditional paradigm:
 - Poorer countries, regions, groups **tend to** catch up, “**converge**”.
 - Fundamental belief: the world is ultimately a great leveler.

- But if convergence fails (which it does), then:
 - Some regions are more **corrupt**, or more **autocratic**,
 - or have a **bad work ethic**, or high **population growth**
 - or are prone to ethnic violence and **conflict**

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 - or are prone to ethnic violence and **conflict**
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- These aren't explanations but outcomes we should study . . .
- . . . as part of the *process*

social outcome → economics → **social outcome**

Uneven Growth, and Reactions To It

- Roots
- Divergence
- Sectoral change
- Globalization
- Reactions
- Occupational choice
- Cross-sector percolation
- Political economy
- Conflict

Uneven Growth, and Reactions To It

■ **Roots**

- **Divergence** (increasing returns, imperfect credit markets)
- Sectoral change
- Globalization

■ **Reactions**

- Occupational choice
- Cross-sector percolation
- Political economy
- Conflict

Uneven Growth, and Reactions To It

■ **Roots**

- Divergence
- **Sectoral change** (agriculture/industry, domestic/exports)
- Globalization

■ **Reactions**

- Occupational choice
- Cross-sector percolation
- Political economy
- Conflict

Uneven Growth, and Reactions To It

■ **Roots**

- Divergence
- Sectoral change
- **Globalization** (sectors with comparative advantage)

■ **Reactions**

- Occupational choice
- Cross-sector percolation
- Political economy
- Conflict

Uneven Growth, and Reactions To It

■ **Roots**

- Divergence
 - Sectoral change
 - Globalization
- ## ■ **Reactions**
- Occupational choice
 - Cross-sector percolation
 - Political economy
 - Conflict

Uneven Growth, and Reactions To It

- Roots
- Divergence
- Sectoral change
- Globalization
- **Reactions**
- Occupational choice (slow, imprecise, intergenerational)
- Cross-sector percolation
- Political economy
- Conflict

Uneven Growth, and Reactions To It

- Roots
 - Divergence
 - Sectoral change
 - Globalization
- **Reactions**
 - Occupational choice
 - Cross-sector percolation (demand patterns, inflation)
 - Political economy
 - Conflict

Uneven Growth, and Reactions To It

- Roots
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- Sectoral change
- Globalization
- **Reactions**
- Occupational choice
- Cross-sector percolation
- **Political economy** (person-based votes, wealth-based lobbying)
- Conflict

Uneven Growth, and Reactions To It

- Roots
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- **Reactions**
- Occupational choice
- Cross-sector percolation
- Political economy
- **Conflict** (Hirschman's Tunnel)

Internal Social Conflict is Ubiquitous...

- 1945–1999: inter-country battle deaths 3.33m
- 127 civil wars in over 1/3 of all countries (25 in 1999).
- 16m+ dead as a direct result
- Does not count displacement and disease (est. 4x violent deaths)
- mass assassination of up to 25m noncombatant civilians
- everyday conflict (e.g., Hindu-Muslim or Basque violence).

... And Often Ethnic

- Doyle-Sambanis (2000), Political Instability Task Force
- 1945–1998, 100 of 700 known ethnic groups participated in rebellion against the state. Fearon (2006)
- Horowitz (1985): “In much of Asia and Africa, it is only modest hyperbole to assert that the Marxian prophecy has had an ethnic fulfillment.”

Four Reasons Why Ethnicity Matters

- 1. Ethnic identity is often **visible**, and unchanging.
 - Often an easier way to create and target an “enemy” .
- 2. Noneconomic markers divide economically **similar** individuals.
 - The gains from conflict are immediate and direct.
- 3. Organized conflict is **people + finance**.
 - Within-group disparities feed the people/finance synergy.
- 4. Post-colonial economic policy sometimes class-based.
 - Other dividing lines are often neglected.

Primordialism vs Instrumentalism

- Ethnic conflict could well be economic (as in Marx), but
- Expressed via non-economic markers (ethnicity).
- Compatible with (but far broader than) the primordialist view:
- Huntington's *Clash of Civilizations* (1993, 1996); see also Lewis.

And What About Economic inequality?

- “The relation between inequality and rebellion is indeed a close one, and it runs both ways.”

Sen (1973)

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Sen (1973)

■ Lichbach survey (1989) mentions 43 papers, some “best forgotten”.

■ Evidence thoroughly mixed.

Economic Inequality and Conflict

- Dube, Esteban, Mayoral and Ray (in progress).

Variable	prio25	prio25	prio1000	prio1000	prio1000	prio1000	prio1000	prio1000	prio1000	prio1000
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)				

Ethnic Divisions and Conflict: Connections

- Theory based on Esteban and Ray (AER 2011)
- Groups engaged in conflict over some combination of:
 - **Public prize:**
 - religious dominance, political control, hatreds, public goods
 - **Private prize:**
 - Oil, diamonds, scarce land
- Each group **contributes resources** to obtain favorite outcome.
- Conflict: sum of all resource contributions

Predicted Connections

- Conflict over public goods related to **polarization** P .
- Conflict over private goods related to **fractionalization** F .
- Overall connection:

$$\text{conflict per-capita} \simeq [\lambda P + (1 - \lambda)F],$$

where

- λ = relative importance of public prize

Empirical Investigation

(Esteban, Mayoral and Ray (AER 2012, *Science* 2012))

- 138 countries over 1960–2008 (pooled cross-section).
- **C**: weighted combination of PRIO indicators
- **isc**: Continuous index, Banks (2008), weighted average of 8 different manifestations of conflict.
- Indices of **publicness** and **privateness** of the prize

	[1]	[2]	[3]	[4]
	C	isc	C	isc
P	*** 5.16 (0.001)	*** 19.50 (0.002)	- 1.48 (0.606)	- 16.33 (0.227)
F	* 0.93 (0.070)	* 3.56 (0.061)	0.76 (0.196)	0.31 (0.878)
$P\Lambda$			*** 11.174 (0.003)	*** 61.89 (0.001)
$F(1 - \Lambda)$			* 1.19 (0.097)	*** 10.40 (0.000)
gdppc	** - 0.34 (0.047)	*** - 2.26 (0.004)	* - 0.36 (0.080)	*** - 3.02 (0.001)
pop	*** 0.24 (0.000)	*** 1.14 (0.000)	*** 0.21 (0.001)	*** 1.30 (0.000)
nr	- 0.27 (0.178)	- 0.53 (0.497)	- 0.00 (0.570)	0.00 (0.432)
mount	0.00 (0.537)	0.02 (0.186)	0.00 (0.362)	* 0.03 (0.061)
ncont	*** 1.06 (0.001)	*** 4.55 (0.001)	** 0.77 (0.026)	*** 4.28 (0.001)
politics	0.18 (0.498)	0.29 (0.789)	- 0.00 (0.328)	** - 0.00 (0.026)
lag	*** 1.99 (0.000)	*** 0.46 (0.000)	*** 1.94 (0.000)	*** 0.44 (0.000)

Growth and Violence

■ Cross-country studies

■ generally negative relationship

- Fearon-Laitin (2003), Collier-Hoeffler (1998, 2004), Miguel *et al.* (2004).

■ lootable natural resources correlated with conflict:

- de Soysa (2002), Lujala (2005), Bruckner-Cicccone (2007)

■ Within-country studies

■ Lots of evidence on resource-grabbing

- Ross (2004, 2006), Dube-Vargas (2009), Angrist and Kugler (2008), Versi (1994), André-Platteau (1998), Mamdani (2009)

Within-Country Studies

■ Uneven Growth: More to Grab

- Spilerman (1979) on 1960s race riots in the US
- Thakore (1993), Das (2000) on 1992–3 Bombay and Calcutta riots [real estate]
- Rajgopal (1987) and Khan (1992) on Bhiwandi and Meerut riots [competition in textile sector]
- Engineer (1994) and Khan (1991) on Jabbalpur, Kanpur, Moradabad [competition in *bidis*, brassware]
- Wilkinson (2004) on Varanasi [wholesale silk trade]
- Sarkar (2007) and Gang of Nine (2007) on Singur and Nandigram [land transfers]

Within-Country Studies

■ **Uneven Growth: Incentives to Engage**

- Murshed and Gates (2005) and Do and Iyer (2007) on poverty in Nepal.
- Honaker (2008) on unemployment in N. Ireland.
- Dube and Vargas (2009) on coffee shocks in Colombia.
- Kapferer (1998) and Senenayake (2004) on poverty in Sri Lanka.
- Gandhi (2003) on Dalit participation in Gujarat.
- Humphreys and Weinstein (2008) on poor conflict participants in Sierra Leone.

Uneven Growth and Hindu-Muslim conflict

- Partition era of the 1940s, and earlier
- Continuing through the second half of the twentieth century.
- Around 8,000 deaths and 30,000 injuries over 1950–1995.
- Numbers small for India but have huge effects.

Theory

- Mitra and Ray (2012)
- Income growth in the victim group increases conflict.
- More to gain from grabbing or exclusion.
- Income growth in aggressor group reduces conflict.
- Lowers incentive to participate in confrontations.

■ Casualties, 5-Year Average Starting Just After

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

■ Mus exp ↑ 1% ⇒ Cas ↑ 3–5%. Opp for Hindu exp.

Remarks

- Economic progress can be inflammatory
 - even across groups not demarcated by economics.
 - \uparrow M Exp \Rightarrow large and significant increase in religious conflict.
 - \uparrow M Exp \Rightarrow (often) significant decline in religious conflict.
 - as measured over a 5-year period starting just after
 - result fades with contemporaneous conflict
 - results robust to lagged conflict
 - No connection between M Exp and “all riots”.

Two Closing Observations

Two Closing Observations

■ The Psychology of Economic Change

- Uneven growth: aspirations versus frustrations.
- Aspirations and frustrations are socially generated.
- Duesenberry (1949), Frank (1985), Robson (1992), Clark and Oswald (1996), Ray (1998, 2006), Dynan and Ravina (2007).
- Exposure of one group to the fortunes of another is fundamental to preference formation.
- Unclear if this exposure leads to betterment or to despair.
- A small, “reachable” economic gap will encourage investment.
- A large and persistent gap may stifle it.

■ The Salience of Group Identity

■ Us and Them, profoundly contextual.

■ The Marxian view: class commands center-stage.

■ In many situations (e.g., land struggles), this makes sense.

■ In others, ethnicity may be focal, as we've seen here.

■ A research agenda in development economics cannot ignore the question of salience.