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## Surviving elections: election violence, incumbent victory, and post-election repercussions

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**Surviving Elections:  
Election Violence, Incumbent Victory, and Post-Election Repercussions**

**January 11, 2016**

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## Appendix A: Sub-National Turnout Estimates

In the main text of the paper, we evaluate turnout effects using cross-national data. While useful, this approach does not allow us to evaluate whether turnout differs between opposition and incumbent supporters. Here we pursue an alternative strategy that allows us to differentiate between these voters. Our approach takes advantage of turnout estimates from Afrobarometer and Latin American Public Opinion Projects surveys conducted from 2006 to 2012 (Afrobarometer, AmericasBarometer).<sup>1</sup> These are regular surveys conducted in a number of different African and Latin American states in order to measure attitudes towards democracy and governance. The samples are designed to be representative of the voting age population in each country. Using these data, we are able to code reported voter turnout for 37,727 respondents across 30 countries and 41 elections.<sup>2</sup>

Using these data, we estimate the following model:

$$P(\text{Vote}_{ij}) = f(\beta \text{Election Violence}_{ijk} * \text{Opposition}_{ijk} + \beta \text{Election Violence}_{ijk} + \beta \text{Opposition}_{ijk} + \varphi X_{ijk})$$

Here *Vote* equals one if respondent *k* claims to have voted in election *j* in country *i* and zero if respondent *k* claims not to have voted. *Opposition* equals one if the respondent claims to support a party other than the incumbent's<sup>3</sup> and zero if the respondent claims to support the incumbent. Building upon similar models by Kuenzi and Lambright,<sup>4</sup> we include controls for demographic and social factors likely to predict turnout in Africa, such as

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<sup>1</sup> We are not able to include estimates from Asia Barometer due to the lack of questions about voting behavior.

<sup>2</sup> We code the following surveys Mexico 2006, 2008, 2010, 2012; Guatemala 2006, 2008, 2010, 2012; El Salvador 2006, 2008, 2010, 2012; Honduras 2006, 2008, 2010, 2012; Nicaragua 2006, 2008, 2010, 2012; Costa Rica 2006, 2008, 2010, 2012; Colombia 2006, 2008, 2010, 2012; Ecuador 2006, 2008, 2010, 2012; Paraguay 2006, 2008, 2010, 2012; Chile 2006, 2008, 2010, 2012; Uruguay 2006, 2008, 2010, 2012; Brazil 2006, 2008, 2010, 2012; Venezuela 2006, 2008, 2010, 2012; Argentina 2006, 2008, 2010, 2012; Dominican Republic 2006, 2008, 2010, 2012; Haiti 2006, 2008, 2010, 2012; Jamaica 2006, 2008, 2010, 2012; Guyana 2006, 2008, 2010, 2012; Benin 2004, 2007; Botswana 2004; Ghana 2004; Kenya 2002, 2007; Madagascar 2002, 2007; Malawi 2004; Mali 2002, 2007; Mozambique 2004; Namibia 2004; Nigeria 2003, 2007; Senegal 2000, 2007; South Africa 2004; Tanzania 2000, 2005; Uganda 2001, 2006; Zambia 2001, 2006; Zimbabwe 2005, 2008.

<sup>3</sup> We exclude cases where there is no incumbent party contesting the election.

<sup>4</sup> Kuenzi and Lambright 2010

education, age, gender, employment and income.<sup>5</sup> Some of these control controls are not shared across the two surveys, and so our control variables are not the same between all of our models. However our results remain consistent. We also include additional country-level controls which might affect turnout, such as *Victory Uncertain*, *Polity2*, *Multi-Round Voting*, and *Compulsory Voting*.<sup>6</sup> We describe the coding details and summary statistics for all controls in Appendix B.

The results are consistent with our hypothesis. Column 1 of Table A1 reports the independent effect of *Pre-Election Violence* and *Opposition* and shows no significant overall effect of *Pre-Election Violence*. This is consistent with the relatively weak effects of pre-election violence found using the cross-national turnout data. Columns 2-4 include an interaction demonstrating that the effect of violence differs between opposition and incumbent supporters. Overall we estimate that incumbent supporters are approximately 2.8% more likely to vote than opposition supporters in violent elections. There is no significant difference in turnout between opposition and incumbent supporters in non-violent elections. These effect sizes are similar even when we limit the sample to Afrobarometer or Americas Barometer surveys. These effects are substantive, and potentially pivotal in close elections. For comparison, employment increases a respondent's likelihood of voting by 7.9%. We plot these effects in Figures A1-A3.

There are several challenges in interpreting these results. First, it is possible that respondents, when faced with the threat of violence, will lie about their true party preferences

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<sup>5</sup> Afrobarometer does not directly measure income. Instead we include two proxies for income: (1) the number of times a respondent's family has gone without food in the past year and (2) whether the respondent has access to electricity.

<sup>6</sup> We exclude the full list of controls due to the small number of countries and the limitations this places on our statistical power. The results are robust to the inclusion of any single cross-national control variable. The main results are also robust to the use of robust clustered standard errors; though clustered errors are known to be biased with small number of clusters (here countries). This is likely to be the case here, especially in our restricted samples.

and turnout decisions. This kind of response bias would likely prejudice us against a significant finding since threatened voters are likely to under-report turnout or exaggerate their support for incumbent parties (Jung et al. 2014). A second challenge is that not all respondents in a violent election are necessarily exposed to violence. To the extent this is a problem it is likely to lead to weaker results; however we think it reasonable to believe that most respondents in violent elections are going to be aware of the possible threat of violence, even if they are not exposed directly. As noted by several studies, election violence is frequently well reported in local and national media outlets prior to the election.<sup>7</sup>

We interpret these results – along with the estimates printed in the main draft – as preliminary evidence that violence successfully coerces incumbent supporters into turning out on election day or, equivalently, violence may be coercing opposition supporters into staying home—we cannot conclusively differentiate in this paper. Either way, these effects are electorally advantageous to incumbents, and potentially decisive in close elections. We are the first (to our knowledge) to demonstrate that incumbent and opposition groups respond differently to violence.<sup>8</sup>

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<sup>7</sup> For instance, an analysis of the 2001 Ugandan election by McIntosh and Allen (2009) found over 250 separate public reports of electoral violence in the national media during the electoral cycle. Hafner-Burton, Hyde and Jablonski (2014) similarly document high levels of reporting of violent electoral events during recent elections in Zimbabwe and Iran.

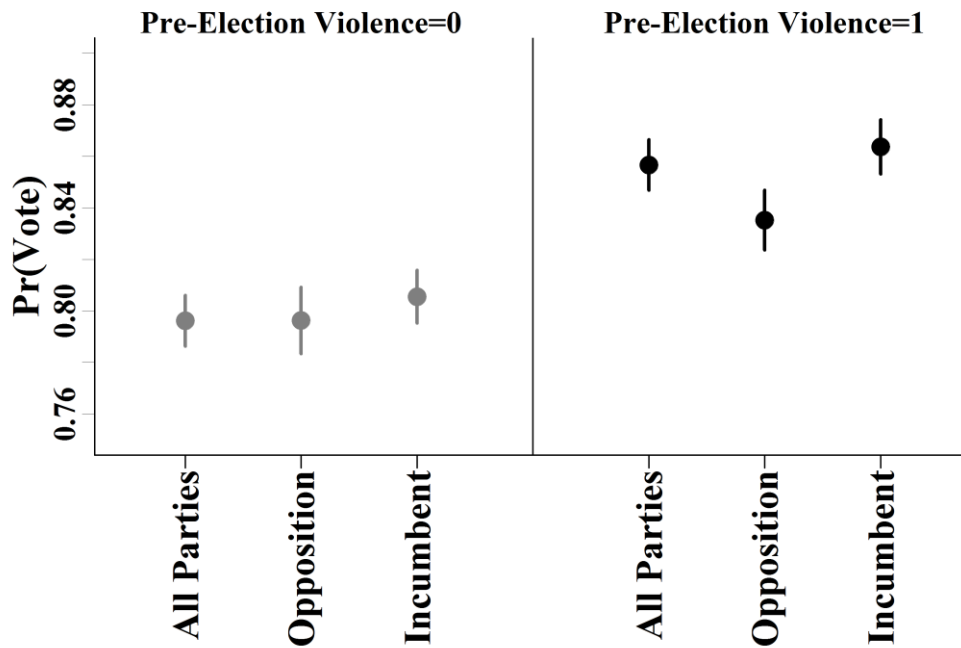
<sup>8</sup> Bratton 2008; Robinson and Torvik 2009 also discuss turnout effects; however unlike our study, neither of these empirically evaluate whether turnout differs between incumbent and opposition supporters.

**Table A1: The Effect of Pre-Election Violence on Reported Turnout**

	(1) <i>Vote</i>	(2) <i>Vote</i>	(3) <i>Vote</i>	(4) <i>Vote</i>
<i>Pre-Election Violence</i>	-0.022 (0.032)	0.102* (0.044)	-0.018 (0.084)	0.425** (0.059)
<i>Opposition</i>	-0.047+ (0.028)	0.041 (0.035)	0.087 (0.060)	-0.058 (0.048)
<i>Pre-Election Violence * Opposition</i>		-0.219** (0.055)	-0.238* (0.099)	-0.165* (0.072)
<i>Gender</i>	-0.099** (0.026)	-0.100** (0.026)	0.106* (0.045)	-0.012 (0.036)
<i>Education</i>	-0.049** (0.005)	-0.050** (0.005)	-0.019** (0.005)	-0.011 (0.010)
<i>Employed</i>	0.528** (0.029)	0.523** (0.029)	0.518** (0.052)	0.414** (0.039)
<i>Polity2</i>	0.005 (0.004)	0.008+ (0.004)	-0.020 (0.020)	0.029** (0.006)
<i>Victory Uncertain</i>	-0.037 (0.030)	-0.034 (0.030)	-0.135+ (0.073)	0.047 (0.038)
<i>Multi-Round Voting</i>	0.210** (0.053)	0.193** (0.054)	0.017 (0.073)	0.410** (0.088)
<i>Compulsory Voting</i>	0.022 (0.046)	0.028 (0.046)	0.109* (0.052)	n.a.
<i>Access to Food</i>				0.040** (0.015)
<i>Head of Household</i>				0.352** (0.041)
<i>Access to Electricity</i>				-0.164** (0.038)
<i>Age</i>				0.062** (0.002)
<i>Latin America Barometer</i>	0.522** (0.047)	0.503** (0.047)		
Constant	1.324** (0.041)	1.273** (0.042)	1.688** (0.158)	-1.245** (0.090)
Observations	37,727	37,727	14,495	22,612
Log Likelihood	-18,709	-18,701	-6,724	-10,506
Afrobarometer Data	Yes	Yes	No	Yes
LAPOP Data	Yes	Yes	Yes	No

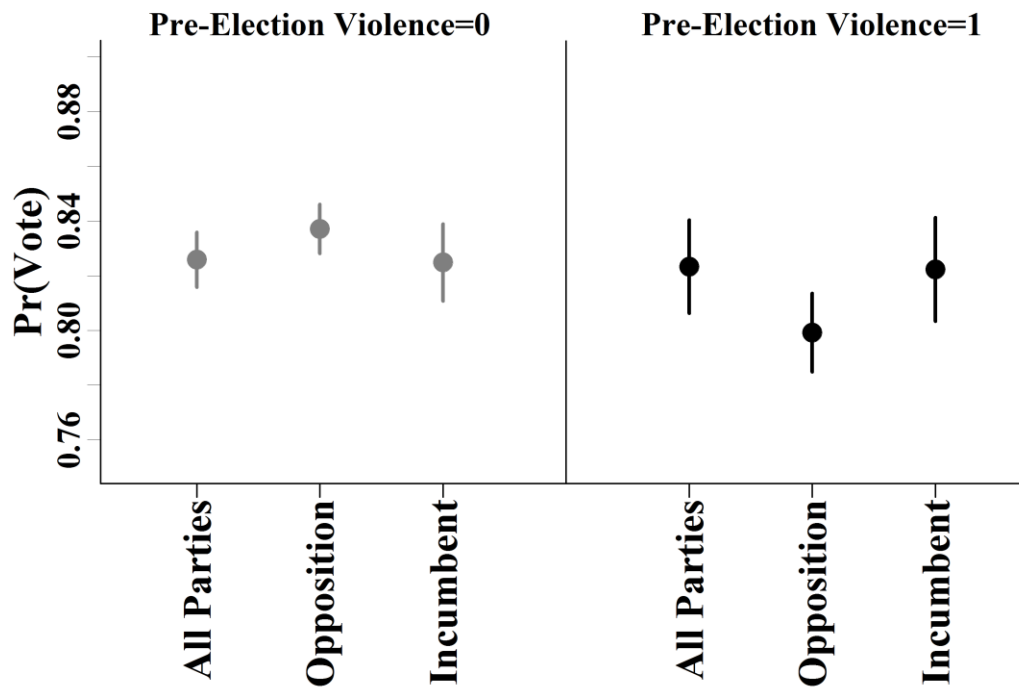
Standard errors in parentheses. \*\* p<0.01, \* p<0.05, + p<0.1

**Figure A1: The Effect of Pre-Election Violence on Turnout, Afrobarometer**



Note: This figure shows the effect of Pre-Election Violence on the probability of voting. Estimated from a logit model with controls individual demographic characteristics (gender, age, education, employment, head of household status and income), *Polity2*, *Victory Uncertain*, *Compulsory Voting* and *Multi-Round Voting*. Our data come from Afrobarometer surveys (round 3 and 4).

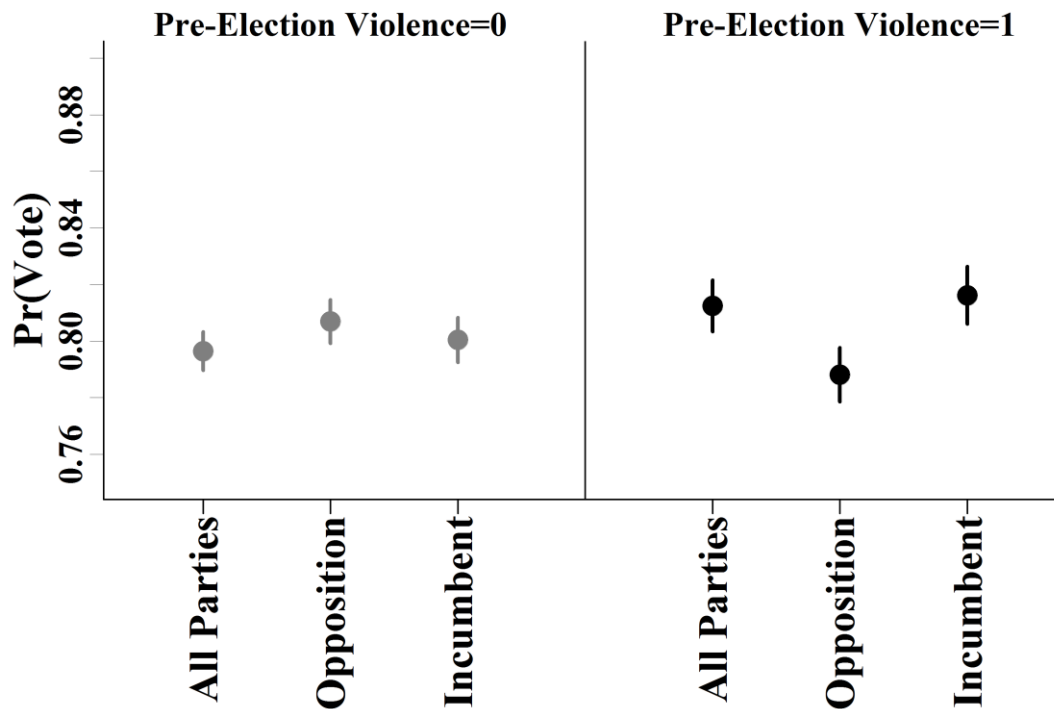
**Figure A2: The Effect of Pre-Election Violence on Turnout, Latin America Barometer**



Note: This figure shows the effect of Pre-Election Violence on the probability of voting. Estimated from a logit model with controls individual demographic characteristics (gender, education and employment), *Polity2*, *Victory Uncertain*, *Compulsory Voting* and *Multi-Round Voting*. Our data come from the Latin America Public Opinion Project surveys.



**Figure A3: The Effect of Pre-Election Violence on Turnout, All Surveys**



Note: This figure shows the effect of Pre-Election Violence on the probability of voting. Estimated from a logit model with controls individual demographic characteristics (gender, education and employment), *Polity2*, *Victory Uncertain*, *Compulsory Voting* and *Multi-Round Voting*. Our data come from Afrobarometer surveys (round 3 and 4) and Latin America Barometer surveys.

## Appendix B: Summary Data

**Table B1: Coding Details for All Variables**

Name	Mean	SD	Min	Max	Description	Source(s)
Access to Electricity	0.54	0.50	0.00	1.00	Equals one if the enumeration area has an electricity grid that most houses can access.	Afrobarometer, Round 3 and 4 (2005, 2008).
Access to Food	1.12	1.23	0.00	4.00	Equals the frequency of times the respondent or his/her family has gone without food in the last year: 0=Never, 1=Just once or twice, 2=Several times, 3=Many times, 4=Always.	Afrobarometer, Round 3 and 4 (2005, 2008).
Age	36.44	14.13	18.00	130.00	Equals the age of the respondent.	Afrobarometer, Round 3 and 4 (2005, 2008).
Boycott	0.14	0.34	0.00	1.00	Equals one if some opposition leaders boycotted the election and zero otherwise (coded from Nelda14)	Hyde, S. D., & Marinov, N. (2012). <i>Which Elections Can Be Lost? Political Analysis</i> , 20(2), 191–210.
Civil War	0.16	0.78	0	6	An index of the intensity of civil conflict in a year	Marshall 2007
Compulsory Voting	0.29	0.45	0	1	Equals one if an election had a compulsory voting rule.	International IDEA Voter Turnout Website. <a href="http://www.idea.int/vt/">http://www.idea.int/vt/</a> (Accessed July 2015).
Demonstrations	1.49	3.76	0	43	The total number of any type of anti-government demonstrations, anti-government strikes and riots	Banks (2005)

					during the year	
Education	3.26	1.94	0.00	9.00	Equals the number of years of schooling the respondent has completed.	Afrobarometer, Round 3 and 4 (2005, 2008).  AmericasBarometer, 2004-2012.
Election Protests	0.17	0.38	0.00	1.00	Equals one if there were election-related riots and protests after the election and zero otherwise. Coded from Nelda 29 which indicates whether there were “riots or protests after the election” that were “at least somewhat related to the outcome or handling of the election.”	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.
Employed	0.36	0.48	0.00	1.00	In the case of Afrobarometer this equals one if the respondent has a job that pays cash income (either full or part-time). It equals zero if the respondent does not have a job, or does not know if he/she has a job.  In the case of AmericasBarometer this equals one if the respondent claims to be working or have a job. It equals zero if the respondent is not working, is a student, stays home, is looking for work, or is retired.	Afrobarometer, Round 3 and 4 (2005, 2008).  AmericasBarometer, 2004-2012.

Fraud	0.36	0.48	0.00	1.00	Equals one if there were concerns, before the election, that it would not be free and fair. Equals zero otherwise (coded from Nelda 11).	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.
GDP (log)	2.42	1.80	-1.66	6.64	The log of a county's GDP (+1)	World Bank 2013.
Gender	0.46	0.50	0.00	1.00	Equals zero if the respondent is male and zero if the respondent is female.	Afrobarometer, Round 3 and 4 (2005, 2008). AmericasBarometer, 2004-2012.
Head of Household	0.51	0.50	0.00	1.00	Equals one if the respondent is the head of the household. Equals zero if the respondent is not the head of the household	Afrobarometer, Round 3 and 4 (2005, 2008).
Incumbent Wins	0.49	0.50	0.00	1.00	Coded from Nelda 4: "Did the leader step down because the vote count gave victory to some other actor?" It equals one if no and zero otherwise	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.
Latin America Barometer	0.38	0.49	0.00	1.00	Equals one if the respondent is coded from the AmericasBarometer it equals zero if the respondent is coded from the Afrobarometer.	Afrobarometer, Round 3 and 4 (2005, 2008). AmericasBarometer, 2004-2012.
Leader Age	5.77	1.11	3.1	8.9	Equals the age of the leader in power (x 0.1)	Goemans, Gleditsch, and Chiozza 2009
Leader Tenure	24.18	23.38	0.24	134.11	Equals the number of days the incumbent has been in power (x 0.01)	Goemans, Gleditsch, and Chiozza 2009

Opposition	0.39	0.49	0.00	1.00	Equals one if the respondent claims to be close to a party other than that of the incumbent party in the last election. Equals zero if the respondent claims to be close to the incumbent party. Missing if the respondent claims not to be close to any party, or does not state a party preference.	Afrobarometer, Round 3 and 4 (2005, 2008).
Physical Integrity	4.59	2.05	0.00	8.00	An additive index of government sponsored repressive activity, including murder, torture, political imprisonment and forced disappearance. It ranges from 0 (no government respect for these four rights) to 8 (full government respect for these four rights). We use the average value from the three years prior to the election in order to ensure that this measure is not itself determined by election violence.	Cingranelli and Richards 2010
Polity2	3.92	4.27	-4.00	9.00	Measure of how autocratic or democratic a country is according to Polity. Negative values indicate more autocratic. Positive values equal more democratic. We use the average value from the three years prior to the election in order to ensure that this measure is not itself determined by election violence.	Marshall and Jaggers (2002).
Population (log)	15.97	1.45	12.86	20.80	A country's population	World Bank 2013
Power Concessions	0.04	0.20	0.00	1.00	Equals one if the incumbent is removed from power by means other than the loss of the election—including through resignation, coup, or other non-electoral means—or the initial election results were annulled and new elections followed.	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.

					This variable was coded from Nelda34: “Were results that were favorable to the incumbent canceled?”, Nelda 39: “Was the incumbent replaced?”, and Nelda 40: “If yes(Nelda39), did the leader step down because the vote count gave victory to some other political actor?” Power Concessions equals one if Nelda34 = “yes” or Nelda39 = “yes”. Cases in which Nelda40 = “yes” are coded as zero to exclude cases in which the incumbent lost the election and stepped down.	
Pre-Election Violence	0.32	0.47	0.00	1.00	Equals one if there was civilian violence during the election, or if the government harassed the opposition.	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.
Pre-Election Protest	0.11	0.31	0.00	1.00	Equals one if there were any election-related anti-government protests in the period before an election took place and zero otherwise.	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.
Victory Uncertain	0.44	0.50	0.00	1.00	Coded from Nelda12 and Nelda26. Nelda 12, which equals “yes” in cases in which the incumbent made “public statements expressing confidence” of victory, the opposition indicated that they were “not likely to win,” or there were cases in which the “incumbent or ruling party has been dominant for a number of years and is	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.

					projected to win in a landslide.” Nelda26 equals “yes” if there were “reliable polls that indicated popularity of ruling political party or of the candidates before elections” and “they were favorable for the incumbent”. Victory Uncertain equals 1 when Nelda12 either variable equals “no”, 0 when Nelda12 both equals 0, and is coded as missing when Nelda12 is both are “unclear” or “N/A.”	
Violence Against Protesters	0.09	0.28	0.00	1.00	Equals one if an incumbent used violence against demonstrators protesting the election and zero otherwise. Coded from Nelda31 “did the government use violence against demonstrators?”	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.
Vote	0.79	0.41	0.00	1.00	Equals one if the respondent claims to have voted in the last election. Equals zero if the respondent claims to have not voted. Coded as missing the respondent didn’t know, couldn’t remember or refused to answer.	Afrobarometer, Round 3 and 4 (2005, 2008). AmericasBarometer, 2004-2012.
Voter Turnout	71.1	14.6	2.7	99.0	Equals voter turnout as a percentage of registered voters.	International IDEA Voter Turnout Website. <a href="http://www.idea.int/vt/">http://www.idea.int/vt/</a> (Accessed July 2015).
Compulsory Voting	0.3	0.46	0	1	Equals one if there are compulsory voting rules during the election and zero otherwise.	International IDEA Voter Turnout Website. <a href="http://www.idea.int/vt/">http://www.idea.int/vt/</a>

						(Accessed July 2015).
Multi-Round Voting	0.20	0.40	0	1	Equals one if there were multiple rounds of voting in the current election and zero otherwise.	Hyde, S. D., & Marinov, N. (2012). Which Elections Can Be Lost? <i>Political Analysis</i> , 20(2), 191–210.



## Appendix C: Robustness Checks

**Table C1: Fixed Effect and Random Effect Estimates for the Effect of Violence on Incumbent Wins, Protest and Power Concessions**

	(1) <i>Incumbent Wins</i>	(2) <i>Incumbent Wins</i>	(3) <i>Protest</i>	(4) <i>Protest</i>	(5) <i>Power Concessions</i>	(6) <i>Power Concessions</i>
<i>Pre-Election Violence</i>	1.03** (0.33)	0.73+ (0.42)	2.03** (0.50)	1.57+ (0.90)	-0.38 (1.12)	-0.29 (1.41)
<i>Protest</i>					3.19* (1.19)	3.18+ (1.71)
<i>Repress Protest</i>						2.29 (2.71)
<i>Pre-Election Protest</i>			1.22* (0.53)	1.57+ (0.90)	-0.17 (1.14)	0.47 (1.58)
<i>Physical Integrity</i>	0.28** (0.10)	0.06 (0.16)	-0.17 (0.14)	-0.43 (0.30)	0.02 (0.28)	0.21 (0.48)
<i>Leader Age</i>	0.05 (0.13)	0.12 (0.19)	-0.05 (0.09)	0.53 (0.48)	-0.27 (0.63)	0.18 (0.17)
<i>Leader Tenure</i>	0.004 (0.01)	-0.01 (0.01)	-0.02+ (0.01)	-0.01 (0.02)	0.01 (0.02)	-0.01 (0.03)
<i>Civil War</i>	-0.14 (0.19)	-0.98* (0.44)	0.25 (0.24)	1.29 (0.94)	0.20 (0.48)	0.09 (0.64)
<i>GDP (log)</i>	-0.17 (0.15)	0.38 (0.93)	-0.36+ (0.21)	4.99* (2.52)	0.55 (0.54)	0.85 (0.86)
<i>Population (log)</i>	0.17 (0.20)	-4.82* (2.28)	0.16 (0.24)	-11.04+ (5.70)	0.12 (0.58)	0.26 (0.80)
<i>Victory Uncertain</i>	-1.89** (0.30)	-1.98** (0.38)				
<i>Polity2</i>	-0.10** (0.03)	0.00 (0.05)	0.02 (0.05)	-0.06 (0.12)	-0.05 (0.10)	-0.11 (0.17)
<i>Demonstrations</i>	-0.003 (0.03)	0.03 (0.04)				
Observations	458	307	206	87	206	206
Log Likelihood	-241.6	-94.75	-90.91	-21.96	-41.11	-40.34
Random Effects	Yes	No	Yes	No	Yes	Yes
Fixed Effects	No	Yes	No	Yes	No	No

Standard errors in parentheses. \*\* p<0.01, \* p<0.05, + p<0.1. Note that fixed effects cannot be estimated for the *Power Concessions* model due to a lack of observations.

**Table C2: Alternative Coding for Pre-Election Violence**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	<i>Incumbent Wins</i>	<i>Incumbent Wins</i>	<i>Incumbent Wins</i>	<i>Boycott</i>	<i>Boycott</i>	<i>Boycott</i>	<i>Turnout</i>	<i>Turnout</i>	<i>Turnout</i>	<i>Protest</i>	<i>Protest</i>	<i>Protest</i>
<i>Pre-Election Violence</i>	1.43** (0.41)	1.82** (0.36)	0.39 (0.30)	0.51 (0.41)	0.76* (0.36)	0.35 (0.38)	2.27 (3.74)	9.77** (2.28)	-0.54 (3.10)	1.42** (0.47)	0.92* (0.46)	2.05** (0.43)
Observations	458	447	456	457	446	455	300	293	300	206	201	204
Log Likelihood	-250.3	-233.7	-255.1	-129.6	-124.9	-129.5	-1,203	-1,162	-1,203	-97.93	-96.91	-88.06
NELDA15 & NELDA33	Yes	No	No	Yes	No	No	Yes	No	No	Yes	No	No
NELDA 15	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	No
NELDA 33	No	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes

Robust clustered standard errors in parentheses. \*\* p<0.01, \* p<0.05, + p<0.1. NELDA33 indicates if there was “significant violence involving civilian deaths immediately before, during, or after the election”. NELDA15 indicates whether there is “evidence that the government harassed the opposition”.

**Table C3: Additional Control Variables, Incumbent Wins, Boycotts and Protest Models**

	(1)	(2)	(3)	(4)	(5)	(6)	(10)	(11)	(12)
	<i>Incumbent Wins</i>	<i>Incumbent Wins</i>	<i>Incumbent Wins</i>	<i>Boycott</i>	<i>Boycott</i>	<i>Boycott</i>	<i>Protest</i>	<i>Protest</i>	<i>Protest</i>
<i>Pre-Election Violence</i>	0.86** (0.29)	1.08** (0.33)	1.18* (0.47)	0.62+ (0.35)	0.70+ (0.41)	1.41* (0.54)	2.06** (0.45)	2.46** (0.60)	2.40** (0.92)
<i>Election Monitors</i>	-0.43 (0.32)			-0.85+ (0.46)			0.52 (0.46)		
<i>Radio Exposure (log per capita)</i>		-0.24 (0.28)			-0.57 (0.37)			-0.61+ (0.36)	
<i>Newspaper Circulation (log per capita)</i>		0.38* (0.18)			-0.31 (0.21)			-0.40 (0.28)	
<i>Government Revenue (log per capita)</i>			2.87* (1.47)			4.56 (2.85)			-0.59 (3.00)
Observations	445	312	179	444	310	178	205	130	72
Log Likelihood	-244.5	-166.9	-90.55	-124.4	-86.69	-43.77	-90.10	-53.84	-29.20

Robust clustered standard errors in parentheses. \*\* p<0.01, \* p<0.05, + p<0.1. Included but now shown are controls for Physical Integrity, Leader Age, Leader Tenure, Civil War, GDP (log), Population (log), Polity2, Victory Uncertain and Demonstrations. These results control for variables that might affect the costs of using electoral violence relative to other electoral strategies. *Election Monitors* equals one if international observers were present during the election and zero otherwise (Hyde and Marinov 2012). *Radio Exposure* equals the log of the number of radios per capita (.0001) (Banks 2005). *Newspaper Circulation* equals the log of daily newspaper circulation per capita (.0001) (Banks 2005). *Government Revenue* equals the log of government revenue per capita (Banks 2005).

**Table C4: Protests and Power Concessions Including Elections where the Incumbent Lost**

	(1)	(2)	(3)	(4)	(5)
	<i>Protest</i>	<i>Power Concession</i>	<i>Power Concession</i>	<i>Power Concession</i>	<i>Power Concession</i>
<i>Protest</i>		2.01** (0.66)	1.92** (0.63)	-0.15 (1.10)	1.98** (0.61)
<i>Violence Against Protesters</i>			0.18 (0.88)	0.16 (0.91)	-0.39 (1.22)
<i>Pre-Election Violence * Protest</i>				18.16** (1.73)	
<i>Pre-Election Violence * Violence Against Protesters</i>					0.74 (1.18)
<i>Pre-Election Violence</i>	1.48** (0.35)	-0.11 (0.77)	-0.12 (0.77)	-16.64** (1.58)	-0.31 (0.75)
<i>Fraud</i>	0.98* (0.42)	1.10 (0.94)	1.10 (0.95)	1.62 (1.09)	1.13 (0.94)
<i>Physical Integrity</i>	0.16+ (0.09)	-0.02 (0.27)	-0.01 (0.30)	0.01 (0.27)	-0.01 (0.29)
<i>Leader Age</i>	0.08 (0.19)	0.18 (0.24)	0.17 (0.26)	0.13 (0.23)	0.14 (0.25)
<i>Leader Tenure</i>	-0.02** (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.02)	-0.01 (0.01)
<i>Civil War</i>	0.09 (0.14)	0.13 (0.22)	0.12 (0.21)	0.14 (0.23)	0.11 (0.21)
<i>GDP (log)</i>	-0.26 (0.17)	0.08 (0.29)	0.08 (0.28)	0.10 (0.31)	0.10 (0.28)
<i>Population (log)</i>	0.54** (0.17)	0.24 (0.30)	0.24 (0.31)	0.31 (0.33)	0.25 (0.31)
<i>Polity2</i>	-0.05 (0.03)	0.06 (0.07)	0.06 (0.07)	0.08 (0.08)	0.06 (0.07)
<i>Incumbent Won Election</i>	0.75* (0.35)	1.91* (0.85)	1.90* (0.90)	1.94* (0.85)	1.92* (0.88)
<i>Pre-Election Protest</i>	0.89* (0.44)	0.56 (0.66)	0.57 (0.67)	0.76 (0.77)	0.58 (0.68)
Constant	-12.08** (2.69)	-11.02* (5.10)	-11.10* (5.26)	-11.90* (5.47)	-11.13* (5.26)
Observations	462	462	462	462	462
Log Likelihood	-161.7	-56.43	-56.13	-51.85	-56.26

Robust clustered standard errors in parentheses. Includes cases where the incumbent lost the election.

\*\* p<0.01, \* p<0.05, + p<0.1

**Table C5: Additional Control Variables, Incumbent Wins, Boycotts and Protest Models**

	(1) <i>Incumbent Wins</i>	(2) <i>Boycott</i>	(3) <i>Protest</i>
<i>Pre-Election Violence</i>	0.69* (0.31)	0.79* (0.36)	2.02** (0.47)
<i>Freedom of Speech</i>	-1.02** (0.26)	0.17 (0.29)	0.13 (0.40)
<i>Leader Age</i>	0.05 (0.11)	0.10 (0.19)	-0.00 (0.25)
<i>Leader Tenure</i>	0.01 (0.01)	0.00 (0.01)	-0.02+ (0.01)
<i>Civil War</i>	-0.17 (0.16)	0.43+ (0.24)	0.11 (0.21)
<i>GDP (log)</i>	-0.06 (0.12)	-0.11 (0.16)	-0.33+ (0.20)
<i>Population (log)</i>	-0.04 (0.18)	0.03 (0.23)	0.16 (0.20)
<i>Victory Uncertain</i>	-1.62** (0.26)	-1.73** (0.46)	
<i>Polity2</i>	-0.07* (0.03)	-0.10** (0.03)	0.01 (0.05)
<i>Demonstrations</i>	-0.00 (0.03)	-0.00 (0.04)	
<i>Pre-Election Protest</i>			1.16+ (0.63)
Observations	454	453	204
Log Likelihood	-236.2	-125.6	-90.24

Robust clustered standard errors in parentheses. \*\* p<0.01, \* p<0.05, + p<0.1. Included but now shown are controls for Physical Integrity, Leader Age, Leader Tenure, Civil War, GDP (log), Population (log), Polity2, Victory Uncertain and Demonstrations. These results control for *Freedom of Speech* in order to account for possible reporting biases introduced by government censorship. Freedom of Speech equals zero in states with complete censorship. It equals one if there was some censorship. It equals two if there was no censorship in a given year (Cingranelli and Richards 2010).

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