

ONLINE APPENDIX TO:
“CRITICAL JUNCTURES: INDEPENDENCE
MOVEMENTS AND DEMOCRACY IN AFRICA”

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A Robustness to Pre-colonial Institutions, Ethnic Partitioning, and Settler Mortality

We have shown that the relationship between rural insurgency and democracy is empirically robust. However, there is a major challenge to causal identification in the relationship between the type of dependence movement and democracy: rural insurgency and urban protest countries may differ in ways that are correlated with both democracy and the probability of having experienced a particular kind of anti-colonial movement. One such possibility is that the degree of democratization achieved by pre-colonial or colonial societies explains both the type of anti-colonial movement and the type of institutional arrangement after independence. In other words, the adoption of rural insurgency as a form of political dissent during colonial times could be endogenous to the existence of past democratic institutions, experiences, or norms of behavior. In fact, recent work by [Michalopoulos and Papaioannou \(2013\)](#) provides empirical evidence that pre-colonial ethnic political centralization is a strong predictor of regional development in Africa.

Table A2 shows that our main result—the effect of rural insurgency on democracy—is robust to the inclusion of a measure of “pre-colonial institutions,” which we define as the number of jurisdictional hierarchies at and beyond the local community during pre-colonial times, based on [Murdock \(1959\)](#)’s classification. The sample size in these regressions is smaller because [Murdock \(1959\)](#)’s coding is only available for 40 countries, which is why we exclude this variable from most of our empirical analysis.¹

We also show that the effect of the type of anti-colonial insurgency on democracy remains virtually identical when controlling for the ethnic partitioning that occurred during the Scramble for Africa, which we measure using the country-level index of state artificiality employed by [Michalopoulos and Papaioannou \(2016\)](#). These results are reported in Table A3. Similarly, following [Acemoglu et al. \(2008\)](#), it could be the case that democracy is related to settler mortality, which may capture the degree of inclusiveness of colonial institutions and therefore be correlated with the type of independence movement. It is thus important to control for the cross-sectional variation in settler mortality. Table A4 shows that our estimates remain similar in magnitude and significant in most specifications when controlling for an index of settler mortality and the full set of controls included in the main results.²

¹Compared to column (5) of Table 2, we lose almost one-fifth of our sample by including this variable in the analysis. More specifically, we lose the following countries: Cape Verde, Comoros, Congo, Eritrea, Gambia, Mauritius, Sao Tome & Principe, Seychelles, and Swaziland.

²Again, note the sample size in these regressions is smaller because the data on settler mortality are only available for 34 countries, which is why we exclude this variable from the remainder of the analysis.

B Coefficient Stability

Despite the fact that the statistical association between the type of independence movement and democracy is robust to numerous potential confounders, one could still argue that some unobserved, or hard-to-account for, characteristics of the countries explain the association between these two variables. Although it is impossible to test whether some unobserved factor is spuriously driving this correlation, it is possible to obtain an estimate of how large the bias from unobservables as opposed to observables is. One approach is to perform the test developed by [Altonji, Elder and Taber \(2008\)](#), which estimates the degree of bias from different degrees of selection on unobservables. In a recent study, [Oster \(Forthcoming\)](#) demonstrates that the approach developed by [Altonji, Elder and Taber \(2008\)](#) is not sufficiently conservative and proposes an extension of such method to calculate treatment effects and the relative degree of selection under proportional selection of observables and unobservables in linear models. We employ the method proposed by [Oster \(Forthcoming\)](#) using our benchmark specification, which includes the full set of geographic and colonial controls. As shown in Figure A2 in the Online Appendix, even when the proportion of selection on unobservables is large, our main estimates remain negative and fairly stable.³

C Sensitivity Analysis of Instrumental Variables Estimates

We start by reporting the reduced-form estimates in Table A8, which indicate that higher levels of rough terrain are significantly associated with less democracy, controlling for different subsets of covariates. This is the first piece of evidence suggesting that terrain conditions affect democratization. The first- and second-stage estimates are reported in Tables 3 and 4, respectively, in the paper. Table A9 reports the results from the falsification exercises described in the paper.

Following [Conley, Hansen and Rossi \(2012\)](#), we employ two strategies to construct confidence intervals around the treatment parameter while relaxing the exclusion restriction in our instrumental variables regressions. The first 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- to compute the union of symmetric intervals⁴. The second strategy uses a large-sample approximation that models uncertainty about the direct effect of the instrument as being the same order of magnitude as sampling uncertainty. The econometric jargon for this strategy is that the direct effect of the instrument is treated as being "local-to-zero."⁵ We use different priors for the direct effect of rough terrain on democracy. These priors are indexed by the parameter δ .

³According to our estimates, selection on unobserved characteristics would need to be between 2.6 and 4.8 times larger than selection on observables such that the effect of rural insurgency is equal to zero.

⁴See [Conley, Hansen and Rossi \(2012, p. 262\)](#) for additional details about the "Union of Confidence Intervals with γ Support Assumption."

⁵See [Conley, Hansen and Rossi \(2012, p. 264\)](#) for additional details about " γ Local-to-Zero Approximation."

Figure A3 visualizes the results of the sensitivity analysis using the local-to-zero approximation method.⁶ The set of dashed lines denote 95% confidence intervals around the estimated effect of rough terrain on democracy through rural insurgency. Figure A4 shows the results of the sensitivity analysis using the union of symmetric 2SLS 95% confidence intervals. We observe that the IV estimates remain statistically significant even with substantial departures from the assumption that the direct effect of the instrument is zero. The direct effect of rough terrain on democracy should be between 40 and 50 percent of the estimated effect in the reduced-form regressions so that our results become insignificant.

D Additional Evidence: Replicating Fearon and Laitin (2003) within Africa

A key part of our argument is that rough terrain helps explain why some countries decided to fight colonialism via rural insurgency, but it does not necessarily explain why the use of violence as a form of political expression and conflict resolution is perpetuated during the post-independence period. Evidence from the relevant political science literature suggests that the presence of mountainous terrain is positively correlated with the onset of civil war (Buhaug and Gates, 2002; Fearon and Laitin, 2003; Hegre and Sambanis, 2006). To further examine the relationship between rough terrain and conflict onset within Africa, we have replicated the main results from Fearon and Laitin (2003, p. 84), restricting the sample to the subset of African countries. The results shown in columns (1) and (5) of Table A10 indicate that rough terrain—defined as the log of the percentage of country area covered by mountains⁷—is positively correlated with two different measures of civil war onset over the 1960-1999 period.⁸ Note, however, that the results are not statistically significant for “ethnic” war (see column (3)).⁹

In columns (2), (4) and (6) of Table A10, we estimate the same regression models as in columns (1), (3), and (5), but with the rural insurgency dummy ($RURAL_i$). The results indicate that the coefficient on rural insurgency is positive and statistically significant across specifications, whereas the estimated effect of rough terrain becomes statistically insignificant. Furthermore, Table A11 shows that these results remain virtually identical if we restrict the time period of analysis to 1960–1989. Within this estimation framework, the type of independence movement—i.e., rural insurgency—should be interpreted as an intermediate outcome between rough terrain and the endpoint outcome—i.e., civil war onset after independence. Therefore, the fact that the relationship between rough terrain and civil war onset “goes away” after controlling for the intermediate outcome

⁶All estimations were performed using the full set of controls.

⁷To be consistent with variable names from Fearon and Laitin (2003), the rough terrain variable is reported as *log(% mountainous)*.

⁸In column (1), the dependent variable is a dummy variable for civil war onset, coded as “1” for all country-years in which a civil war started and “0” for all others, based on the original data collected by Fearon and Laitin (2003). In column (5), the dependent variable is a dummy for civil war onset, as defined in the Correlates of War (COW) project.

⁹In this model, the dependent variable marks the onset of wars coded as “ethnic” or “partially ethnic” by Fearon and Laitin (2003).

may be indicative that post-independence civil wars are shaped, to a large extent, by the legacy of rural insurgency independence movements.

E Afrobarometer Analysis

We provide additional empirical evidence in support of the behavioral hypothesis using survey data from the Afrobarometer. We present the results from a series of regressions based on the most recent wave of the Afrobarometer (Round 6), which measured political attitudes in 33 African countries between 2014 and 2015. Specifically, we estimate the effect of rural insurgency on attitudes toward democracy¹⁰, and support for one-party rule¹¹. We also use the Afrobarometer Round 3, which was conducted in 18 countries 2005 and in which respondents were asked whether they support the use of violence in politics. The estimated equation is of the following form:

$$y_{jc} = \beta_0 + \beta_1 RURAL_c + \mathbf{X}'_j \zeta + \varepsilon_{jc} \quad (1)$$

where y_{jc} is the outcome of interest, i.e., a dummy equal to 1 if respondent j from country c supports the use of violence in politics (or supports one-party rule). $RURAL$ is an indicator that equals 1 if the respondent lives in a country that is coded as having a legacy of rural insurgency; \mathbf{X}' is a vector of individual controls that includes age of the respondent, a gender indicator variable, an indicator variable that equals 1 if the respondent lives in a rural location, five fixed effects for the respondent's living conditions, and a series of fixed effects for the ethnicity of the respondent and their highest level of educational attainment. Since our independent variable of interest (rural insurgency) only varies across countries, we cluster the standard errors in all regressions at the country level.

The results shown in Table A12 indicate that rural insurgency is negatively correlated with support for democracy and positively correlated with support for one-party rule and support for violence. These results are robust to the inclusion of individual controls and statistically significant at the conventional levels across estimation methods (LPM and Logit). The most conservative estimates show that, *ceteris paribus*, the probability of reporting democracy as the preferable kind of government decreases 11% if a respondent is from a country with a legacy of rural insurgency. Likewise, the probability of agreeing to have only one party in elections increases by 23% if a respondent is a from a rural insurgency country.

¹⁰In the Afrobarometer Round 6, respondents were asked to choose which of the following statements was closest to their view: (A) "Democracy is preferable to any other kind of government," (B) "In some circumstances, a non-democratic government can be preferable," or (C) "For someone like me, it doesn't matter what kind of government we have." We have recoded this variable as an indicator that equals 1 if "agree with A" and 0 otherwise.

¹¹Round 6 of the Afrobarometer asked the following question: "There are many ways to govern a country. Would you disapprove or approve of the following alternative? Only one political party is allowed to stand for election and hold office." Answer options included: (i) strongly disapprove, (ii) disapprove, (iii) neither approve nor disapprove, (iv) approve, and (v) strongly approve. We recoded this variable as an indicator equal to 1 if the respondent approves or strongly approves one-party rule, and 0 otherwise.

While these results are merely indicative of a correlation between the type of independence movement and the extent to which citizens legitimate autocracies, they are consistent with the idea that the legacy of rural insurgencies erodes democratic norms, facilitating the emergence of autocratic regimes.

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F Tables

Table A1: RURAL INSURGENCY & DEMOCRACY—INTERACTION MODELS WITH SUBREGION DUMMIES (OLS AND 2SLS ESTIMATES)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rural insurgency	-0.43*** (0.13)	-0.48*** (0.14)	-0.58*** (0.17)	-0.45** (0.20)	-0.39*** (0.11)	-0.45** (0.20)	-0.45*** (0.16)	-0.53* (0.31)
Eastern Africa	0.07 (0.18)	-0.26 (0.29)	0.07 (0.21)	-0.07 (0.47)	0.05 (0.16)	-0.18 (0.36)	0.10 (0.20)	-0.27 (0.67)
West Africa	-0.15 (0.16)	-0.37 (0.32)	-0.26 (0.17)	-0.49* (0.25)	-0.05 (0.18)	-0.19 (0.40)	-0.14 (0.18)	-0.55 (0.37)
Mid Africa	-0.49** (0.21)	-0.78** (0.34)	-0.45* (0.25)	-0.75* (0.39)	-0.53** (0.24)	-0.71* (0.40)	-0.27 (0.23)	-0.69 (0.51)
Southern Africa	0.28 (0.25)	0.27 (0.21)	0.45** (0.23)	0.42 (0.32)	0.28 (0.29)	0.21 (0.28)	0.40* (0.22)	0.18 (0.54)
East Afr. × Rural ins	0.20 (0.18)	0.21 (0.24)	0.08 (0.31)	0.01 (0.57)	0.21 (0.14)	0.23 (0.32)	0.13 (0.24)	0.51 (0.83)
West Afr. × Rural ins	0.21 (0.15)	0.10 (0.19)	-0.29 (0.62)	0.53 (0.56)	0.21 (0.15)	0.13 (0.30)	0.30 (0.57)	1.28 (0.98)
Mid Afr. × Rural ins	0.43** (0.18)	0.28 (0.20)	0.20 (0.26)	0.30 (0.35)	0.43** (0.18)	0.34 (0.27)	0.01 (0.23)	0.47 (0.47)
South Afr. × Rural ins	0.00 (0.32)	-0.17 (0.26)	-0.26 (0.29)	-0.39 (0.34)	0.07 (0.35)	-0.03 (0.30)	-0.30 (0.25)	-0.10 (0.58)
Geographic controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Colonial controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Contemporaneous controls?		Yes		Yes		Yes		Yes
Estimation	OLS	OLS	2SLS	2SLS	OLS	OLS	2SLS	2SLS
N	47	43	47	43	47	43	47	43
R ²	0.62	0.80	0.18	0.67	0.66	0.74	0.50	0.33
σ	0.20	0.17	0.22	0.13	0.22	0.21	0.19	0.21

Notes: Robust standard errors are shown in parentheses. In columns, 3, 4, 7, and 8, *Rural insurgency* and its interactions with sub-region dummies are instrumented by *Rough terrain* and *Rough terrain* interacted with subregion dummies, respectively. *Rough terrain* is measured as the natural log of the percent of a country's area covered by mountains. Geographic, colonial, and contemporaneous controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A2: RURAL INSURGENCY & DEMOCRACY—ACCOUNTING FOR PRE-COLONIAL INSTITUTIONS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rural insurgency	-0.12* (0.07)	-0.16*** (0.06)	-0.16* (0.08)	-0.29*** (0.09)	-0.15* (0.08)	-0.20*** (0.07)	-0.15 (0.09)	-0.26** (0.10)
Pre-colonial institutions	-0.13** (0.06)	-0.17*** (0.06)	-0.15* (0.08)	-0.11 (0.09)	-0.15** (0.07)	-0.23*** (0.07)	-0.19** (0.08)	-0.17* (0.09)
Geographic controls?		Yes	Yes	Yes		Yes	Yes	Yes
Colonial controls?			Yes	Yes			Yes	Yes
Contemporaneous controls?				Yes				Yes
<i>N</i>	40	40	40	38	40	40	40	38
<i>R</i> ²	0.16	0.45	0.50	0.63	0.15	0.50	0.56	0.65
σ	0.20	0.18	0.19	0.18	0.24	0.21	0.21	0.21

Notes: Estimates are based on OLS regressions. Robust standard errors are shown in parentheses. The *pre-colonial institutions* variable is a country-level measure of the average number of jurisdictional hierarchies at the local and beyond the local community during pre-colonial times, based on Murdock's classification (1959). Geographic, colonial, and contemporaneous controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A3: RURAL INSURGENCY & DEMOCRACY—ACCOUNTING FOR ARTIFICIAL BORDERS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rural insurgency	-0.13* (0.07)	-0.16** (0.06)	-0.18** (0.08)	-0.32*** (0.11)	-0.14* (0.08)	-0.19** (0.08)	-0.17* (0.09)	-0.28** (0.12)
Split	-0.05 (0.15)	0.14 (0.20)	0.14 (0.19)	0.08 (0.14)	0.05 (0.15)	0.19 (0.23)	0.23 (0.22)	0.17 (0.16)
Geographic controls?		Yes	Yes	Yes		Yes	Yes	Yes
Colonial controls?			Yes	Yes			Yes	Yes
Contemporaneous controls?				Yes				Yes
<i>N</i>	43	43	43	41	43	43	43	41
<i>R</i> ²	0.09	0.38	0.45	0.60	0.08	0.34	0.46	0.56
σ	0.22	0.20	0.20	0.19	0.25	0.23	0.23	0.22

Notes: Estimates are based on OLS regressions. Robust standard errors are shown in parentheses. The *Split* variable is a country-level measure of state artificiality, based on the index constructed by Michalopoulos and Papaioannou (2016). Geographic, colonial, and contemporaneous controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A4: RURAL INSURGENCY & DEMOCRACY—ACCOUNTING FOR SETTLER MORTALITY

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
Rural insurgency	-0.12 (0.08)	-0.16* (0.09)	-0.16* (0.08)	-0.22** (0.09)	-0.16* (0.09)	-0.18* (0.10)	-0.15 (0.10)	-0.20* (0.10)
Settler mortality	-0.02 (0.05)	-0.06 (0.05)	-0.02 (0.05)	-0.05 (0.08)	-0.03 (0.05)	-0.04 (0.06)	-0.01 (0.05)	0.02 (0.09)
Geographic controls?		Yes	Yes	Yes		Yes	Yes	Yes
Colonial controls?			Yes	Yes			Yes	Yes
Contemporaneous controls?				Yes				Yes
<i>N</i>	34	34	34	34	34	34	34	34
<i>R</i> ²	0.08	0.31	0.53	0.71	0.10	0.31	0.58	0.69
σ	0.21	0.21	0.19	0.17	0.24	0.24	0.21	0.20

Notes: Estimates are based on OLS regressions. Robust standard errors are shown in parentheses. The *Settler mortality* variable is a country-level index of settler mortality based on Acemoglu et al (2008). Geographic, colonial, and contemporaneous controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A5: ROUGH TERRAIN & RURAL INSURGENCY—ACCOUNTING FOR PRE-COLONIAL INSTITUTIONS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	DEPENDENT VARIABLE IS RURAL INSURGENCY							
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)
<i>N</i>	40	40	40	40	40	40	40	40
<i>R</i> ²	0.33		0.42		0.38		0.48	
σ	0.43		0.44		0.44		0.46	
Geographic controls?			Yes	Yes			Yes	Yes
Colonial controls?					Yes	Yes	Yes	Yes
Estimation	LPM	Logit	LPM	Logit	LPM	Logit	LPM	Logit

Notes: Estimates are based on Linear Probability Models (LPM) and logistic regressions (Logit). Robust standard errors are shown in parentheses. The *Rough terrain* variable is measured as the natural log of the percent of a country's area covered by mountains. Geographic and colonial controls include those reported in Tables 2 and 3. The *pre-colonial institutions* variable measures the average number of jurisdictional hierarchies at the local and beyond the local community during pre-colonial times, based on Murdock's classification (1959). *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A6: ROUGH TERRAIN & RURAL INSURGENCY—ACCOUNTING FOR ARTIFICIAL BORDERS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DEPENDENT VARIABLE IS RURAL INSURGENCY								
Rough terrain	0.22*** (0.04)	1.20*** (0.39)	0.21*** (0.05)	1.28*** (0.35)	0.22*** (0.06)	1.26*** (0.46)	0.21*** (0.05)	1.93*** (0.46)
Split	-0.19 (0.26)	-1.11 (1.53)	-0.29 (0.50)	-1.57 (3.01)	-0.22 (0.27)	-1.10 (1.34)	-0.38 (0.47)	-2.60 (2.52)
<i>N</i>	43	43	43	43	43	43	43	43
<i>R</i> ²	0.34		0.40		0.37		0.45	
σ	0.42		0.44		0.44		0.46	
Geographic controls?			Yes	Yes			Yes	Yes
Colonial controls?					Yes	Yes	Yes	Yes
Estimation	LPM	Logit	LPM	Logit	LPM	Logit	LPM	Logit

Notes: Estimates are based on Linear Probability Models (LPM) and logistic regressions (Logit). Robust standard errors are shown in parentheses. The *Rough terrain* variable is measured as the natural log of the percent of a country's area covered by mountains. The *Split* variable is a country-level measure of state artificiality, based on the index constructed by Michalopoulos and Papaioannou (2016). Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A7: ROUGH TERRAIN & RURAL INSURGENCY—ACCOUNTING FOR SETTLER MORTALITY

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DEPENDENT VARIABLE IS RURAL INSURGENCY								
Rough terrain	0.22*** (0.05)	1.27** (0.50)	0.19*** (0.06)	1.89*** (0.72)	0.23*** (0.06)	1.53*** (0.56)	0.23** (0.09)	2.06* (1.10)
Settler mortality	-0.01 (0.06)	-0.07 (0.39)	-0.08 (0.06)	-1.16* (0.62)	-0.03 (0.06)	-0.51 (0.55)	-0.07 (0.08)	-1.31 (0.96)
<i>N</i>	34	34	34	34	34	34	34	34
<i>R</i> ²	0.42		0.57		0.47		0.62	
σ	0.39		0.38		0.41		0.41	
Geographic controls?			Yes	Yes			Yes	Yes
Colonial controls?					Yes	Yes	Yes	Yes
Estimation	LPM	Logit	LPM	Logit	LPM	Logit	LPM	Logit

Notes: Estimates are based on Linear Probability Models (LPM) and logistic regressions (Logit). Robust standard errors are shown in parentheses. The *Rough terrain* variable is measured as the natural log of the percent of a country's area covered by mountains. The *Settler mortality* variable is a country-level index of settler mortality based on Acemoglu et al (2008). Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A8: REDUCED-FORM ESTIMATES: ROUGH TERRAIN AND DEMOCRACY

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	POST-1990 POLITY IV				POST-1990 FREEDOM HOUSE			
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?		Yes		Yes		Yes		Yes
Colonial controls?			Yes	Yes			Yes	Yes
<i>N</i>	47	47	47	47	49	49	47	47
<i>R</i> ²	0.06	0.18	0.21	0.33	0.10	0.32	0.40	0.49
σ	0.24	0.24	0.23	0.23	0.27	0.26	0.23	0.23

Notes: Estimates are based on OLS regressions. Robust standard errors are shown in parentheses. *Rough terrain* is measured as the natural log of the percent of a country's area covered by mountains. Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A9: FALSIFICATION EXERCISES

	(1)	(2)	(3)	(4)	(5)	(6)
PANEL A: PRE-1990 INCOME AND GROWTH						
	<i>pre-1990 GDP p.c.</i>			<i>pre-1990 GDP growth</i>		
Rough terrain	-0.06 (0.09)	-0.02 (0.06)	-0.07 (0.05)	-0.19 (0.25)	-0.17 (0.24)	-0.27 (0.32)
Geographic controls?		Yes	Yes		Yes	Yes
Colonial controls?			Yes			Yes
<i>N</i>	43	43	43	43	43	43
<i>R</i> ²	0.01	0.59	0.86	0.02	0.44	0.53
σ	0.81	0.57	0.36	2.14	1.78	1.76
PANEL B: PRE-1990 SOCIAL DIVERSITY						
	<i>pre-1990 Ethnic Frac.</i>			<i>pre-1990 Religious Frac.</i>		
Rough terrain	-0.02 (0.03)	-0.02 (0.02)	0.01 (0.02)	0.02 (0.03)	0.03 (0.02)	0.01 (0.02)
Geographic controls?		Yes	Yes		Yes	Yes
Colonial controls?			Yes			Yes
<i>N</i>	42	42	42	42	42	42
<i>R</i> ²	0.01	0.59	0.80	0.01	0.68	0.76
σ	0.24	0.17	0.13	0.23	0.15	0.14
PANEL C: PRE-1990 VIOLENCE						
	<i>pre-1990 No. of Civil Wars</i>			<i>pre-1990 Civil War Years</i>		
Rough terrain	0.07*** (0.02)	0.04 (0.03)	0.05 (0.04)	0.06*** (0.02)	0.04 (0.02)	0.03 (0.03)
Geographic controls?		Yes	Yes		Yes	Yes
Colonial controls?			Yes			Yes
<i>N</i>	42	42	42	42	42	42
<i>R</i> ²	0.12	0.27	0.52	0.11	0.30	0.54
σ	0.26	0.26	0.23	0.24	0.24	0.21

Notes: Estimates are based on OLS regressions. Panel A: in columns (1)-(3), the dependent variable is the country-level average income per capita between the year of independence and 1989; in columns (4)-(6), the dependent variable is the average GDP growth rate during the same time period. Panel B: in columns (1)-(3), the dependent variable is the average level of ethnic fractionalization between the year of independence and 1989; in columns (4)-(6), the dependent variable is the average level of religious fractionalization during the same period. Panel C: in columns (1)-(3), the dependent variable is the average number of civil wars between the year of independence and 1989; in columns (4)-(6), the dependent variable is the fraction of years that a country was involved in a civil war during the same period. Robust standard errors are shown in parentheses. *Rough terrain* is measured as the natural log of the percent of a country's area covered by mountains. Geographic and colonial controls include those reported in Tables 2 and 3. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A10: ROUGH TERRAIN, RURAL INSURGENCY, AND CIVIL WAR (1960-1999)

	(1)	(2)	(3)	(4)	(5)	(6)
	<u>CIVIL WAR</u>		<u>"ETHNIC" WAR</u>		<u>CIVIL WAR (COW)</u>	
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)
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)
Noncontiguous state	1.70 (1.18)	1.56 (1.20)	1.85 (1.23)	1.69 (1.24)	2.30 (1.48)	1.74 (1.53)
Oil exporter	0.30 (0.70)	0.22 (0.71)	0.11 (0.77)	0.06 (0.78)	2.03** (1.03)	2.30** (1.06)
New state	1.73*** (0.58)	1.71*** (0.58)	1.68*** (0.58)	1.68*** (0.58)	1.63** (0.74)	1.77** (0.78)
Instability	0.70 (0.48)	0.62 (0.48)	0.52 (0.50)	0.46 (0.50)	1.62*** (0.60)	1.40** (0.60)
Democracy	0.02 (0.04)	0.03 (0.04)	0.02 (0.04)	0.03 (0.04)	0.12** (0.05)	0.12** (0.05)
Ethnic fractionalization	0.33 (0.90)	0.77 (0.98)	0.17 (0.91)	0.64 (0.99)	-0.26 (1.17)	-0.37 (1.28)
Religious fractionalization	-0.78 (1.06)	-1.33 (1.10)	-0.57 (1.09)	-1.16 (1.13)	-1.41 (1.50)	-1.68 (1.58)
Constant	-7.22*** (1.93)	-8.95*** (2.16)	-7.06*** (1.97)	-8.60*** (2.18)	-9.62*** (3.28)	-14.00*** (4.36)
N	1,567	1,567	1,527	1,527	1,286	1,286

Notes: This table reproduces the analysis by Fearon and Laitin (2003), but subsetting the sample of countries to the African continent in all specifications. We include the *Rural insurgency* variable in columns (2), (4), and (6). Estimates are based on logistic regressions. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

Table A11: ROUGH TERRAIN, RURAL INSURGENCY, AND CIVIL WAR (1960-1989)

	(1)	(2)	(3)	(4)	(5)	(6)
	<u>CIVIL WAR</u>		<u>"ETHNIC" WAR</u>		<u>CIVIL WAR (COW)</u>	
log(% mountainous)	0.28 (0.20)	-0.24 (0.25)	0.27 (0.20)	-0.23 (0.25)	0.71*** (0.26)	0.12 (0.30)
Rural insurgency		2.11*** (0.73)		2.08*** (0.73)		2.86** (1.14)
Full set of controls?	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	1,008	1,008	978	978	1157	1157

Notes: This table reproduces the analysis by Fearon and Laitin (2003), but subsetting the sample of countries to the African continent and restricting the time period of analysis to 1960–1989 in all specifications. We also include the *Rural insurgency* variable in columns (2), (4), and (6). Estimates are based on logistic regressions. The full set of controls includes those reported in the Table A8. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

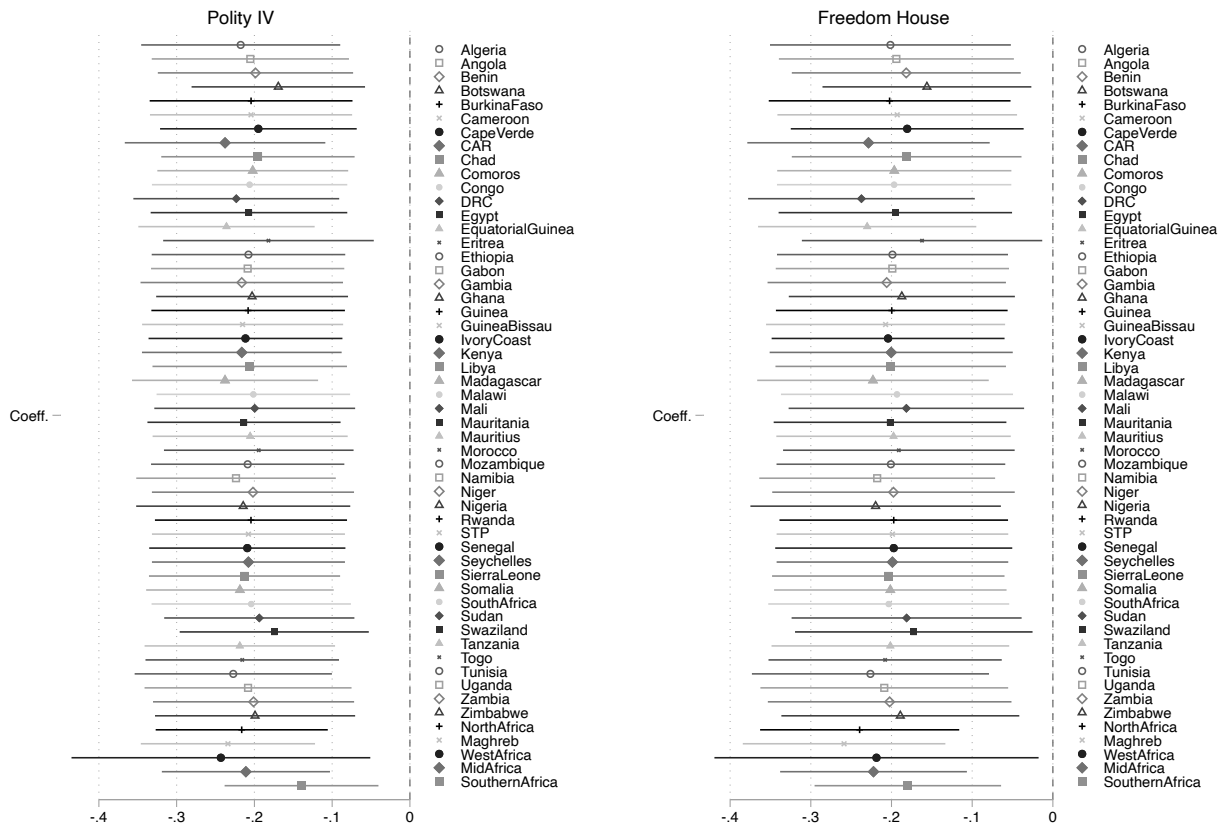
Table A12: SURVEY EVIDENCE: RURAL INSURGENCY AND AUTHORITARIAN VIEWS

	(1)	(2)	(3)	(4)	(5)	(6)
	<u>Support Democracy</u>		<u>Support One-Party Rule</u>		<u>Support Violence</u>	
Rural insurgency	-0.11*** (0.04)	-0.49*** (0.17)	0.23** (0.09)	0.41** (0.17)	0.06** (0.03)	0.40** (0.17)
Individual controls?	Yes	Yes	Yes	Yes	Yes	Yes
Estimation	LPM	Logit	OLS	Ologit	LPM	Logit
<i>N</i>	49,803	49,803	48,633	48,633	24,316	24,316
Countries	33	33	33	33	18	18
R^2	0.05		0.05		0.02	
σ	0.46		1.2		0.38	

Notes: Estimates are based on Linear Probability Models (LPM) and logistic regressions (Logit) when the outcome variable is *Support Democracy* and *Support Violence*. Estimates are based on OLS and ordered logistic regressions (Ologit) when the outcome variable is *Support One-Party Rule*. Robust standard errors clustered at the country level are shown in parentheses. Individual controls include age of the respondent, a gender indicator variable, an indicator variable that equals one if the respondent lives in a rural location, five fixed effects for the respondent's living conditions, ten fixed effects for the educational attainment of the respondent, and twelve fixed effects for the ethnicity of the respondent. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.

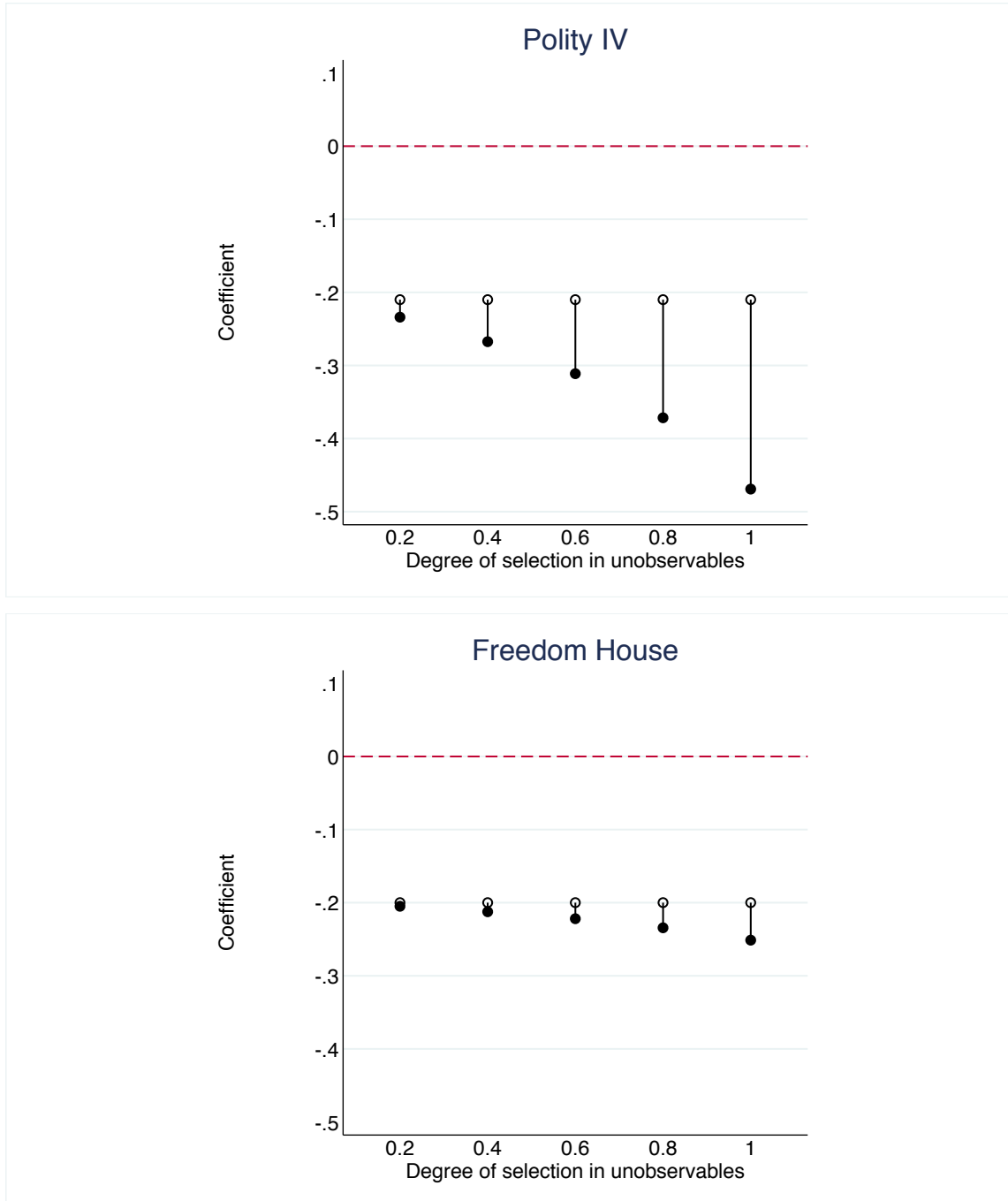
G Figures

Figure A1: SENSITIVITY TO THE EXCLUSION OF SPECIFIC COUNTRIES AND SUBREGIONS



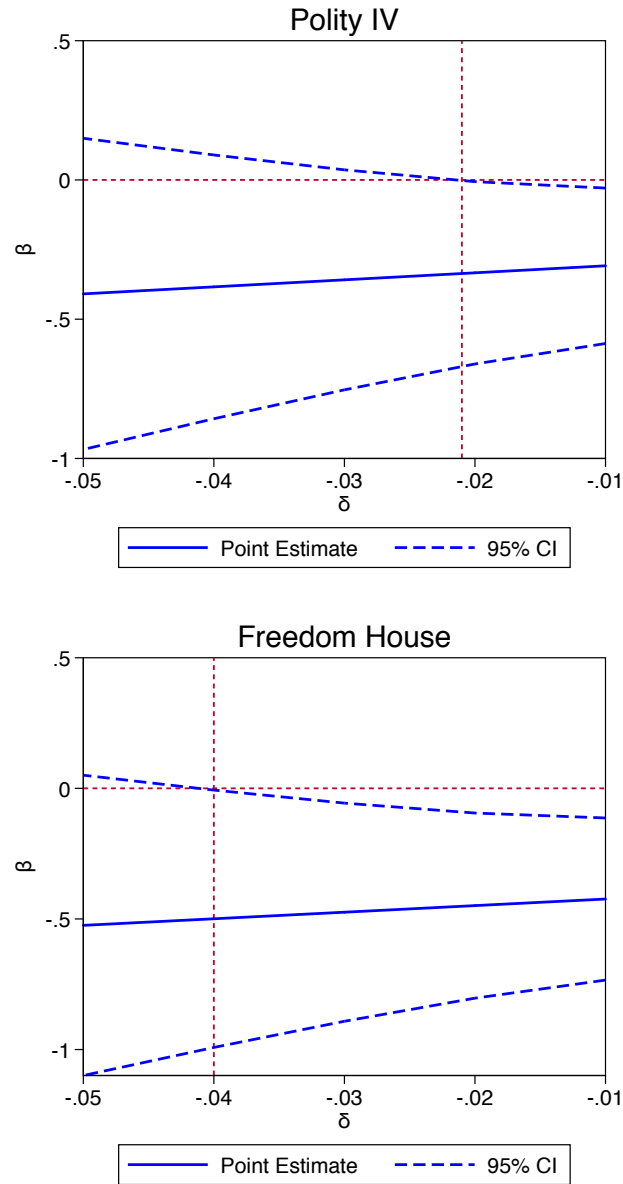
Notes: Symbols represent point estimates from OLS regressions of the average post-1990 democracy score on the rural insurgency dummy, excluding specific countries and subregions. All estimates include both geographic and colonial controls. Horizontal bars indicate 90% confidence intervals.

Figure A2: COEFFICIENT STABILITY



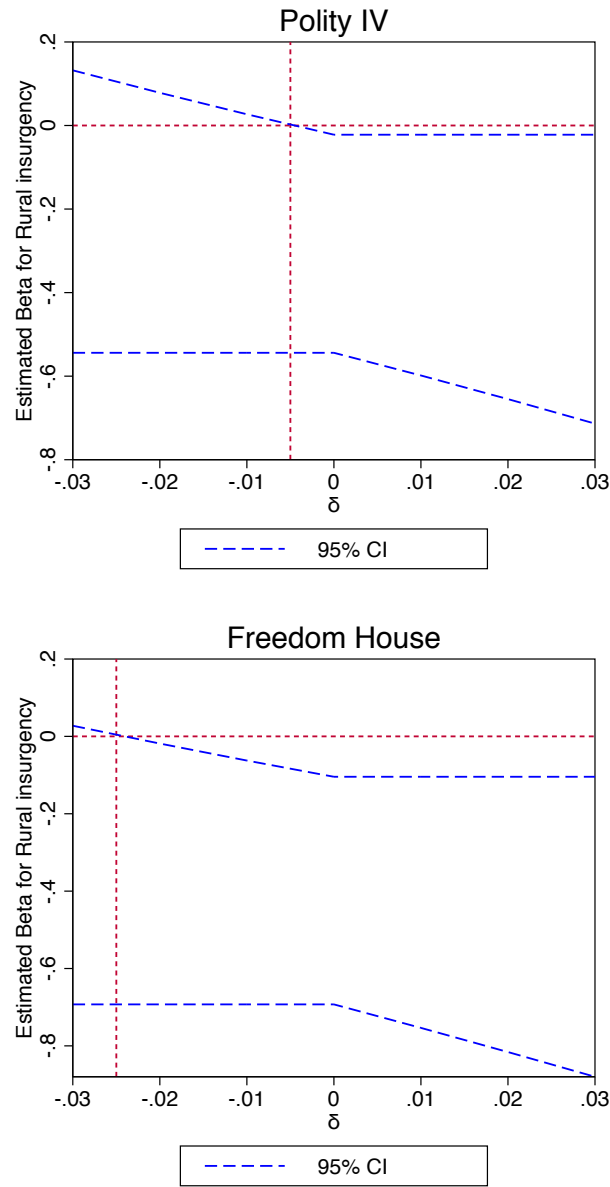
Notes: This figure shows changes in the estimated coefficient at varying degrees of selection in unobservables, following the test developed by Oster (Forthcoming). All estimates are based on the benchmark specification, which includes the full set of geographic and colonial controls. Hollow circles denote the unadjusted coefficient. Black circles denote the adjusted bound.

Figure A3: ROBUSTNESS TO NON-PERFECT EXOGENEITY



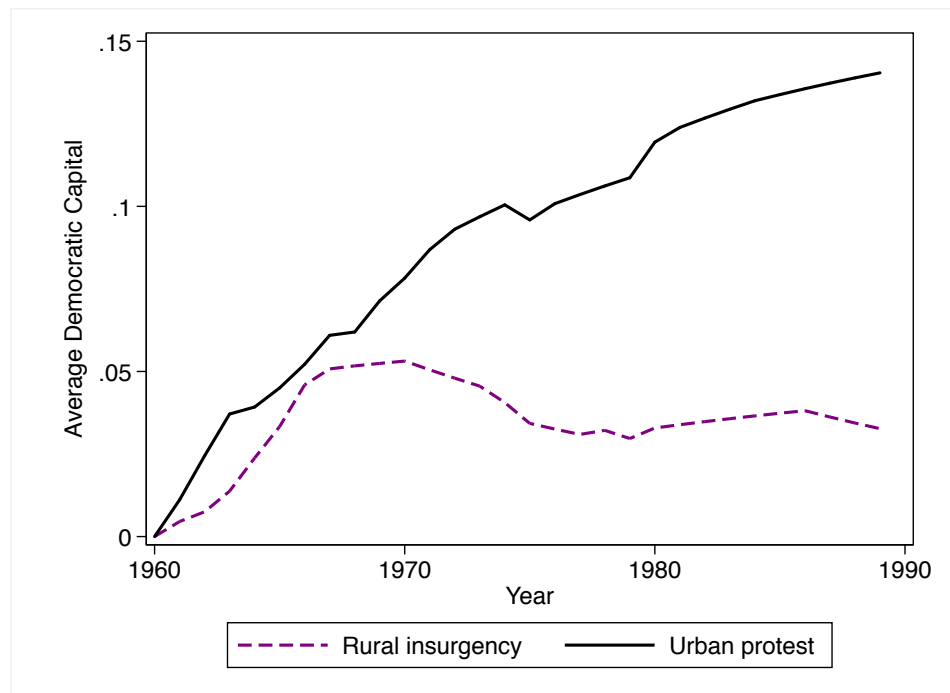
Notes: These plots show confidence intervals around the estimated effect of rural insurgency on democracy while relaxing the exclusion restriction, following Conley et al. (2012). All estimates are based on the benchmark specification, which includes the full set of geographic and colonial controls. The set of dashed lines represent 95% confidence intervals based on the local-to-zero approximation method. The solid line corresponds to the point estimate.

Figure A4: ROBUSTNESS TO NON-PERFECT EXOGENEITY—UNION OF CONFIDENCE INTERVALS



Notes: These plots show confidence intervals around the estimated effect of rural insurgency on democracy while relaxing the exclusion restriction, following Conley et al. (2012). All estimates are based on the benchmark specification, which includes the full set of geographic and colonial controls. The set of dot-dashed lines present the symmetric 2SLS 95% confidence intervals.

Figure A5: DEMOCRATIC CAPITAL AND TYPE OF INDEPENDENCE MOVEMENT



Notes: This figure shows the relationship between type of independence movement and democratic capital (based on Persson and Tabellini, 2006) between 1960 and 1990.