SUPPLEMENT TO "SEGMENTARY LINEAGE ORGANIZATION AND CONFLICT IN SUB-SAHARAN AFRICA"

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This appendix of "supplementary material" reports additional tables and figures referenced in the body of the paper. A separate Webpage Appendix includes details of all variables used in the analysis, in particular our coding of the segmentary linage indicator variable. It also includes summary statistics of all variables (Appendix Tables B.II and B.III).
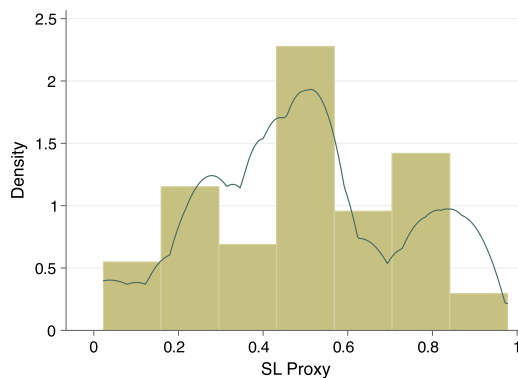

FIGURE A.1.—Distribution of the continuous segmentary lineage measure, inputed using information from the *Ethnographic Atlas*.

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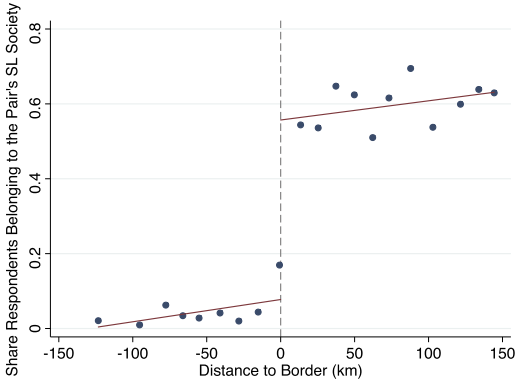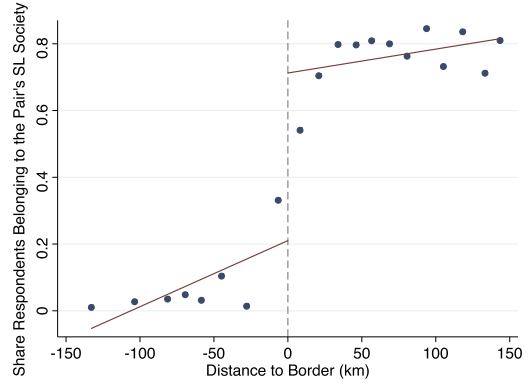James A. Robinson: jamesrobinson@uchicago.edu

(a) Data from round 3 of the *Afrobarometer*.

(b) Data from round 4 of the *Afrobarometer*.
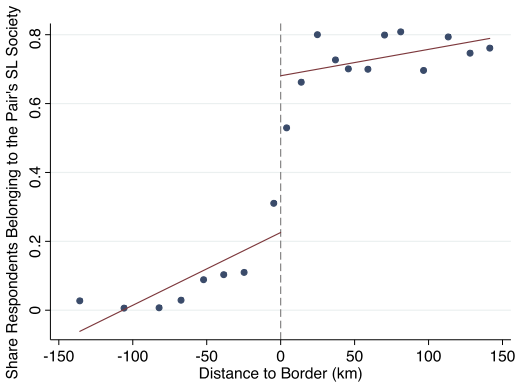
(c) Data from round 5 of the *Afrobarometer*.
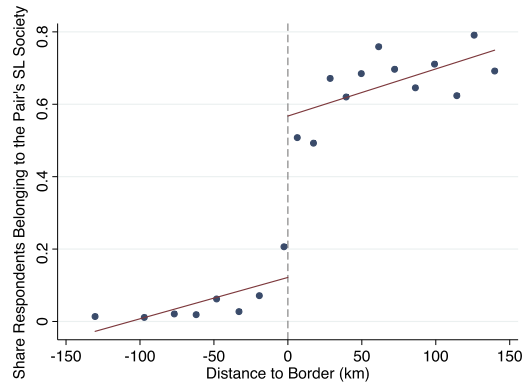
(d) Data from round 6 of the *Afrobarometer*.

FIGURE A.2.—Versions of Figure 5, but separately for each available round (3–6) of the *Afrobarometer*. The *y*-axis measures the fraction of the population at each distance that identifies as being a member of the segmentary lineage group. The *x*-axis reports distance (in kilometers) from the borders between segmentary lineage and nonsegmentary lineage societies. Positive values indicate kilometers in the territories of segmentary lineage societies.
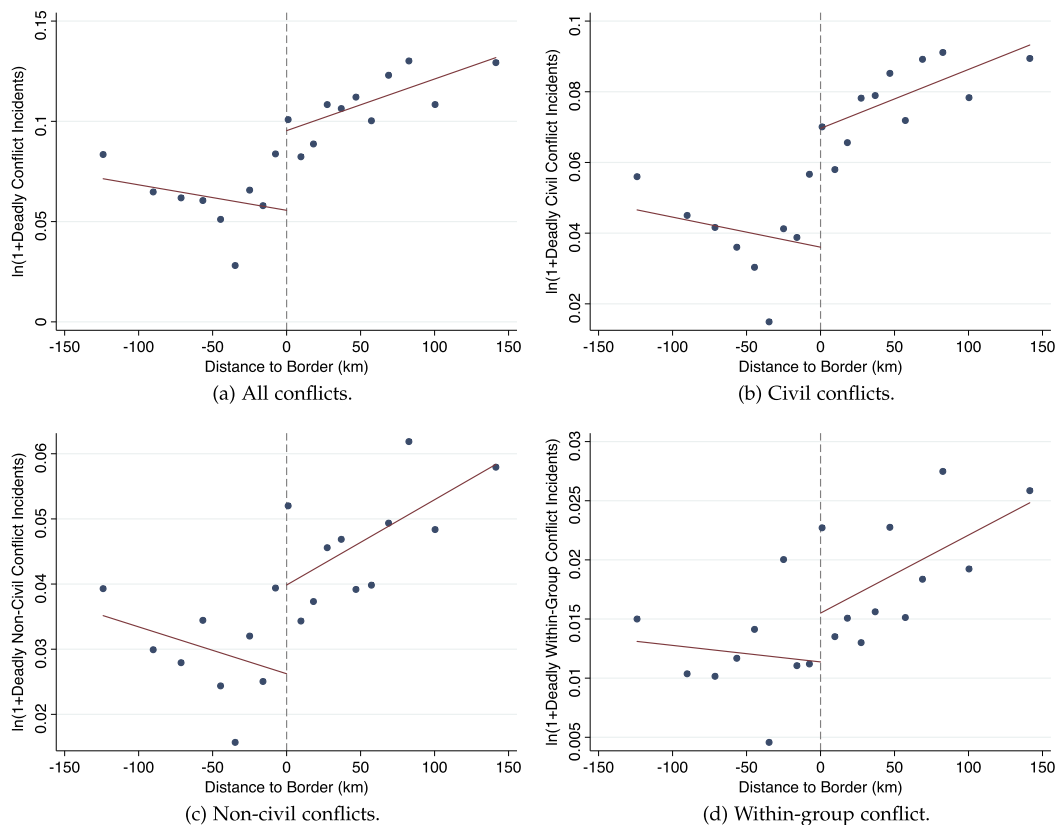
FIGURE A.3.—The baseline RD results graphically as binned scatter partial correlation plots (20 bins) from the specification that conditions on ethnicity-pair fixed effects and country fixed effects. The *y*-axis reports the natural log of 1 plus the number of deadly conflict incidents for each of the the four different types of conflict. The *x*-axis reports distance (in kilometers) from the borders between segmentary lineage and nonsegmentary lineage societies. Positive values indicate kilometers in the territories of segmentary lineage societies.

TABLE A.I

DIFFERENCES IN CHARACTERISTICS BETWEEN THE ETHNIC GROUPS[a]

	Sample Mean (1)	In Sample vs. Out of Sample (2)	t-Statistic (3)
ln Population	12.876	0.897 (0.141)	6.36
Jurisd. Hierarchy, 1–5	2.057	0.276 (0.0974)	2.83
Settlement pattern complexity, 1–8	6.1	−0.166 (0.148)	−1.12
Patrilineal, 0/1	0.69	0.0340 (0.0474)	0.8
Matrilineal, 0/1	0.171	−0.0514 (0.0376)	−1.37
Patrilocal, 0/1	0.757	0.0368 (0.0435)	0.85
Matrilocal, 0/1	0.025	0.0244 (0.0178)	1.37
Slavery historically, 0/1	0.832	−0.0335 (0.0412)	−0.81
Dependence on gathering, 0–9	0.36	0.0732 (0.0850)	0.86
Dependence on hunting, 0–9	0.937	−0.0660 (0.0795)	−0.83
Dependence on fishing, 0–9	0.922	−0.105 (0.109)	−0.96
Dependence on husbandry, 0–9	1.867	0.108 (0.130)	0.83
Dependence on agriculture, 0–9	5.913	−0.0170 (0.151)	−0.11
Agricultural intensity, 1–6	3.432	0.0311 (0.102)	0.31
Female particip. in agriculture, 1–5	4.101	−0.131 (0.149)	−0.88
Headmen elected, 0/1	0.068	0.0389 (0.0312)	1.25
Moral high God, 0/1	0.186	−0.00233 (0.0568)	0.11
Longitude	17.215	2.817 (1.579)	1.78
Latitude	1.68	−0.307 (0.944)	−0.33
Absolute latitude	7.886	−0.753 (0.546)	−1.38

[a]The unit of observation is an ethnic group and this table reports balance tests comparing groups inside and outside of our baseline sample. Population estimates are based on grid cell level data from NASA's EarthData and are calculated for ethnic groups in the Murdock map. Variables coded from the Ethnographic Atlas are constructed using Ethnographic Atlas variables: v33 (jursditional hierarchy), v30 (settlement complexity), v43 (matrilineal, patrilineal), v12 (matrilocal, patrilocal), v1 (gathering), v2 (hunting), v3 (fishing), v4 (husbandry), v5 (agriculture), v28 (intensity of agriculture), v54 (female participation in agriculture), v72 (election of headman = 1 if v72 = 6), and v34 (presence of active god = 1 if v34 > 2).

TABLE A.II
ESTIMATES ACCOUNTING FOR SPATIAL SPILLOVERS[a]

	$\ln(1 + \text{Number of Deadly Conflict Incidents})$			$\ln(1 + \text{Number of Conflict Deaths})$			$\ln(1 + \text{Months of Deadly Conflict})$		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Panel A: All Conflicts								
Segmentary Lineage, 0/1	1.168	1.157	1.099	1.644	1.691	1.436	0.926	0.905	0.867
	(0.293)	(0.221)	(0.245)	(0.467)	(0.382)	(0.423)	(0.239)	(0.178)	(0.194)
Segmentary Lineage Spillover, 0–1	−0.757	−0.0969	−0.127	−1.202	−0.183	−0.218	−0.487	0.00635	−0.0311
	(0.757)	(0.711)	(0.725)	(1.075)	(1.047)	(1.056)	(0.597)	(0.559)	(0.577)
Non-Segmentary Lineage Spillover, 0–1	0.580	0.511	0.323	0.267	0.330	0.139	0.682	0.611	0.467
	(0.756)	(0.635)	(0.666)	(1.171)	(1.062)	(1.052)	(0.619)	(0.503)	(0.526)
R-squared	0.537	0.707	0.718	0.559	0.693	0.716	0.530	0.715	0.726
	Panel B: Civil Conflicts								
Segmentary Lineage, 0/1	0.835	0.796	0.607	1.314	1.368	1.04	0.723	0.715	0.573
	(0.299)	(0.248)	(0.258)	(0.496)	(0.439)	(0.459)	(0.252)	(0.208)	(0.216)
Segmentary Lineage Spillover, 0–1	−0.819	−0.193	−0.212	−1.973	−0.863	−1.012	−0.748	−0.232	−0.230
	(0.742)	(0.765)	(0.786)	(1.143)	(1.225)	(1.243)	(0.597)	(0.632)	(0.653)
Non-Segmentary Lineage Spillover, 0–1	0.346	0.329	0.283	−0.387	−0.290	−0.415	0.516	0.528	0.522
	(0.724)	(0.641)	(0.658)	(1.155)	(1.107)	(1.096)	(0.611)	(0.529)	(0.540)
R-squared	0.561	0.693	0.715	0.526	0.635	0.673	0.480	0.637	0.660
	Panel C: Non-Civil Conflicts								
Segmentary Lineage, 0/1	0.927	0.906	0.99	1.548	1.612	1.636	0.793	0.777	0.845
	(0.242)	(0.195)	(0.219)	(0.406)	(0.319)	(0.367)	(0.213)	(0.168)	(0.186)
Segmentary Lineage Spillover, 0–1	−0.534	−0.154	−0.195	−0.578	0.114	0.203	−0.502	−0.117	−0.166
	(0.666)	(0.647)	(0.641)	(0.982)	(0.947)	(0.942)	(0.574)	(0.551)	(0.555)
Non-Segmentary Lineage Spillover, 0–1	0.726	0.626	0.353	1.206	1.273	1.071	0.641	0.555	0.306
	(0.654)	(0.531)	(0.560)	(1.062)	(0.897)	(0.931)	(0.579)	(0.463)	(0.486)
R-squared	0.588	0.731	0.741	0.521	0.683	0.693	0.530	0.706	0.719

(*Continues*)

TABLE AII—Continued

	ln (1 + Number of Deadly Conflict Incidents)			ln (1 + Number of Conflict Deaths)			ln (1 + Months of Deadly Conflict)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Panel D: Within Group Conflicts					
Segmentary Lineage, 0/1	0.783	0.785	0.8	1.411	1.378	1.321	0.674	0.666	0.684
	(0.189)	(0.187)	(0.205)	(0.350)	(0.343)	(0.387)	(0.162)	(0.161)	(0.175)
Segmentary Lineage Spillover, 0–1	−0.222	0.0337	0.0323	−0.266	0.0792	0.188	−0.201	0.0396	0.0357
	(0.591)	(0.575)	(0.549)	(0.985)	(0.995)	(0.965)	(0.512)	(0.513)	(0.493)
Non-Segmentary Lineage Spillover, 0–1	0.340	0.245	0.0733	0.610	0.589	0.385	0.310	0.213	0.0515
	(0.494)	(0.455)	(0.489)	(0.868)	(0.875)	(0.905)	(0.429)	(0.380)	(0.418)
R-squared	0.586	0.678	0.695	0.576	0.649	0.671	0.583	0.687	0.701
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Historical Controls	No	No	Yes	No	No	Yes	No	No	Yes
Observations	144	144	140	144	144	140	144	144	140

[a]The unit of observation is an ethnic group. Along with the segmentary lineage variable, all specifications also include the fraction of adjacent groups that are segmentary lineage societies and the fraction of adjacent groups that are not segmentary lineage societies. Because there are uncoded societies, these two fractions need not sum to one. Columns 1, 4, and 7 include country fixed effects. Columns 2, 5, and 8 also include a set of 'geographic controls' (the log of the land area occupied by the ethnic group, the log of the minimum distance between the ethnic group centroid and a national border, an indicator variable that equals one if the ethnic group is split by a national border, mean altitude, absolute latitude, longitude, an agricultural suitability index, and the average sickle cell allele frequency in the ethnic group's traditional territory). Columns 3, 6, and 9 include a set of 'Historical Controls' (historical political centralization, historical settlement pattern complexity, and an indicator for patrilineal societies). In Panel A, the dependent variables are constructed using all conflicts in the ACLED data; in Panel B they are constructed using civil conflicts; in Panel C, they are constructed using non-civil conflicts; and in Panel D, they are constructed using within-group conflicts. All dependent variables are parameterized as ln(1 + x). Robust standard errors are reported in parentheses.

TABLE A.III
CONTROLLING FOR COMPONENTS OF THE SEGMENTARY LINEAGE INDICATOR[a]

	ln (1 + Number of Deadly Conflict Incidents)			ln (1 + Number of Conflict Deaths)			ln (1 + Months of Deadly Conflict)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: All Conflicts									
Segmentary Lineage (1 + 2 + 3)	1.12	1.237	1.214	1.58	1.799	1.538	0.89	0.986	0.997
	(0.395)	(0.355)	(0.398)	(0.604)	(0.558)	(0.633)	(0.322)	(0.277)	(0.309)
Unilineal + Political Segments (1 + 2)	0.160	0.446	0.348	0.571	1.000	0.704	0.160	0.423	0.357
	(0.501)	(0.490)	(0.499)	(0.793)	(0.796)	(0.773)	(0.428)	(0.409)	(0.416)
Unilineal + Affects Residence (1 + 3)	0.0983	0.327	0.210	−0.139	0.0618	−0.233	0.167	0.363	0.292
	(0.692)	(0.566)	(0.615)	(1.133)	(0.919)	(0.977)	(0.569)	(0.461)	(0.505)
Unilineal (1)	−0.225	−0.147	−0.0371	−0.427	−0.366	−0.201	−0.212	−0.133	−0.0275
	(0.560)	(0.437)	(0.514)	(0.848)	(0.691)	(0.834)	(0.456)	(0.340)	(0.396)
Affects Residence (3)	−0.676	−0.864	−0.909	−1.578	−1.876	−1.656	−0.555	−0.702	−0.818
	(0.646)	(0.512)	(0.565)	(1.140)	(0.906)	(0.998)	(0.517)	(0.403)	(0.447)
Panel B: Civil Conflicts									
Segmentary Lineage (1 + 2 + 3)	0.759	0.825	0.646	1.171	1.428	1.080	0.615	0.709	0.589
	(0.367)	(0.356)	(0.401)	(0.607)	(0.603)	(0.699)	(0.311)	(0.291)	(0.329)
Unilineal + Political Segments (1 + 2)	0.136	0.344	0.126	0.522	0.929	0.627	0.176	0.413	0.267
	(0.467)	(0.452)	(0.478)	(0.805)	(0.793)	(0.811)	(0.417)	(0.391)	(0.416)
Unilineal + Affects Residence (1 + 3)	−0.0452	0.131	−0.0348	−0.0260	0.258	0.0448	−0.0174	0.137	0.0353
	(0.590)	(0.485)	(0.508)	(1.099)	(0.922)	(0.992)	(0.497)	(0.406)	(0.445)
Unilineal (1)	−0.274	−0.191	0.0322	−0.794	−0.692	−0.583	−0.424	−0.378	−0.259
	(0.497)	(0.474)	(0.517)	(0.858)	(0.823)	(0.918)	(0.406)	(0.373)	(0.422)
Affects Residence (3)	−0.605	−0.766	−0.643	−1.314	−1.549	−1.247	−0.571	−0.682	−0.612
	(0.528)	(0.422)	(0.492)	(1.009)	(0.824)	(0.921)	(0.453)	(0.352)	(0.401)

(*Continues*)

TABLE AIII—*Continued*

	ln (1 + Number of Deadly Conflict Incidents)			ln (1 + Number of Conflict Deaths)			ln (1 + Months of Deadly Conflict)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Panel C: Non-Civil Conflicts								
Segmentary Lineage (1 + 2 + 3)	0.896	0.95	1.087	1.389	1.551	1.664	0.769	0.847	0.98
	(0.329)	(0.302)	(0.334)	(0.508)	(0.480)	(0.515)	(0.283)	(0.252)	(0.281)
Unilineal + Political Segments (1 + 2)	−0.0127	0.192	0.187	−0.237	0.203	0.113	0.0143	0.239	0.237
	(0.450)	(0.459)	(0.449)	(0.788)	(0.741)	(0.688)	(0.395)	(0.396)	(0.390)
Unilineal + Affects Residence (1 + 3)	−0.0206	0.129	0.0814	−0.314	−0.230	−0.344	0.135	0.320	0.296
	(0.586)	(0.501)	(0.549)	(0.972)	(0.797)	(0.854)	(0.513)	(0.435)	(0.476)
Unilineal (1)	0.000391	0.0229	0.140	−0.113	−0.113	0.198	−0.0733	−0.0208	0.110
	(0.501)	(0.387)	(0.427)	(0.783)	(0.652)	(0.729)	(0.431)	(0.327)	(0.361)
Affects Residence (3)	−0.338	−0.499	−0.770	−1.068	−1.326	−1.535	−0.267	−0.397	−0.664
	(0.531)	(0.483)	(0.517)	(0.992)	(0.837)	(0.882)	(0.440)	(0.396)	(0.436)
	Panel D: Within-Group Conflicts								
Segmentary Lineage (1 + 2 + 3)	0.861	0.934	0.949	1.54	1.548	1.506	0.756	0.816	0.841
	(0.263)	(0.289)	(0.318)	(0.462)	(0.498)	(0.539)	(0.225)	(0.247)	(0.277)
Unilineal + Political Segments (1 + 2)	0.163	0.360	0.346	0.560	0.721	0.577	0.131	0.291	0.287
	(0.308)	(0.368)	(0.365)	(0.671)	(0.719)	(0.660)	(0.265)	(0.322)	(0.326)
Unilineal + Affects Residence (1 + 3)	0.0274	0.157	0.0749	−0.182	−0.142	−0.356	0.167	0.309	0.246
	(0.423)	(0.398)	(0.425)	(0.790)	(0.732)	(0.759)	(0.370)	(0.351)	(0.380)
Unilineal (1)	0.198	0.213	0.212	0.254	0.176	0.390	0.175	0.203	0.200
	(0.414)	(0.365)	(0.383)	(0.703)	(0.660)	(0.688)	(0.366)	(0.314)	(0.334)
Affects Residence (3)	0.206	0.145	0.175	−0.0223	−0.165	−0.0258	0.196	0.126	0.151
	(0.339)	(0.366)	(0.421)	(0.733)	(0.716)	(0.853)	(0.297)	(0.319)	(0.374)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Historical Controls	No	No	Yes	No	No	Yes	No	No	Yes
Observations	145	145	141	145	145	141	145	145	141

[a]The unit of observation is an ethnic group. Along with the segmentary lineage variable, all specifications also include the individual components of the definition of segmentary lineage societies, along with their two-way interactions. Columns 1, 4, and 7 include country fixed effects. Columns 2, 5, and 8 also include a set of 'geographic controls' (the log of the land area occupied by the ethnic group, the log of the minimum distance between the ethnic group centroid and a national border, an indicator variable that equals one if the ethnic group is split by a national border, mean altitude, absolute latitude, longitude, an agricultural suitability index, and the average sickle cell allele frequency in the ethnic group homeland). Columns 3, 6, and 9 include a set of 'Historical Controls' (historical political centralization, historical settlement pattern complexity, and an indicator for patrilineal societies). In Panel A, the dependent variables are constructed using all conflicts in the ACLED data; in Panel B they are constructed using civil conflicts; in Panel C, they are constructed using non-civil conflicts; and in Panel D, they are constructed using within group conflicts. All dependent variables are parameterized as ln(1 + x). Robust standard errors are reported in parentheses.

TABLE A.IV

OLS ESTIMATES USING AN INTERPOLATED SEGMENTARY LINEAGE MEASURE[a]

	ln (1 + Number of Deadly Conflict Incidents)			ln (1 + Number of Conflict Deaths)			ln (1 + Months of Deadly Conflict)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Panel A: All Conflict, OLS Estimates								
Segmentary Lineage Proxy	0.787	0.556	0.634	1.156	0.785	0.948	0.732	0.531	0.596
	(0.266)	(0.242)	(0.257)	(0.418)	(0.398)	(0.432)	(0.216)	(0.194)	(0.206)
R-squared	0.365	0.494	0.528	0.327	0.458	0.481	0.340	0.488	0.520
	Panel B: Civil Conflict, OLS Estimates								
Segmentary Lineage Proxy	0.64	0.438	0.474	1.008	0.653	0.74	0.553	0.37	0.395
	(0.247)	(0.224)	(0.233)	(0.430)	(0.411)	(0.442)	(0.210)	(0.188)	(0.195)
R-squared	0.373	0.493	0.519	0.327	0.445	0.461	0.349	0.490	0.512
	Panel C: Non-Civil Conflict, OLS Estimates								
Segmentary Lineage Proxy	0.571	0.387	0.483	0.778	0.494	0.662	0.579	0.421	0.503
	(0.232)	(0.218)	(0.231)	(0.376)	(0.360)	(0.398)	(0.196)	(0.182)	(0.193)
R-squared	0.369	0.486	0.542	0.319	0.44	0.48	0.346	0.473	0.531
	Panel D: Within Group Conflict, OLS Estimates								
Segmentary Lineage Proxy	0.38	0.279	0.377	0.524	0.332	0.418	0.419	0.331	0.413
	(0.190)	(0.183)	(0.192)	(0.361)	(0.349)	(0.381)	(0.161)	(0.153)	(0.163)
R-squared	0.345	0.439	0.474	0.306	0.401	0.433	0.354	0.457	0.489
	Panel E: All Conflict, Negative Binomial Estimates								
Segmentary Lineage Proxy	0.927	0.688	0.606	1.177	1.031	1.263	0.985	0.777	0.725
	(0.324)	(0.283)	(0.297)	(0.411)	(0.386)	(0.409)	(0.246)	(0.219)	(0.226)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Historical Controls	No	No	Yes	No	No	Yes	No	No	Yes
Observations	514	514	458	514	514	458	514	514	458

[a]The unit of observation is an ethnic group located in Africa and in the Ethnographic Atlas. The independent variable of interest is an interpolated proxy for segmentary lineage organization and the sample includes the full Ethnographic Atlas sample. To construct the proxy, we first estimated the within-sample relationship between the hand-coded segmentary lineage measure with fixed effects for all categories of Ethnographic Atlas variables v17, v19, v15, and v12. We selected a restricted set of predictors using LASSO and the extended Bayesian information criterion (EBIC). In Panel A, the dependent variables are constructed using all conflicts in the ACLED data; in Panel B they are constructed using civil conflicts; in Panel C, they are constructed using non-civil conflicts; and in Panel D, they are constructed using within group conflicts. All dependent variables are parameterized as ln(1 + x). All specifications include country fixed effects. Columns 2, 5, and 8 also include our set of 'geographic controls' and columns 3, 6, and 9 also include 'Geographic Controls' and 'Historical Controls'. Robust standard errors are reported in parentheses. The underlying LASSO coefficients are reported in Table B.IV.

TABLE A.V

ALTERNATIVE MEASURES OF CONFLICT[a]

	ACLED Data: Using Actor Descriptions			UCDP-GED Conflict Dataset		
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable:	ln (1 + Conflict Incidents)	ln (1 + Conflict Deaths)	ln (1 + Months)	ln (1 + Conflict Incidents)	ln (1 + Conflict Deaths)	ln (1 + Months)
Segmentary Lineage	0.588	0.778	0.483	0.903	1.769	0.481
	(0.294)	(0.534)	(0.242)	(0.248)	(0.467)	(0.145)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	141	141	141	141	141	141
Mean of Dependent Var.	0.718	1.299	0.615	1.96	3.30	1.20
R-squared	0.390	0.382	0.411	0.753	0.729	0.750

[a]The unit of observation is an ethnic group. The table reports OLS estimates using alternative calculations of the dependent variables. In columns 1–3, ethnic groups are identified as experiencing a conflict if they are mentioned in the description of actors or conflict summary in the ACLED data. In columns 4–6, dependent variables are constructed using conflict data from the UCDP-GED conflict data set. The dependent variables are constructed from all conflict incidents in their respective data sets (i.e. without restricting to civil conflicts, non-civil conflicts, within group conflicts). Robust standard errors are reported in parentheses.

TABLE A.VI

ROBUSTNESS OF OLS ESTIMATES TO CONTROLLING FOR PRE-COLONIAL CONFLICT[a]

	Dependent Var. is ln (1 + Deadly Conflict Incidents)				
	(1)	(2)	(3)	(4)	(5)
Segmentary Lineage	1.1	1.098	1.101	1.047	1.035
	(0.245)	(0.248)	(0.248)	(0.264)	(0.266)
Historical Conflict Indicator (Jaques), 0–1900	−0.100				−0.184
	(0.377)				(0.384)
Number of Historical Conflicts (Jaques), 0–1900		0.053			
		(0.231)			
Years of Historical Conflict (Jaques), 0–1900			0.009		
			(0.228)		
Historical Conflict Indicator (B & RQ), 1400–1700				0.281	0.328
				(0.462)	(0.484)
Country FE	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes
Observations	141	141	141	141	141
R-squared	0.717	0.717	0.717	0.718	0.718

[a]The unit of observation is an ethnic group. The dependent variable is parameterized as $\ln(1+x)$. Each column includes a different control of set of controls for pre-colonial conflict. These include an indicator if a group experienced any conflict according to Jaques (column 1); the number of conflicts each group experienced according to Jaques (column 2); the years of historical conflict each group experienced according to Jaques (column 3); an indicator of a group experienced any pre-colonial conflict according to Besley and Reynal-Querol (2014) (coliumn 4); and the Jaques indicator along with the Besley & Reynal-Querol (2014) indicator (column 5). All columns also include country fixed effects and the full set of geographic and historical controls. Robust standard errors are reported in parentheses.

TABLE A.VII

ROBUSTNESS OF OLS ESTIMATES TO RESTRICTED SAMPLES[a]

Dependent Variable: ln(1 + x):	All Conflict			Civil Conflict			Non-Civil Conflict			Within Group Conflict		
	(1) Incidents	(2) Deaths	(3) Months	(4) Incidents	(5) Deaths	(6) Months	(7) Incidents	(8) Deaths	(9) Months	(10) Incidents	(11) Deaths	(12) Months
	Panel A: Excluding Observations with Cook's Distance > 4/n (n = 141)											
Segmentary Lineage	1.112	1.3	0.832	0.516	0.436	0.475	0.887	1.559	0.795	0.806	0.942	0.658
	(0.228)	(0.370)	(0.182)	(0.244)	(0.378)	(0.218)	(0.168)	(0.302)	(0.157)	(0.179)	(0.296)	(0.159)
Observations	130	126	129	128	124	129	130	127	128	126	132	129
R-squared	0.772	0.820	0.786	0.765	0.822	0.731	0.821	0.784	0.789	0.775	0.736	0.749
	Panel B: Excluding Observations with Values of the Dependent Variable in the Top 5%											
Segmentary Lineage	1.14	1.476	0.838	0.586	1.038	0.476	0.996	1.52	0.831	0.662	0.992	0.606
	(0.238)	(0.416)	(0.200)	(0.253)	(0.457)	(0.225)	(0.210)	(0.327)	(0.181)	(0.183)	(0.341)	(0.161)
Observations	133	133	133	133	133	133	133	133	133	133	133	133
R-squared	0.683	0.684	0.688	0.666	0.595	0.601	0.711	0.714	0.673	0.661	0.676	0.671
	Panel C: Excluding Conflicts with Low Geographic Precision											
Segmentary Lineage	1.096	1.444	0.869	0.74	1.057	0.568	1.025	1.637	0.835	0.791	1.349	0.665
	(0.241)	(0.423)	(0.194)	(0.259)	(0.461)	(0.214)	(0.219)	(0.372)	(0.186)	(0.203)	(0.379)	(0.169)
Observations	141	141	141	141	141	141	141	141	141	141	141	141
R-squared	0.721	0.713	0.725	0.666	0.664	0.656	0.710	0.687	0.716	0.695	0.677	0.704
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

[a]The unit of observation is the ethnic group. Along with the segmentary lineage variable, all columns we include a set of country fixed effects and the full set of geographic and historical controls. The dependent variable is listed at the top of the column. In Panel A, we exclude ethnic groups (observations) with a Cook's Distance value greater than 4/n (where $n = 141$ is the sample size) in the baseline regression. In Panel B, in each column we exclude ethnic groups in the top 5% in the corresponding dependent variable. In Panel C, we calculate each dependent variable excluding conflict events coded in the ACLED data as having low geographic precision (geographic precision score of 3).

TABLE A.VIII

NEAREST NEIGHBOR MATCHING ESTIMATES[a]

	Nearest Neighbor Matching Based On:		
	Geographic Proximity (Latitude, Longitude)	Geographic & Historical Controls	Geographic & Historical Controls; Exact Jurisd. Hierarchy
	(1)	(2)	(3)
ln (1 + Deadly Conflict Incidents):			
All conflicts	1.005	1.543	1.511
	(0.352)	(0.287)	(0.368)
Civil conflicts	0.653	0.903	0.934
	(0.337)	(0.316)	(0.358)
Non-civil conflicts	0.843	1.175	1.154
	(0.304)	(0.258)	(0.333)
Within group conflicts	0.687	1.099	1.062
	(0.240)	(0.208)	(0.238)
ln (1 + Conflict Deaths):			
All conflicts	1.367	1.96	1.752
	(0.503)	(0.485)	(0.646)
Civil conflicts	1.046	1.558	1.373
	(0.539)	(0.506)	(0.604)
Non-civil conflicts	1.522	1.909	1.792
	(0.457)	(0.391)	(0.566)
Within group conflicts	1.275	1.786	1.604
	(0.399)	(0.362)	(0.491)
ln (1 + Months of Conflict):			
All conflicts	0.769	1.203	1.173
	(0.295)	(0.233)	(0.302)
Civil conflicts	0.615	0.957	0.907
	(0.275)	(0.230)	(0.273)
Non-civil conflicts	0.726	1.154	1.095
	(0.271)	(0.201)	(0.268)
Within group conflicts	0.567	0.94	0.898
	(0.220)	(0.179)	(0.208)
Observations	145	141	140

[a]The unit of observation is an ethnic group. Column 1 reports the estimated difference between segmentary lineage and non-segmentary lineage societies for each of the listed 12 conflict measures. The estimates use nearest neighbor matching, where each segmentary lineage ethnic groups is matched to its nearest neighbor using the Mahalanobis distance function based on their latitude and longitude. Column 2 reports estimates using nearest neighbor matching, where ethnic groups are matched using the Mahalanobis distance function based on our baseline set of 'geographic' and 'historical' controls. Column 3 reports the average treatment effect on the treated using nearest neighbor matching, where ethnic groups are matched using the Mahalanobis distance function based on the 'geographic' and 'historical' controls with the added restriction that matched ethnic groups must have the same measure of levels of jurisdictional hierarchy. Standard errors are reported in parentheses.

TABLE A.IX

POISSON AND NEGATIVE BINOMIAL ESTIMATES[a]

	Poisson			Negative Binomial		
	Number of Deadly Conflict Incidents	Number of Conflict Deaths	Months of Deadly Conflict	Number of Deadly Conflict Incidents	Number of Conflict Deaths	Months of Deadly Conflict
	(1)	(2)	(3)	(4)	(5)	(6)
Segmentary Lineage	0.906	0.953	0.743	1.112	1.294	0.835
	(0.263)	(0.447)	(0.198)	(0.260)	(0.339)	(0.198)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Var.	57.0	1639.9	21.2	57.0	1639.9	21.2
Observations	141	141	141	141	141	141

[a]The unit of observation is an ethnic group. Columns 1–3 report estimates from a Poisson regression model and columns 4–6 report estimates from a negative binomial model. The outcome variables are the number of deadly conflict incidents (columns 1 and 3), the number of conflict deaths (columns 2 and 5), and the number of months of deadly conflicts (clumns 3 and 6). 'Geographic Controls' include the log of the land area occupied by the ethnic group, the log of the minimum distance between the ethnic group centroid and a national border, an indicator variable that equals one if the ethnic group is split by a national border, mean altitude, absolute latitude, longitude, an agricultural suitability index, and the average sickle cell allele frequency in the ethnic group homeland; 'Historical Controls' include historical political centralization (jurisdictional hierarchy beyond the local community), historical settlement pattern complexity, and an indicator for patrilineal societies. Robust standard errors are reported in parentheses.

TABLE A.X

HETEROGENEITY OF SEGMENTARY LINEAGE EFFECTS BY COUNTRY CHARACTERISTICS[a]

	Dependent Variable is ln (1 + Deadly Conflict Incidents)					
Country Characteristic:	UK Colony/Legal Origin	Rural Inde-pendence Movement	ln (p.c. GDP)	Polity Score	Rule of Law	1-Ethnic Frac
	(1)	(2)	(3)	(4)	(5)	(6)
Segmentary Lineage	1.242	1.335	5.255	1.831	1.951	1.026
	(0.446)	(0.267)	(2.764)	(0.753)	(0.724)	(0.559)
SL × Country Characteristic	−0.227	−0.705	−0.629	−0.134	−0.670	0.356
	(0.586)	(0.547)	(0.418)	(0.121)	(0.490)	(2.184)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	141	141	141	141	141	141
R-squared	0.718	0.722	0.721	0.72	0.723	0.717

[a]The unit of observation is an ethnic group. Along with the segmentary lineage indicator, each regression includes an interaction term between the segmentary lineage indicator and the country-level variable listed at the top of the column. The dependent variable is the log of one plus the number of deadly conflict events in the ethnic group. All specifications include country fixed effects and the full set of geographic and historical controls. Robust standard errors are reported in parentheses.

TABLE A.XI

HETEROGENEITY OF SEGMENTARY LINEAGE EFFECTS BY ETHNICITY CHARACTERISTICS[a]

	Dependent Variable is ln (1 + Deadly Conflict Incidents)										
Ethnicity Characteristic:	Pre-Colonial Measures			Colonial Measures			Contemporary Measures				
	Slave Exports	Levels of Jurisdictional Hierarchy	Local Elections	Split by National Border	Colonial Missions	Colonial Railroad	Islam Majority	ln Light Desity (Top Half)	Capital City	Diamond	Petroleum
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Segmentary Linenage	1.082	1.475	1.119	1.193	1.295	1.145	1.126	0.954	1.096	1.042	0.979
	(0.296)	(0.631)	(0.243)	(0.300)	(0.426)	(0.282)	(0.280)	(0.420)	(0.250)	(0.280)	(0.267)
SL × Ethnicity Characteristic	−0.133	−0.171	0.801	−0.364	−0.333	−0.0584	−0.0722	0.195	−1.746	0.0155	0.613
	(0.416)	(0.250)	(1.076)	(0.586)	(0.508)	(0.702)	(0.493)	(0.556)	(0.697)	(0.687)	(0.496)
All Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	141	141	141	141	141	141	141	141	141	141	141
R-squared	0.706	0.706	0.718	0.707	0.729	0.709	0.707	0.713	0.723	0.709	0.709

[a]The unit of observation is an ethnic group. Along with the segmentary lineage indicator, each column includes an interaction term between the segmentary lineage indicator and a different ethnicity-level variable listed at the top of the column. In columns 1–3, the ethnicity-level variables are pre-colonial characteristics; in columns 4–6, they are characteristics of the colonial period; and in columns 7–11, they are contemporary characteristics. The dependent variable is the log of one plus the number of conflict events in the ethnic group. All specifications include country fixed effects and the full set of geographic and historical controls. Robust standard errors are reported in parentheses., and indicate significance at the 10%, 5%, and 1% levels.

TABLE A.XII

OLS ESTIMATES OF THE DIFFERENTIAL EFFECT OF ADVERSE RAINFALL SHOCKS ON
CONFLICT[a]

	ln (1 + Deadly Conflict Incidents)		ln (1 + Conflict Deaths)	
	(1)	(2)	(3)	(4)
Negative Rainfall Shock	0.815	−0.192	1.043	−1.011
(1000 mm/day)	(0.402)	(0.384)	(0.798)	(0.775)
Neg. Rainfall Shock ×		2.336		4.764
Segmentary Lineage		(0.791)		(1.694)
Segmentary Lineage		0.0205		0.0519
		(0.0061)		(0.0159)
Mean of Dependent Variable	0.104	0.104	0.216	0.216
SD of Dependent Variable	0.362	0.362	0.802	0.802
Time FE	Yes	Yes	Yes	Yes
6 Lags of Dependent Variable	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes
Observations	28,518	28,518	28,518	28,518
R-squared	0.438	0.439	0.363	0.364

[a]All columns present results from a 216 month panel (1998–2014) of ethnic groups in the baseline sample. The ethnicity-level negative rainfall shock variable is included in all specifcations. This is cacluated as realized monthly rainfall subtracted from the ethnic group average over the sample period. The mean value of the rainfall shock is (mechanically) 0.000 and the standard deviation is 4.015. The dependent variable is constructed using all conflicts in the ACLED data. All specifications include month fixed effects, the full set of geographic and historical controls, and six lags of the dependent variable. Standard errors, clustered at the ethnic group level, are reported in parentheses.

TABLE A.XIII

FUZZY RD ESTIMATES[a]

	ln (1 + Deadly Conflict Incidents)		ln (1 + Conflict Deaths)		ln (1 + Months of Conflict)	
	Baseline RD	Fuzzy RD (2SLS)	Baseline RD	Fuzzy RD (2SLS)	Baseline RD	Fuzzy RD (2SLS)
	(1)	(2)	(3)	(4)	(5)	(6)
Segmentary Lineage	0.0948	0.338	0.284	1.011	0.0692	0.247
	(0.0810)	(0.277)	(0.145)	(0.493)	(0.0666)	(0.230)
Ethnicity Pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic Groups	64	64	64	64	64	64
Observations	1,018	1,018	1,018	1,018	1,018	1,018
R-squared	0.241	0.226	0.166	0.118	0.234	0.223

[a]The unit of observation is a 10km-by-10 km grid cell. The sample includes all RD grid cells matched to at least one Afrobarometer respondent in rounds 3–6 of the Afrobarometer. Columnns 1, 3, and 5 report OLS estimates where the independent variable of interest is an indicator that equals one if the grid cell is inside the homeland of a segmentary lineage society. Columns 2, 4, and 6 report IV-2SLS estimates in which the endogenous variable is the share of Afrobarometer respondents in the grid cell who identify as a member of the ethnic group pair's segmentary lineage society, and the instrument is the indicator that equals one if the grid cell is inside the homeland of a segmentary lineage society. All dependent variables are parameterized as $\ln(1+x)$. All specifications include ethnicity pair fixed effects and country fixed effects. Standard errors, clustered at the ethnicity level, are reported in parentheses.

TABLE A.XIV

ROBUSTNESS TO ADDITIONAL RD SPECIFICATIONS[a]

	Deadly Conflict Incidents			Conflict Deaths			Months of Deadly Conflict		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Distance to Border:	<100 km	<80 km	<60 km	<100 km	<80 km	<60 km	<100 km	<80 km	<60 km
Panel A: OLS Estimates, Linear Running Variable in Euclidean Distance									
Segmentary Lineage	0.0359	0.0342	0.0373	0.0676	0.0753	0.0791	0.0281	0.0274	0.0283
	(0.0187)	(0.0176)	(0.0153)	(0.0392)	(0.0346)	(0.0283)	(0.0164)	(0.0149)	(0.0126)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.125	0.114	0.122	0.086	0.080	0.088	0.113	0.106	0.116
Panel B: Negative Binomial Estimates, Linear Running Variable in Euclidean Distance									
Segmentary Lineage	0.656	0.734	0.599	1.153	1.516	1.014	0.55	0.583	0.507
	(0.281)	(0.280)	(0.289)	(0.484)	(0.494)	(0.452)	(0.252)	(0.257)	(0.254)
Country FE	No	No	No	No	No	No	No	No	No
Panel C: Poisson Estimates, Linear Running Variable in Euclidean Distance									
Segmentary Lineage	0.799	0.667	0.791	0.271	0.265	0.599	0.695	0.616	0.733
	(0.338)	(0.351)	(0.385)	(0.637)	(0.718)	(0.815)	(0.300)	(0.302)	(0.305)
Country FE	No	No	No	No	No	No	No	No	No
Panel D: OLS Estimates, Linear Running Variable in Euclidean Distance that Varies at the Contiguous Group Level									
Segmentary Lineage	0.041	0.038	0.0392	0.0746	0.0797	0.0812	0.0328	0.0309	0.0301
	(0.0181)	(0.0174)	(0.0157)	(0.0367)	(0.0336)	(0.0284)	(0.0157)	(0.0147)	(0.0129)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.130	0.119	0.127	0.094	0.088	0.095	0.119	0.112	0.122
Panel E: OLS Estimates, Linear Running Variable in Lat & Lon that Varies at the Contiguous Group Level									
Segmentary Lineage	0.0704	0.0719	0.0622	0.146	0.146	0.131	0.0625	0.0633	0.0552
	(0.0142)	(0.0136)	(0.0131)	(0.0281)	(0.0259)	(0.0237)	(0.0129)	(0.0124)	(0.0120)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.132	0.121	0.130	0.093	0.088	0.094	0.119	0.113	0.124
Panel F: OLS Estimates, Quadratic Running Variable in Lat & Lon that Varies at the Contiguous Group Level									
Segmentary Lineage	0.0618	0.0606	0.0577	0.129	0.129	0.12	0.0534	0.0532	0.0505
	(0.0171)	(0.0151)	(0.0141)	(0.0319)	(0.0278)	(0.0252)	(0.0155)	(0.0137)	(0.0127)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.143	0.134	0.143	0.108	0.103	0.108	0.131	0.126	0.137

(*Continues*)

TABLE XIV—Continued

Distance to Border:	Deadly Conflict Incidents			Conflict Deaths			Months of Deadly Conflict		
	(1) <100 km	(2) <80 km	(3) <60 km	(4) <100 km	(5) <80 km	(6) <60 km	(7) <100 km	(8) <80 km	(9) <60 km
Panel G: OLS Estimates, Linear Running Variable in Euclidean Distance that Varies at the Pair Level									
Segmentary Lineage	0.0465	0.0391	0.0373	0.088	0.0812	0.0771	0.0387	0.0324	0.0285
	(0.0144)	(0.0134)	(0.0139)	(0.0255)	(0.0237)	(0.0243)	(0.0127)	(0.0117)	(0.0116)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.160	0.152	0.159	0.129	0.123	0.123	0.151	0.146	0.158
Panel H: OLS Estimates, Linear Running Variable in Lat & Lon that Varies at the Pair Level									
Segmentary Lineage	0.0426	0.0354	0.0305	0.092	0.0867	0.0778	0.0362	0.0304	0.0252
	(0.0179)	(0.0174)	(0.0171)	(0.0347)	(0.0324)	(0.0303)	(0.0156)	(0.0148)	(0.0143)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.163	0.154	0.161	0.135	0.128	0.127	0.154	0.149	0.160
Panel I: OLS Estimates, Quadratic Running Variable in Lat & Lon that Varies at the Pair Level									
Segmentary Lineage	0.0388	0.0313	0.0270	0.0752	0.067	0.0573	0.033	0.0264	0.0212
	(0.0146)	(0.0142)	(0.0173)	(0.0272)	(0.0263)	(0.0296)	(0.0127)	(0.0122)	(0.0149)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.189	0.183	0.190	0.168	0.163	0.160	0.183	0.180	0.190
Ethnicity Pair FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic Groups	80	80	80	80	80	80	80	80	80
Observations	17,330	14,111	10,739	17,330	14,111	10,739	17,330	14,111	10,739

[a]The unit of observation is a 10km-by-10 km grid cell. In columns 1–3, the dependent variable is the number of conflicts that resulted in at least one death; in columns 4–6, the dependent variable is the number of conflict deaths; and in columns 7–9 the dependent variable is the number of months during the sample period with at least one conflict. The dependent variable is parameterized as ln(1 + x) when an OLS model is used and as the raw number when a negative binomial or Poisson model is used. The model used for each regression is noted in the panel heading. The RD polynomial varies across specifications and is reported in the header of each column. In columns 1 and 4, the sample only includes observations located within 100 km of the relevant ethnic group boundary. The threshold is reduced to 80 km in columns 2 and 5, and 60 km in columns 3 and 6. All specifications include 68 border segment fixed effects, where a border segment is the portion of an ethnic group's boundary that divides two ethnic groups that have different lineage organization (segmentary lineage versus not). Country fixed effects are also included in all OLS models. Standard errors, clustered at the ethnic group level, are reported in parentheses.

TABLE A.XV

BASELINE RD ESTIMATES EXCLUDING CONFLICTS WITH LOW GEOGRAPHIC PRECISION[a]

Dependent Variable:	$\ln(1 + \text{Deadly Conflict Incidents})$			$\ln(1 + \text{Conflict Deaths})$			$\ln(1 + \text{Months of Deadly Conflict})$		
	(1) All	(2) Civil	(3) Non-Civil	(4) Local	(5) All	(6) Civil	(7) Non-Civil	(8) Local	(9) All	(10) Civil	(11) Non-Civil	(12) Local
Segmentary Lineage	0.0389	0.0283	0.0219	0.0126	0.0817	0.0529	0.0575	0.0287	0.0298	0.0213	0.0197	0.0099
	(0.0145)	(0.0118)	(0.0083)	(0.0057)	(0.0275)	(0.0230)	(0.0163)	(0.0123)	(0.0120)	(0.0093)	(0.0078)	(0.0051)
Ethnicity Pair FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic Groups	80	80	80	80	80	80	80	80	80	80	80	80
Observations	10,739	10,739	10,739	10,739	10,739	10,739	10,739	10,739	10,739	10,739	10,739	10,739
R-squared	0.092	0.096	0.052	0.036	0.089	0.094	0.050	0.036	0.094	0.098	0.054	0.038

[a]The unit of observation is a 10km-by-10 km grid cell. The table reports baseline RD estimates where the dependent variables are constructed excluding conflicts with low geographic precision based on the precision coding in the ACLED data. In columns 1–3, the dependent variable is the number of conflicts that resulted in at least one death; in columns 4–6, the dependent variable is the number of conflict deaths; and in columns 7–9, the dependent variable is the number of months during the sample period with at least one conflict, all parameterized as $\ln(1 + x)$. All specifications include a linear running variable, estimated separately on each side of the boundary, ethnicity pair fixed effects, country fixed effects, and restrict the sample to observations within 60 kilometers of the relevant border. Standard errors, clustered at the ethnicity level, are reported in parentheses.

TABLE A.XVI

RD ESTIMATES EXAMINING OBSERVABLE CHARACTERISTICS[a]

Dependent Variable:	Terrain Ruggedness	ln Mean Elevation	Mean Slope	Mean Temp.	Water Indicator	Cereal Suitability	% Land Cultivated	Petroleum Indicator	Diamond Indicator	Mission Stations	Railway Indicator	Explorer Route
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Segmentary Lineage	−0.629	−0.0041	−0.0015	0.0589	−0.0015	0.0337	0.6060	−0.0040	−0.0379	0.0081	−0.0015	−0.0009
	(1.491)	(0.0327)	(0.2160)	(0.0995)	(0.0163)	(0.0649)	(1.0670)	(0.0120)	(0.0297)	(0.0052)	(0.0109)	(0.0138)
Beta Coefficient	*−0.013*	*−0.002*	*0.000*	*0.011*	*−0.004*	*0.015*	*0.017*	*−0.012*	*−0.048*	*0.026*	*−0.006*	*−0.002*
Ethnicity Pair FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic Groups	80	80	80	80	80	80	80	80	80	80	80	80
Observations	10,739	10,739	10,739	10,739	10,638	10,739	10,739	10,739	10,739	10,739	10,739	10,739
R-squared	0.569	0.855	0.167	0.844	0.133	0.396	0.542	0.619	0.892	0.040	0.089	0.113

[a]The unit of observation is a 10km-by-10 km grid cell. All regressions use the same specification as in Table 5. They include a linear running variable in distance to the border, ethnicity-pair fixed effects and country fixed effects, and restrict the sample to observations within 60 kilometers of the relevant border. Data on crop suitability and land use are from the FAO GAEZ database. Data on missionary and colonial railway presence are from Nunn (2010) and Nunn and Wantchekon (2011), respectively. Data on the location of petroleum fields and diamonds are from PRIO. Temperature is calculated as the mean daily temperature over the period 2000–2010. Standard errors, clustered at the ethnicity level, are reported in parentheses.

TABLE A.XVII

DIFFERENTIAL EFFECT OF SEGMENTARY LINEAGE BY RETALIATORY CONFLICTS OR NOT[a]

	Dep Var: Number of Deadly Conflict Incidents of a Particular Type (Retaliatory or Non-Retaliatory)		
	Time Window Used for Retaliation Definition		
	One Month	Three Months	Six Months
	(1)	(2)	(3)
Segmentary Lineage × Retaliatory Conflict	0.376 (0.249)	0.462 (0.227)	0.495 (0.228)
Ethnic Group FE	Yes	Yes	Yes
Conflict Type FE	Yes	Yes	Yes
Baseline Controls × Conflict Type FE	Yes	Yes	Yes
Ethnic Groups	141	141	141
Observations	282	282	282

[a]The unit of observation is an ethnic group-by-conflict type, where the two conflict types are retaliatory and non-retaliatory conflict. Retaliatory conflict is defined as conflict between two actors that fought in the past one month (column 1), three months (column 2), or six months (column 3). The coefficient of interest is an interaction between the segmentary lineage indicator and a variable that equals one for the retaliatory conflict type. All columns include ethnic group fixed effects, conflict type fixed effects, and the full set of baseline controls, each interacted with conflict type fixed effects. All reported coefficients are from a negative binomial model. Standard errors, clustered at the ethnicity level, are reported in parentheses.

TABLE A.XVIII

SEGMENTARY LINEAGE AND DIFFERENCE IN TRUST BETWEEN FAMILY AND NONFAMILY MEMBERS[a]

	Trust Gap: Trust in Relatives Minus Trust in:		
	Others You Know (1)	Fellow Countrymen (2)	Non-Coethnics (3)
Segmentary Lineage	0.0719 (0.0307)	0.114 (0.0447)	0.133 (0.0505)
Country Fixed Effects	Yes	Yes	Yes
Survey Round Fixed Effects	Yes	Yes	n/a
Individual Controls	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes
Afrobarometer sample	Rounds 4 & 5	Rounds 3 & 4	Round 3
Ethnic Groups	94	77	66
Observations	25,866	18,699	9,645
R-squared	0.080	0.052	0.046

[a]The unit of observation an individual from the Afrobarometer surveys. The dependent variables are the difference between self-reported trust in relatives and trust in "others you know" (column 1), the difference between self-reported trust in relatives and trust in fellow countrymen (column 2), and the difference between self-reported trust in relatives and trust in non-coethnics (column 3). Each trust measure is reported on a 1–4 integer scale, where a higher value means more trust. All specifications also include country fixed effects, survey round fixed effects, a set of baseline individual-level controls, the full set of ethnicity-level geographic and historical controls. Individual-level controls include the respondent's age, age squared, and gender, as well as an indicator that equals one if the respondent lives in an urban area. The Afrobarometer rounds included in each regression are reported at the bottom of each column. Standard errors, clustered by ethnic group, are reported in parentheses.

TABLE A.XIX

SEGMENTARY LINEAGE AND ECONOMIC PROSPERITY[a]

| | Wealth Index | | ln (1 + Nightlight Density) | | Years of Education | | | |
| | | | | | Men | | Women | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Segmentary Lineage	0.0606	0.214	0.191	0.196	0.312	0.78	0.398	0.832
	(0.113)	(0.128)	(0.107)	(0.120)	(0.375)	(0.351)	(0.454)	(0.385)
Survey Fixed Effects	Yes	Yes	n/a	n/a	Yes	Yes	Yes	Yes
Country Fixed Effects	n/a	n/a	Yes	Yes	n/a	n/a	n/a	n/a
Age and Age Squared	Yes	Yes	n/a	n/a	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	No	Yes	No	Yes	No	Yes
Historical Controls	No	Yes	No	Yes	No	Yes	No	Yes
Ethnic Groups	84	81	n/a	n/a	84	81	84	81
Observations	172,365	170,249	145	141	169,313	167,221	132,781	131,148
R-squared	0.066	0.089	0.420	0.548	0.284	0.294	0.311	0.328

[a]An observation is an individual in the DHS (column 1–2, 5–8) or an ethnic group (columns 3–4). Along with the segmentary lineage indicator, columns 1, 5, and 7 include survey fixed effects and the age and age squared of the respondent. Columns 2, 6, and 8 also include the full set of geographic and historical ethnicity-level controls. Column 3 includes country fixed effects and column 4 also includes the full set of geographic and historical ethnicity-level controls. The dependennt variables are the household wealth index, computed as the household's country-specific wealth quintile and ranging from 1–5 (columns 1–2); the light density at night of the ethnic group's homeland (columns 3–4); the years of education of male DHS respondents (columns 5–6); and the years of education of female DHS respondents (columns 7–8). Standard errors are clustered at the ethnicity level.

TABLE A.XX

SEGMENTARY LINEAGE AND PUBLIC GOODS[a]

| | Dep. Var. is: Indicator for the Presence of the Following Public Good: | | | | | | Average of Dep. Vars. in Cols 1–6 | First Principal Component |
| | Electricity | Water | Sewage | School | Health Clinic | Police | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Segmentary Lineage	0.0582	0.0227	−0.0259	0.0278	0.0060	−0.0324	0.0083	0.0360
	(0.0318)	(0.0306)	(0.0203)	(0.0131)	(0.0248)	(0.0280)	(0.0163)	(0.0876)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ethnicity-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ethnic Groups	99	99	99	99	98	99	98	98
Observations	50,562	50,389	49,894	50,406	50,152	50,117	49,036	49,036
R-squared	0.403	0.337	0.316	0.070	0.103	0.165	0.386	0.406

[a]A The unit of observation an individual. The dependent variables, constructed from rounds 3–6 of the Afrobarometer, are indicators for the presesence of a series of public goods (columns 1–6), the average value of these public goods measures (column 7), and the first principal component from factor analysis that includes all public goods measures (column 8). All specifications also include country and survey round fixed effects, a set of baseline individual level conntrols, and the full set of ethnicity-level geographic and historical controls. Baseline individual-level controls include the age, age squared, and gender of the respondent, as well as an indicator that equals one if the individual lives in an urban area. Standard errors, clustered by ethnic group, are reported in parentheses.

TABLE A.XXI

SEGMENTARY LINEAGE AND INEQUALITY[a]

| | ln (SD Light Density) | | Gini Coefficient: DHS Wealth | |
	(1)	(2)	(3)	(4)
Segmentary Lineage	−0.205	−0.300	0.0180	0.0094
	(0.172)	(0.171)	(0.0189)	(0.0175)
Country FE	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	No	Yes
Historical Controls	No	Yes	No	Yes
Observations	145	141	84	81
R-squared	0.357	0.518	0.407	0.597

Dependent Variable (header spanning columns 1–4).

[a]The unit of observation is an ethnic group. In columns 1–2, the dependent variable is the standard deviation of light density at night in the ethnic group, normalized by the mean. In columns 3–4, the dependent variable is the wealth Gini coefficient calculated using the DHS surveys. All specifications include country fixed effects. Columns 2 and 4 also include the full set of geographic and historical controls. Robust standard errors are reported in parentheses.

TABLE A.XXII

SEGMENTARY LINEAGE AND INTERNATIONAL RISK SHARING[a]

	OLS (1)	Logit (2)
Segmentary Lineage	0.0208	0.116
	(0.0153)	(0.099)
Marginal Effect at Mean	*0.0208*	*0.0282*
Country FE	Yes	Yes
Survey Round FE	Yes	Yes
Individual Controls	Yes	Yes
Geographic Controls	Yes	Yes
Historical Controls	Yes	Yes
Ethnic Groups	91	91
Observations	24,670	24,670
R-squared	0.399	

Remittance Receipt Indicator (header spanning columns 1–2).

[a]The unit of observation is an individual from rounds 4 and 6 of the Afrobarometer. The dependent variable is an indicator that equals one if the respondent received any remittances in the last year. All specifications include country fixed effects, survey round fixed effects, a set of baseline individual-level controls, and the full set of ethnicity-level geographic and historical controls. Individual-level controls include the respondent's age, age squared, and gender, as well as an indicator that equals one if the respondent lives in an urban area. Standard errors, clustered by ethnic group, are reported in parentheses.

TABLE A.XXIII

SEGMENTARY LINEAGE AND POLITICAL DISCRIMINATION[a]

	Dependent Variable: Fraction of Years From 1960–2017 that the Ethnic Group is:					
	Powerless for Any Reason		Powerless Due to Discrimination		Powerless Not Due to Discrimination	
	(1)	(2)	(3)	(4)	(5)	(6)
Segmentary Lineage	0.0717	−0.0095	0.0228	0.0058	0.0476	−0.0164
	(0.0543)	(0.0550)	(0.0207)	(0.0316)	(0.0494)	(0.0461)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	No	Yes	No	Yes
Historical Controls	No	Yes	No	Yes	No	Yes
Observations (EPR groups)	154	151	154	151	154	151
Clusters (Murdock groups)	105	102	105	102	105	102
R-squared	0.452	0.539	0.350	0.384	0.533	0.614

[a]An observation is an ethnic group in the EPR dataset. The dependent variables, listed at the top of each column, are measures of political representation from the Ethnic Power Relations database. Columns 1, 3, and 5 include country fixed effects. Columns 2, 4, and 6 also include the full set of geographic and historical controls. Standard errors are clustered at the level of ethnic groups as classified by Murdock.

TABLE A.XXIV

SEGMENTARY LINEAGE AND POLITICAL REPRESENTATION[a]

	Ethnicity's Share of Cabinet, 0–100			Ethnicity's Share in Top Posts, 0–100		
	(1)	(2)	(3)	(4)	(5)	(6)
Segmentary Lineage	0.121	0.147	0.374	0.436	0.692	0.674
	(0.851)	(0.929)	(1.101)	(1.107)	(1.233)	(1.475)
Population Share, 0–100	0.892	0.898	0.963	0.743	0.784	0.812
	(0.192)	(0.192)	(0.192)	(0.283)	(0.281)	(0.276)
Pop. Share Squared, 0–100	0.00167	0.000181	−0.00253	0.0170	0.0155	0.0138
	(0.00888)	(0.00905)	(0.00915)	(0.0145)	(0.0143)	(0.0141)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Controls	No	Yes	Yes	No	Yes	Yes
Historical Controls	No	No	Yes	No	No	Yes
Observations	100	100	95	100	100	95
R-squared	0.845	0.855	0.873	0.793	0.809	0.822

[a]The unit of observation is an ethnic group. The dependent variable is the ethnicitiy's share of cabinet posts during the post-independence period (columns 1–3) and the ethnicity's share of top cabinet posts during the post independence period (columns 4–6). Both are constructed by Francois, Rainer and Trebbi (2015). Following Francois, Rainer and Trebbi (2015), we also include the ethnicity's population share and population share squared in each regression. All specifications include country fixed effects. In columns 2 and 4, we also include the full set of geographic controls. In columns 3 and 6, we also include the full set of historical controls. Robust standard errors are reported in parentheses.

REFERENCES

BESLEY, T., AND M. REYNAL-QUEROL (2014): "The Legacy of Historical Conflict: Evidence from Africa," *American Political Science Review*, 108 (2), 319–336. [10]

FRANCOIS, P., I. RAINER, AND F. TREBBI (2015): "How is Power Shared in Africa?" *Econometrica*, 83 (2), 185–234. [23]

NUNN, N. (2010): "Religious Conversion in Colonial Africa," *American Economic Review*, 100 (2), 147–152. [19]

NUNN, N., AND L. WANTCHEKON (2011): "The Slave Trade and the Origins of Mistrust in Africa," *American Economic Review*, 101 (7), 3221–3252. [19]