Supplementary material

**Viewing Violence through a Partisan lens: How Electoral Violence Shapes Citizens’ Support for Democracy**

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# Appendix

* 1. **Descriptive statistics**

Table A1 shows the descriptive statistics for the variables included in our analysis of the full sample.

Table A1: Descriptive statistics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Count | Mean | Sd | Min | Max |
| Support for democracy | 28972 | 0.46 | 0.39 | 0 | 1 |
| Government perpetrated EV | 28972 | 0.12 | 0.33 | 0 | 1 |
| Nonpartisan | 28972 | 0.43 | 0.50 | 0 | 1 |
| Incumbent partisan | 28972 | 0.32 | 0.47 | 0 | 1 |
| Male | 28972 | 0.50 | 0.50 | 0 | 1 |
| Age | 28972 | 36.78 | 14.40 | 18 | 100 |
| Secondary education | 28972 | 0.24 | 0.43 | 0 | 1 |
| Urban | 28972 | 0.36 | 0.48 | 0 | 1 |
| Poverty | 28972 | 1.42 | 0.94 | 0 | 4 |
| Competitiveness | 28972 | 0.69 | 0.50 | 0 | 4 |
| Round | 28972 | 4.58 | 0.49 | 4 | 5 |
| Opposition perpetrated EV | 28972 | 0.11 | 0.31 | 0 | 1 |
| EV past 10 years | 28972 | 3.34 | 11.04 | 0 | 95 |
| SBV past 10 years | 28972 | 0.64 | 3.99 | 0 | 54 |
| Sensitivity | 28972 | 0.59 | 0.49 | 0 | 1 |
| Clashes 50 | 28972 | 0.07 | 0.26 | 0 | 1 |
| SBV current | 28972 | 0.80 | 5.79 | 0 | 172 |
| Liberal democracy index | 28972 | 0.40 | 0.13 | 0 | 1 |

# Countries and survey years included in the analysis

 Table B1: Countries included, ECAV violent events Total Pro-inc. EV

Benin (Round 4, 5) Benin (Round 5)

Kenya (Round 4) Kenya (Round 4)

Madagascar (Round 4) Madagascar (Round 4)

Nigeria (Round 4, 5) Nigeria (Round 4, 5)

Senegal (Round 4) Senegal (Round 4)

Tanzania (Round 5) Tanzania (Round 5)

Uganda (Round 5) Uganda (Round 5)

Zambia (Round 4) Zambia (Round 4)

Zimbabwe (Round 4, 5) Zimbabwe (Round 4)

Burkina Faso (Round 4, 5)

Cameroon (Round 5)

Cape Verde (Round 5)

Cote d’Ivoire (Round 5)

Lesotho (Round 4, 5)

Liberia (Round 5)

Mali (Round 4)

Mauritius (Round 5)

Niger (Round 5)

# Robustness checks

We provide some additional information about the propensity score matching procedure here. The variables selected for matching were chosen based on two criteria. First, they must be measured earlier in time than the violent events, or be stable over time, so that they cannot have been affected by the violent events. Second, they must be theoretically relevant predictors of government-perpetrated electoral violence within a certain space. While the unit of analysis in the study is the individual, the violence measure is originally event-data located in a geographical location. Therefore, we select variables that are related to the geographical area, rather than the individual. The individuals’ characteristics should not affect whether violence takes place in their area. This suggests three particularly relevant variables: the country, whether or not the area is urban, and the other forms of political violence in the area over the 10 years preceding the time period that the recent violence was measured in. Areas already afflicted with political violence are more likely to have electoral violence, as are urban areas. Importantly, the different countries have distinct probabilities of electoral violence, while some have extensive electoral violence, others have none.

Before constructing the propensity scores and running the weighted analysis presented in Table C3, we conducted balance tests to see the distribution of the treatment variable - government-perpetrated electoral violence. Figure C1 shows the balance between the treatment and control groups, i.e. those that have had violence in their proximity, and those that have not. Table C4 shows the balance table. The standardized differences should be closer to 0, while the variances should be closer to 1. This is achieved for each of the variables, particularly for the urban and armed conflict variables the values are optimal after matching. Given that some countries have no violence while others have plenty, the standardized differences are slightly further from the optimal values. They are nonetheless significantly improved. Figure C1 shows the overlap between the treatment and control groups with and without matching. The matched sample shows a substantially closer overlap of the distribution of the propensity scores in the matched sample than in the raw sample. The matched sets are very similar in

terms of the median, the 25th and the 75th percentiles, while there is slight difference in a few outliers.

Table C1: Government-perpetrated electoral violence and citizen support for democracy. Buffer sizes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| Government perpetrated EV 50 | 0.016 |  |  |  |
| Male | (0.016)0.064*∗∗* | 0.060*∗∗* | 0.060*∗∗* | 0.060*∗∗* |
| Age | (0.005)0.000*∗* | (0.005)0.000*∗* | (0.005)0.000*∗* | (0.005)0.000*∗* |
| Secondary education | (0.000)0.096*∗∗* | (0.000)0.095*∗∗* | (0.000)0.095*∗∗* | (0.000)0.095*∗∗* |
| Urban | (0.008)0.030*∗∗* | (0.008)0.031*∗∗* | (0.008)0.031*∗∗* | (0.008)0.031*∗∗* |
| Poverty | (0.006)-0.021*∗∗* | (0.006)-0.021*∗∗* | (0.006)-0.021*∗∗* | (0.006)-0.021*∗∗* |
|  | (0.005) | (0.005) | (0.005) | (0.005) |
| Competitiveness | 0.009 | -0.000 | -0.000 | 0.000 |
| Round | (0.009)0.074*∗∗* | (0.009)0.075*∗∗* | (0.009)0.075*∗∗* | (0.009)0.077*∗∗* |
|  | (0.018) | (0.018) | (0.017) | (0.017) |
| Government perpetrated EV 25 |  | 0.018 |  |  |
| Nonpartisan |  | (0.021)-0.052*∗∗* | -0.045*∗∗* | -0.047*∗∗* |
|  |  | (0.009) | (0.009) | (0.010) |
| Government perpetrated EV 25 *×* Nonpartisan |  | -0.022 |  |  |
| Incumbent partisan |  | (0.020)-0.034*∗∗* | -0.027*∗∗* | -0.026*∗∗* |
|  |  | (0.008) | (0.008) | (0.009) |
| Government perpetrated EV 25 *×* Incumbent partisan |  | -0.021 |  |  |
|  |  | (0.029) |  |  |
| Government perpetrated EV 100 |  |  | 0.037+ |  |
| Government perpetrated EV 100 *×* Nonpartisan |  |  | (0.021)-0.042*∗* |  |
| Government perpetrated EV 100 *×* Incumbent partisan |  |  | (0.017)-0.044*∗* |  |
|  |  |  | (0.018) |  |
| Government perpetrated EV 250 |  |  |  | 0.003 |
|  |  |  |  | (0.025) |
| Government perpetrated EV 250 *×* Nonpartisan |  |  |  | -0.020 |
|  |  |  |  | (0.015) |
| Government perpetrated EV 250 *×* Incumbent partisan |  |  |  | -0.028 |
| Constant | 0.37*∗∗* | 0.41*∗∗* | 0.40*∗∗* | (0.018)0.40*∗∗* |
|  | (0.037) | (0.038) | (0.038) | (0.038) |
| N | 28972 | 28972 | 28972 | 28972 |
| R2 within | 0.030 | 0.033 | 0.033 | 0.033 |
| R2 between | 0.46 | 0.46 | 0.46 | 0.46 |
| R2 overall | 0.10 | 0.11 | 0.11 | 0.11 |
| Standard errors in parentheses |  |  |  |  |
| + *p <* 0*.*10, *∗ p <* 0*.*05, *∗∗ p <* 0*.*01 |  |  |  |  |

Balance plot

Propensity Score

.2

.3

.4

Raw

Matched

control treated

Figure C1: Balance plot. Left panel: Unmatched sample. Right panel: Matched sample.

0

.1

Table C2: Only countries with government-perpetrated EV.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| Government perpetrated EV | 0.060*∗∗* | 0.048*∗* | 0.046*∗∗* | 0.054*∗∗* |
| Nonpartisan | (0.019)-0.063*∗∗* | (0.019)-0.055*∗∗* | (0.019)-0.055*∗∗* | (0.020)-0.056*∗∗* |
|  | (0.014) | (0.013) | (0.013) | (0.013) |
| Government perpetrated EV *×* Nonpartisan | -0.035+ | -0.038*∗* | -0.038*∗* | -0.041+ |
| Incumbent partisan | (0.020)-0.056*∗∗* | (0.019)-0.051*∗∗* | (0.019)-0.051*∗∗* | (0.023)-0.051*∗∗* |
|  | (0.014) | (0.013) | (0.013) | (0.013) |
| Government perpetrated EV *×* Incumbent partisan | -0.023 | -0.023 | -0.023 | -0.024 |
| Male | (0.023) | (0.023)0.060*∗∗* | (0.023)0.060*∗∗* | (0.026)0.060*∗∗* |
|  |  | (0.006) | (0.006) | (0.006) |
| Age |  | 0.000 | 0.000 | 0.000 |
| Secondary education |  | (0.000)0.076*∗∗* | (0.000)0.077*∗∗* | (0.000)0.077*∗∗* |
| Urban |  | (0.010)0.029*∗∗* | (0.010)0.029*∗∗* | (0.010)0.029*∗∗* |
| Poverty |  | (0.009)-0.025*∗∗* | (0.009)-0.025*∗∗* | (0.009)-0.025*∗∗* |
|  |  | (0.007) | (0.007) | (0.007) |
| Competitiveness |  | -0.009 | -0.009 | -0.009 |
|  |  | (0.006) | (0.006) | (0.006) |
| Round |  | 0.044 | 0.047 | 0.041 |
|  |  | (0.029) | (0.029) | (0.029) |
| EV past 10 years |  |  | -0.000 | -0.001 |
| SBV past 10 years |  |  | (0.001)0.008*∗∗* | (0.001)0.008*∗∗* |
| SBV current |  |  | (0.001)-0.002*∗∗* | (0.001)-0.001*∗∗* |
|  |  |  | (0.001) | (0.001) |
| Opposition perpetrated EV |  |  |  | -0.034 |
|  |  |  |  | (0.024) |
| Opposition perpetrated EV *×* Nonpartisan |  |  |  | 0.010 |
|  |  |  |  | (0.021) |
| Opposition perpetrated EV *×* Incumbent partisan |  |  |  | -0.004 |
| Constant | 0.68*∗∗* | 0.59*∗∗* | 0.58*∗∗* | (0.025)0.59*∗∗* |
|  | (0.033) | (0.041) | (0.041) | (0.043) |
| N | 15640 | 15640 | 15640 | 15640 |
| R2 within | 0.007 | 0.029 | 0.029 | 0.030 |
| R2 between | 0.30 | 0.34 | 0.46 | 0.46 |
| R2 overall | 0.058 | 0.082 | 0.088 | 0.089 |
| Standard errors in parentheses |  |  |  |  |
| + *p <* 0*.*10, *∗ p <* 0*.*05, *∗∗ p <* 0*.*01 |  |  |  |  |

Table C3: Government-perpetrated electoral violence and citizen support for democracy. Matching

|  |  |  |  |
| --- | --- | --- | --- |
| Pooled | Incumbent | Opposition | Non-partisans |
| ATE 0.052*∗∗* | 0.084 | 0.080*∗∗* | -0.005 |
|  (0.014) | (0.052) | (0.031) | (0.014) |
| N 28972 | 9245 | 7243 | 12484 |

Standard errors in parentheses

+ *p <* 0*.*10, *∗ p <* 0*.*05, *∗∗ p <* 0*.*01

Table C4: Matching overview, balance table

|  |  |  |  |
| --- | --- | --- | --- |
| **Overview** | Raw | Matched |  |
| Number of obs | 28,972 | 57,944 |  |  |
| Treated obs | 3,603 | 28,972 |  |  |
| Control obs | 25,369 | 28,972 |  |  |
|  | **Standardized diff.** |  | **Variance ratio** |  |
|  | Raw | Matched | Raw | Matched |
| Urban | .2210076 | .0501532 | 1.093416 | 1.028724 |
| Country | .4523951 | -.1236265 | .6593964 | .6151146 |
| Armed conflict (within 10yrs) | .4520306 | .0765318 | 1.419244 | 1.085385 |

# Extended analysis

Table D1: Government-perpetrated electoral violence and trust in electoral commission.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| Government perpetrated EV | -0.39*∗∗* | -0.38*∗∗* | -0.38*∗∗* | -0.41*∗∗* |
| Nonpartisan | (0.049)0.19*∗∗* | (0.050)0.18*∗∗* | (0.051)0.18*∗∗* | (0.056)0.18*∗∗* |
| Government perpetrated EV *×* Nonpartisan | (0.031)0.29*∗∗* | (0.030)0.27*∗∗* | (0.030)0.27*∗∗* | (0.030)0.30*∗∗* |
| Incumbent partisan | (0.047)0.44*∗∗* | (0.045)0.42*∗∗* | (0.045)0.42*∗∗* | (0.054)0.42*∗∗* |
| Government perpetrated EV *×* Incumbent partisan | (0.034)0.49*∗∗* | (0.033)0.48*∗∗* | (0.033)0.48*∗∗* | (0.033)0.51*∗∗* |
| Male | (0.085) | (0.083)-0.051*∗∗* | (0.084)-0.051*∗∗* | (0.084)-0.051*∗∗* |
| Age |  | (0.017)0.004*∗∗* | (0.017)0.004*∗∗* | (0.017)0.004*∗∗* |
| Secondary education |  | (0.001)-0.14*∗∗* | (0.001)-0.14*∗∗* | (0.001)-0.14*∗∗* |
| Urban |  | (0.020)-0.12*∗∗* | (0.020)-0.13*∗∗* | (0.020)-0.13*∗∗* |
| Poverty |  | (0.024)-0.064*∗∗* | (0.024)-0.064*∗∗* | (0.024)-0.064*∗∗* |
| Competitiveness |  | (0.012)-0.014 | (0.012)-0.014 | (0.012)-0.014 |
| Round |  | (0.010)0.090*∗* | (0.010)0.085*∗* | (0.010)0.087*∗* |
|  |  | (0.040) | (0.041) | (0.041) |
| EV past 10 years |  |  | 0.001 | 0.001 |
| SBV past 10 years |  |  | (0.001)-0.006*∗∗* | (0.001)-0.006*∗∗* |
| SBV current |  |  | (0.002)0.003*∗∗* | (0.002)0.003*∗* |
|  |  |  | (0.001) | (0.001) |
| Opposition perpetrated EV |  |  |  | 0.061 |
|  |  |  |  | (0.071) |
| Opposition perpetrated EV *×* Nonpartisan |  |  |  | -0.065 |
|  |  |  |  | (0.065) |
| Opposition perpetrated EV *×* Incumbent partisan |  |  |  | -0.063 |
| Constant | 1.53*∗∗* | 1.47*∗∗* | 1.48*∗∗* | (0.088)1.47*∗∗* |
|  | (0.050) | (0.068) | (0.068) | (0.069) |
| N | 28955 | 28955 | 28955 | 28955 |
| R2 within | 0.031 | 0.042 | 0.042 | 0.042 |
| R2 between | 0.68 | 0.71 | 0.71 | 0.71 |
| R2 overall | 0.14 | 0.16 | 0.16 | 0.16 |
| Standard errors in parentheses |  |  |  |  |
| + *p <* 0*.*10, *∗ p <* 0*.*05, *∗∗ p <* 0*.*01 |  |  |  |  |

Figure D1: Marginal effect of opposition-perpetrated violence on support for democracy by partisan affiliation.



Table D2: Government-perpetrated electoral violence and satisfaction with democracy.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| Government perpetrated EV | -0.18*∗∗* | -0.17*∗∗* | -0.19*∗∗* | -0.22*∗∗* |
|  | (0.055) | (0.055) | (0.056) | (0.052) |
| Nonpartisan | 0.063*∗* | 0.048+ | 0.048+ | 0.057*∗* |
|  | (0.026) | (0.026) | (0.026) | (0.025) |
| Government perpetrated EV *×* Nonpartisan | 0.098+ | 0.095+ | 0.094 | 0.15*∗∗* |
| Incumbent partisan | (0.057)0.33*∗∗* | (0.057)0.32*∗∗* | (0.057)0.32*∗∗* | (0.052)0.32*∗∗* |
| Government perpetrated EV *×* Incumbent partisan | (0.024)0.21*∗* | (0.024)0.19*∗* | (0.024)0.19*∗* | (0.024)0.26*∗∗* |
| Male | (0.085) | (0.085)-0.044*∗∗* | (0.084)-0.044*∗∗* | (0.073)-0.043*∗∗* |
| Age |  | (0.013)0.002*∗∗* | (0.013)0.002*∗∗* | (0.013)0.002*∗∗* |
| Secondary education |  | (0.000)-0.10*∗∗* | (0.000)-0.10*∗∗* | (0.000)-0.10*∗∗* |
| Urban |  | (0.020)-0.085*∗∗* | (0.020)-0.087*∗∗* | (0.020)-0.085*∗∗* |
| Poverty |  | (0.020)-0.080*∗∗* | (0.020)-0.080*∗∗* | (0.020)-0.081*∗∗* |
| Competitiveness |  | (0.010)-0.028*∗* | (0.010)-0.029*∗∗* | (0.010)-0.029*∗∗* |
|  |  | (0.011) | (0.011) | (0.011) |
| Round |  | 0.057 | 0.058 | 0.055 |
|  |  | (0.056) | (0.056) | (0.059) |
| EV past 10 years |  |  | 0.003 | 0.003 |
|  |  |  | (0.002) | (0.002) |
| SBV past 10 years |  |  | -0.005 | -0.005 |
|  |  |  | (0.003) | (0.003) |
| SBV current |  |  | 0.002 | 0.002 |
|  |  |  | (0.001) | (0.001) |
| Opposition perpetrated EV |  |  |  | 0.079 |
|  |  |  |  | (0.065) |
| Opposition perpetrated EV *×* Nonpartisan |  |  |  | -0.14+ |
|  |  |  |  | (0.073) |
| Opposition perpetrated EV *×* Incumbent partisan |  |  |  | -0.14+ |
| Constant | 2.48*∗∗* | 2.51*∗∗* | 2.51*∗∗* | (0.080)2.50*∗∗* |
|  | (0.067) | (0.089) | (0.089) | (0.091) |
| N | 28960 | 28960 | 28960 | 28960 |
| R2 within | 0.021 | 0.030 | 0.030 | 0.031 |
| R2 between | 0.72 | 0.73 | 0.73 | 0.74 |
| R2 overall | 0.12 | 0.13 | 0.13 | 0.13 |
| Standard errors in parentheses |  |  |  |  |
| + *p <* 0*.*10, *∗ p <* 0*.*05, *∗∗ p <* 0*.*01 |  |  |  |  |

# Components of the dependent variable

In order to make sure that all of the component terms of the index were on the same scale and consistent in the direction of the relationship between higher values and degree of support for democracy we recoded each response in line with the numbers in parenthesis. We then standardized them to be on a scale from 0 to 1 (where 5=1, 3=0.5 and 1=0) and finally multiplied.

## Component nr 1 – Stated support for democracy: ”Which of these three state- ments is closest to your own opinion?”

* Democracy is preferable to any other kind of government. (5)
* In some circumstances, a non-democratic government can be preferable. (1)
* For someone like me, it doesn’t matter what kind of government we have. (3) 11

## Component nr 2, 3, 4 – Support for alternative regime types (statements): ”There are many ways to rule a country. Would you disapprove or approve of the following alternatives:”

* Only one political party is allowed to stand for election and hold office. (One party rule)
* The army comes in to govern the country. (Military rule)
* Elections and Parliament/National Assembly are abolished so that the President/Prime Minister can decide everything. (Presidential single rule)

## Component nr 2, 3, 4 – Support for alternative regime types (responses):

* Strongly disapprove (5)
* Disapprove (4)
* Neither approve nor disapprove (3)12
* Approve (2)
* Strongly approve (1)

11”Don’t know” responses were coded as 3 in line with the recommendation by (Mattes and Bratton, 2007).

12”Don’t know” responses were coded as 3 in line with the recommendation by (Mattes and Bratton, 2007).