

# AFRICAN ANTI-COLONIAL RESISTANCE: MOTIVATION, NATURE AND IMPACT

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# Research Questions

- What was the motivation, the nature and the impact of the Anti-colonial resistance in Africa:
  - Demands, Organization and Strategies?
- How did colonial powers respond?
- What are the post-colonial impacts of these movements and colonial responses? How to quantitatively assess impacts?

# Historical Background (I): Economic Conditions

- Restructuring of local economies to profit colonial powers:
- **Strategies:** Land seizures, Forced labor, Taxation, Low-wage payments

# Historical Background (I): Economic Conditions



*Building of a railway in Dahomey around 1900. (Source: Roger Viollet)*



*French officials inspect latex collected by laborers in Cameroon in 1941. (Source: Jacobinmag.com)*



# Historical Background (II): Political Conditions

- Post-WWII fading colonial empires instigated significant institutional reforms (1945-1950):
  - Extensions of citizenship to Africans and legislative elections (France).
    - e.g., 4<sup>th</sup> French Republic Constitution assigned overseas territory status to Madagascar in 1946. All Malagasy were granted full French citizenship.
  - Devolution of power to local governments (UK).

# Historical Background (III):

- These events have been documented by historians (e.g., Cooper 2002 and Mamdani 1996), but several questions remain:
  - **Why did independence movements turn violent in some areas and not in others?**
  - **To what extent do these movements still matter today?**
- Cooper focuses on colonial repression, and Mamdani on pre-colonial institutions. Limited to few cases. **We need a more comprehensive investigation.**
- In our view, **the key determinant of post-independence institutions is the geography of the insurgency** (rural versus urban) and economic variables such as land and natural resources.

## Historical Background (IV): Independence Movements as Critical Junctures

- The decade following the end of World War II was a foundational moment for African political development.
- Movements against colonial rule evolved into large-scale Pan-African organizations that reflected the ideological divide of the international socialist and labor movement:
  - 1. *Western European-style socialists***, such as Kwame Nkrumah in Ghana, and Julius Nyerere in Tanzania .
  - 2. *Radical Maoists***, such as Frantz Fanon in Algeria, Dedan Kimathi in Kenya, and Ruben Um Nyobé in Cameroon.

# These two sets of leaders advocated radically different paths towards independence...

- For instance, in a May 1958 address to his party, Nyerere stressed the importance of a non-violent opposition:

*We shall wage a relentlessly determined battle against [ colonialism ] until we are free. We shall use no violence. We shall stoop to no dishonest methods. We shall be as clean in our methods as we are in our aims. We shall publicly declare our methods as we publicly declare our aims (pp. 59-60).*



In contrast, Fanon [1961] colorfully advocated the use of violence as a necessary strategy of emancipation...

*[ At the national level ] insurgents' violence unifies the people [ ... ] At the level of individuals, [ it ] is a cleansing force. It frees the native from his inferiority complex and from his despair and inaction; it makes him fearless and restores his self-respect (p.94).*





The choice between these contrasting strategies was driven in part by geographic conditions...

- Consider the case of Guinea Bissau and Cape Verde. The armed resistance occurred in the jungle of Guinea-Bissau. Amilcar Cabral, the founder of the PAIGC wrote:

*Everyone knows that in general the guerrilla force uses the mountains as a starting point for the armed struggle. [ ... ] we had to take full advantage of the jungles and swamps in our country to create difficult conditions for the enemy in his confrontation with the victorious advance of our armed struggle (Cabral [1969, p. 18]).*



# African Resistance

- **Demands:** Full independence, Active participation in local elections, Human capital investments.
- **Organizations:** unions, parties and militant groups (F. Ransome-Kuti, Nyerere, Diagne...)
  - Integration to **Black liberation movements** (WEB Dubois, M. Garvey, with Tovalou Houenou)



# African Resistance: Leaders



*George Marke, Prince Marc Kojo Tovalou  
Houénou, and Marcus Garvey, 1924*

# African Resistance: Leaders

September 3, 1924.

Monsieur le Dr. W. E. Du Bois:

Cher Monsieur:

J'ai reçu votre lettre du 29 Aout 1924. Je Vous remercie de votre extrême franchise, Moi-même, J'étais très embarrassé et J'Aurais voulu dès mon arrivée avoir une conversation intime avec vous. Malheureusement l'occasion ne s'en offrit pas.

Je connaissais les dissensions graves et profondes qui vous separaient de Mr. Garvey. On M'avait dit à Paris de choisir entre les deux frères ennemis. J'ai refusé.

Aujourd'hui encore je refuse de choisir et je prouve l'échec, complet des deux présidents privés de leurs conseils.

Je ne cherche pas à n'essayer pas d'attitude n'est pas

Je suis de donc partial. En mouvement favorable amis, je serai de son parti, je serai son partisan ou mieux partial.

Je ne suis pas neutre, le moyen d'être neutre, quand nous sommes la race la plus avilie, la plus calomniée, la plus persécutée, la plus méprisée, celle qu'on a injustement asservie depuis des siècles, qu'on opprime encore et qu'on attend soiemment pour mieux lui faire le reproche d'être inférieure.

Cette question de la race, je ne l'aborderai jamais avec indifférence et neutralité.

Le problème de la race noire me rend agressif et révolutionnaire. L'histoire nous montre que toutes les réformes sociales ont été obtenues par la guerre, guerre à l'extérieur ou guerre à l'intérieur. Celle-ci s'appelle une révolution. Pas de tractation, pas de compromission possible avec les voleurs et les bandes européennes et américains. Il s'agit aujourd'hui de leur faire rendre gorge, comment? S'il faut périr périssons en vendant chèrement notre vie. Assez de cette magnanimité qui nous vaut toujours le coup de pied aux derrières ou le lynch.

La légalité s'arrête là où il y a crime---flagrant tout homme est autorisé par la loi sacrée et primordiale de légitime défense à prendre les armes et à se faire justice.

Il n'y a rien à espérer des tartufes européens et américains. Aidons-nous, défendons-nous, et les honnêtes d'entre eux qui malheureusement sont les plus lâches et les plus timorés par un sursaut tardif de conscience----viendront à nous.

Je suis de tous les partis qui s'intéressent aux noirs, donc partial. En quelque endroit où un congénère créera un mouvement favorable à l'évolution de sa race, il sera de mes amis, je serai de son parti, je serai son partisan ou mieux partial.

La guerre ou la révolution qu'on le veuille on non est toujours "l'ultima ratio".

Dans notre association "La Ligue universelle pour la défense de la Race Noire", nous recherchons plutôt l'union, la fédération de toutes les sociétés existantes. Une centralisation à Paris permet d'agir à Londres, à Bruxelles à Genève et par là sur toute la terre d'Afrique. Cette concentration, cette convergence, cette coordination de toutes les forces noires est elle possible, l'histoire, le dira.

C'est le hasard qui m'a jeté dans les bras de Mr. Garvey. IL tenait un congrès important j'y ai participé avec joie et enthousiasme, comme je participerais dans les mêmes sentiments à vos réunions.

Si j'ai été renseigné sur votre inimitié, j'ignorais cependant vos griefs réciproques.

Vous êtes tous deux mes aînés, je n'ai pas de conseils à vous donner et je n'ai pas la prétention d'être au courant de vos problèmes nationaux.

de diverses personnes.

Je les tiens à votre disposition afin de vous témoigner la même franchise.

S'il vous est possible de m'accorder une entrevue cette semaine, écrivez-moi pour me fixer un rendez-vous.

Veuillez-agrèr, cher Monsieur, L'assurance de mes sincères sentiments.

*K. J. Labou*

Signed.

# African Resistance: Leaders



*Teacher Union Leader and mother of musician Fela Kuti*

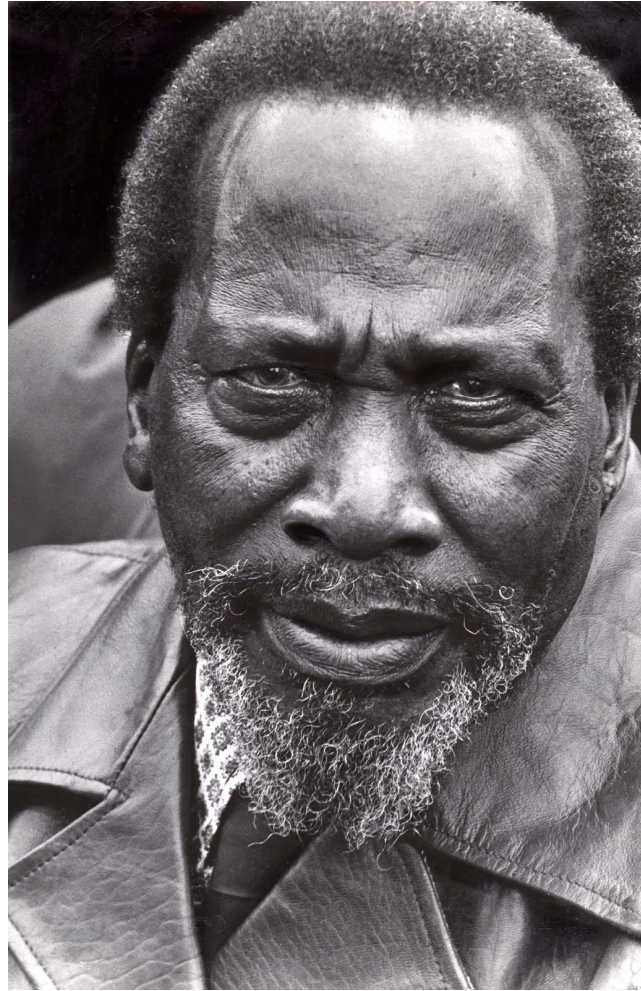


# African Resistance: Leaders



*Ivorian president Felix Houphouët Boigny (R) and Senegalese president Léopold Sédar Senghor*

# African Resistance: Leaders

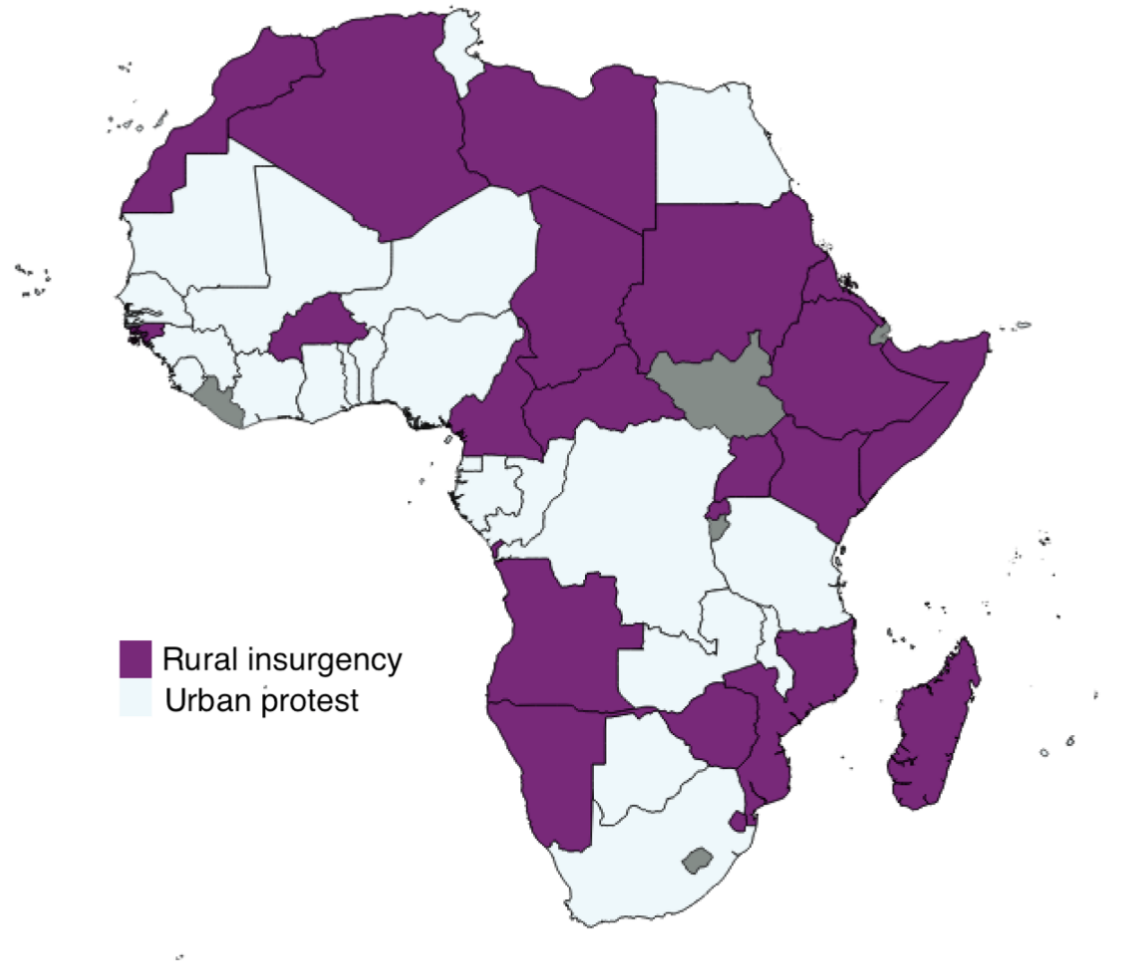


*Jomo Kenyatta, President of Kenya and prominent independence leader*

# African Resistance: Two Broad Categories

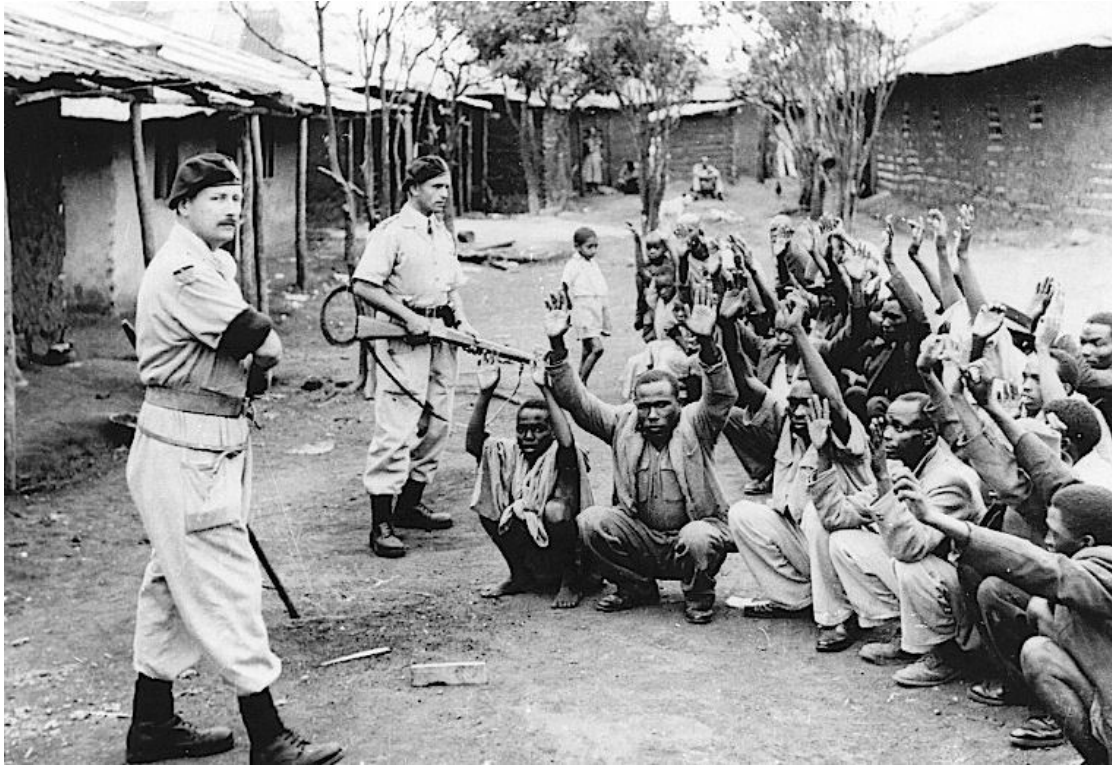
- Initial response of African political elites:
  - **Urban social movements** pushing for independence and later active participation in elections (e.g., Ghana, Senegal).
  - Spread of **violent independence movements** in about 40% cases (Madagascar, Cameroon, Algeria).
  - Emergence of new democratically elected leaders (Benin, Gabon, Mali, Senegal, etc.).

# African Resistance: Two Broad Categories





# African Resistance



*British soldiers and police in Karoibangi, Kenya, in about 1954 round up local people for interrogation as they look for Mau Mau fighters.*



# Colonial Response

- **Violent and brutal repression:**
  - Following a 1947 rebellion in Madagascar, France sent 18,000 troops to restore order, resulting in 30,000 - 100,000 deaths.
  - The 1955 outlawing of the Union des Populations du Cameroun (UPC) prompted a long guerrilla war and assassination of Ruben Um Nyobé, the leader of the UPC.
- **Political response:**
  - Election result falsification (Côte d'Ivoire), Arrest of political leaders (Kwame Nkrumah of Ghana), Backing of political leaders to introduce changes (Abubakar Tafawa Balewa and Aminu Kano of Nigeria)

# Colonial Response



- Castor Osendé Afana (pictured 1<sup>st</sup> by the left) a Marxist economist and militant nationalist died in 1966 while fighting as a guerrilla against the government of Cameroon.

# Impact of Colonial Response

- What was the impact on democracy and development in Africa?
  - Need data in order to quantitatively measure
  - Use of novel methods to establish causality
- Critical Junctures: Independence Movements and Democracy in Africa (García-Ponce and Wantchekon, 2022)
- The Long-Term Effects of Colonial Repression on Political Attitudes in Madagascar (García-Ponce and Wantchekon, 2018)

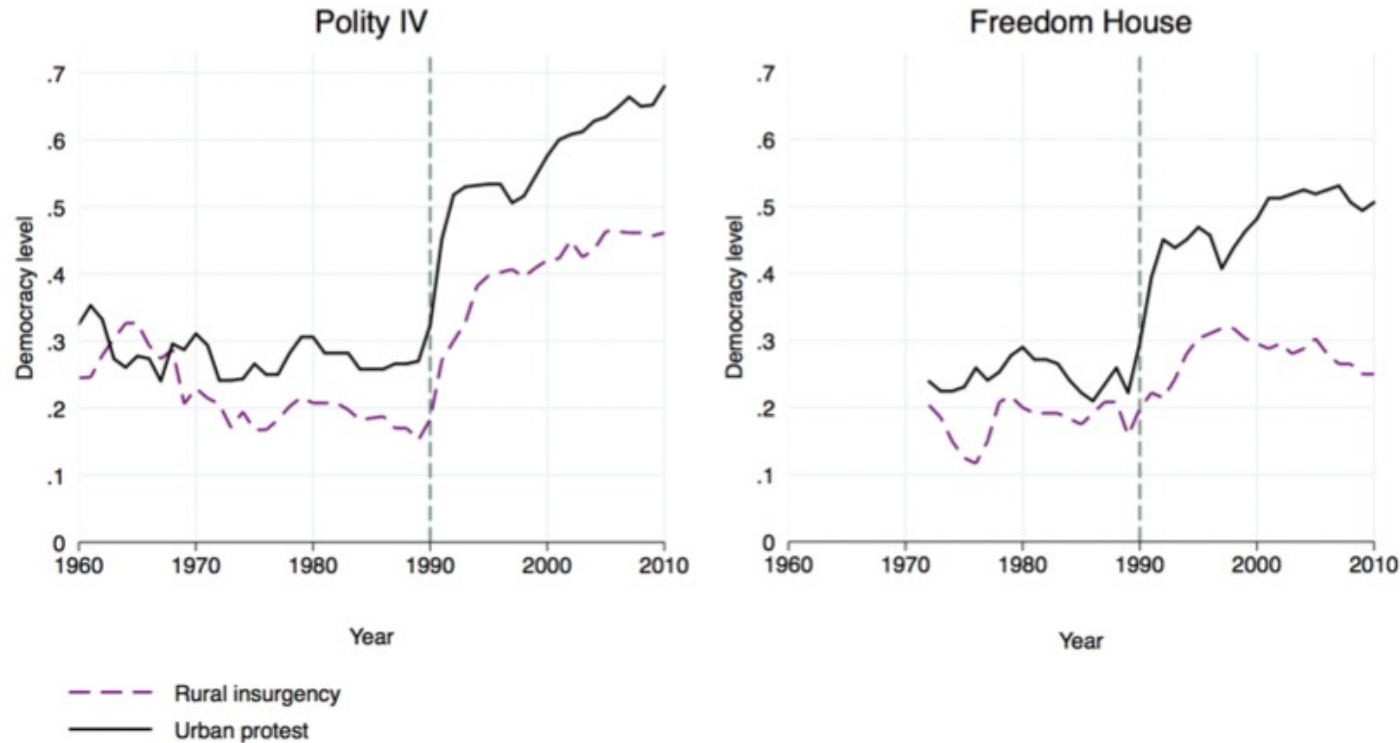


# Critical Junctures: Independence Movements and Democracy in Africa (García-Ponce and Wantchekon, 2022)

## Data

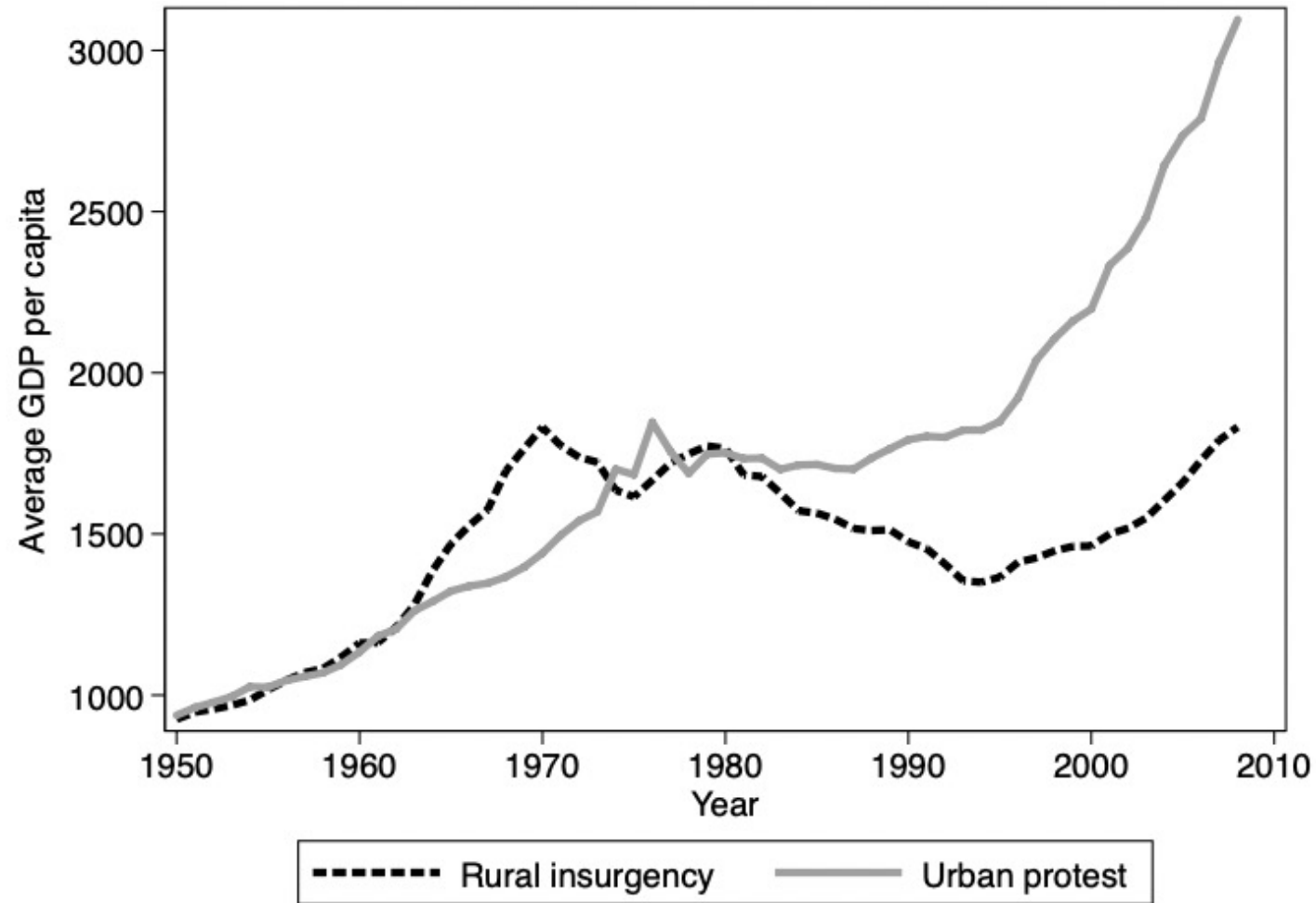
- Original coding of independence movements (**rural insurgency vs. urban protest**).
- **Democracy** measures (Polity IV and Freedom House).
- **Rough terrain** (% mountains) and **other geographic conditions** (fertile soil, desert, climate, distance to coast, land size, natural resources).
- **Colonial data** (urbanization, colonial rule indicators, slave exports, % European descent).
- **Contemporaneous controls** (per capita income, population size, ethnic and religious fractionalization).

# Relationship between Democracy and Type of Independence Movement over Time (1960s–2010)



The gap in democracy levels between these two sets of countries is very clear after the end of the Cold War

# Relationship between Type of Independence Movement and GDP per capita, 1950–2010





# The Long-Term Effects of Colonial Repression on Political Attitudes in Madagascar (García-Ponce and Wantchekon, 2018)

## Data

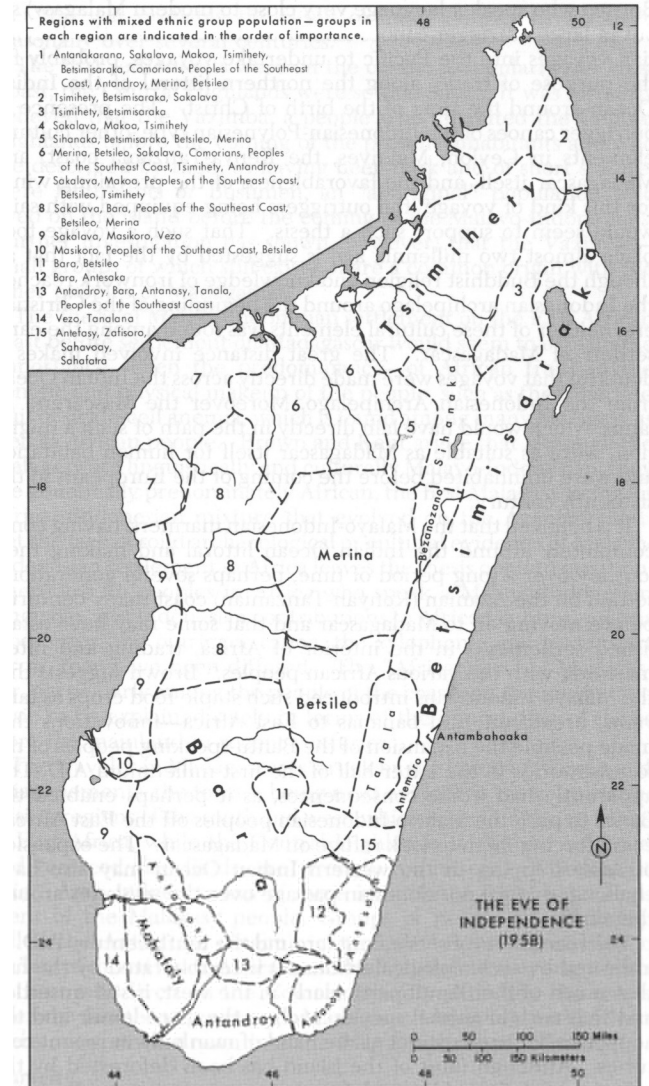
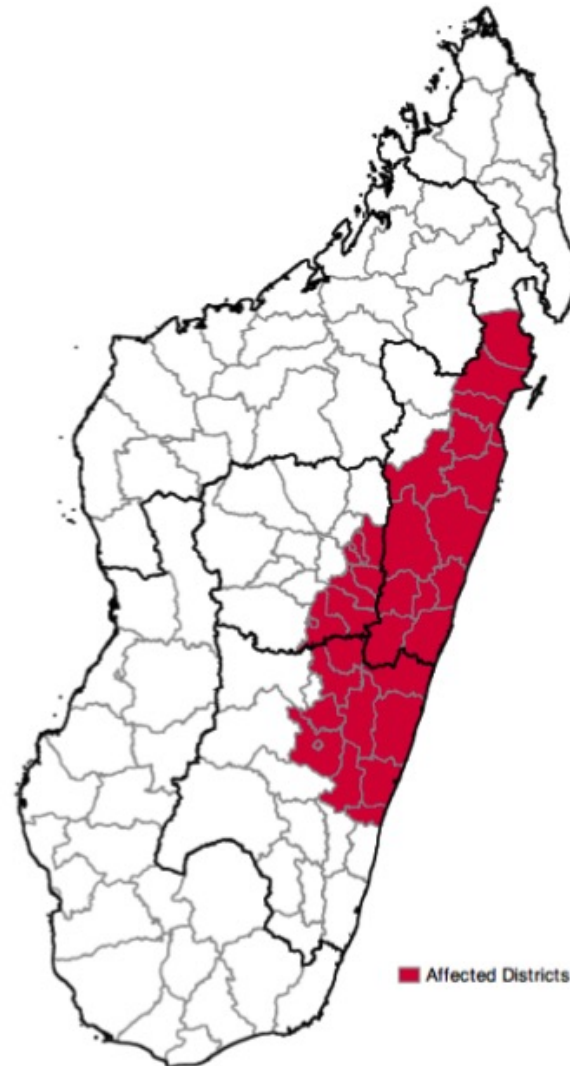
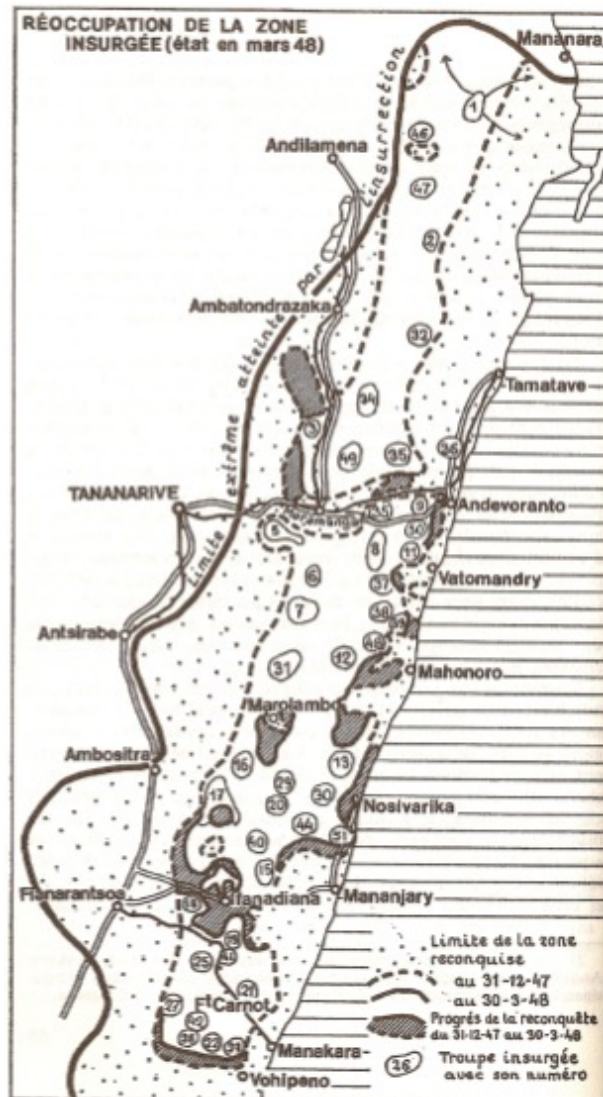
- Freedom of expression come from the **Afrobarometer surveys** conducted in Madagascar.
- Exposure to the legacy of repression taking into consideration both the **ethnicity and the residential location of respondents**.
- District-level controls: rainfall (1946), temperature (1946), area, mean elevation, distance to the nearest industrial town (1950s).

# Freedom of Expression

Freedom of Expression is operationalized as a latent continuous variable. We estimate an ordinal-item response model based on the following items:

1. How free are you to say what you think?
2. How free are you to join any political organization you want?
3. How free are you to vote without feeling pressured?
4. How likely do you think it is that people can be punished if they make complaints about poor quality services or misuse of funds?
5. During election campaigns in this country, how much do you personally fear becoming a victim of political intimidation or violence?
6. How often do people have to be careful of what they say about politics?

# Exposure to legacy of repression



# Methodologies

- Critical Junctures: Independence Movements and Democracy in Africa (García-Ponce and Wantchekon, 2022) uses three empirical approaches:
  - Statistical association between rural insurgency and post-1990 levels of democracy is robust to a number of potential confounders (**OLS**)
  - **Instrumental variables (IV)** approach that relates exogenous variation in rough terrain to democracy levels through its impact on rural insurgency.
  - **DID approach** with fixed effects which compares democracy levels before and after the end of the Cold War in rural insurgency versus urban protest countries.

Sensitivity & Robustness

# Methodologies

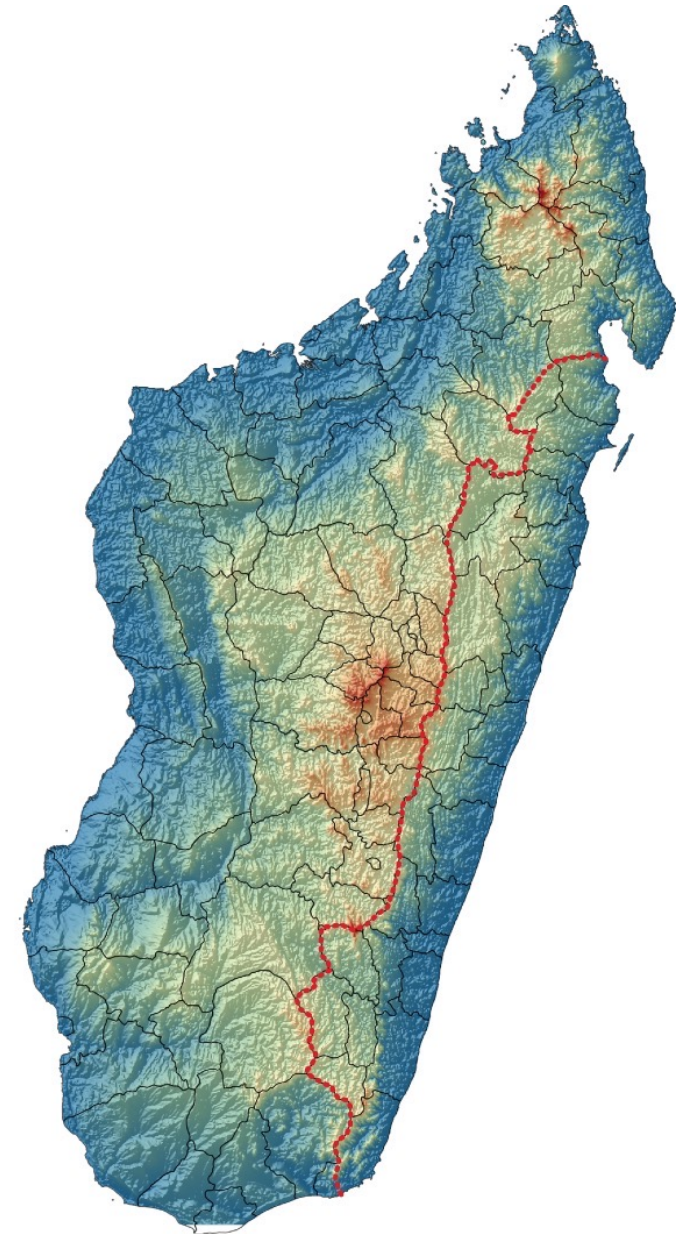
- The Long-Term Effects of Colonial Repression on Political Attitudes in Madagascar (García-Ponce and Wantchekon, 2018) uses:
  - **GenMatch** (Diamond and Sekhon's, 2005), **CEM Matching** (King, Iacus and Porro, 2008)
  - **Fuzzy Regression Discontinuity** (FRD) design (Imbens and Lemieux 2010)

Sensitivity & Robustness



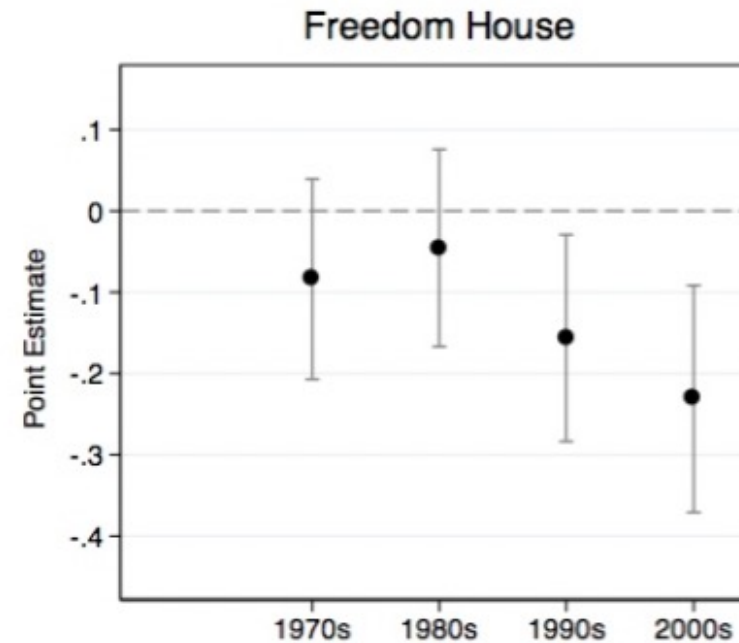
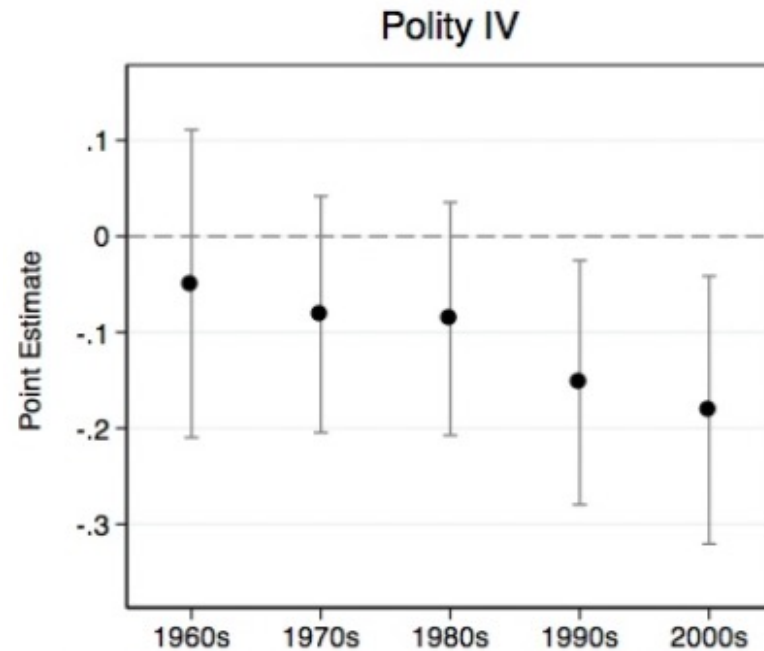
# RDD

- We exploit plausible exogenous variation in exposure to the rebellion generated by a mountain range that contained the spread of the rebellion and helped the French army to seize the insurgent area (Tronchon 1986)



# Statistical Association between Democracy and Rural Insurgency by Decade (OLS Estimates)

- Rural insurgency is negatively and significantly correlated with democracy during the 1990s and 2000s, but not before





# Critical Junctures: Independence Movements and Democracy in Africa (García-Ponce and Wantchekon, 2022) – OLS estimates

DV IS POST-1990 POLITY IV	(1)	(2)	(3)	(4)	(5)	(6)
Rural insurgency	-0.16** (0.07)	-0.19** (0.07)	-0.17** (0.07)	-0.16** (0.07)	-0.21*** (0.07)	-0.33*** (0.09)

DV IS POST-1990 FREEDOM HOUSE	(1)	(2)	(3)	(4)	(5)	(6)
Rural insurgency	-0.21*** (0.07)	-0.21** (0.08)	-0.16** (0.07)	-0.15* (0.08)	-0.20** (0.08)	-0.29** (0.11)

Column (1) doesn't include controls.

Column (2) includes geographic controls.

Column (3) includes colonial controls.

Column (4) includes contemporaneous controls.

Column (5) includes geographic and colonial controls.

Column (6) includes the full set of controls.

# 1st Stage: Rough Terrain and Rural Insurgency

DV IS RURAL INSURGENCY	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PANEL A: FULL SAMPLE								
Rough terrain	0.22*** (0.04)	1.13*** (0.35)	0.19*** (0.04)	1.22*** (0.40)	0.22*** (0.05)	1.25*** (0.37)	0.19*** (0.06)	1.41*** (0.49)
N	49	49	49	49	47	47	47	47
R <sup>2</sup>	0.31		0.42		0.36		0.44	
$\sigma$	0.42		0.42		0.43		0.45	
PANEL B: ACCOUNTING FOR PRE-COLONIAL INSTITUTIONS								
Rough terrain	0.21*** (0.04)	1.11*** (0.37)	0.19*** (0.05)	1.18*** (0.34)	0.20*** (0.06)	1.12*** (0.42)	0.18** (0.06)	1.85*** (0.63)
Pre-colonial institutions	-0.15 (0.11)	-0.80 (0.73)	-0.24 (0.14)	-1.84** (0.81)	-0.21 (0.13)	-1.19 (0.81)	-0.30* (0.17)	-4.68** (1.95)
N	40	40	40	40	40	40	40	40
R <sup>2</sup>	0.33		0.42		0.38		0.48	
$\sigma$	0.43		0.44		0.44		0.46	
Geographic controls?			✓	✓			✓	✓
Colonial controls?					✓	✓	✓	✓
Estimation	LPM	Logit	LPM	Logit	LPM	Logit	LPM	Logit

# Reduced-Form Estimates: Rough Terrain and Democracy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<u>POST-1990 POLITY IV</u>				<u>POST-1990 FREEDOM HOUSE</u>			
Rough terrain	-0.04* (0.03)	-0.05* (0.03)	-0.05* (0.03)	-0.05* (0.03)	-0.07** (0.03)	-0.07*** (0.03)	-0.07*** (0.03)	-0.08*** (0.03)
Geographic controls?		✓		✓		✓		✓
Colonial controls?			✓	✓			✓	✓
<i>N</i>	47	47	47	47	49	49	47	47
<i>R</i> <sup>2</sup>	0.06	0.18	0.21	0.33	0.10	0.32	0.40	0.49
<i>σ</i>	0.24	0.24	0.23	0.23	0.27	0.26	0.23	0.23

- Higher levels of rough terrain are significantly associated with lower democracy scores.

## IV Estimates: Rural Insurgency and Democracy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<u>POST-1990 POLITY IV</u>				<u>POST-1990 FREEDOM HOUSE</u>			
Rural insurgency	-0.21* (0.12)	-0.26** (0.12)	-0.21* (0.12)	-0.28** (0.13)	-0.32** (0.13)	-0.38*** (0.13)	-0.32** (0.12)	-0.41*** (0.15)
Geographic controls?		✓		✓		✓		✓
Colonial controls?			✓	✓			✓	✓
<i>N</i>	47	47	47	47	49	49	47	47
<i>R</i> <sup>2</sup>	0.11	0.22	0.26	0.39	0.09	0.26	0.31	0.39
<i>σ</i>	0.22	0.21	0.20	0.19	0.27	0.24	0.23	0.21

# DID Estimates with Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POLITY IV				FREEDOM HOUSE			
Rural insurgency $\times$ post-1990	-0.14* (0.07)	-0.18** (0.07)	-0.17** (0.07)	-0.13* (0.06)	-0.14* (0.08)	-0.14* (0.08)	-0.17** (0.08)	-0.12* (0.07)
Geographic controls $\times$ post-1990?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls $\times$ post-1990?		✓	✓	✓		✓	✓	✓
Contemporaneous controls?			✓	✓			✓	✓
Subregion-specific time trends?				✓				✓
N	2,196	2,196	1,945	1,945	1,855	1,780	1,621	1,621
Countries	47	47	46	46	49	47	46	46
R <sup>2</sup>	0.38	0.45	0.46	0.49	0.24	0.32	0.31	0.37
$\sigma$	0.18	0.16	0.16	0.16	0.18	0.17	0.17	0.16

# Potential Mechanisms

We consider two alternative pathways:

- 1. Institutions:** early post-independence constitutional arrangements may have been decisive in shaping future democratic development (e.g., rural insurgencies may have generated exclusive institutions immediately after independence).
- 2. Norms of behavior:** armed struggles may have perpetuated political violence, making post-colonial (civil) wars more likely to occur in countries that fought violently for their independence. Rural insurgencies legitimated the use of violence as a form of political expression.



# The logic behind the second mechanism was clearly outlined in Nyerere in 1967...

*It is clear that the independence campaign has had great influence on [current] attitudes [in] independent Tanzania. TANU's emphasis on the morality of its case, and its stress on peaceful methods, has created among the people certain expectations about the actions of their independent nation and its leadership. TANU called for equality; our people now expect it [...] We called for equality of opportunity; our people are now critical that this does not exist. It is these moral expectations which create both the problems and the opportunities in the very different circumstances of the post-independence period in Tanzania.*

# Potential Mechanisms: Social Movements & Institutions

PANEL A: SOCIAL MOVEMENTS DURING THE 1960s

	<u>Attempted Coups</u>		<u>Armed Rebellions</u>		<u>Demonstrations</u>		<u>Workers Strikes</u>	
Rural insurgency	0.28 (0.64)	5.21** (2.13)	0.42 (0.50)	1.97** (0.96)	-1.22** (0.60)	-2.18* (1.16)	-1.55*** (0.39)	-1.48** (0.70)
Geographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls?		✓		✓		✓		✓
N	29	29	29	29	29	29	29	29
Pseudo R <sup>2</sup>	0.19	0.42	0.34	0.42	0.26	0.48	0.32	0.37

PANEL B: INSTITUTIONAL OUTCOMES DURING THE COLD WAR

	<u>Competitiveness</u>		<u>Direct Legislature</u>		<u>Exec. constraints</u>		<u>Direct President</u>	
Rural insurgency	-0.41 (0.25)	-0.41 (0.26)	-0.10 (0.08)	-0.14 (0.09)	-0.27 (0.50)	-0.09 (0.46)	-0.06 (0.18)	-0.05 (0.22)
Geographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls?		✓		✓		✓		✓
N	42	42	41	41	42	42	34	34
R <sup>2</sup>	0.38	0.59	0.29	0.39	0.13	0.66	0.18	0.50
$\sigma$	0.77	0.67	0.23	0.23	1.61	1.09	0.47	0.41

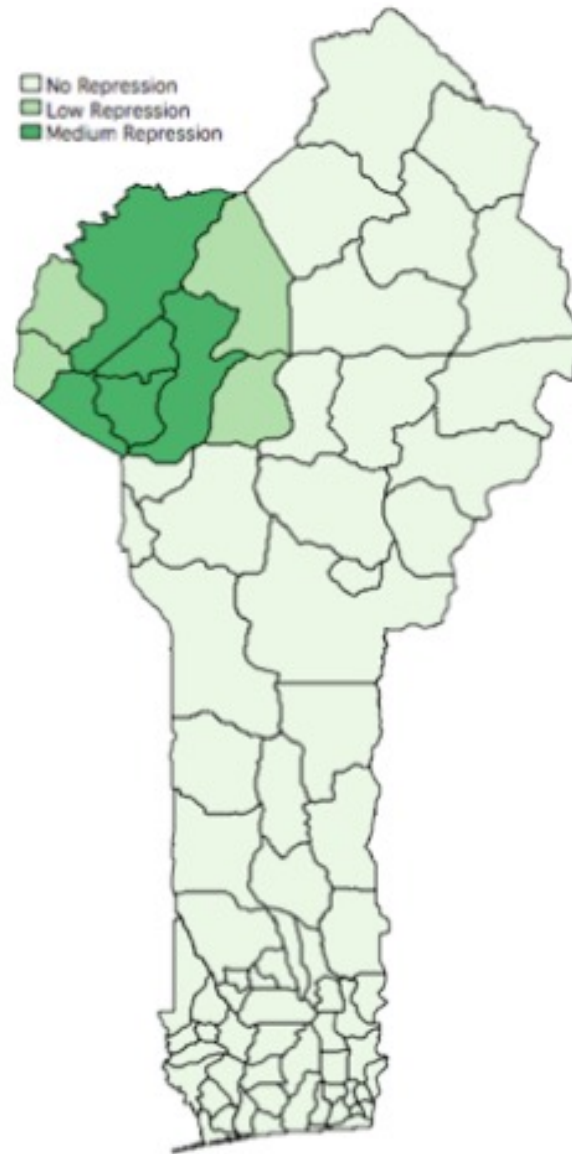
# Mediating Effect of Social Movements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rural Insurgency	-0.15** (0.06)	-0.16** (0.06)	-0.11* (0.06)	-0.11 (0.07)	-0.21*** (0.07)	-0.21** (0.08)	-0.18** (0.08)	-0.15* (0.08)
Attempted Coups 1960s		-0.04 (0.04)		-0.07** (0.03)		-0.07 (0.05)		-0.10*** (0.03)
Armed Rebellions 1960s		-0.03 (0.03)		-0.03 (0.04)		-0.02 (0.04)		-0.03 (0.05)
Demonstrations 1960s			0.00 (0.01)	0.00 (0.01)			-0.02 (0.02)	-0.02 (0.02)
Workers Strikes 1960s			0.02*** (0.01)	0.02*** (0.01)			0.03*** (0.01)	0.03*** (0.01)
<i>N</i>	29	29	29	29	29	29	29	29
<i>R</i> <sup>2</sup>	0.15	0.19	0.27	0.36	0.20	0.24	0.35	0.43
<i>σ</i>	0.17	0.18	0.17	0.16	0.21	0.22	0.20	0.19

# Further Evidence (from Afrobarometer): Support for Violence and One-party Rule

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<u>SUPPORT FOR VIOLENCE</u>				<u>SUPPORT ONE-PARTY RULE</u>			
Rural insurgency	0.06* (0.03)	0.36* (0.19)	0.06* (0.03)	0.35* (0.19)	0.09** (0.04)	0.48** (0.22)	0.08** (0.03)	0.48** (0.20)
Individual controls?			✓	✓			✓	✓
Estimation	LPM	Logit	LPM	Logit	LPM	Logit	LPM	Logit
N	23,545	23,545	22,340	22,340	70,143	70,143	66,207	66,207
R <sup>2</sup>	0.01		0.01		0.01		0.04	
σ	0.39		0.39		0.41		0.40	

# Micro-level Evidence





# Alternative Mechanism

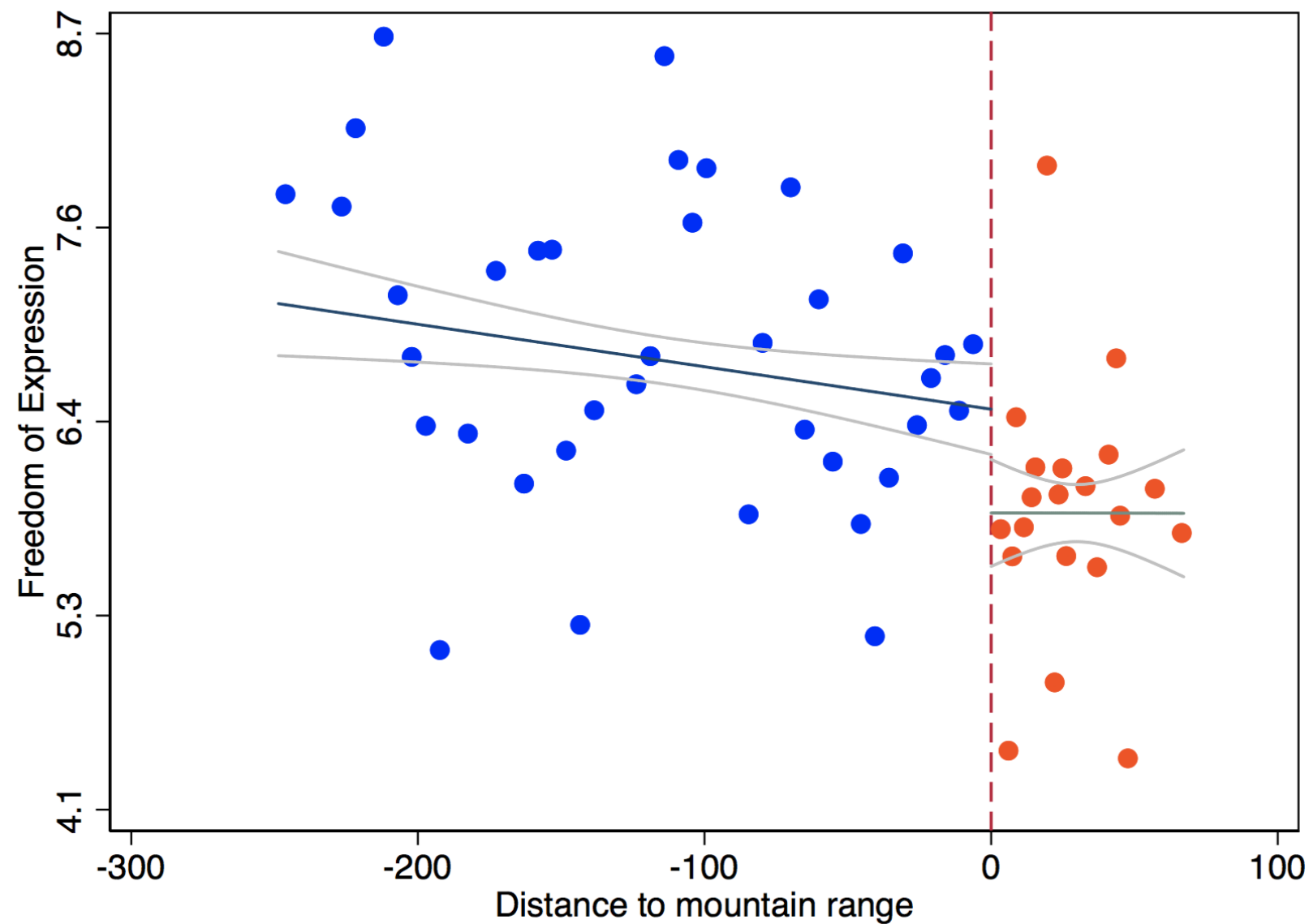
The Long-Term Effects of Colonial Repression on Political Attitudes in Madagascar (García-Ponce and Wantchekon, 2018): **past violence induces change in behavior e.g., self-censoring (lower level of freedom of expression)**

# RD Estimates

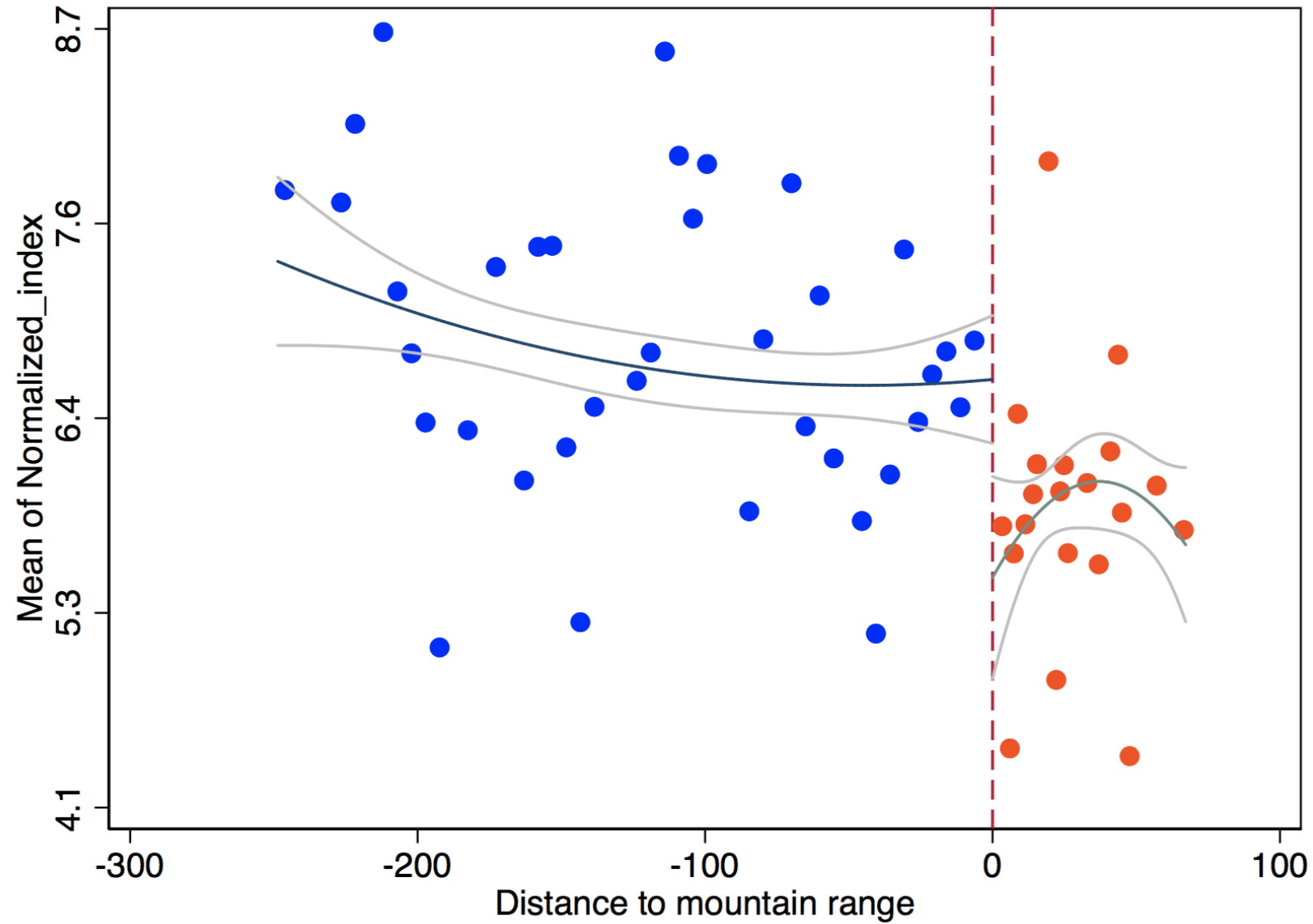
DV: Freedom of Expression	Model 5	Model 6	Model 7	Model 8
Effect of Treatment	-1.49	-0.86	-0.94	-1.13
Standard error	0.41	0.46	0.50	0.54
Individual controls	-	✓	✓	✓
District-level controls	-	-	✓	✓
Province fixed effects	-	-	-	✓
Observations	166	165	165	165

*\*\* The results confirm the existence of a negative and statistically significant treatment effect. The results are robust across specifications that add or remove different subsets of control variables.*

# RD Graphic Analysis



# RD Graphic Analysis



# Summary of Findings and Contribution (1)

- Democratic culture in Africa can be traced back to the **legacy of the independence movements**.
  - Countries that experienced **rural anti-colonial insurgencies** tend to be either **autocratic or unstable democracies**.
  - In contrast, those that experienced **urban anti-colonial movements** tend to have **stable democracies**.
- The effect is stronger when introducing a measure of conflict intensity.
- Land or resource conflicts negatively affect democracy, regardless of the type of insurgency.
- One potential channel of causality is the strengthening of civil liberties prior to democratization.



# Summary of Findings and Contribution (2)

1. **Path dependence.** Significant historical events can generate path-dependency and shape future institutions and norms of behavior (Arthur 1994; Pierson 2000).
2. **Critical juncture.** Events at critical historical junctures can lead to divergent political development paths (Acemoglu et al 2009). In our case, the critical juncture for democratic change in Africa is the particular form of its independence movements.
3. **Social movements and democratic culture.** The nature of social movements can facilitate or inhibit the emergence of civil liberties and liberal democracy (Dahl 1971).

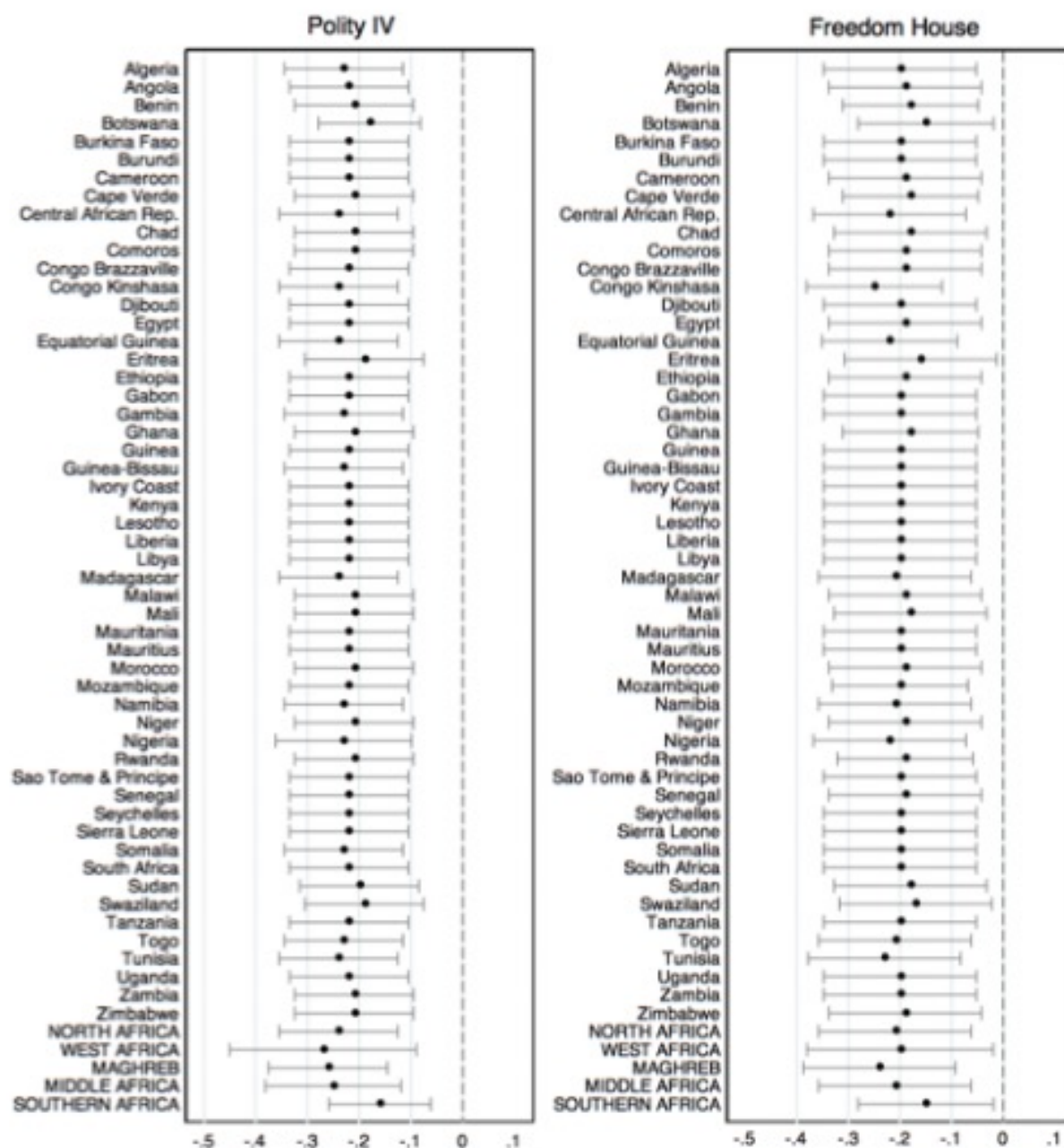
# Summary of Findings and Contribution (3)

- The repression of the 1947 Madagascar revolt has negatively affected people's willingness to express themselves freely
- The mechanism through which this legacy operates may be cultural, rather than institutional
  - Persistence of fears associated with engagement in politics
- Future work: impacts on turnout and political preferences, heterogeneity by profession and education level
  - Extension to similar events: Bamileke War (Cameroon).

## Sensitivity to Specific Countries and Subregions

- One legitimate concern is that some countries are unquestionably either rural or urban, but other cases are not clean cut (e.g., Algeria).
- We evaluate the influence of individual cases and subsets (subregions) by estimating the effect of rural insurgency in the absence of each case or subset of cases.
- Our results hold statistically significant regardless of which country or subregion –North Africa, Maghreb, West Africa, Middle Africa, or Southern Africa– is dropped from the analysis.

# Sensitivity to Specific Countries and Subregions, cont'd



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# Potential Violations of the Exclusion Restriction?

- To satisfy the exclusion restriction, rough terrain should affect the post-1990 average level of democracy only through its effect on the adoption of rural insurgency as a means to achieve independence.
- Alternative accounts:
  - 1 Terrain  $\rightarrow$  Income  $\rightarrow$  Democracy
  - 2 Terrain  $\rightarrow$  Post-independence violence  $\rightarrow$  Democracy



## Falsification Exercises

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	PRE-1990 GDP		PRE-1990 CIV. WAR		ETHNIC FRAC.		RELIGIOUS FRAC.	
Rough terrain	-0.03 (0.06)	0.01 (0.07)	0.04 (0.03)	0.04 (0.04)	-0.02 (0.02)	0.01 (0.02)	0.03 (0.02)	0.01 (0.02)
Geographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Colonial controls?		✓		✓		✓		✓
<i>N</i>	43	43	42	42	42	42	42	42
<i>R</i> <sup>2</sup>	0.58	0.84	0.26	0.52	0.62	0.80	0.68	0.76
<i>σ</i>	0.58	0.39	0.26	0.23	0.17	0.13	0.14	0.14

## Terrain Doesn't Explain Conflict after Independence

	(1)	(2)	(3)	(4)	(5)	(6)
	<u>CIVIL WAR</u>		<u>"ETHNIC" WAR</u>		<u>CIVIL WAR (COW)</u>	
Prior war	-1.30* (0.68)	-1.61** (0.68)	-1.21* (0.68)	-1.51** (0.68)	-2.29** (0.90)	-2.65*** (0.91)
Per capita income	-0.47 (0.36)	-0.55 (0.41)	-0.56 (0.40)	-0.66 (0.45)	-1.93** (0.87)	-2.41*** (0.92)
log(population)	0.37* (0.22)	0.56** (0.24)	0.38* (0.22)	0.54** (0.24)	0.68* (0.35)	1.16** (0.45)
log(% mountainous)	0.28* (0.17)	-0.05 (0.19)	0.23 (0.17)	-0.05 (0.19)	0.77*** (0.26)	0.24 (0.29)
Rural insurgency		1.44*** (0.52)		1.31** (0.52)		2.44** (1.04)

- The fact that the relationship between rough terrain and civil war onset "goes away" after controlling for rural insurgency may reflect that rough terrain affects civil war onset mostly through this intermediate outcome.

# Sensitivity to Non-perfect Exogeneity

- Let's define a parameter  $\gamma$  that reflects how close the exclusion restriction is to being satisfied in the following model:

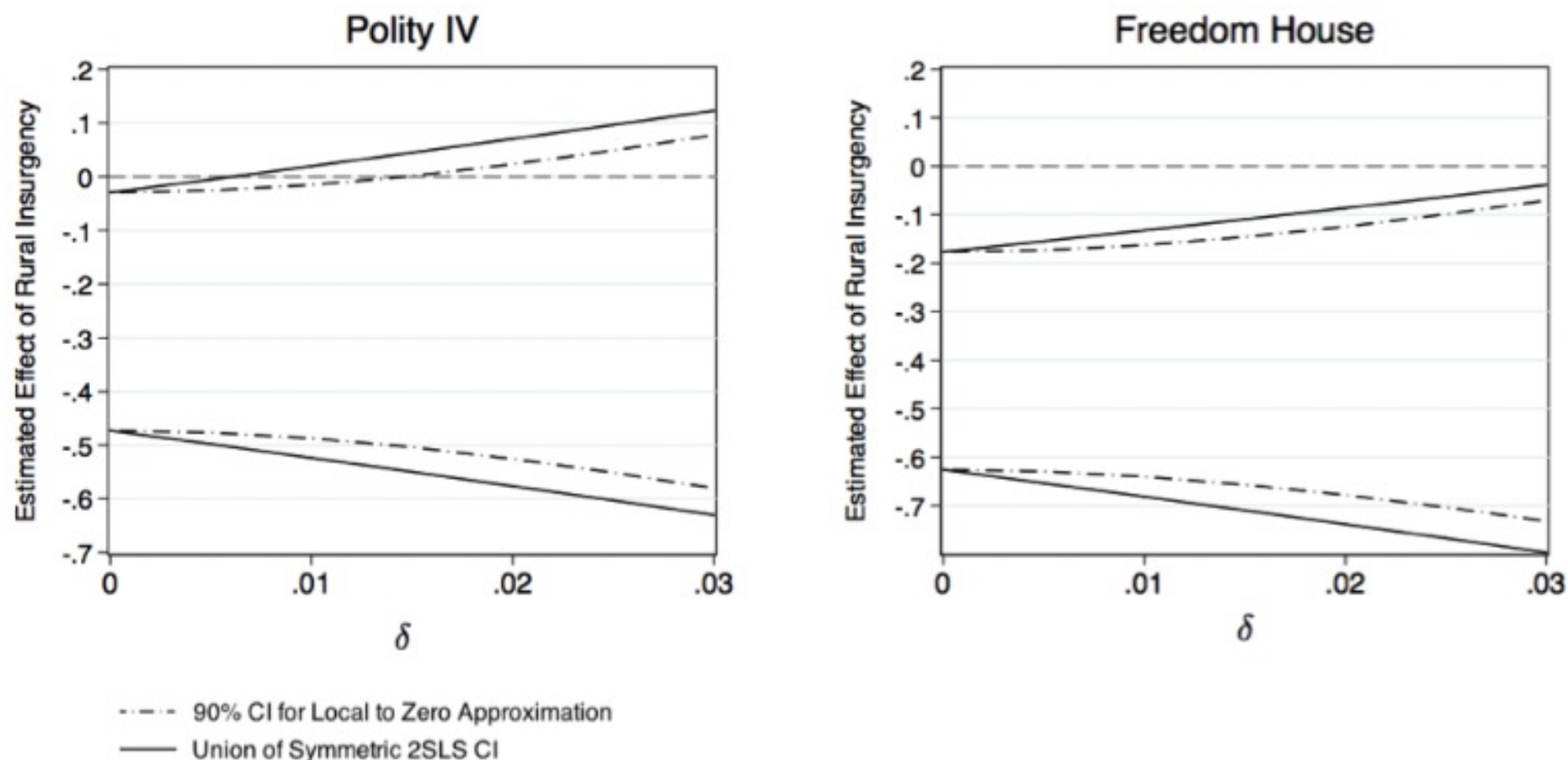
$$Y = X\beta + Z\gamma + \varepsilon$$

- The IV exclusion restriction is equivalent to the dogmatic prior belief that  $\gamma$  is identically 0.
- Conley et al. (2012) define “plausible exogeneity” as having prior information that implies  $\gamma$  is near 0 but not exactly 0. This assumption relaxes the exclusion assumption but still provides sufficient structure to allow inference to proceed.

## Sensitivity to Non-perfect Exogeneity, cnt'd

- We can derive analytical bounds for level of endogeneity necessary to overturn results (see Conley et al. 2012).
- We employ two strategies to construct confidence intervals around the treatment parameter while relaxing the exclusion restriction.
- One strategy requires only to specify a range of plausible values for the direct effect of the instrument – without requiring complete specification of a prior distribution. The other strategy treats  $\gamma$  as being “local-to-zero”.

## Sensitivity to Non-perfect Exogeneity, cont'd



- Our results remain statistically significant even assuming large departures from perfect exogeneity.

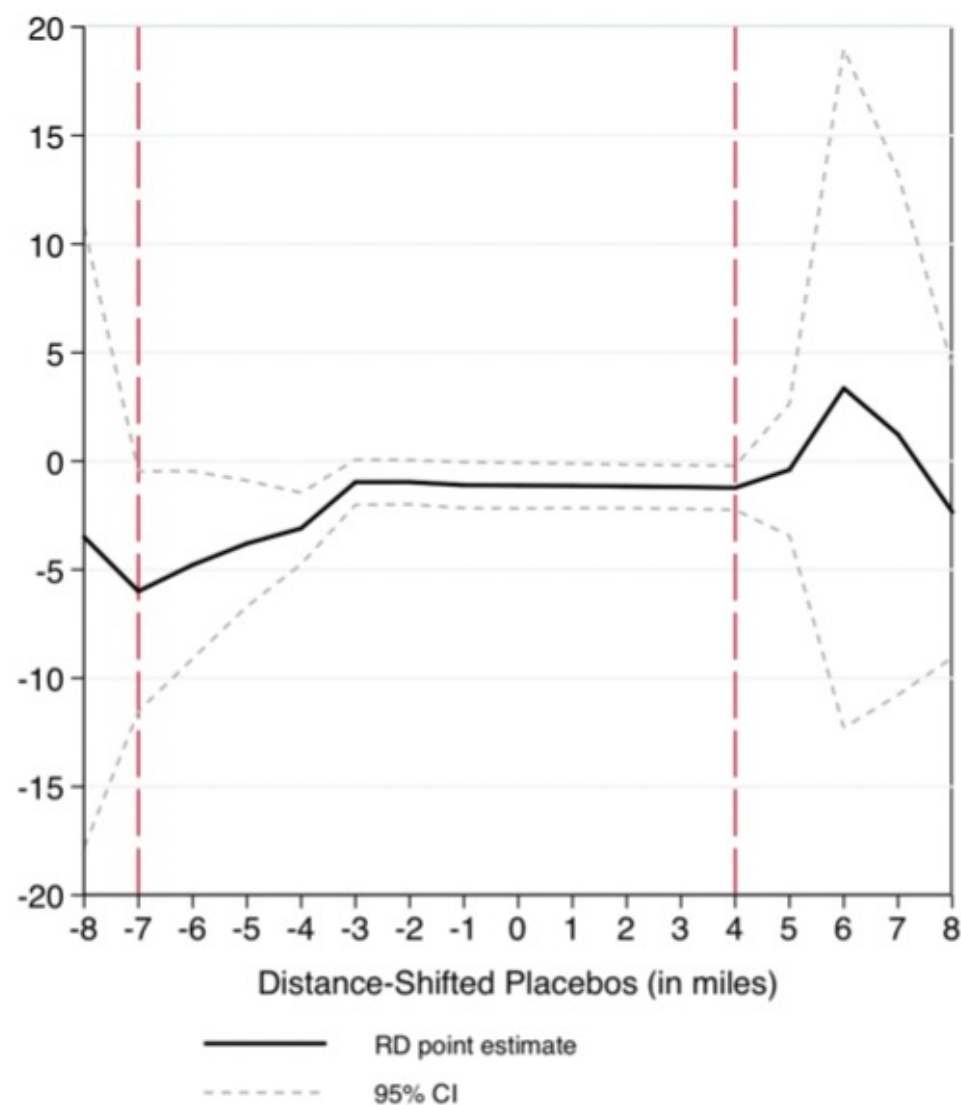


# ANALYZING ROBUSTNESS: ALLOWING MEASUREMENT UNCERTAINTY

	Original Point Estimates			Measurement Uncertainty		
	RD	GenMatch	CEM	RD	GenMatch	CEM
DV: Freedom of Expression	ATE	ATE	ATE	ATE	ATE	ATE
Effect of Treatment	-1.13	-0.85	-0.91	-1.03	-0.60	-0.66
Standard error	0.54	0.21	0.18	0.45	0.19	0.18
Individual controls	✓	✓	✓	✓	✓	✓
District-level controls	✓	✓	✓	✓	✓	✓
Province fixed effects	✓	✓	✓	✓	✓	✓
Observations	165	552	691	165	552	691



# EFFECTS FROM DISTANCE-SHIFTED PLACEBO LAWS



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# PLACEBO DEPENDENT VARIABLES

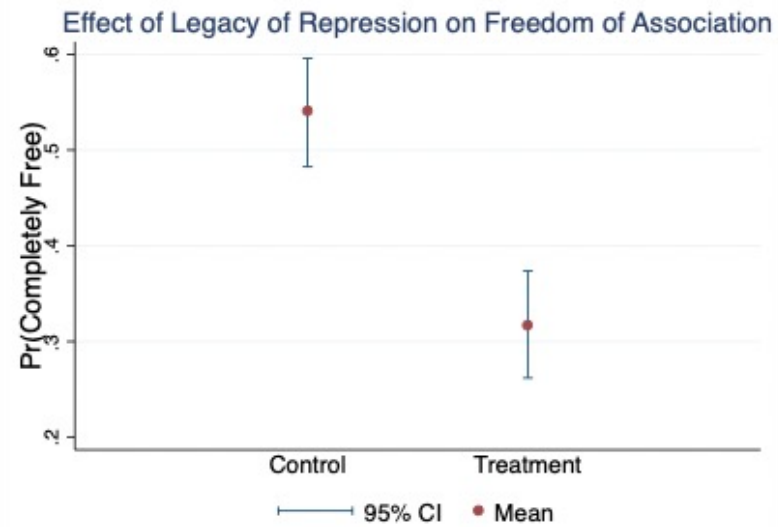
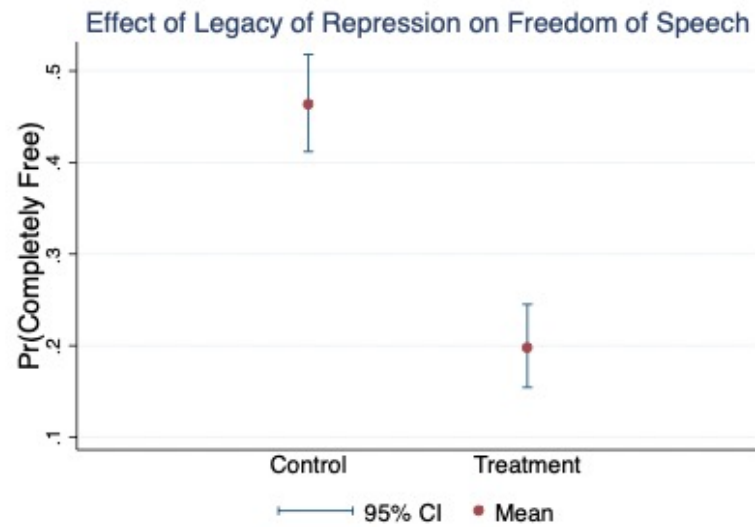
**Panel A: Trust in Institutions**

Placebo DVs:	<b>President</b>	<b>Parliament</b>	<b>Courts</b>	<b>Trad. Leaders</b>	<b>Elect. Inst.</b>	<b>Police</b>
	(Logit)	(Logit)	(Logit)	(Logit)	(Logit)	(Logit)
Treatment	-0.20	-0.74	-0.63	0.28	-1.72	-0.75
Standard error	0.32	0.40	0.45	0.55	0.60	0.41
Observations	659	558	604	231	542	662

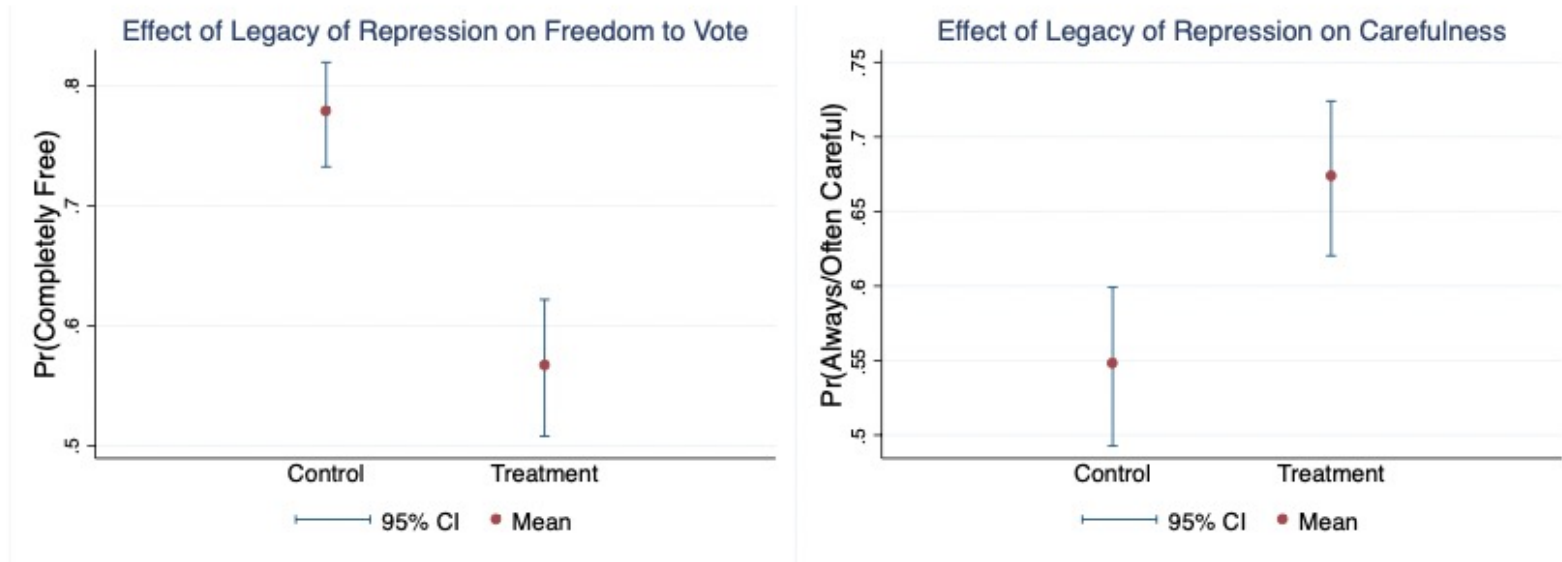
**Panel B: Democratic Views**

Placebo DVs:	<b>Plurality</b>	<b>Supp. Elect.</b>	<b>Supp. Dem.</b>	<b>Patronage</b>	<b>No Term Lim.</b>	<b>Turnout</b>
	(Logit)	(Logit)	(Logit)	(Logit)	(Logit)	(Logit)
Treatment	0.07	-0.42	0.37	-0.084	0.25	0.08
Standard error	0.27	0.34	0.22	0.22	0.25	0.24
Observations	616	647	509	647	610	693

# COMPONENTS OF THE INDEX



# COMPONENTS OF THE INDEX



# COMPONENTS OF THE INDEX

