

Supplemental Appendix for
“Electoral Institutions and Electoral Violence in Sub-Saharan Africa”
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A1. Descriptive Statistics

Country	1 Opposition violence	2 Gov. violence	3 Electoral system	4 Max. district magnitude
Angola	1	1	Majoritarian and PR	78.9
Benin	3	2	Majoritarian and PR	13.8
Botswana	0	0	Majoritarian	1
Burkina Faso	0	2	PR	8.41
Burundi	1	2	PR	10.6
Cameroon	6	7	Majoritarian	3.1
CAR	6	4	Majoritarian	3.9
Chad	0	1	Majoritarian and Mixed	2.63
Congo Brazzaville	1	1	Majoritarian	1
Congo Kinshasa	9	8	Majoritarian and PR	
Ethiopia	1	3	Majoritarian	1
Gabon	5	6	Majoritarian	13.3
Gambia	1	1	Majoritarian	1.2
Ghana	5	5	Majoritarian	1
Guinea	6	13	Mixed	51
Guinea-Bissau	3	3	PR	3.8
Ivory Coast	13	15	Majoritarian	1.46
Kenya	20	24	Majoritarian	1
Lesotho	1	5	Mixed	14
Liberia	0	2	Majoritarian and PR	64
Madagascar	6	6	Majoritarian and PR	1.29
Malawi	5	15	Majoritarian	1
Mali	3	5	Majoritarian and Mixed	1.76
Mauritania	1	3	Majoritarian and Mixed	3.6
Mauritius	2	0	Majoritarian	3
Mozambique	1	2	PR	22.7
Namibia	0	1	PR	.72
Niger	0	3	PR	8.6
Nigeria	41	37	Majoritarian	1
Rwanda	0	5	Majoritarian and PR	53
Senegal	4	2	Mixed	41.5
Sierra Leone	7	3	PR	9.3
Somalia	0	0	Majoritarian	
South Africa	6	3	PR	44.4
Sudan	6	5	Majoritarian and Mixed	1
Swaziland	0	3	Majoritarian	1
Tanzania	12	11	Majoritarian	1
Togo	4	9	Majoritarian and PR	13.5
Uganda	4	11	Majoritarian	1
Zambia	13	10	Majoritarian	1
Zimbabwe	9	24	Majoritarian	1

Note:
 The list shows all countries included with at least one monthly observation during 1990-2010.
 1) Number of months with opposition electoral violence by country during time period
 2) Number of months with government electoral violence by country during time period
 3) Electoral system according to IAEP. Where electoral rules have changed during the time period, more than one electoral system is recorded.
 4) The maximum on the “Mean district magnitude” variable recorded during time period 1990-2010

A2) Electoral institutions and count of electoral violence events

	Non-state violence	Non-state violence	State violence	State violence
	(1)	(2)	(3)	(4)
Majoritarian	1.106 (0.392)***		0.691 (0.356)*	
Mdmh		-0.254 (0.090)***		-0.200 (0.093)**
Polity _{lag}	0.018 (0.018)	0.019 (0.024)	-0.028 (0.017)	-0.043 (0.020)**
Polity sq. lag	-0.010 (0.004)***	-0.016 (0.006)***	-0.012 (0.005)**	-0.011 (0.005)**
Population _{lag,log}	0.472 (0.091)***	0.530 (0.087)***	0.359 (0.085)***	0.392 (0.080)***
GCPpc _{lag, log}	0.216 (0.120)*	0.343 (0.174)**	-0.081 (0.120)	-0.027 (0.166)
Armed Conflict _{lag}	-1.052 (0.407)***	-0.771 (0.497)	-1.268 (0.505)**	-0.957 (0.588)
DV _{lag}	2.306 (0.323)***	2.207 (0.397)***	2.317 (0.266)***	2.304 (0.269)***
Mixed system	0.566 (0.423)		0.448 (0.364)	
Constant	-13.440 (1.966)***	-13.985 (1.434)***	-8.965 (1.595)***	-9.130 (1.421)***
Lalpha	1.025 (0.342)***	1.033 (0.371)***	2.058 (0.297)***	1.968 (0.344)***
N	8,466	7,534	8,466	7,534

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country

A3) Opposition electoral violence expanded to include organized militant groups

	(1)	(2)
Majoritarian	1.057 (0.387)***	
Mdmh _{log}		-0.265 (0.089)***
Polity _{lag}	0.026 (0.019)	0.031 (0.026)
Polity sq _{lag}	-0.012 (0.003)***	-0.018 (0.006)***
Population _{lag,log}	0.510 (0.082)***	0.570 (0.084)***
GCPpc _{lag, log}	0.166 (0.105)	0.302 (0.153)**
Armed Conflict _{lag}	-1.184 (0.383)***	-0.904 (0.431)**
DV _{lag}	2.246 (0.318)***	2.064 (0.381)***
Mixed system	0.560 (0.415)	
Constant	-13.747 (1.858)***	-14.397 (1.504)***
N	8,466	7,534

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country

A4) Control for previous electoral violence by the opponent

	<i>Non-state Violence</i>	<i>Non-state Violence</i>	<i>State Violence</i>	<i>State Violence</i>
	(1)	(2)	(3)	(4)
Majoritarian	1.040 (0.386)***		0.670 (0.293)**	
Mdmh		-0.259 (0.088)***		-0.190 (0.091)**
Polity _{lag}	0.026 (0.019)	0.033 (0.027)	-0.013 (0.014)	-0.027 (0.018)
Polity sq. lag	-0.011 (0.004)***	-0.018 (0.006)***	-0.009 (0.004)**	-0.009 (0.005)
Population _{lag,log}	0.508 (0.083)***	0.568 (0.084)***	0.344 (0.081)***	0.380 (0.076)***
GCPpc _{lag, log}	0.168 (0.106)	0.309 (0.153)**	-0.137 (0.121)	-0.094 (0.160)
Armed Conflict _{lag}	-1.156 (0.387)***	-0.866 (0.436)**	-0.644 (0.465)	-0.399 (0.529)
Opp. violence.lag	1.818 (0.373)***	1.586 (0.467)***	2.007 (0.335)***	2.107 (0.356)***
Gov. violence.lag	0.794 (0.275)***	0.859 (0.292)***	1.011 (0.328)***	0.839 (0.363)**
Mixed system	0.543 (0.416)		0.635 (0.317)**	
Constant	-13.755 (1.890)***	-14.441 (1.546)***	-8.766 (1.384)***	-8.911 (1.262)***
N	8,466	7,534	8,466	7,534

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country

A5) Control for quality of governance

	<i>Non-state Violence</i>	<i>Non-state Violence</i>	<i>State Violence</i>	<i>State Violence</i>
	(1)	(2)	(3)	(4)
Majoritarian	1.577 (0.340)***		1.545 (0.397)***	
Mdmh		-0.278 (0.098)***		-0.241 (0.103)**
Polity _{lag}	0.014 (0.018)	0.019 (0.025)	-0.003 (0.018)	-0.010 (0.021)
Polity sq. lag	-0.011 (0.003)***	-0.018 (0.005)***	-0.012 (0.004)***	-0.015 (0.005)***
Population _{lag,log}	0.622 (0.092)***	0.586 (0.096)***	0.422 (0.072)***	0.417 (0.081)***
GCPpc _{lag, log}	0.325 (0.114)***	0.340 (0.158)**	-0.008 (0.111)	-0.003 (0.178)
Armed Conflict _{lag}	-0.734 (0.460)	-0.827 (0.503)	-0.970 (0.574)*	-1.102 (0.620)*
DV _{lag}	1.971 (0.331)***	1.875 (0.376)***	2.122 (0.211)***	2.303 (0.226)***
Good governance _{lag}	-0.460 (0.901)	-0.754 (0.996)	-0.484 (1.092)	-0.460 (1.073)
Mixed system	-0.547 (0.158)***		-0.371 (0.194)*	
Constant	-16.838 (2.318)***	-14.498 (2.083)***	-11.210 (1.605)***	-9.627 (1.477)***
N	5,649	5,506	5,649	5,506

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country

A6) Control for time since first multiparty election in the period

	<i>Non-state Violence</i>	<i>Non-state Violence</i>	<i>State Violence</i>	<i>State Violence</i>
	(1)	(2)	(3)	(4)
Majoritarian	0.954 (0.353)***		0.633 (0.293)**	
Mdmh		-0.238 (0.099)**		-0.174 (0.096)*
Polity _{lag}	0.029 (0.024)	0.036 (0.035)	0.007 (0.024)	0.013 (0.024)
Polity sq. lag	-0.009 (0.005)*	-0.016 (0.007)**	-0.009 (0.006)	-0.012 (0.006)*
Population _{lag,log}	0.431 (0.114)***	0.542 (0.134)***	0.369 (0.107)***	0.420 (0.115)***
GCPpc _{lag, log}	0.212 (0.117)*	0.385 (0.179)**	-0.006 (0.126)	0.089 (0.189)
Armed Conflict _{lag}	-1.804 (0.773)**	-1.682 (0.768)**	-1.444 (0.575)**	-1.521 (0.640)**
DV _{lag}	2.448 (0.337)***	2.400 (0.348)***	2.366 (0.246)***	2.403 (0.265)***
Time, 1st multiparty	-0.001 (0.001)*	-0.002 (0.001)	-0.002 (0.001)***	-0.002 (0.001)***
Mixed system	0.633 (0.416)		0.748 (0.316)**	
Constant	-12.570 (2.492)***	-14.394 (2.503)***	-9.743 (1.885)***	-10.425 (1.914)***
N	6,524	5,909	6,524	5,909

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country

A7) Control for British legal origin

	<i>Non-state Violence</i>	<i>Non-state Violence</i>	<i>State Violence</i>	<i>State Violence</i>
	(1)	(2)	(3)	(4)
Majoritarian	1.047 (0.423)**		0.583 (0.276)**	
Mdmh		-0.236 (0.076)***		-0.143 (0.085)*
Polity _{lag}	0.026 (0.019)	0.031 (0.026)	-0.009 (0.014)	-0.020 (0.017)
Polity sq. lag	-0.012 (0.003)***	-0.019 (0.006)***	-0.011 (0.004)**	-0.011 (0.006)*
Population _{lag,log}	0.504 (0.101)***	0.546 (0.092)***	0.330 (0.086)***	0.370 (0.081)***
GCPpc _{lag,log}	0.165 (0.110)	0.288 (0.156)*	-0.111 (0.131)	-0.074 (0.166)
Armed Conflict _{lag}	-1.175 (0.405)***	-0.889 (0.434)**	-0.616 (0.453)	-0.411 (0.518)
DV _{lag}	2.247 (0.318)***	2.060 (0.381)***	2.449 (0.230)***	2.477 (0.241)***
Time, 1st multiparty	0.036 (0.265)	0.165 (0.218)	0.354 (0.240)	0.314 (0.235)
UK legal origin	0.566 (0.398)		0.685 (0.308)**	
Constant	-13.649 (2.210)***	-14.002 (1.567)***	-8.770 (1.419)***	-9.007 (1.258)***
N	8,466	7,534	8,466	7,534

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country

A8) Control for electoral dynamics, parliamentary elections only

	<i>Non-state Violence</i>	<i>Non-state Violence</i>	<i>State Violence</i>	<i>State Violence</i>
	(1)	(2)	(3)	(4)
Majoritarian system	0.960 (0.360)***		0.654 (0.297)**	
MDM _{log}		-0.191 (0.100)*		-0.249 (0.103)**
Allegations of fraud	0.852 (0.277)***	0.893 (0.299)***	0.741 (0.203)***	0.751 (0.212)***
Competitiveness	2.240 (0.665)***	1.960 (0.665)***	-0.120 (0.395)	-0.307 (0.389)
Incumbent running	-0.050 (0.210)	0.104 (0.217)	0.225 (0.170)	0.283 (0.168)*
International monitors	0.004 (0.371)	-0.025 (0.349)	0.192 (0.377)	0.053 (0.393)
Democracy index _{lag}	0.043 (0.019)**	0.066 (0.025)***	0.013 (0.015)	0.006 (0.018)
Democracy index sq _{lag}	-0.011 (0.005)**	-0.020 (0.006)***	-0.010 (0.004)**	-0.009 (0.005)*
Population _{lag log}	0.248 (0.129)*	0.316 (0.114)***	0.242 (0.095)**	0.263 (0.083)***
GDP pc _{lag, log}	0.080 (0.134)	0.296 (0.158)*	-0.075 (0.131)	0.081 (0.170)
Armed conflict _{lag}	-0.590 (0.576)	-0.138 (0.628)	-0.409 (0.474)	0.127 (0.485)
DV <i>t-1</i>	1.601 (0.285)***	1.528 (0.287)***	1.626 (0.249)***	1.730 (0.255)***
Mixed system	0.451 (0.395)		0.592 (0.328)*	
Constant	-10.224 (2.749)***	-11.491 (2.302)***	-6.722 (1.853)***	-7.171 (1.691)***
N	2337	2149	2337	2149

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Robust standard errors clustered by country.