Curses 2

Index of contents

Topic 4.3: curses – more research evidence

Conflict – Dube and Vargas (2013) – 1

THE CASE OF COLOMBIA

Comparing different resources.

Study focuses on income shocks induced by movements in world commodity prices, and estimates how these shocks have affected civil war dynamics in Colombia.

Unique event-based dataset which records four measures of violence, including guerrilla attacks, paramilitary attacks, clashes and war-related casualties, in over 950 municipalities from 1988 to 2005.

Empirical strategy interacts the exogenous international commodity price with the amount of the commodity produced in each municipality.

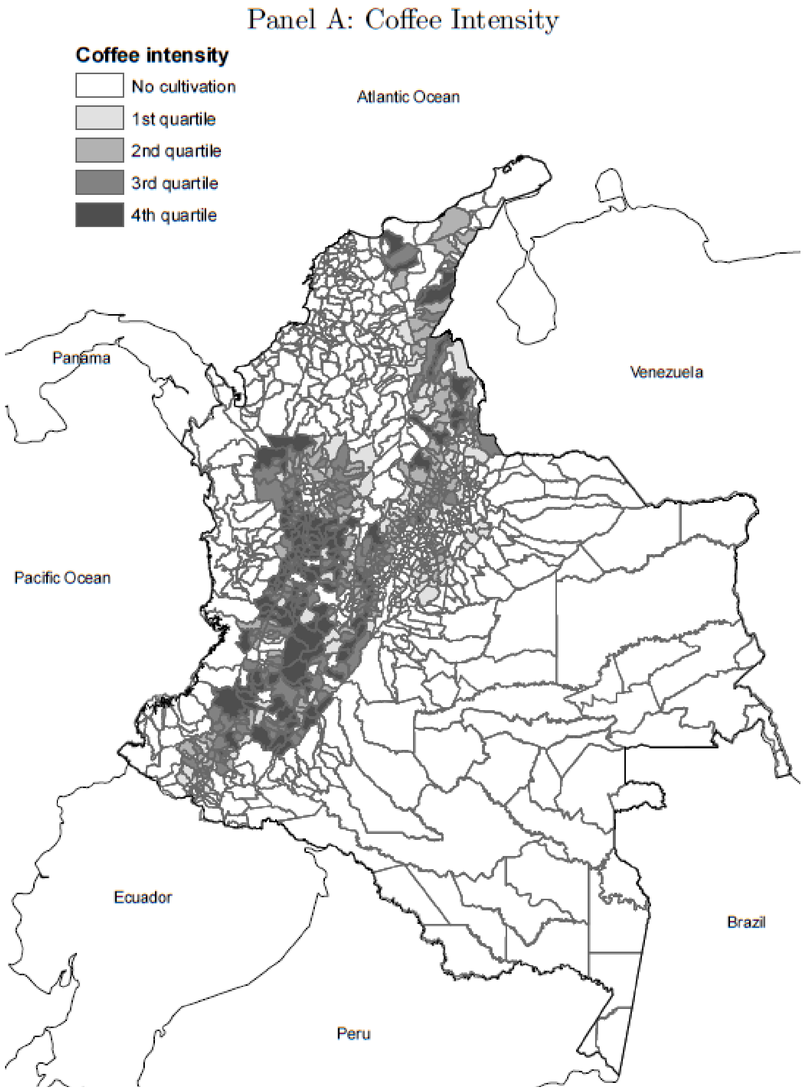
How do income shocks affect armed conflict? Theory suggests two opposite effects. If labour is used to appropriate resources violently, higher wages may lower conflict by reducing labour supplied to appropriation. This is the opportunity cost effect. Alternatively, a rise in contestable income may increase violence by raising gains from appropriation. This is the rapacity effect. Our article exploits exogenous price shocks in international commodity markets and a rich dataset on civil war in Colombia to assess how different income shocks affect conflict. We examine changes in the price of agricultural goods (which are labour intensive) as well as natural resources (which are not). We focus on Colombia's two largest exports, coffee and oil. We find that a sharp *fall* in coffee prices during the 1990s lowered wages and increased violence differentially in municipalities cultivating more coffee. This is consistent with the coffee shock inducing an opportunity cost effect. In contrast, a *rise* in oil prices increased both municipal revenue and violence differentially in the oil region. This is consistent with the oil shock inducing a rapacity effect. We also show that this pattern holds in six other agricultural and natural resource sectors, providing evidence that price shocks affect conflict in different directions depending on the type of the commodity.

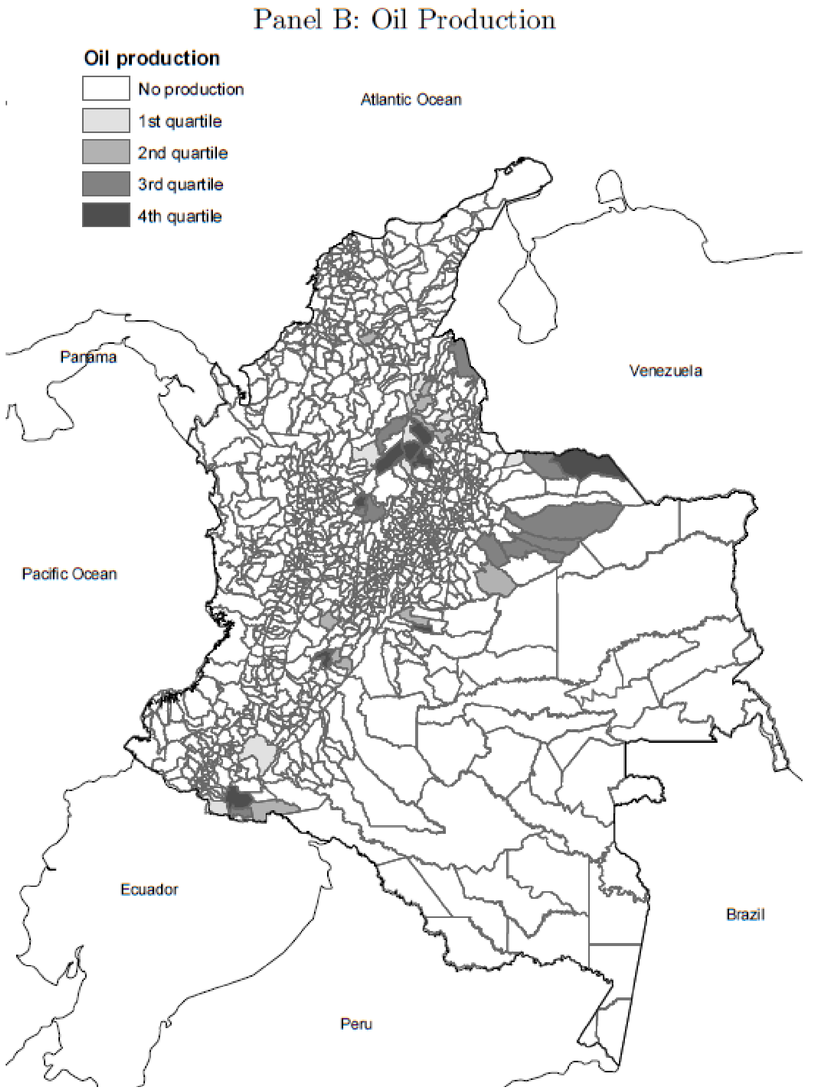
The opportunity cost effect: higher wages – less conflict

The rapacity effect: higher gains from appropriation – more conflict

Conflict – Dube and Vargas (2013) - 2

THE CASE OF COLOMBIA





Conflict – Dube and Vargas (2013) - 3

THE CASE OF COLOMBIA

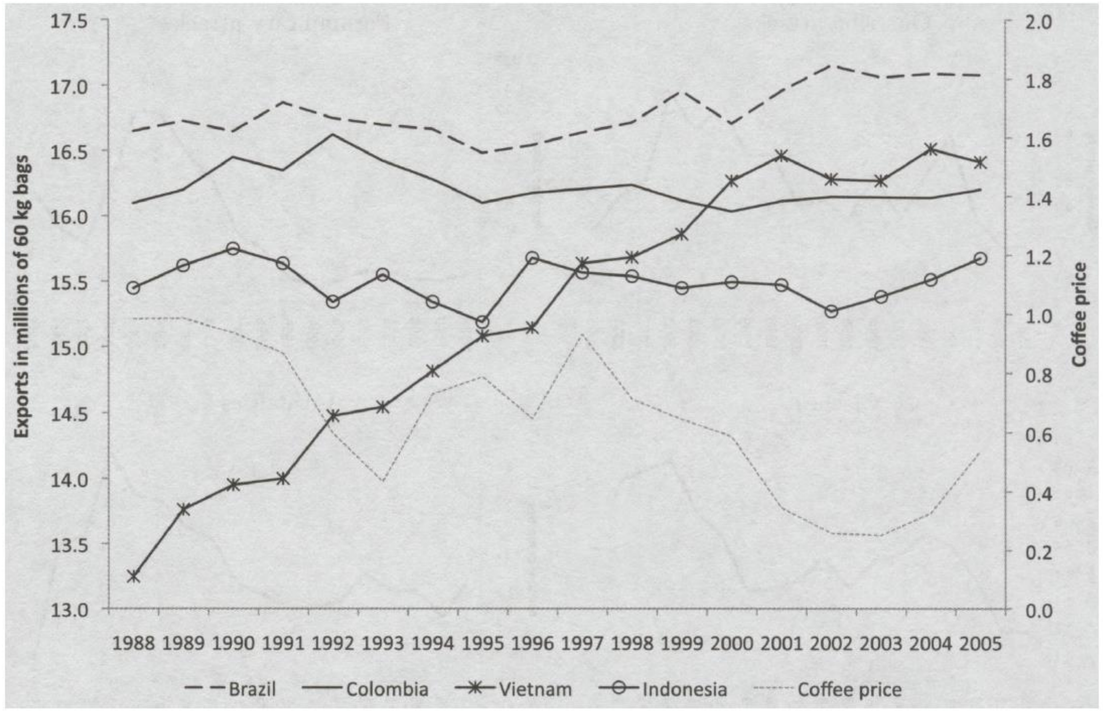


FIGURE 2

The coffee price and exports of main producers

Conflict – Dube and Vargas (2013) - 4

THE CASE OF COLOMBIA

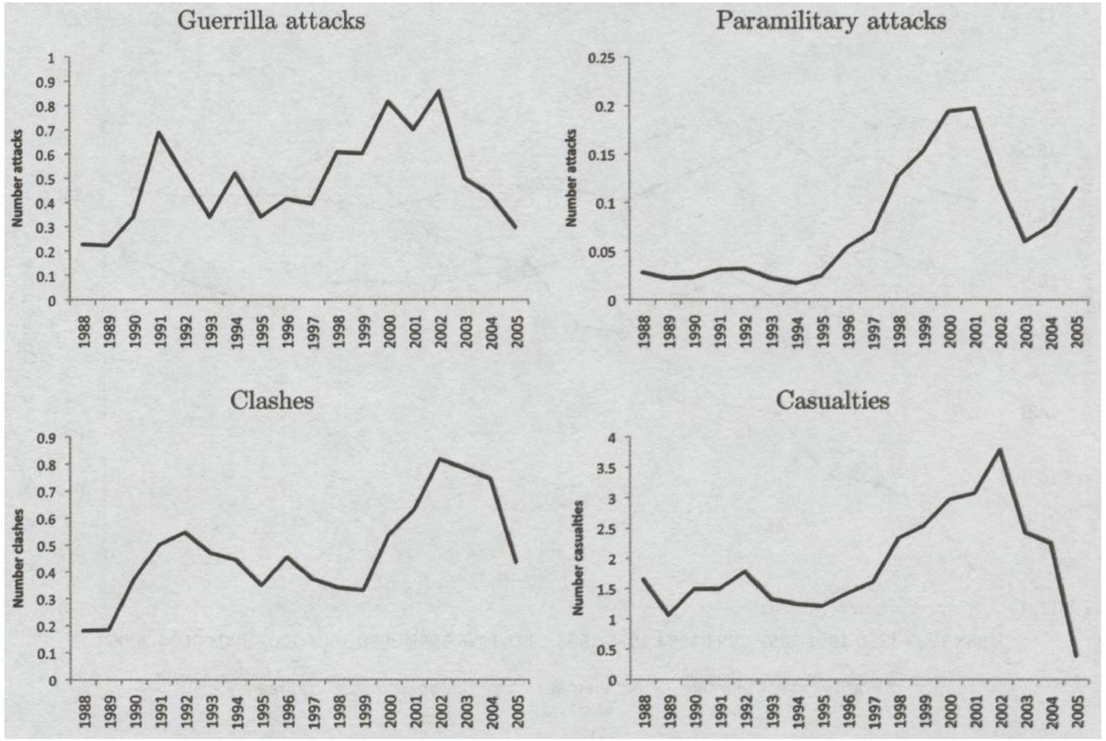


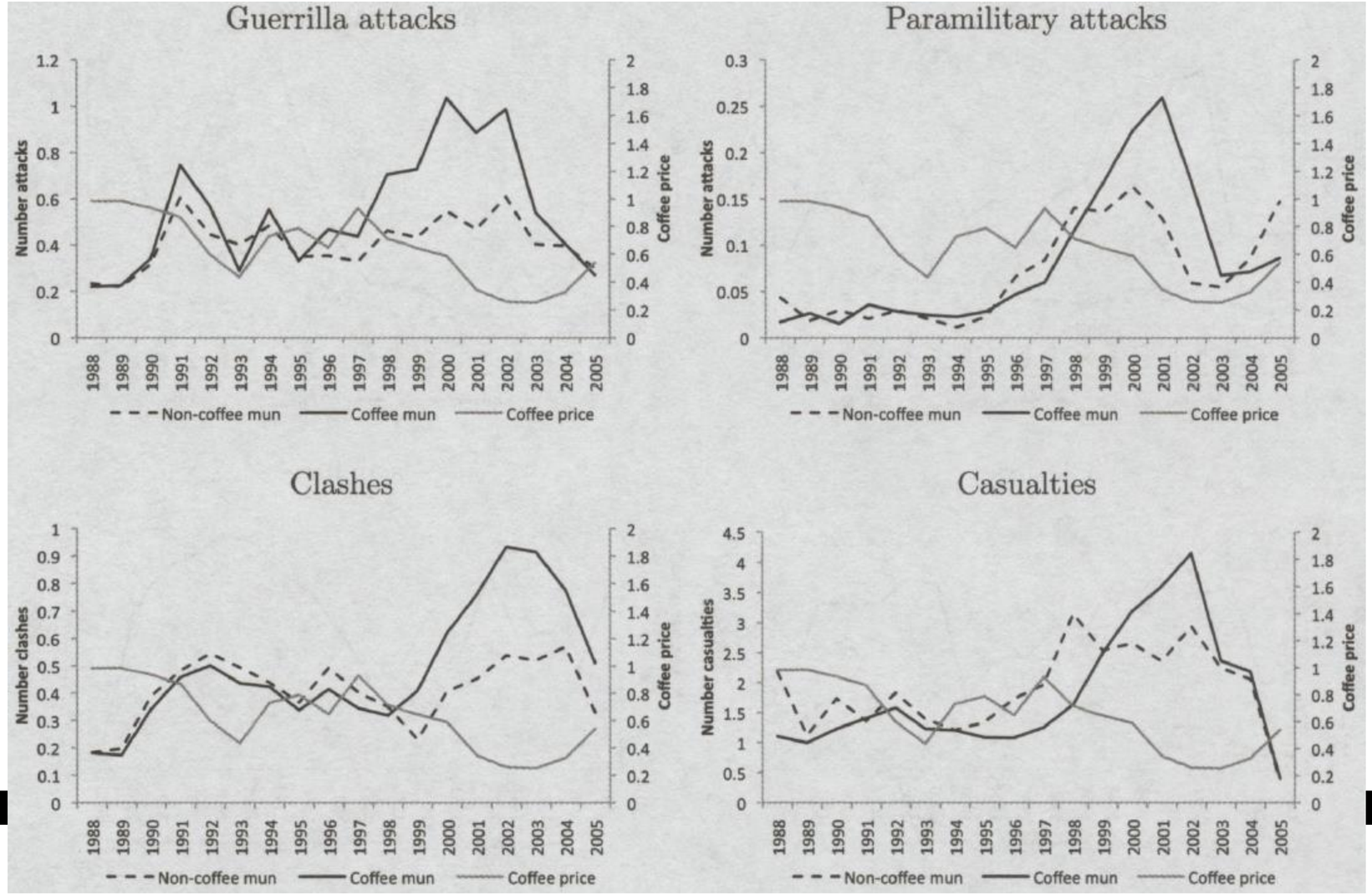
FIGURE 3

Mean violence in Colombian municipalities, 1988–2005

***Notes*: This figure shows mean violence levels in the sample municipalities.**

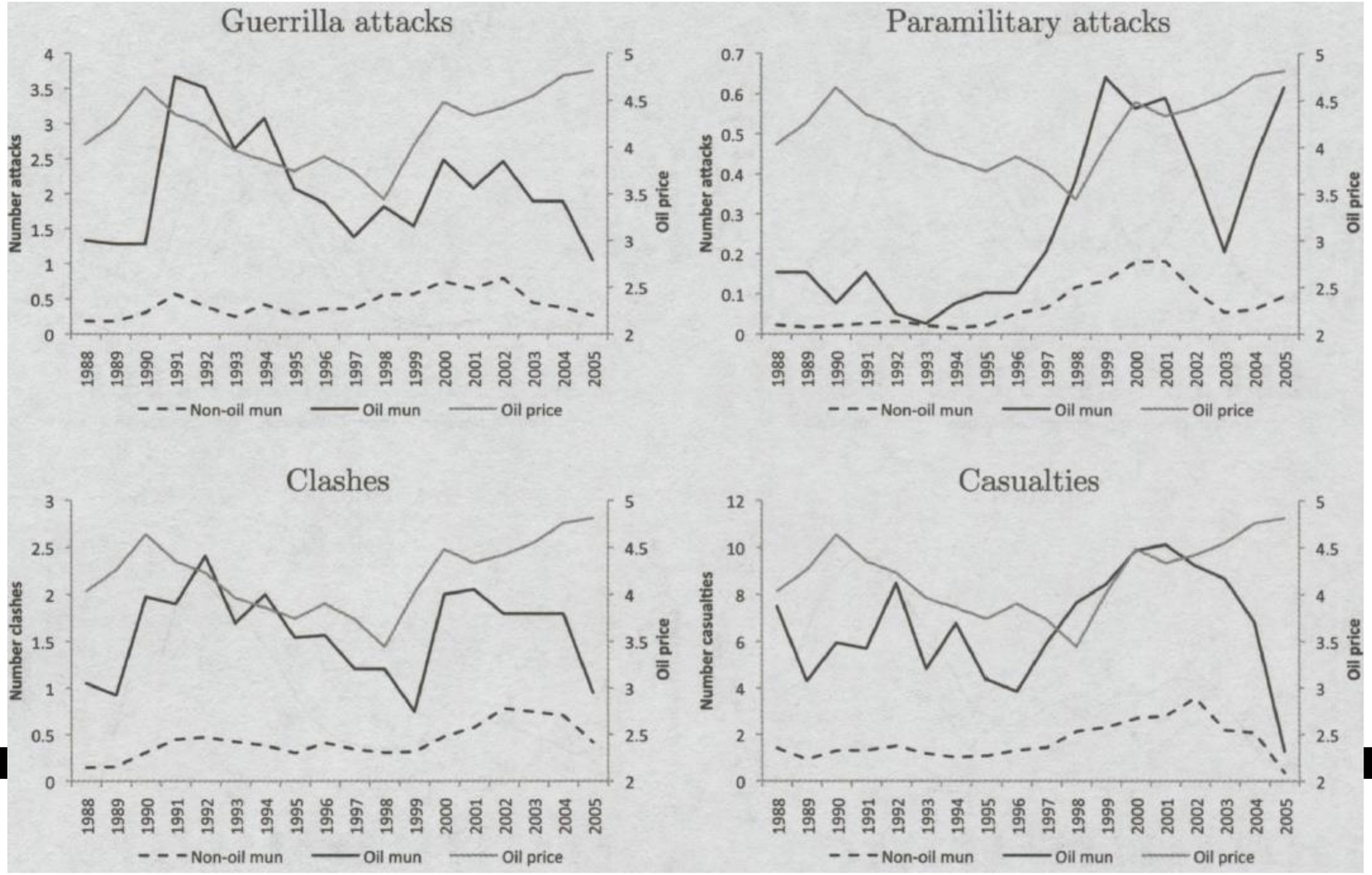
Conflict – Dube and Vargas (2013) - 6

THE CASE OF COLOMBIA - MECHANISMS



Conflict – Dube and Vargas (2013) - 7

THE CASE OF COLOMBIA - MECHANISMS



Conflict – Dube and Vargas (2013) - 8

THE CASE OF COLOMBIA - MECHANISMS

TABLE 2

The effect of the coffee and oil shocks on violence

Dependent variables	(1) Guerrilla attacks	(2) Paramilitary attacks	(3) Clashes	(4) Casualties
Coffee int. x log coffee price	−0.611**	−0.160***	−0.712***	−1.828*
	(0.249)	(0.061)	(0.246)	(0.987)
Oil production x log oil price	0.700	0.726***	0.304	1.526
	(1.356)	(0.156)	(0.663)	(2.127)
Observations	17,604	17,604	17,604	17,604

Notes: Standard errors clustered at the department level are shown in parentheses. Variables not shown include municipality fixed effects, year fixed effects, log of population, and linear trends by region and municipalities cultivating coca in 1994. The interaction of the internal coffee price with coffee intensity is instrumented by the interaction of the coffee export volume of Brazil, Vietnam, and Indonesia with rainfall, temperature, and the product of rainfall and temperature.
*** is significant at the 1% level; ** is significant at the 5% level; * is significant at the 10% level

Conflict – Dube and Vargas (2013) - 9

THE CASE OF COLOMBIA - MECHANISMS

The price of coffee (which is labor-intensive) is negatively related to conflict: when the price rises, conflict falls differentially in municipalities that produce more coffee.

These results are consistent with an account in which the coffee negative shock increased violence by lowering the opportunity cost of joining armed activity.

In contrast, the price of oil (which uses labor less intensively) is positively related to conflict: when the price rises, conflict rises differentially in municipalities that produce more oil.

These results are consistent with the oil shock increasing violence by promoting rapacity over contestable resources.

International interests: Guidolin and La Ferrara (2007) - 1

Study looks at the relationship between conflict in a poor resource-abundant country and the value of international firms: "*under some circumstances violent conflict may be perceived by investors as beneficial, not detrimental, to incumbent firms*".

Focus on diamond mining firms – investors' reaction to conflict-related events.

Event study on the sudden end of the conflict, marked by the death of the rebel leader (Jonas Savimbi) in 2002. Angola: resource war (government oil, rebels diamonds) + sudden, unexpected end.

Event study of investors' reactions to an exogenous conflict-related event: computation of cumulative abnormal returns (not explained by stock market regressions) over event windows.

Construction of two portfolios: one formed by diamond companies holding concessions in Angola, and another formed by those without interests in that country (control).

International interests: Guidolin and La Ferrara (2007) - 2

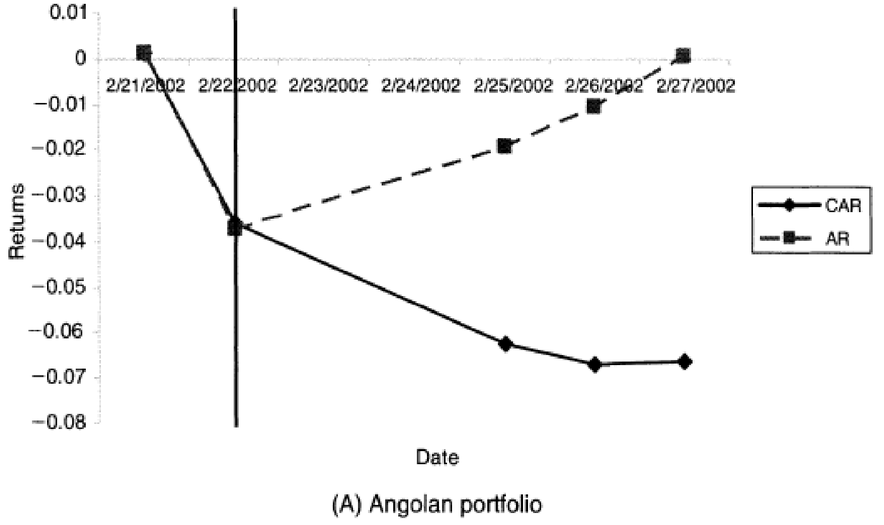
Our main finding is that the cumulative abnormal returns of "Angolan" stocks experienced a significant drop in correspondence to the end of the conflict, while those of a control portfolio made of otherwise similar diamond mining companies *not* holding concessions in Angola did not. In other words, international stock markets perceived Savimbi's death (and later the cease-fire) as "bad news" for the companies operating in Angola, but not for others. On the event date, the abnormal returns of the "Angolan" portfolio declined by 4 percentage points, and the difference between "Angolan" and control abnormal returns was −7 percentage points. This suggests that, no matter how high the costs to be borne by diamond mining firms in Angola during the conflict, the war appears to have generated some counterbalancing "benefits" that in the eye of investors more than outweighed these costs.

Possible explanations:

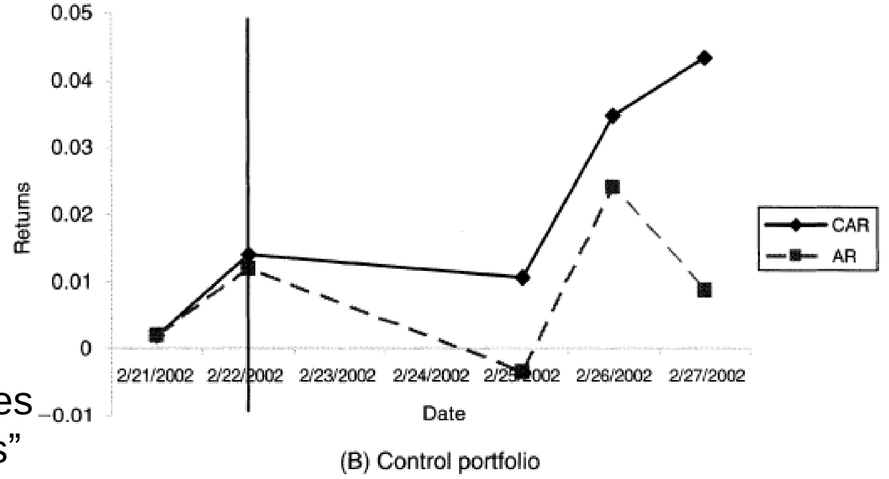
Entry barriers for new producers higher during the war.

Bargaining power of government lower during the war: lower licensing and rent-seeking costs for incumbent firms.

Transparency lower during the war: profitable unofficial dealings.



(A) Angolan portfolio



(B) Control portfolio

FIGURE 1. SAVIMBI'S DEATH

"investors perceived Savimbi's death as "bad news" for the companies holding mining concesions in Angola and as "no news" or "good news" for otherwise similar companies not operating in the country

Mechanisms: Berman, Couttenier, Rohner, and Thoenig (2017) - 1

MINING IN AFRICA: MORE ON MECHANISMS

This Mine is Mine! How Minerals Fuel Conflicts in Africa†

By NICOLAS BERMAN, MATHIEU COUTTENIER, DOMINIC ROHNER, AND MATHIAS THOENIG*

We combine georeferenced data on mining extraction of 14 minerals with information on conflict events at spatial resolution of $0.5^o \times 0.5^o$ *for all of Africa between 1997 and 2010. Exploiting exogenous variations in world prices, we find a positive impact of mining on conflict at the local level. Quantitatively, our estimates suggest that the historical rise in mineral prices* (commodity super-cycle) *might explain up to one-fourth of the average level of violence across African countries over the period. We then document how a fighting group's control of a mining area contributes to escalation from local to global violence. Finally, we analyze the impact of corporate practices and transparency initiatives in the mining industry.* (*JEL* C23, D74, L70, O13, Q34)

Mechanisms: Berman, Couttenier, Rohner, and Thoenig (2017)

MINING IN AFRICA: MORE ON MECHANISMS

Recent study applies same methodology as Dube and Vargas for Africa 1997-2010: looks at the impact of mining on conflict in face of price shocks, while employing detailed geographical data.

They confirm the finding that conflict increases after increases in prices (consistently with the rapacity mechanism): one fourth of the average level of violence is explained by the increase in mineral prices.

They find a new feasibility mechanism, as armed groups use the control of new mines to fuel conflict in subsequent years (with violence diffusing over space): spikes in the price of minerals extracted in the ethnic homeland of a rebel group tend to diffuse its fighting operations spatially outside its homeland.

Study also finds that:

- Countries with less corrupt institutions and lower religious polarization are less affected.
- Mines operated by foreign companies more likely to fuel conflict. Those operated by firms complying with socially responsible practices are less at risk to fuel violence.

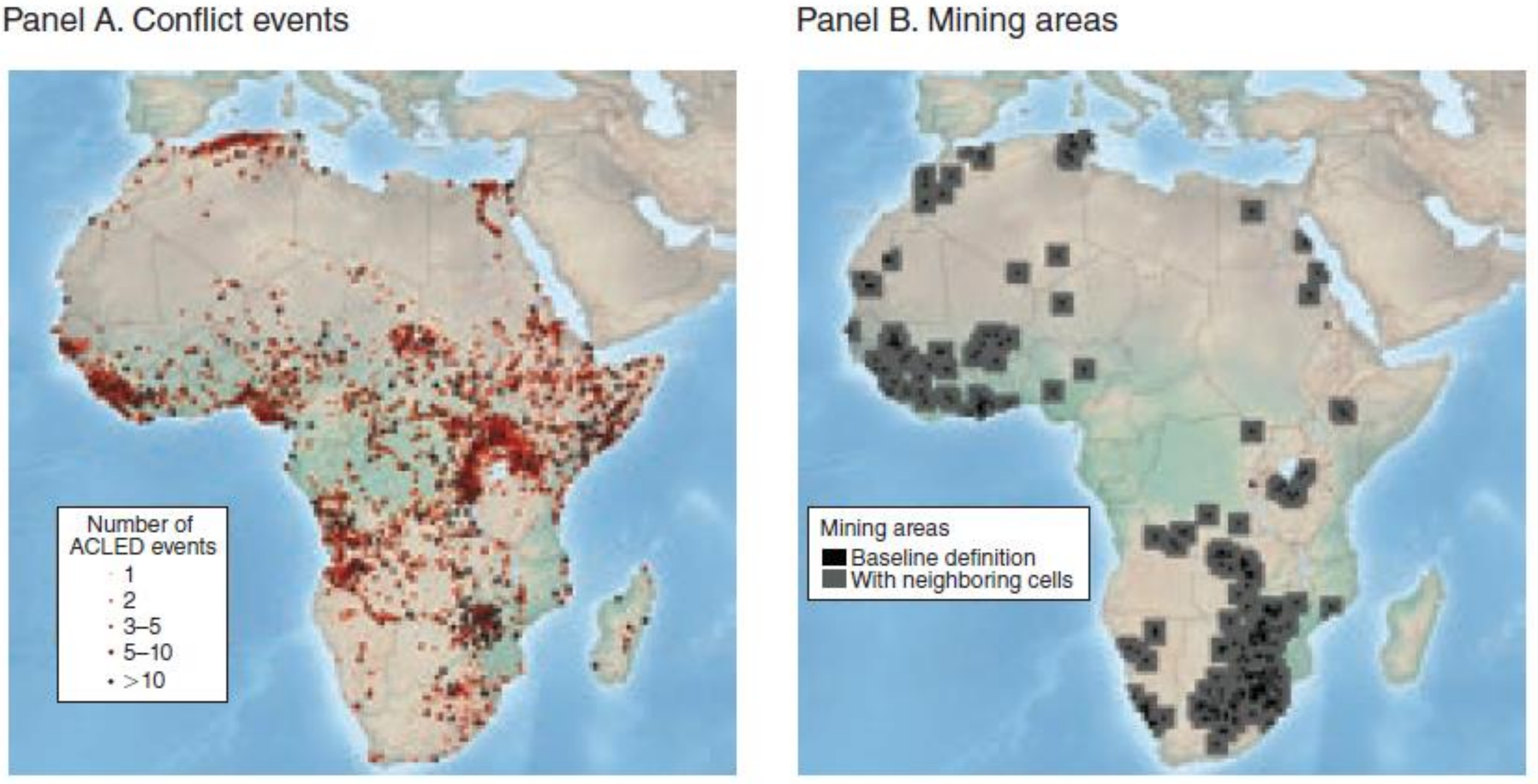


FIGURE 3. CONFLICT EVENTS AND MINING AREAS

Sources: Geolocation of conflict from the Armed Conflict Location and Event dataset (ACLED 2014). Geolocation of active mining areas from Raw Material Data (RMD).

Table 4: Conflicts and mineral prices

	(1)	(2)	(3)	(4)	(5)	(6)
Estimator	LPM		LPM		LPM	
Dep. var.	Conflict incidence		# conflicts		Conflict incidence	
Sample	All	$\text{Var}(M_{kt}) = 0$	All	$\text{Var}(M_{kt}) = 0$	All	$\text{Var}(M_{kt}) = 0$
mine > 0	0.055		0.043			
	(0.094)		(0.111)			
ln price main mineral	-0.029		-0.045^{c}		0.010	
	(0.019)		(0.024)		(0.012)	
ln price $\times$ mines > 0	0.093^{a}	0.073^{a}	0.148^{a}	0.099^{a}		
	(0.027)	(0.020)	(0.035)	(0.033)		
# mines					0.036^{b}	
					(0.015)	
ln price $\times$ # mines					0.017^{a}	0.004^{a}
					(0.004)	(0.001)
Observations	142817	141890	142817	141890	142926	141568
R^2	0.445	0.445	0.562	0.563	0.447	0.446
Country$\times$year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Cell FE	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors, clustered by country, in parentheses. ^{c} significant at 10%; ^{b} significant at 5%; ^{a} significant at 1%. $\text{Var}(M_{kt}) = 0$ means that we consider only cells in which the mine variable takes always the same value over the period. mine > 0 is a dummy taking the value 1 if at least 1 mine is active in the cell in year t. $log(x + 1)$ used for dependent variable in columns (3) and (4). # mines is the number of active mines in the cell in year t. ln price main mineral is the world price of the mineral with the highest average production in the cell over the period.

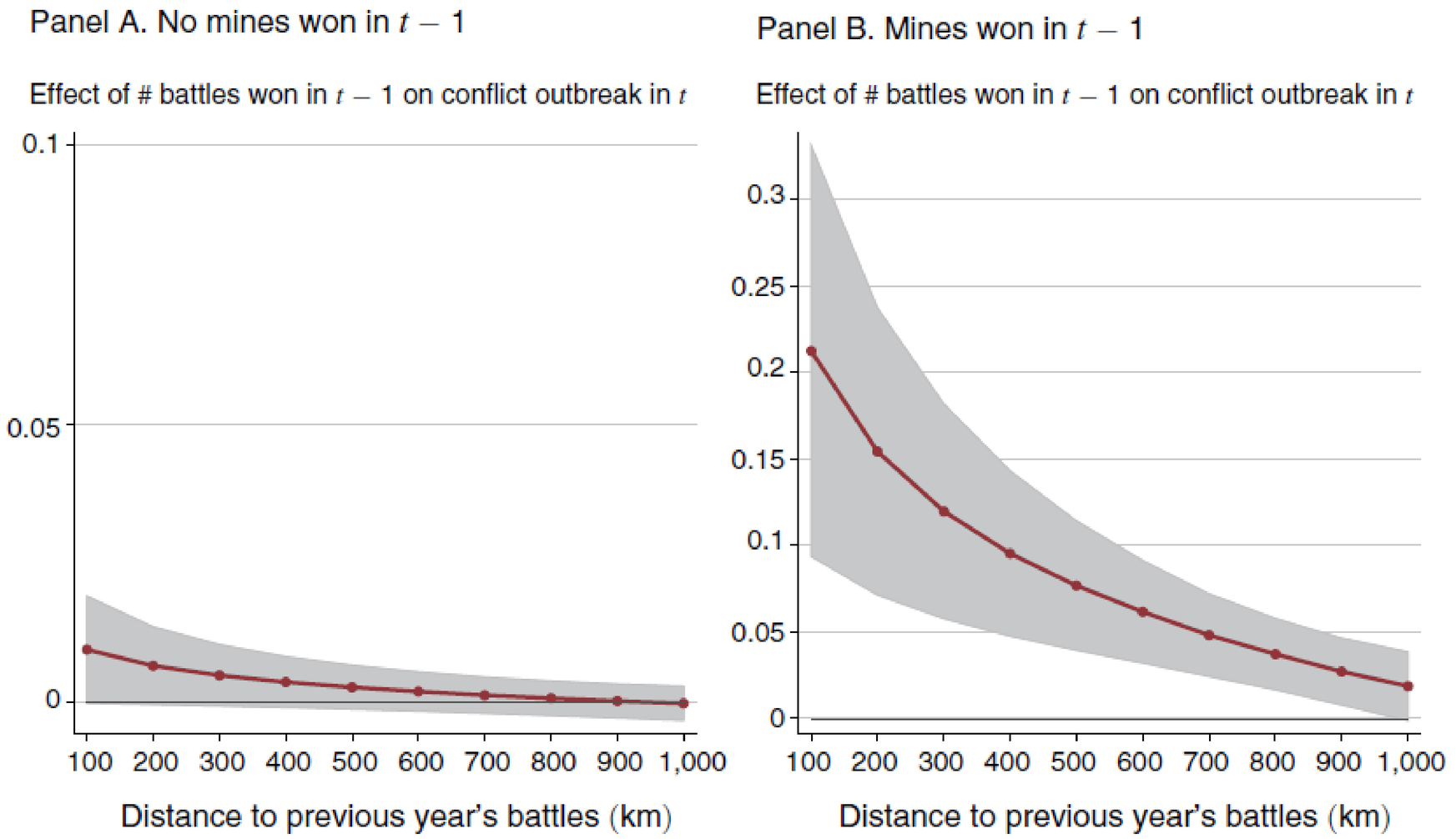


FIGURE 2. FEASIBILITY AND THE SPATIAL DIFFUSION OF CONFLICTS

Armand, Coutts, Vicente, and Vilela (2020) - 1

THE CASE OF MOZAMBIQUE

Does Information Break the Political Resource Curse? Experimental Evidence from Mozambique[†]

By ALEX ARMAND, ALEXANDER COUTTS, PEDRO C. VICENTE, AND INÊS VILELA[*]

Natural resources can have a negative impact on the economy through corruption and civil conflict. This paper tests whether information can counteract this political resource curse. We implement a large-scale field experiment following the dissemination of information about a substantial natural gas discovery in Mozambique. We measure outcomes related to the behavior of citizens and local leaders through georeferenced conflict data, behavioral activities, lab-in-the-field experiments, and surveys. We find that information targeting citizens and their involvement in public deliberations increases local mobilization and decreases violence. By contrast, when information reaches only local leaders, it increases elite capture and rent-seeking. (*JEL* C73, D72, D74, O13, O17, Q33, Q34)

Armand, Coutts, Vicente, and Vilela (2020) - 2

THE CASE OF MOZAMBIQUE

Substantial discoveries of natural gas in the period 2011-2014, with the potential to transform Mozambique into a global player in natural gas; growth predicted at 24% per year 2021-2025 (IMF).

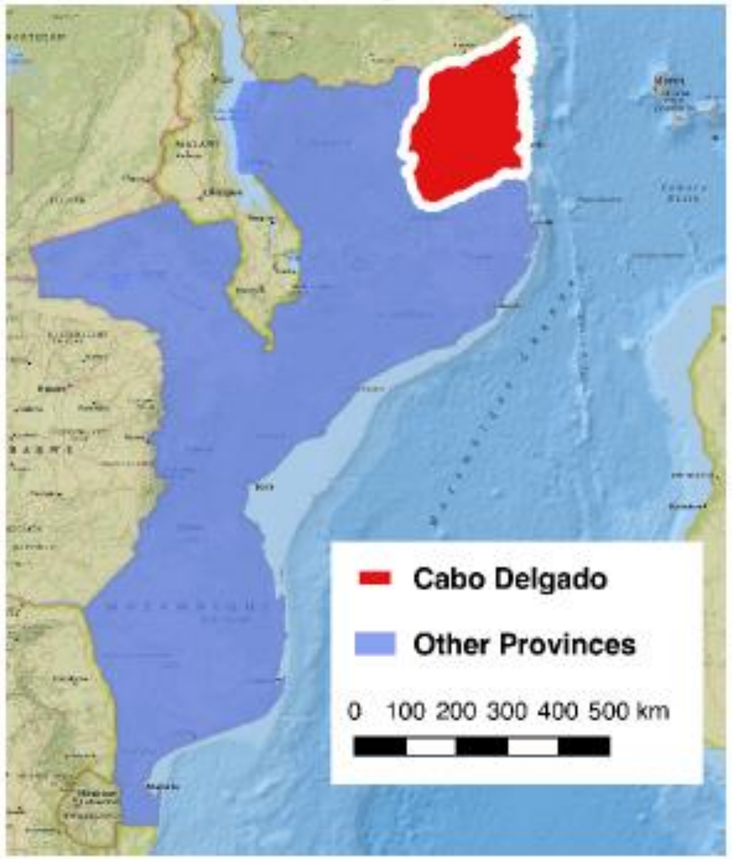
Randomized controlled trial (RCT), 206 sampled communities were randomly allocated to:

1. Group of information to the leader (50 communities)
    2. Group of information to the leader and to the community (50 communities).
    3.Group of information to the leader and to the community + deliberation sessions (50 communities)
4. Control group (50 communities).

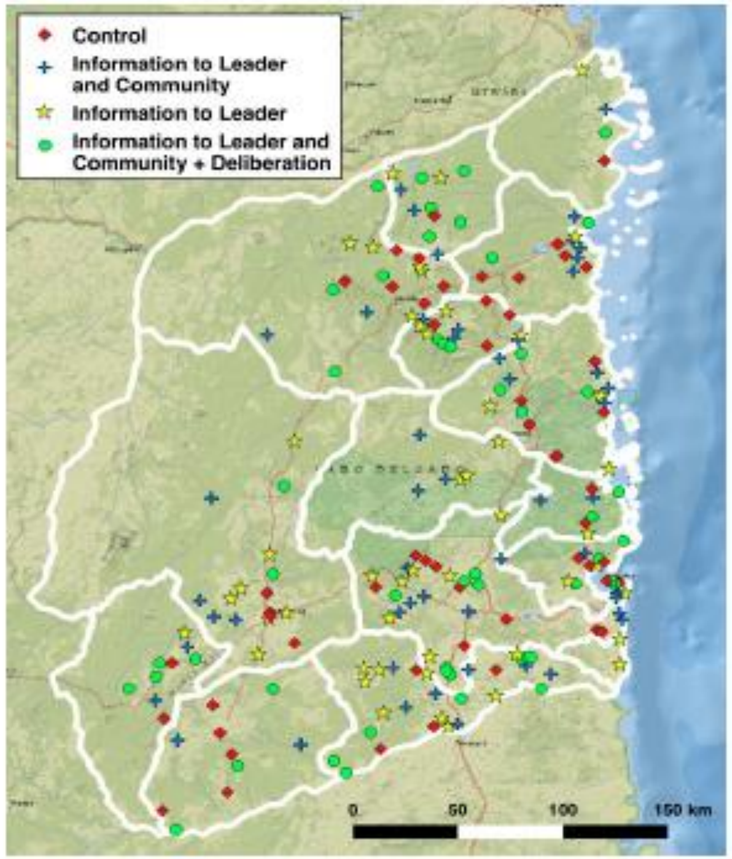
The Case of Mozambique: Sample

Figure 2: Selected communities and allocation to treatment groups

Selected province

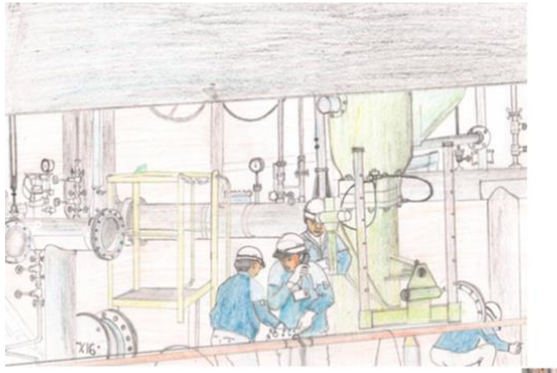


Selected districts and commmunities



Note: In dark blue the selected province for the project. Geo-coded coordinates were obtained from tablets' GPS sensors used for interviews. The geo-coded coordinate of each location is determined using the average of all available data points within each location (household interviews, leader interviews, and community interviews). For the locations where geo-coding is missing (10 communities), we use the closest neighbor community and the reported distance to the missing community to formulate an approximation.

The Case of Mozambique: Interventions

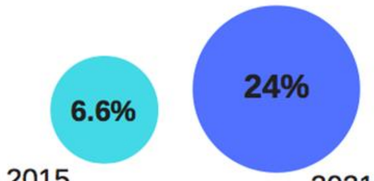


AS COMUNIDADES DEVEM ESTAR PREPARADAS

E informadas sobre os seus direitos e deveres

PREVISÃO DE QUE A ECONOMIA MOÇAMBICANA PODE CRESCER ATÉ 24% DURANTE 2021-2025*

Crescimento da Economia em 2015 vs 2021-2025:



*Previsões do FMI

Direito à informação

Lei do Ordenamento do Território (Lei nº19/2007) - Artigo 21

Direito à participação

Lei do Ordenamento do Território (Lei nº19/2007) - Artigo 22
Lei de Minas - Artigo 32

Direito à responsabilidade social das empresas

Resolução nº 21/2014 – Artigo 3

Direito a parte das receitas serem investidas localmente

Lei das Minas – Artigo 20
Lei nº 10/99 de 7 de Julho - Artigo 102
Lei das Pescas, artigo 23

Direito ao emprego

Decreto-Lei nº2/2014 - Artigo 18

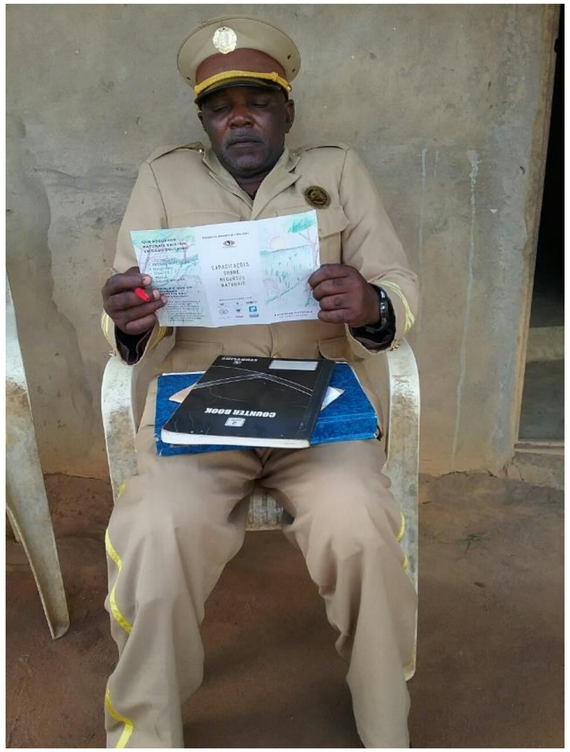
Direito a educação/formação

Decreto-Lei nº2/2014 - Artigo 19

Direito a uma justa indeminização

Lei do Ordenamento do Território (Lei nº19/2007) - Artigo 22

Flyer being distributed.



Local chief receiving the training.

Community receiving the training.

Discussion in a deliberation group.

Armand, Coutts, Vicente, and Vilela (2020): Measurement

THE CASE OF MOZAMBIQUE

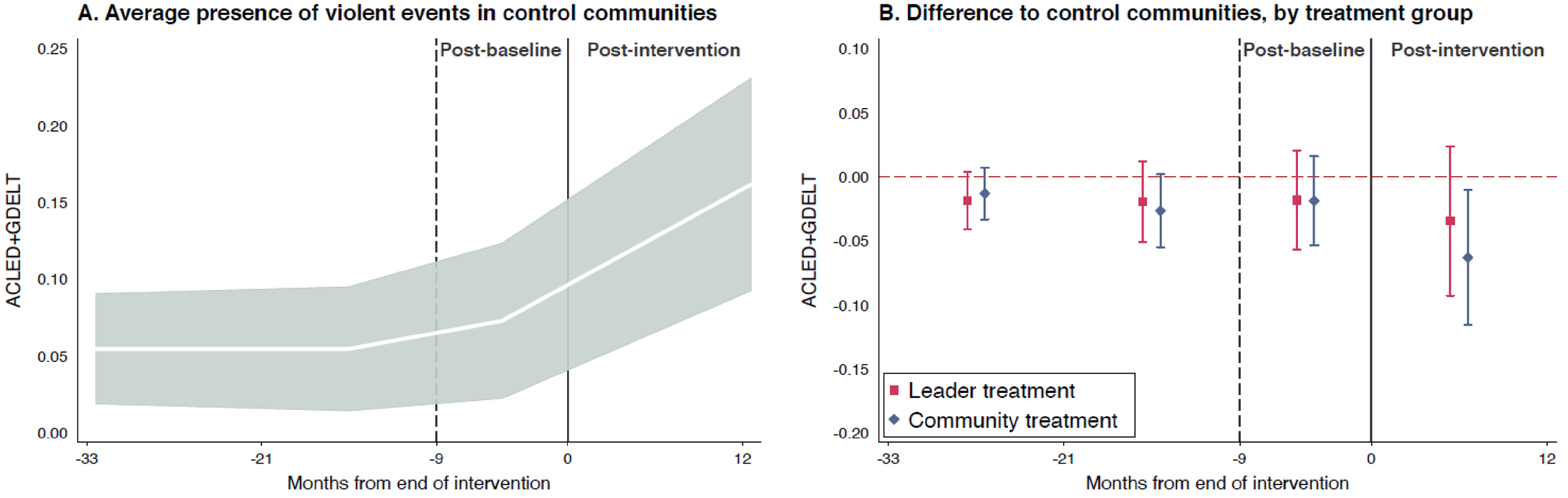
Leader and villager outcomes measured through:
- Surveys (200 leaders and 2000 households).
- Behavioral games: altruism and trust (leaders), trust and social cohesion (villagers).
- Structured community activities:

Leaders:
a. Utilization of a gift for the community handed to the leader (capture I);
b. Appointments of citizens aimed at specific tasks (capture II);
c. Willingness to pay for a lunch with province-level party representatives (rent-seeking).

Villagers:
a. Citizens' propensity to contribute to matching grants (social cohesion);
b. Meeting to measure community participation and involvement (public engagement);
c. Willingness to pay for a lunch with province-level party representatives (rent-seeking).

Results

Figure 3: Treatment effects by timing of violent events



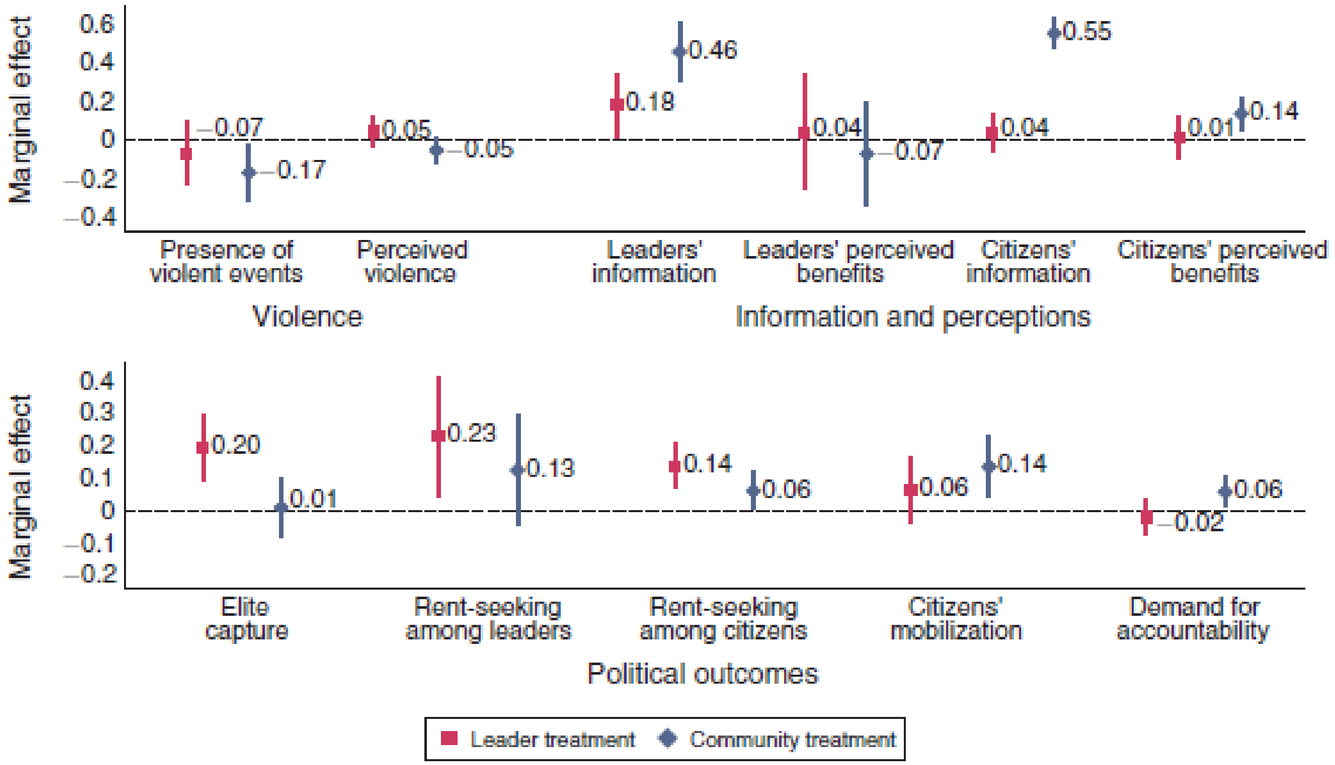
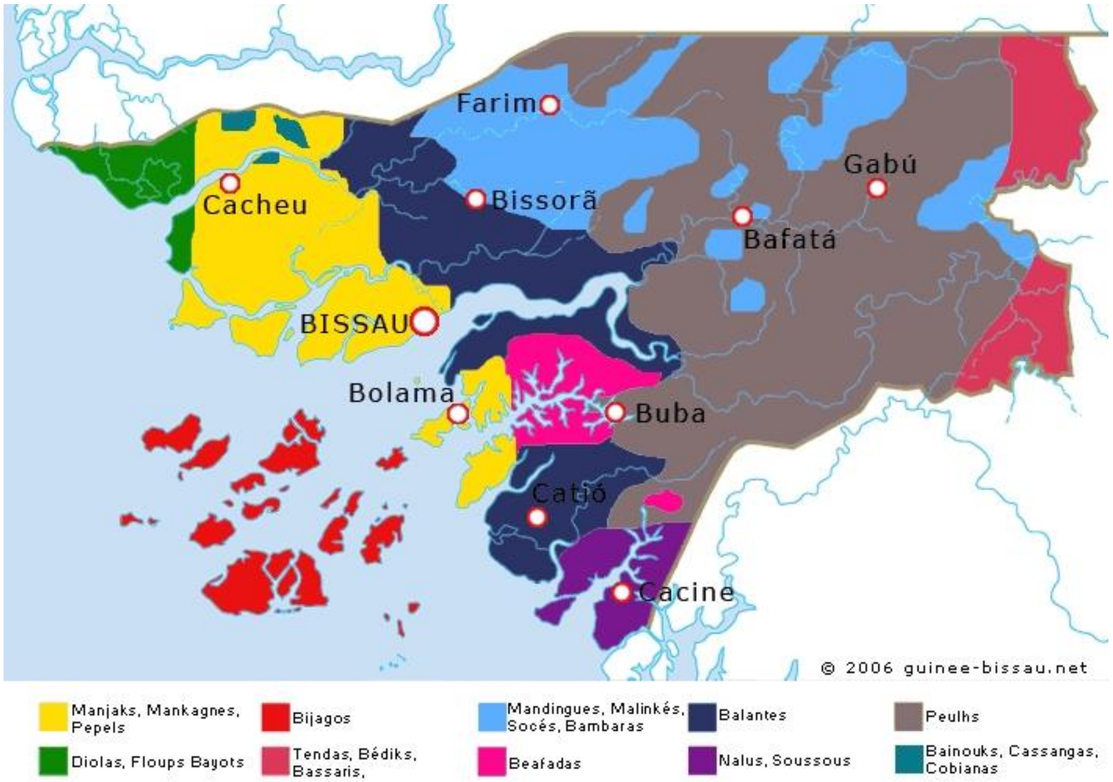


FIGURE 2. RESULTS BY AGGREGATION OF OUTCOMES

Notes: Estimates based on OLS regressions (equation (1)). The full set of point estimates and standard errors are presented in online Appendix Table D11. Confidence intervals are built using statistical significance at the 10 percent level, and standard errors clustered at the community level when employing citizen-level outcomes. The specifications include community and household-level controls (for citizen-level outcomes) or community-level controls (for leader- and community-level outcomes). The full list of controls is presented in Section IV. Outcomes are grouped in indices that are built using the Kling, Liebman, and Katz (2007) procedure. Outcomes are first normalized in standardized units to study mean effect sizes of the indices relative to the standard deviation of the control group and then averaged within each category. Indices and their specific components are described in online Appendix D.1.

Topic 4.4: another type of curse? Ethnic divisions and conflict



Income and identity: the determinants of autonomism and secessionism in Europe

ÁLVAREZ PEREIRA, PORTOS AND VOURDAS 2017

- Use share of votes for regionalist or secessionist parties (in 10 European countries, 1969 - 2014) as proxy for the support for increasing autonomism (or secessionism).

- Richer regions are more likely to support increasing autonomism, BUT only to the extent that they are relatively richer than the country they belong to.

=> Poorer regions do not want more autonomy even if they are highly differentiated, culturally.

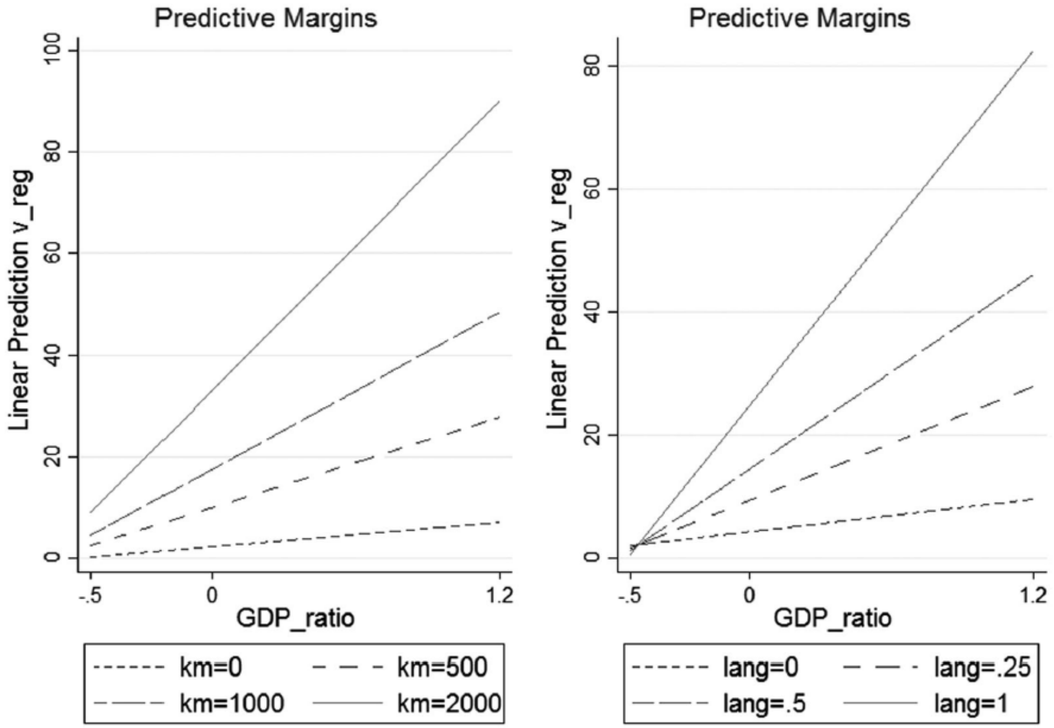


Figure 1. (left) Predicted vote for regional parties (*v_reg*) as a function of *GDP_ratio* for given distance (in 100 km); and (right) predicted vote for regional parties (*v_reg*) as a function of *GDP_ratio* for given values of language (in proportion 0–1). The other variables are evaluated at their averages.

Introduction: why might diversity matter?

ETHNIC DIVERSITY: HISTORY AND WHY IT MIGHT MATTER FOR DEVELOPMENT

- Isolation and geographic distance naturally create culturally differentiated populations => lots of different ethnicities in long-term poorly connected regions. *Many references*.

- From social psychology, how conflicts between groups can arise and escalate – in-group vs. out-group behavior:

  - Asch 1956: Studies of Independence and Conformity: A Minority of One Against a Unanimous Majority - **conformity in the face of group pressure**. Amplifying differences between groups.

  - Milgram 1963: Behavioral Study of **Obedience**. Authorities' influence and diffusion of responsibility.

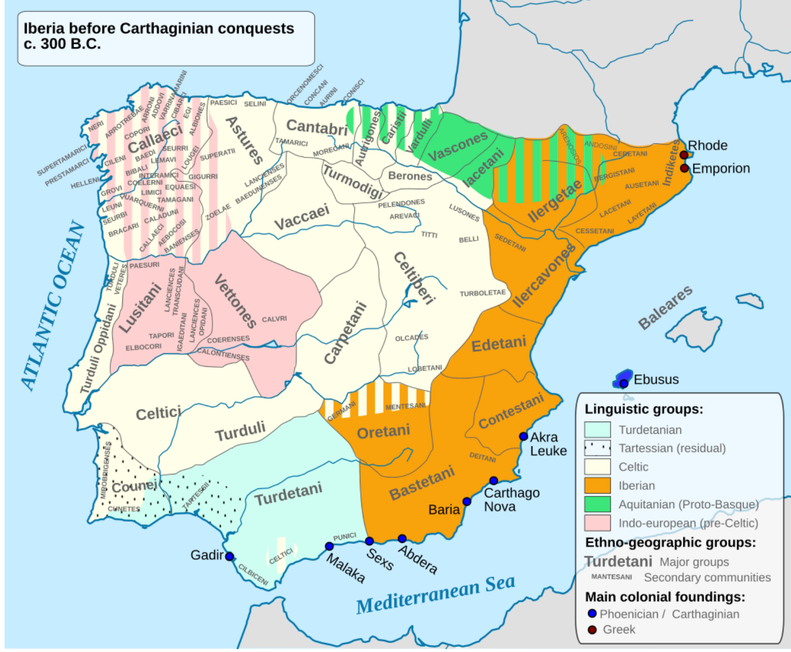
  - Tajfel 1970: intergroup discrimination. Minimal group paradigm. Tendency to maximize differences between groups. Social identity.

  - Zimbardo: Stanford prison experiment 1971. Fast adoption of social roles. Power imbalances and group norms.

    => Conflict easy to arise between groups.

    => Understanding the psychological mechanisms underlying intergroup behavior to effectively address and mitigate conflicts.

  - Reciprocity, in-group solidarity and out-group aggression. Fear-Based aggression (Simunovic 2013), Feedback loops (Collins 2012) of external aggression and in-group solidarity, **in-group defense** (De Dreu et al 2016).



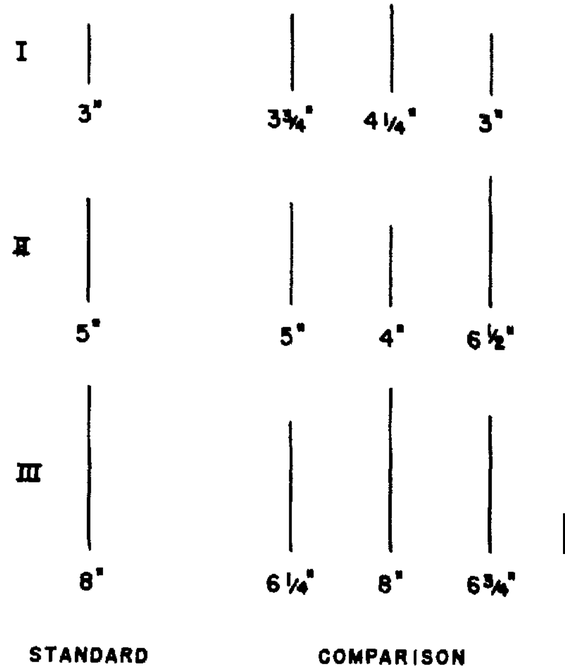


FIG. 2. Critical comparisons.

Easterly and Levine (QJE, 1997) -1

CROSS COUNTRY

AFRICA'S GROWTH TRAGEDY: POLICIES AND ETHNIC DIVISIONS*

WILLIAM EASTERLY AND ROSS LEVINE

Explaining cross-country differences in growth rates requires not only an understanding of the link between growth and public policies, but also an understanding of why countries choose different public policies. This paper shows that ethnic diversity helps explain cross-country differences in public policies and other economic indicators. In the case of Sub-Saharan Africa, economic growth is associated with low schooling, political instability, underdeveloped financial systems, distorted foreign exchange markets, high government deficits, and insufficient infrastructure. Africa's high ethnic fragmentation explains a significant part of most of these characteristics.

I. INTRODUCTION

Africa's economic history since 1960 fits the classical definition of tragedy: potential unfulfilled, with disastrous consequences. In the 1960s a leading development textbook ranked Africa's growth potential ahead of East Asia's, and the World Bank's chief economist listed seven African countries that "clearly have the potential to reach or surpass" a 7 percent growth rate.[1] Yet, these hopes went awry. On average, real per capita GDP did not grow in Africa over the 1965–1990 period, while, in East Asia and the Pacific, per capita GDP growth was over 5 percent and Latin America grew at almost 2 percent per

Those 7 countries had negative real per capita GDP growth between 1969-1988

Easterly and Levine (QJE, 1997) -2

CROSS COUNTRY

Main arguments:

- Ethnic diversity plays a significant role in explaining Africa's slow economic growth.
- Ethnic fragmentation is associated with poor policies that hinder economic development.

Africa's poor growth linked to:

- Low levels of schooling.
- Political instability.
- Underdeveloped financial systems.
- Distorted foreign exchange markets.
- High government deficits.
- Insufficient infrastructure.

Ethnic fragmentation explains many of these growth-inhibiting characteristics.

TABLE VI

DETERMINANTS OF ECONOMIC INDICATORS

Dependent variable	C	ETHNIC	R^2	Number of observations
Log of schooling	1.508	−0.991	0.08,0.09,0.10	83; 85; 91
	(17.12)	(−6.21)		
Assassinations	1.24E-05	1.03E-06	−0.01,−0.06,−0.02	98; 105;
	(1.52)	(0.07)		105
Financial depth	0.417	−0.266	0.09,0.06,−0.02	94; 100;
	(11.44)	(−3.67)		103
Black market	0.070	0.252	0.05,0.08;−0.04	97; 107;
premium	(1.82)	(3.39)		106
Fiscal surplus/	−0.026	−0.013	−0.14,−0.02,−0.13	55; 87; 82
GDP	(−5.48)	(−1.37)		
Log of	4.331	−3.067	0.21,0.23,0.04	95; 103; 92
telephones	(18.95)	(−7.17)		
per worker				

t-statistics are in parentheses.

Equations estimated using Seemingly Unrelated Regression procedures.

Habyarimana et al. (APSR, 2007) - 1

WHY? THE MECHANISM LINKING HIGH LEVELS OF ETHNIC DIVERSITY TO LOW LEVELS OF PUBLIC GOOD PROVISION

Subjects from an area of Kampala, Uganda, characterized by high levels of ethnic diversity and low levels of public goods.

Subjects play multiple rounds of each game with randomized matching - sometimes with co-ethnics, sometimes with non-co-ethnics.

<u>The authors propose three possibilities:</u>

1. Preferences (different tastes on public goods, lower altruism);

2. Technology (easier modes of interaction among co-ethnics, networks findability);

3. Strategy selection (ethnicity leading to focal points in multiple equilibria – cooperation vs. defection).

Lab games are played to isolate the salience of specific mechanisms

Habyarimana et al. (APSR, 2007) – 2 : Preferences

WHY? THE MECHANISM LINKING HIGH LEVELS OF ETHNIC DIVERSITY TO LOW LEVELS OF PUBLIC GOOD PROVISION

Anonymous dictator game.

High inequality aversion.
No effect of ethnicity (preferences)

TABLE 2. Average Offers in the 100 USh Dictator Game with Anonymous Offerer

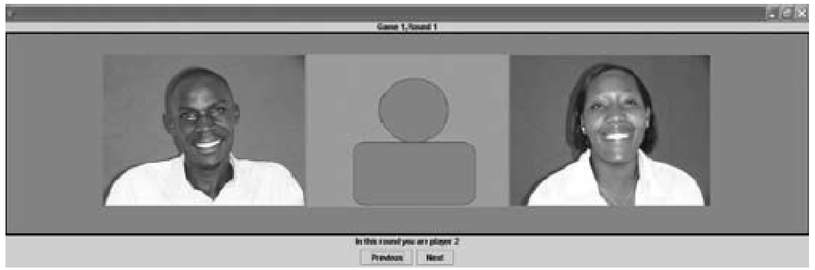
	Benchmark Co-ethnicity		Subjective Co-ethnicity	
	Ethnicity	Region	Ethnicity	Region
In-group member	−11	−10	−9	−4
	(11.20)	(9.55)	(15.41)	(15.64)
Egoist	−99	−100	−101	−99
	(11.23)***	(11.77)***	(12.22)***	(14.59)***
Egoist & In-group member	1	3	13	3
	(16.41)	(13.70)	(23.63)	(24.17)
Observations	1174	1174	1118	1118
R-squared	0.23	0.20	0.22	0.19

Notes: ***Significant at 1%; **significant at 5%; *significant at 10%. Robust standard errors in parentheses. The cells report coefficient estimates from an OLS regression with the offer as the dependent variable. The benchmark ethnicity samples exclude observations in which enumerators indicated that the subject had problems comprehending the exercise logic and observations with no information on the receiver. The subjective ethnicity sample is restricted to observations in which receivers are identified in the identification exercise. Disturbance terms are clustered for each player across all of his or her games and fixed effects for the ethnic group of the offerer are included.

FIGURE 1. Public Information Box with Nonanonymous Offerer

Note: Player 2, the offerer, is "seen" by all players. Note that the images used in this figure are for illustration purposes only and are not the images of actual subjects.

FIGURE 2. Public Information Box with Anonymous Offerer



Note: Player 2, the offerer, is anonymous. Note that the images used in this figure are for illustration purposes only and are not the images of our subjects.

Habyarimana et al. (APSR, 2007) – 3 : Technology 1

WHY? THE MECHANISM LINKING HIGH LEVELS OF ETHNIC DIVERSITY TO LOW LEVELS OF PUBLIC GOOD PROVISION

The puzzle game: efficacy? Maybe co-ethnics play/work better together.

Blind but with oral communication.
Each player had two pieces.
3 minutes. 40% solved it successfully – 25% at random.

FIGURE 3. The Puzzle Game

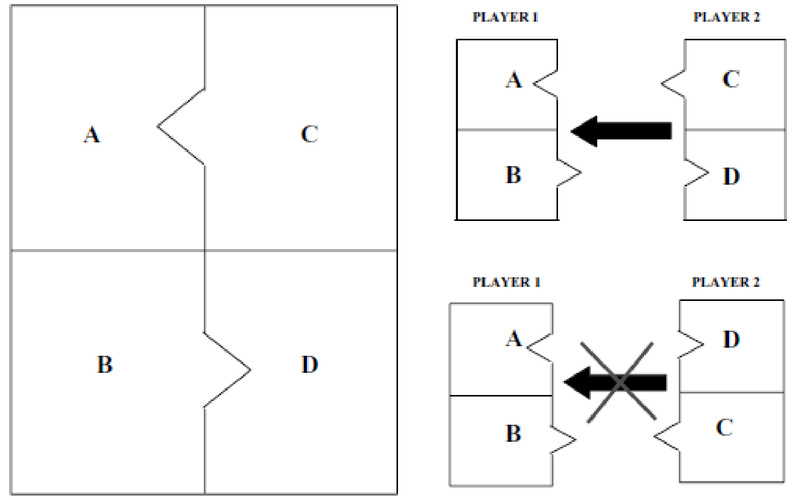


TABLE 4. Success Rates in Puzzle Game

	Non-Co-Ethnic Pairing (N)	Co-Ethnic Pairing (N)	Difference (standard errors)
Ethnicity	0.38	0.48	0.10
	(271)	(73)	(0.07)
Region	0.40	0.42	0.02
	(227)	(117)	(0.06)
Any Common Language	0.45	0.40	−0.05
	(20)	(324)	(0.11)

Notes: Table presents results of a two-sample *t*-test. ***Significant at 1%; **significant at 5%; *significant at 10%.

Habyarimana et al. (APSR, 2007) – 4 : Technology 2

WHY? THE MECHANISM LINKING HIGH LEVELS OF ETHNIC DIVERSITY TO LOW LEVELS OF PUBLIC GOOD PROVISION

The network game: efficacy? Individuals more findable and easier to sanction if they defect from their obligations or commitments => more likely to contribute in the first place.

148 targets, from outside the pool of subjects. Ethnicity, birthday and picture – given a message.

Study participants would go to look for them, $12 (> 0.5 average monthly income) per finding the target in 3 hours, declining every hour, 0 after 24 hours.

TABLE 5. Success Rates in Network Game

	Non-Co-Ethnic Pairing (N)	Co-Ethnic Pairing (N)	Difference (standard errors)
Ethnicity	0.28 (97)	0.43 (51)	0.15* (0.08)
Region	0.30 (86)	0.38 (61)	0.08 (0.08)

Notes: Table presents results of a two-sample *t*-test. ***Significant at 1%; **significant at 5%; *significant at 10%.

Habyarimana et al. (APSR, 2007) – 5 : Strategy selection

WHY? THE MECHANISM LINKING HIGH LEVELS OF ETHNIC DIVERSITY TO LOW LEVELS OF PUBLIC GOOD PROVISION

Non-anonymous dictator game: violation of social norm requiring cooperation – potential post-experimental consequences and judgement by others.

TABLE 6. Average Offers in the 100 USh Dictator Game When Offerers Are Seen

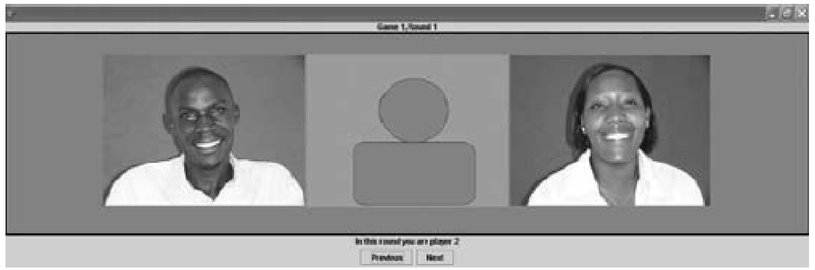
	Benchmark Co-ethnicity		Subjective Co-ethnicity	
	Ethnicity	Region	Ethnicity	Region
In-group member	−19	−8	−36	−8
	(11.03)*	(10.94)	(20.26)*	(19.94)
Egoist	−106	−106	−114	−115
	(11.73)***	(12.51)***	(12.57)***	(15.11)***
Egoist & In-group member	55	31	88	51
	(16.99)***	(15.25)**	(28.74)***	(27.51)*
Observations	951	951	922	922
R-squared	0.23	0.19	0.24	0.20

Notes: ***Significant at 1%; **significant at 5%; *significant at 10%. Robust standard errors in parentheses. Each column reports the coefficient on co-ethnicity/co-region from an OLS regression. The benchmark ethnicity samples exclude observations in which enumerators indicated that the subject had problems comprehending the game logic and observations with no information on the receiver. The subjective ethnicity sample is restricted to observations in which receivers are identified in the identification game. In each case fixed effects for the player's group are included, and disturbance terms are clustered for each player across all of his or her games.

FIGURE 1. Public Information Box with Nonanonymous Offerer

Note: Player 2, the offerer, is "seen" by all players. Note that the images used in this figure are for illustration purposes only and are not the images of actual subjects.

FIGURE 2. Public Information Box with Anonymous Offerer



Note: Player 2, the offerer, is anonymous. Note that the images used in this figure are for illustration purposes only and are not the images of our subjects.

Habyarimana et al. (APSR, 2007) – 6 : results and policy implications

WHY? THE MECHANISM LINKING HIGH LEVELS OF ETHNIC DIVERSITY TO LOW LEVELS OF PUBLIC GOOD PROVISION

Results:

- No evidence for preference mechanism

- No evidence for technology-interaction mechanism

- Evidence in favor of network findability and strategy selection: findings suggest that co-ethnics cooperate because they adhere to in-group reciprocity norms - plausibly supported by expectations that non-contribution will be sanctioned and by an ethnic technology, findability.

A major implication of our findings is that generating higher levels of public goods provision in diverse communities does not require the segregation of ethnic groups, as many preference-based or technology-based explanations might suggest. Indeed, just the opposite may be needed: policies that promote repeated social interactions and the free flow of information across ethnic lines. Our results suggest that when individuals believe that their behavior is observed by others and that their reputation may influence opportunities for cooperation in the future, social cooperation can happen, even in the face of individual incentives to shirk. The challenge of generating effective cooperation in diverse societies is to make such beliefs equally characteristic of cross-group and within-group interactions.

Collier and Hoeffler 2004

GREED AND GRIEVANCE IN CIVIL WAR – THE VIABILITY OF REBELLION

- Dataset of civil wars from 1960-99.

- They compare two contrasting motivations for rebellion: greed and grievance. Economic opportunities (greed) more important than political and social grievances in explaining civil wars.
  - Factors contributing to civil war: dependence on primary commodity exports, low average incomes and slow economic growth and time since the previous conflict.
  - Most proxies for grievances (inequality, political rights, ethnic and religions fractionalization) not statistically significant.

Several papers have explored the **important role of the interaction between economic factors and horizontal inequalities between groups / ethnic divisions**, as an important predictor of the risk of conflict: *Murshed and Tadjoeddin (2009), Caderman, Weidmann, and Gleditsch (2011) Otsby (2011).*

- Greed and grievances coexist: degradation of the social contract is more likely in contexts of poverty and economic stagnation: crucial for transforming grievances and greed into collective violence.

Impact the Slave Trade on Ethnic Divisions in SSA

ETHNIC DIVISIONS: THE ORIGINS – NUNN QJE 2008

***In 1850 Africa's population = ½ of what it would have been – Manning (1990)*:**

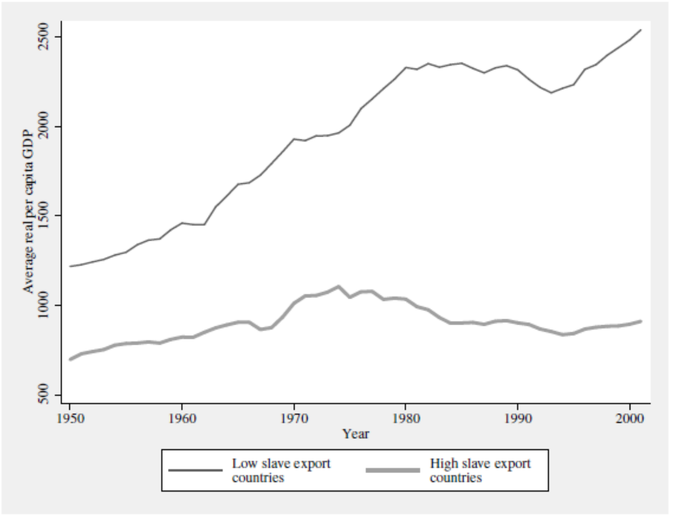
The slave trade and colonization played a significant role in shaping and exacerbating ethnic divisions:

Nunn (QJE - 2008), larger number of slaves taken in the past (*Instruments: sailing distance to important centers of demand for slaves)*:

- Increased ethnic fractionalization.
- Weakened political structures – lower state development.
- Poorer economic performance (lower GDPpc) – higher at the start of the slave trade.

Ethnic fractionalization:

Probability (0 to 1) that any two randomly selected individuals belong to different ethnic groups.



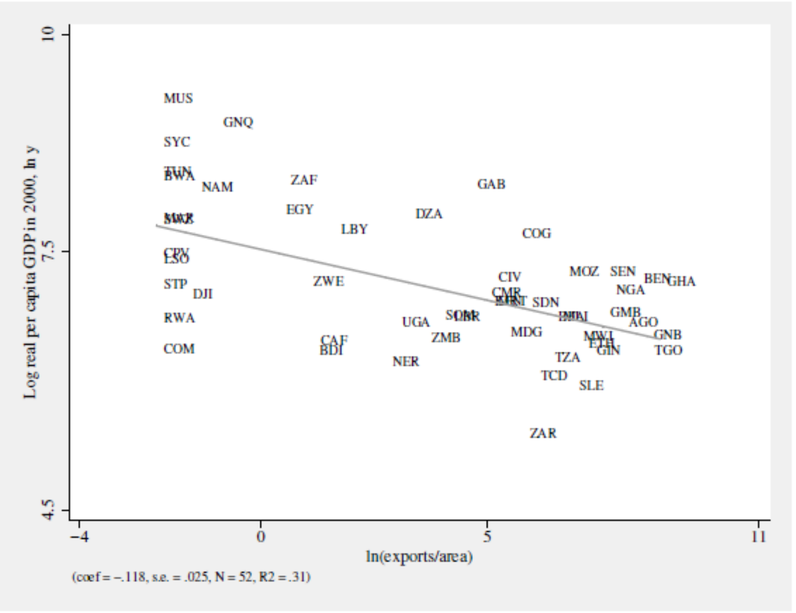
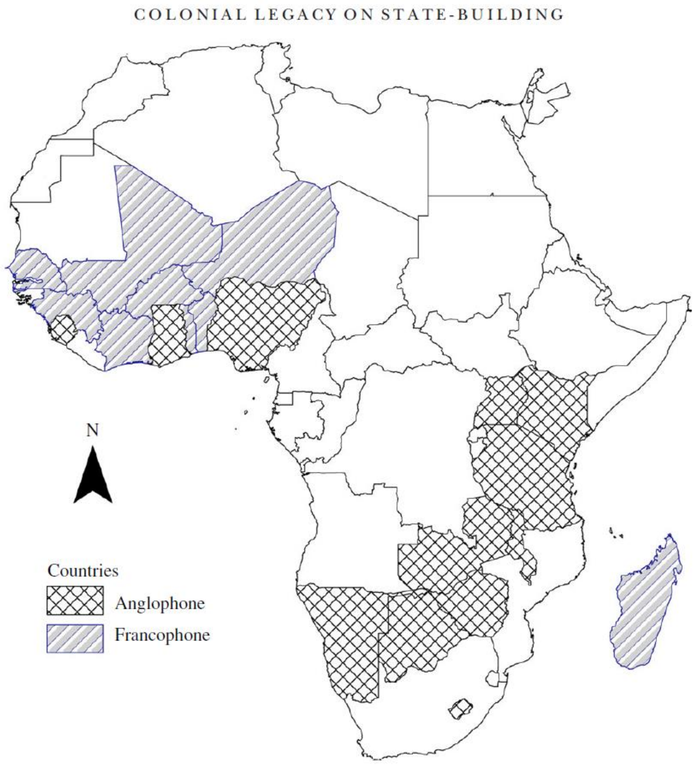


FIGURE III

Relationship between log slave exports normalized by land area, ln(exports/area), and log real per capita GDP in 2000, ln y

Impact of Colonization on Ethnic Divisions in SSA

ETHNIC DIVISIONS: THE ORIGINS

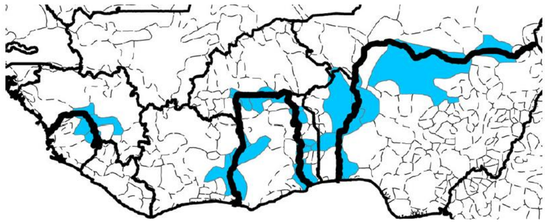


- Ali et al. (EJ - 2019) examine the colonial legacy and its impact on ethnic divisions (RDD colonial borders):

  - Britain's divide-and-rule and decentralized-power strategies: deliberately fostered ethnic rivalries (rigid association between ethnic identity and access to basic resources –land and government services), to weaken and control.

  - French legal system and the concentration of more political power in the central state.

  - Citizens of anglophone countries more likely to attach greater importance to ethnic identity over national identity + weaker norms against tax evasion, more corruption and crime, stronger traditional chiefs: lower state capacity.



- Michalopoulos and Papaioannou (JEL - 2020) for a recent review on the "shadow of history" on the Africa's economy and polity.

Please be advised that the following slide contains graphic images that some viewers may find disturbing or upsetting.

Not meeting the rubber quota in “Belgian” Congo - 1904

The remains of over 250.000 genocide victims in Kigali Memorial – Rwanda 1994

Children at a disarmament and demobilization ceremony – South Sudan 2017

Dunia, De la Sierra and Yu 2025 1

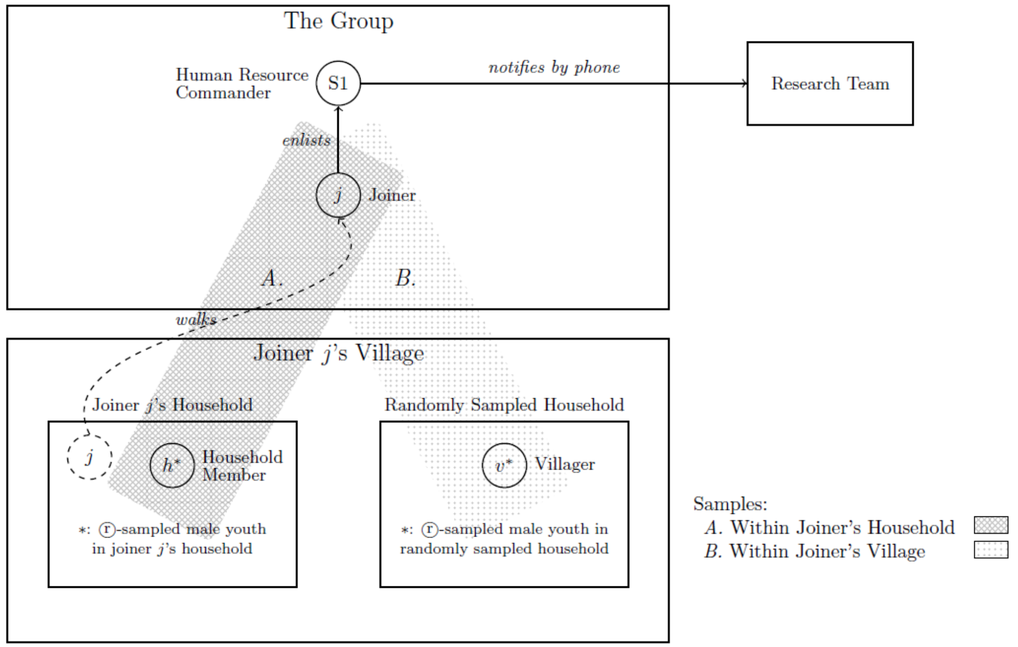
MORAL VIOLENCE: UNBUNDLING SOCIAL PREFERENCES AT THE HEART OF A MAJOR ARMED GROUP IN CONGO

$$U_0 = w_0,\ U_1 = w_1 + \underbrace{\bar{\theta} + \tilde{s}_C - \tilde{\lambda}_E}_{\text{Social Preferences}},$$

where $w_0, w_1 \in \mathbb{R}^+$ are exogenous wages associated with not enlisting and enlisting, respectively, $\bar{\theta}$ is an exogenous term capturing the average psychological effect of enlisting, and $\tilde{s}_C$ and $\tilde{\lambda}_E$ are exogenous, mean-zero individual idiosyncratic deviations that are unaffected by enlistment.

These two deviations capture heterogeneity in the two core components of unbundled social preferences. The first, $\tilde{s}_C$, captures individual variation in the intrinsic psychological reward from the perceived contribution of the *act of enlisting* to the Collective's welfare outcomes—akin to mission-driven intrinsic motivation (Besley and Ghatak, 2005b). The second, $\tilde{\lambda}_E$, captures individual variation in the intrinsic utility or disutility associated with anticipating *the act of perpetrating* violence toward the Enemy, which may be emotionally taxing or rewarding.

Panel B. Data Collection Design Triggered by One Enlistment Intent Event—Stylized Representation



Notes. This panel provides a graphical representation of the data collection design for one enlisting event. S1 indicates human resource commander, of which there are 55, all included in the embedded enlisting monitoring system. For each notification, one team visited the joiner, while another visited the joiner's village. The joiner team met with the joiner to gather measures of their social preferences. Simultaneously, the village team visited two households: (a) the joiner's household and (b) a randomly selected household within the same village. In each of these households, the village team met with a randomly selected *youth* (aged 18–45) matching the joiner's gender (virtually all were male), gathering measures of their social preferences—referred to as the *household member* and the *villager*. Additionally, in both the joiner's household and the village household, the village team collected information about the household from the household head. From January 22 to August 25, 2022, we stationed ten survey teams, each consisting of two surveyors, across the District.

Dunia, De la Sierra and Yu 2025 2

MORAL VIOLENCE: UNBUNDLING SOCIAL PREFERENCES AT THE HEART OF A MAJOR ARMED GROUP IN CONGO

- Enlisting to fight highly detrimental for individual, self-interested “utility”, in material terms: lower life expectancy and lower wage.

- Joiners of an armed group in context show:
  - To be more pro-social towards in-group members. DEFENSE.
  - Cognitive empathy suppression towards out-group members.

the existence of the following mechanism: those most committed to the District (the outcome-prosocial toward the District) uphold the *prevailing morality of killing* more strongly, suppressing cognitive empathy toward the enemy and thereby selectively suppressing A.M. empathy toward the enemy. Section Appendix C formalizes this mechanism.

Case 3. If Social Preferences are Unbundled (“zealots”)

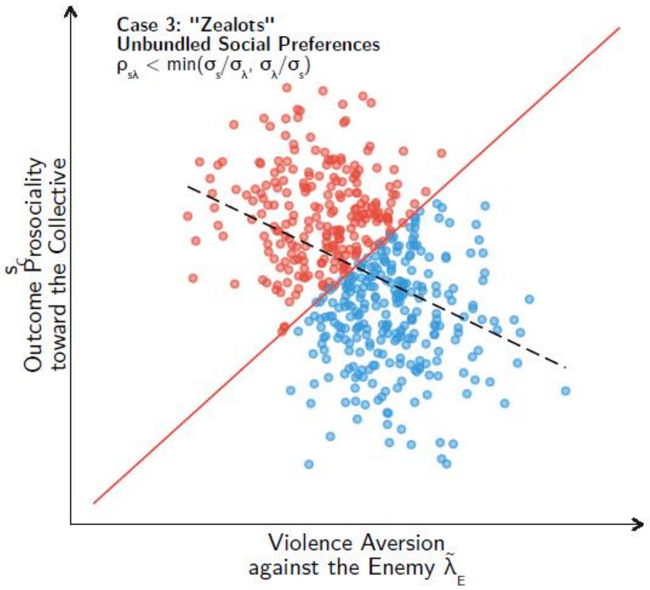


Table 3: Outcome Prosociality toward the District, not Differences in Individual-Held Morality, is Associated with Enlisting

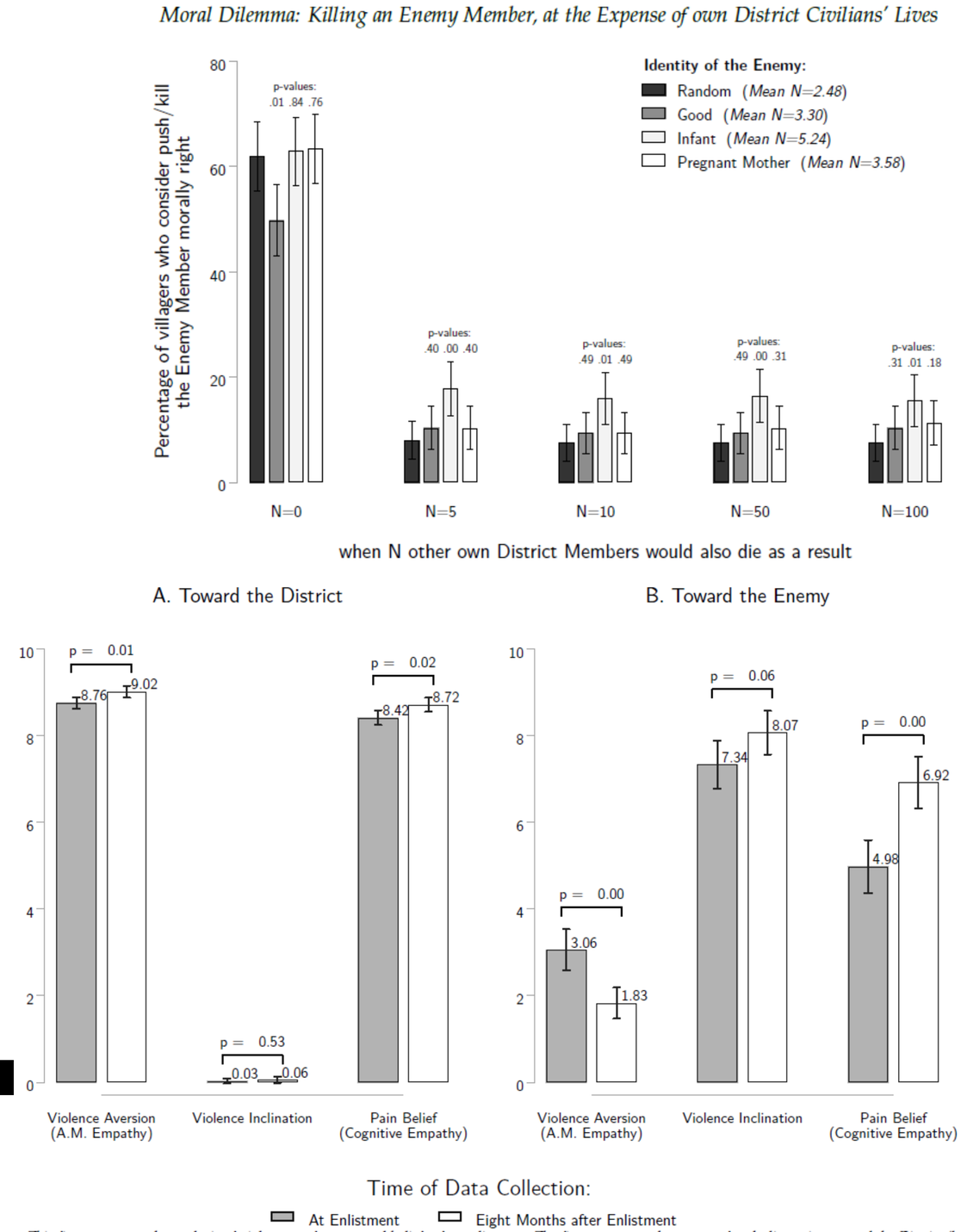
	Dependent Variable: Enlists				
	(1)	(2)	(3)	(4)	(5)
Prosociality toward the District	0.063***	0.056***	0.049***	0.043**	0.038**
	(0.019)	(0.019)	(0.018)	(0.019)	(0.019)
Violence Aversion (A.M. Emph.) toward the Enemy	-0.025***	-0.005	0.008	0.025**	0.032***
	(0.008)	(0.010)	(0.009)	(0.012)	(0.011)
Cognitive Empathy toward the Enemy		-0.027***	-0.023***	-0.029***	-0.025***
		(0.009)	(0.008)	(0.009)	(0.008)
Enlistment Moral Dilemma: Joins			0.395***		0.364***
			(0.052)		(0.055)
Violence Moral Dilemma: Kills Enemy				0.005	-0.018
				(0.064)	(0.060)
Moral Disengagement (Bandura 2011)				0.077***	0.059***
				(0.015)	(0.015)
Negative Reciprocity toward the Enemy				-0.009	0.005
				(0.012)	(0.011)
Family Victimized by the Enemy				-0.127**	-0.118**
				(0.053)	(0.051)
Joiner ID FEs	✓	✓	✓	✓	✓
Mean Dependent Variable	0.33	0.33	0.33	0.33	0.33
R^2	0.05	0.07	0.18	0.13	0.21
Observations	635	635	635	630	630

Notes. This table presents the estimates from a regression in which the dependent variable is an indicator taking value 1 if the respondent belongs to the set of joiners and zero otherwise. The sample in all regressions includes joiners, the *household members* (a randomly selected young male adult within each joiner's household), and the *villagers* (a randomly selected young male adult within a randomly selected household in each joiner's village), in which case the sample is 635. Regressions include fixed effects for joiner ID, which generate groups for each joiner, his corresponding *household member*, and his corresponding *villager*. Standard errors are not clustered.

Dunia, De la Sierra and Yu 2025 3

MORAL VIOLENCE: UNBUNDLING SOCIAL PREFERENCES AT THE HEART OF A MAJOR ARMED GROUP IN CONGO

- Enlisting and the act of (lethal) violence toward the enemy as moral **duty**.
- Genocidal moral: the fraction considering killing the enemy member rises from 50% for a harmless individual to 62% when the enemy civilian is an (also harmless) infant or a pregnant woman: destruction of the enemy social group as a moral duty.
- Selective desensitization – follow-up 8 months after enlisting.



Posner (APSR 2004) – 1

THE POLITICAL SALIENCE OF CULTURAL DIFFERENCE: WHY CHEWAS ARE ALLIES IN ZAMBIA AND ADVERSARIES IN MALAWI

This paper explores the conditions under which cultural cleavages become politically salient.

Natural experiment given by the division of the Chewa and Tumbuka by the border between Zambia and Malawi.

While the objective cultural differences between Chewas and Tumbukas on both sides of the border are identical.

The political salience of the division between these communities is altogether different.

This difference stems from the different sizes of the Chewa and Tumbuka communities in each country relative to each country's national political arena.

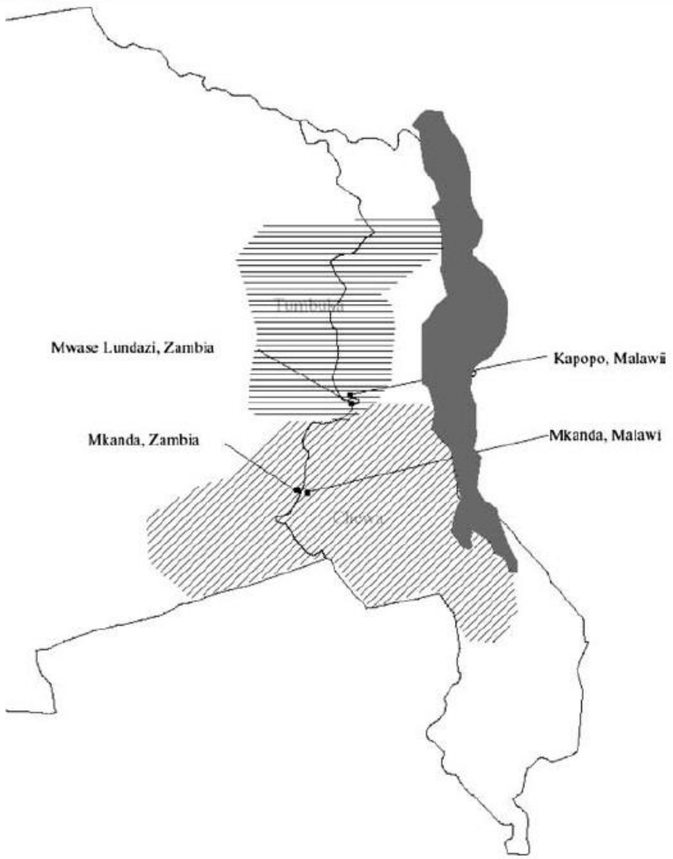
In Malawi, Chewas and Tumbukas are each large groups (viable political aspirations).

In Zambia, Chewas and Tumbukas are relatively small.

Posner (APSR 2004) – 2

THE POLITICAL SALIENCE OF CULTURAL DIFFERENCE: WHY CHEWAS ARE ALLIES IN ZAMBIA AND ADVERSARIES IN MALAWI

FIGURE 1. Research Sites



(either Chichewa or Chitumbuka). We asked five questions:

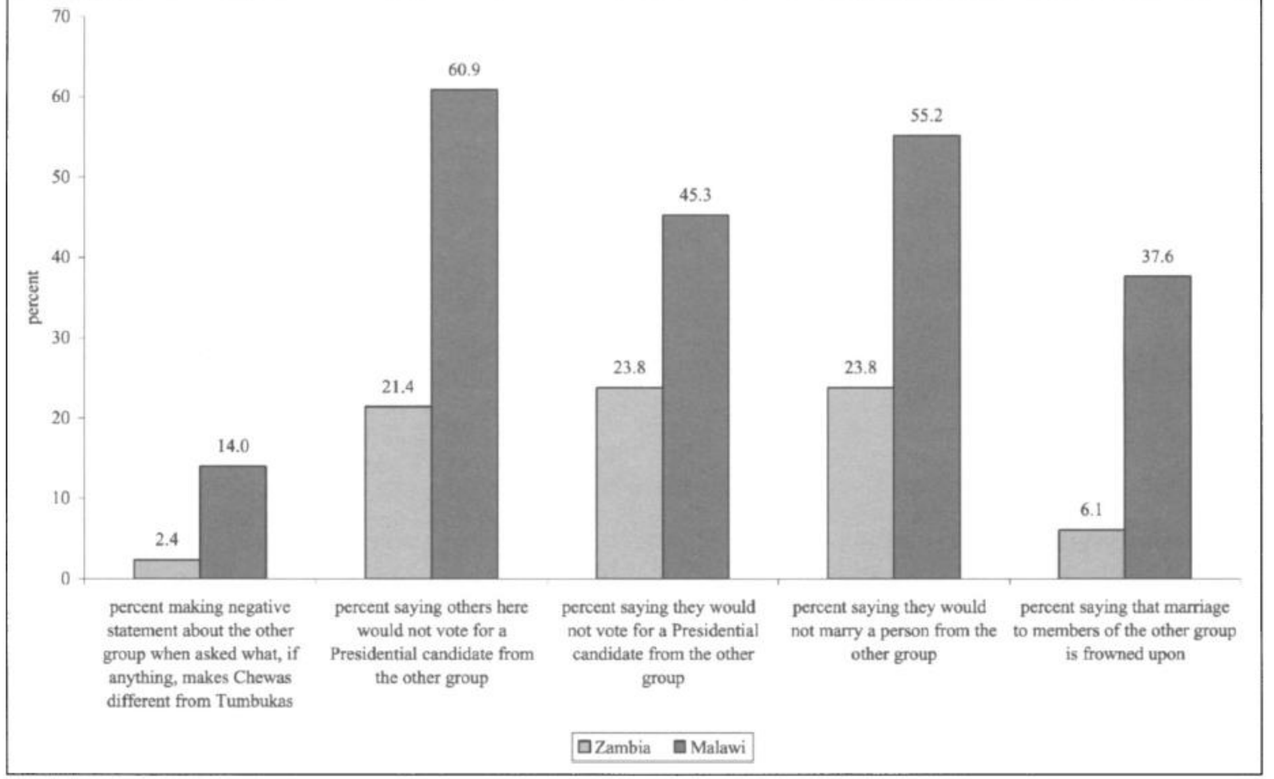
- What, if anything, makes Chewas different from Tumbukas?
- Do you think Chewas (Tumbukas) here would vote for a Tumbuka (Chewa) if he were standing for president?
- What about you? Would you vote for a Chewa (Tumbuka) if he were standing for president?
- Are you married?
  [If married] Are you married to a Chewa (Tumbuka)? [If no] Would you have considered marrying a Chewa (Tumbuka)?
  [If not married] Would you marry a Chewa (Tumbuka)?
- In general, how do people here feel about Chewas marrying Tumbukas?

In addition to the formal surveys, I also conducted focus groups in each of the four survey sites to gather further information about the characteristics of each village and the history of Chewa–Tumbuka relations in the area.

Posner (APSR 2004) – 3

THE POLITICAL SALIENCE OF CULTURAL DIFFERENCE: WHY CHEWAS ARE ALLIES IN ZAMBIA AND ADVERSARIES IN MALAWI

FIGURE 2. Chewa—Tumbuka Relations in Zambia and Malawi Compared



Eifert, Miguel, and Posner (AJPS, 2010)

This paper draws on data from over 35,000 respondents in twenty-two public opinion surveys in ten African countries (Afrobarometer data).

Main dependent variable: likelihood that a respondent names a tribal or language group membership in response to a question about the social group with which she feels she belongs to first and foremost.

Main hypothesis:

If ethnic identities are tools that people use to get access to political power, then they are likely to be rendered most salient when:

Political power is at stake (elections).

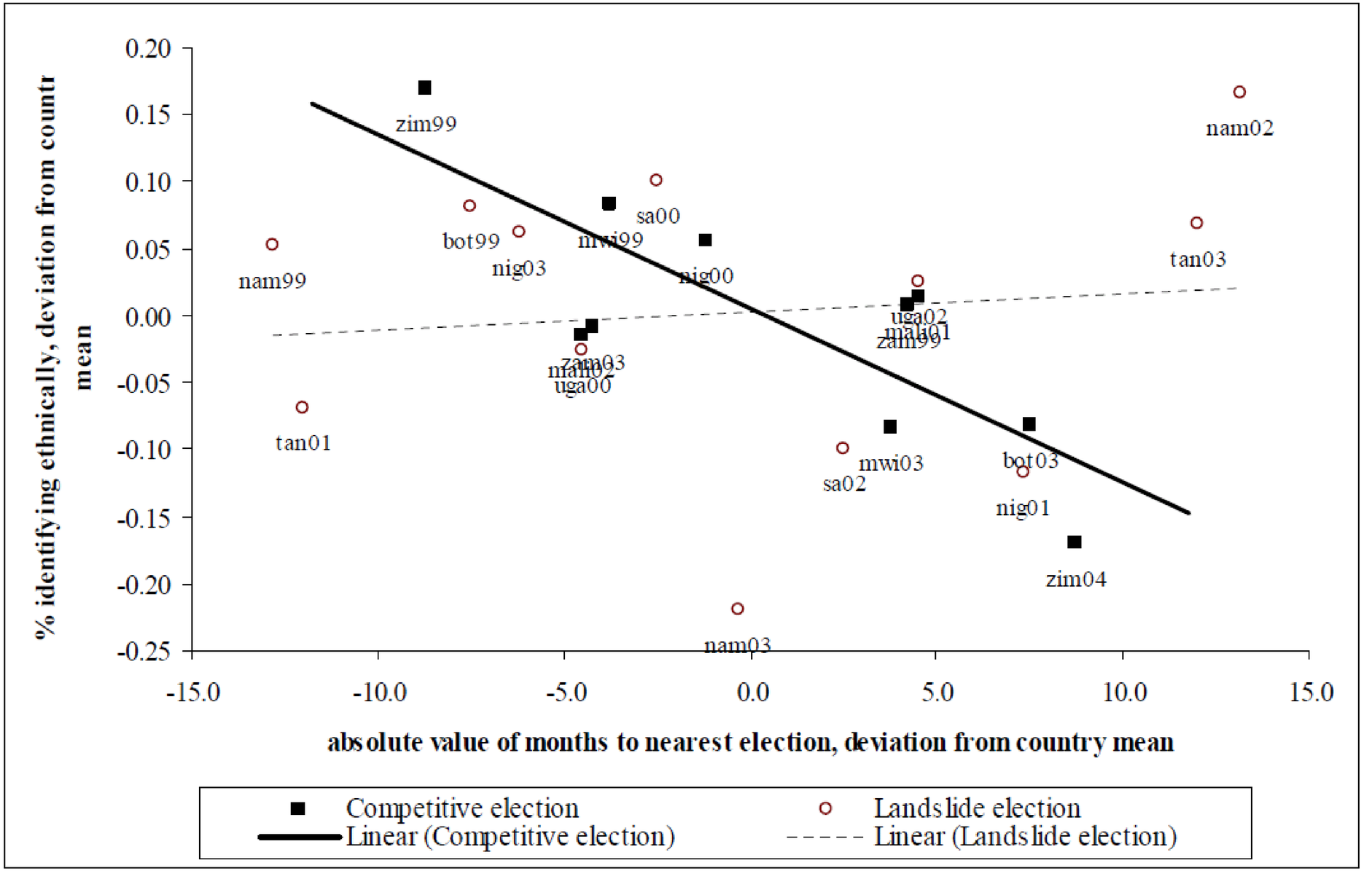
Namely, during elections that are closely fought.

Results:

Strong evidence that ethnic identities in Africa are strengthened by exposure to political competition.

In particular, for every month closer their country is to a competitive presidential election, survey respondents are nearly 2 percentage points more likely to identify in ethnic terms.

These findings are consistent with the view that ethnic identities matter in Africa for instrumental reasons: because they are useful in the competition for political power.


0.20
0.15
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-15.0
-10.0
-5.0
0.0
5.0
10.0
15.0
% identifying ethnically, deviation from countr mean
absolute value of months to nearest election, deviation from country mean
zim99
nam02
sa00
bot99
mwi99
nig03
tan03
nam99
nig00
uga02
mali01
zam99
zam03
mali02
uga00
tan01
mwi03
bot03
sa02
nig01
zim04
nam03
Competitive election
Landslide election
Linear (Competitive election)
Linear (Landslide election)

Ethnic curse?

Ethnic fragmentation correlated with low quality of public policies, particularly in Africa.

Why? Enforcement of cooperation within ethnic groups, not between ethnic groups.

But ethnic identification can be endogenous to political competition.

Thanks for your attention and contributions!