

Foreign transfers and authoritarian peace

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Challenges to peace in autocracies

- Problem of authoritarian power-sharing and control (Svolik 2012)
- Autocracies more prone to civil war (Blattman and Miguel 2010)

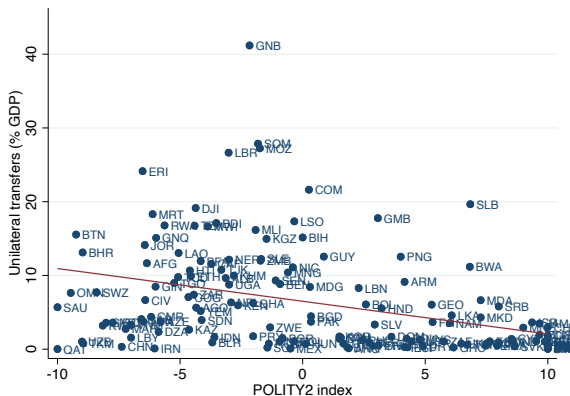
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- A possible solution: Financial transfers
 - Government: oil, sovereign borrowing, aid
 - Opposition: remittances, aid to rebels, natural resources (e.g., diamonds)
 - Studied separately, although transfers often correlated
 - Remittances ease borrowing costs (Singer 2012)
 - Aid associated with migration (Bermeo and Leblang 2015)
 - Oil revenues (petro-dollars) affect sovereign finance (Frieden 1991)

Foreign transfers in nondemocracies

Unilateral transfers (e.g., aid, remittances) are important in less democratic countries



What this paper does

General model of two-sided transfers and political violence

- Extend framework from Besley and Persson (2010)
- Incorporate transfers that go to incumbent (G) and opposition (H)
- Prediction: A decline in G and/or H makes a society more vulnerable to conflict, rising in contexts where (ex-ante) sharing institutions are less egalitarian

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Empirical evaluation

- Application: foreign transfers (foreign aid, migrant remittances)
- Prior studies: decline in aid or remittances may make conflict more likely
- Unexplored: Study *simultaneous* change in two-sided transfers on conflict, autocracy

Setup

- 2 groups, Incumbent (I) and Opposition (O), each with population normalized to 1
- Each group earns wage rate, w (normalized to 1)
- O receives transfer H , I receives transfer G
- Sharing institutions (exogenous): $\theta \in [0, \frac{1}{2}]$

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Violence technology

- I and O can fund an army, $A \in (0, 1)$, cost wA
- Army size: I can fund small (S) or large (L) army, O can (only) fund small army S
- Conflict function:

$$\gamma(A^O, A^I) = \begin{cases} 0 & \text{if } A^I > A^O \\ 1 & \text{if } A^I < A^O \\ \frac{1}{2} & \text{if } A^I = A^O \end{cases}$$

- O contributes to its own and incumbent's army (from w , H)
- I uses G to finance its army

Setup

Single-shot game:

- Sequence of play: I starts in power, O chooses to attack or not, I defends or not
- End of period: State resources (G) divided between two groups, utility is linear in consumption (risk-neutral).
 - Group out of power: θG
 - Group in power: $(1 - \theta)G$

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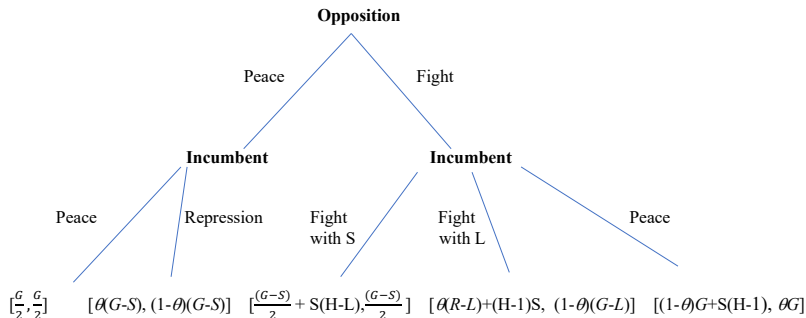
Payoffs (recall, $w = 1$):

$$V^I(A^O, A^I) = (1 - \gamma(A^O, A^I))(1 - \theta)(G - A^I) + \gamma(A^O, A^I)\theta(G - A^I)$$

$$V^O(A^O, A^I) = (1 - \gamma(A^O, A^I))\theta(G - A^I) + \gamma(A^O, A^I)(1 - \theta)(G - A^I) - (1 - H)A^O$$

Sequential game

- Sequential game: Opposition moves first
- Solution: Backward induction, find I 's optimal response first, then O



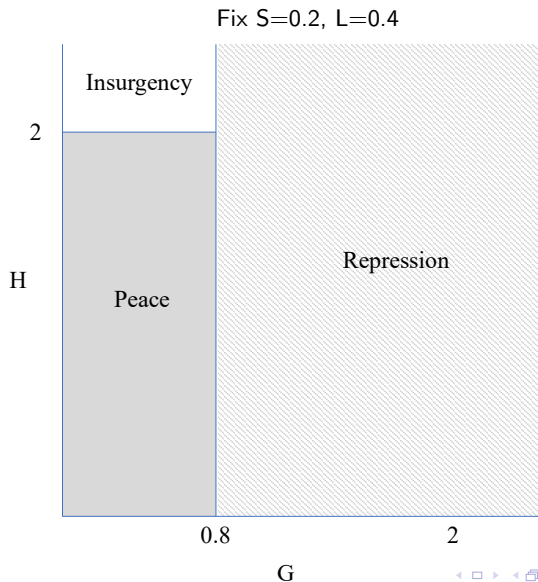
Optimal responses

Interval	G range	H range	Inc. response to		Opp.	Inc.	Outcome
			0	S			
1	$0 \leq G \leq \frac{S}{1-\theta}$	$0 \leq H \leq \frac{G(2\theta-1)+2S(1-\theta)}{2S-\theta}$	0	0	0	0	Peace
2	$\frac{S}{1-2\theta} \leq G \leq \frac{2S(1-\theta)}{1-2\theta}$	$H \leq \frac{(G-S)(2\theta-L)}{2S}$	0	S	0	S	Repression
			S	S	0	S	Repression
3	$\frac{S}{1-2\theta} \leq G \leq \frac{2S(1-\theta)}{1-2\theta}$	$H \geq \frac{(G-S)(2\theta-S)}{2S}$	0	S	S	S	Conflict
			S	S	S	S	Conflict
4	$0 \leq G \leq \frac{S}{1-2\theta}$	$H \geq \frac{G(2\theta-1)+2S(1-\theta)}{2S-\theta}$	0	0	S	0	Conflict*
5	$G \geq \frac{2L(1-\theta)-S}{1-2\theta}$	$H \geq 0$	S	L	0	L	Repression

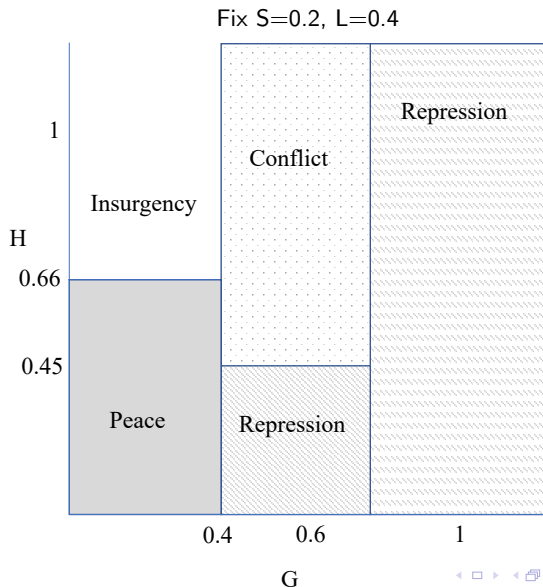
Notes: * denotes "unchallenged" conflict (opposition insurgency).

Inferences:

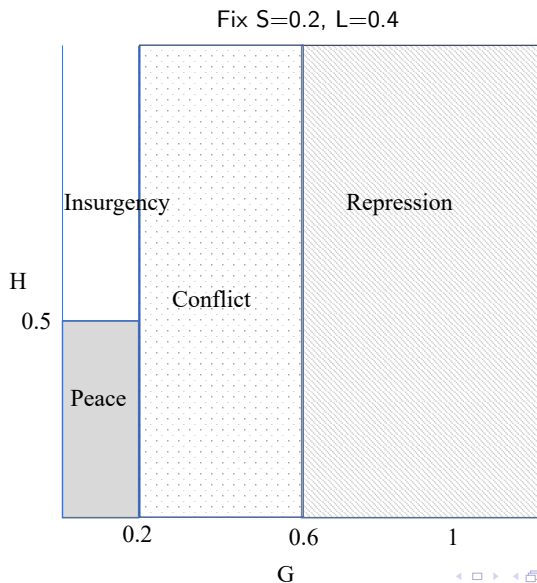
- Higher levels of G and/or H tend to raise violence, e.g., Interval 1 \Rightarrow 2, 2 \Rightarrow 3
- Conflict possible when G and/or H decline, i.e., Interval 5 \Rightarrow 4 or 3

Fully sharing institutions ($\theta = \frac{1}{2}$)

Partially sharing institutions ($\theta = \frac{1}{4}$)



Non-sharing institutions ($\theta=0$)



Implications

- 1 With full sharing institutions ($\theta = \frac{1}{2}$), two-sided conflict is unlikely. Unchallenged conflict (insurgency) is possible when incumbent has low resources (G)
- 2 *Less* egalitarian sharing institutions *increase* incidence of two-sided conflict when transfers *decline*
- 3 Conflict is possible from a *simultaneous* reduction in G and H (i.e., movement in southwest direction) and is magnified where sharing institutions are less egalitarian ($\theta \rightarrow 0$)

Application: International financial transfers

Context

- Aid and remittances (AR) are an importance source of foreign transfers in developing countries
- Prior studies: Drop in aid or remittances associated with conflict (e.g., Nielsen et al. 2011, Regan and Frank 2014)
- Unexplored: Simultaneous increase (decrease) in AR

Challenges to inference

- AR is endogenous to conflict and regime type
- Quasi-natural experiment: Oil price induced AR shock to Muslim non-oil producers, relative to non-Muslim counterparts (Ahmed 2012)
- **New evidence: AR reduces conflict and maintains institutional equilibrium (distinct from political survival)**

Conclusion

This paper

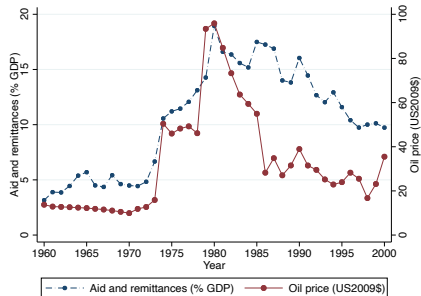
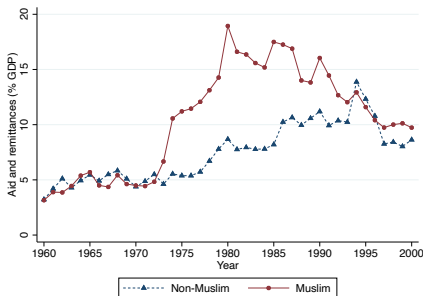
- Model: Two-sided transfers can affect prospect of peace, varies across institutional settings (θ)
- Implication: Declines in transfers to government and opposition can foster conflict, especially in less egalitarian institutional settings

Extensions

- Non-financial sources of conflict and political transitions
 - Interventions by foreign powers (Boix 2011, Anderson 2019)
 - Structure of international system (Kalyvas and Balcells 2010, Gunitsky 2017)

Quasi-natural experiment

- 1973-1985: AR “boom” in Muslim societies (left figure)
- AR boom positively correlated with world oil prices (right figure)



Empirical setup

Two-stage least squares (2SLS)

First stage: $AR_{it} = a + b(MUSLIM_i \times POIL_t) + cX_{it} + C_i + Y_t + e_{it}$

Second stage: $V_{it} = \alpha + \beta AR_{it} + \gamma X_{it} + C_i + Y_t + \epsilon_{it}$

- V_{it} : Incidence of civil war or measure of democracy in country i in year t
- $MUSLIM_i$: 1 if at least 75% of population identifies with Islam, 0 otherwise
- $POIL_t$: Price of oil
- Sample: non-oil producing developing countries, 1970-2000
- Data: Armed Conflict Database, POLITY IV, World Development Indicators

Interpretation

- Second stage: Average treatment effect of AR in Muslim recipients (autocracies)
- If $\beta < 0$: AR *lowers* incidence of civil war, level of democracy

Aid and remittances foster authoritarian peace

- AR lowers incidence of civil war, does not upset institutional equilibrium

	Civil war			Democracy		
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	2SLS	OLS	OLS	2SLS
Aid and remittances (% GDP)	-0.002 (0.001)		-0.017 (0.009)	0.032 (0.027)		-0.137 (0.171)
Muslim \times p(oil)		-0.002 (0.001)			-0.019 (0.024)	
<i>F</i> -stat. on instrument						
Cragg-Donald			51.9			51.9
Kleibergen-Paap			9.98			9.98
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.28	0.29	0.09	0.71	0.71	0.68

Notes: Robust standard errors, clustered by country reported in parentheses. The unit of observation is country-year (87 countries total). p(oil) is the world oil price in 2009 US\$. Across all specifications, $N=1777$. All specifications include country and year fixed effects. These coefficients and a constant are not reported.

Threats to inference

Exclusion restriction

- Economic distress: control for GDP per capita (“dirty control”)
- Foreign meddling: control for assassinations, exclude possible externalized conflicts
- Internal rent-seeking: control for coups

Confounders (omitted variables)

- Measures of repression: control for political rights, exec. constraints
- Political transitions in non-Muslim countries associated with declining oil prices
 - Latin America (Frieden 1991), Eastern Europe (Lieberman 1998)
 - Control for LA dummy \times p(oil), E.Europe dummy \times p(oil)
- End of Cold War: control for Muslim \times Cold War dummy

Channels: Sharing institutions as a mediator

- Sharing institutions (θ) affect transitions (low $\theta \rightarrow$ conflict)
- Need exogenous measure of θ :
 - More ethnically diverse societies share less (Alesina and Ferrara 2005)
 - Societies with less democratic institutions share less (Lake and Baum 2001)
 - Societies with longer “state histories” are less democratic (Hariri 2012)

	Civil war			Democracy
	(1)	(2)	(3)	(4)
	OLS	OLS	2LS	2SLS
Aid and remittances (% GDP)	-0.001 (0.001)		-0.003 (0.012)	0.029 (0.236)
Muslim \times p(oil)		0 (0.001)		
State history \times p(oil)	-0.007 (0.002)	-0.007 (0.003)	-0.007 (0.003)	-0.006 (0.055)
ELF in 1961 \times p(oil)	0.002 (0.002)	0.002 (0.002)	0.002 (0.003)	0.049 (0.072)

Notes: Robust standard errors, clustered by country reported in parentheses. All specifications include country and year fixed effects. These coefficients and a constant are not reported