**Appendix**

**Table A: Summary of quantitative findings on nonviolent protest and armed conflict** **in previous research** **(resource related in bold)**

| **Intra-group Factors**  *(internal factors)* | **Nonviolent conflict** | **Armed conflict** | **Source** |
| --- | --- | --- | --- |
| Group size/total pop | - | + | (Cunningham 2013) |
| Internal fragmentation | No | + | (Cunningham 2013) |
| Geographic concentration | - | No | (Cunningham 2013) |
| Previous nonviolent protest history | +  +  \* | No | (Cunningham 2013)  (Braithwaite et al. 2015)  (Chenoweth and Ulfelder 2015) |
| **Inter-group Factors** *(group-group or group-state relations)* | | | |
| Competing violent groups |  | + | (Shellman et al. 2013) |
| Econ discrimination | + | +  + | (Cunningham 2013)  (Shellman et al. 2013) |
| Political exclusion | +  No\*  No | +  + | (Cunningham 2013)  (Chenoweth and Ulfelder 2015)  (Regan and Norton 2005) |
| Repression | No\*  - | + (Squared)  + | (Shellman et al. 2013)  (Chenoweth and Ulfelder 2015)  (Regan and Norton 2005) |
| Popular support for gov’t |  | - | (Shellman et al. 2013) |
|  |  |  |  |
| **Government-level Factors** |  |  |  |
| Democracy | -  -  -  No | No  No  + (Squared) | (Cunningham 2013)  (Chenoweth and Lewis 2013)  (Gleditsch and Rivera 2015) |
| Civil liberties | \* |  | (Chenoweth and Ulfelder 2015) |
| Election year | No  No  \* | No | (Cunningham 2013)  (Braithwaite et al. 2015)  (Chenoweth and Ulfelder 2015) |
| Political instability (>3 shift in polity) | No  No | +  No | (Chenoweth and Lewis 2013)  (Cunningham 2013) |
| Military personnel | No |  | (Gleditsch and Rivera 2015) |

| **Context factors, including resource related factors** |  |  |  |
| --- | --- | --- | --- |
| Rough terrain | No | + | (Chenoweth and Lewis 2013) |
| Total population | +  +  +  +  No | No  +  + | (Cunningham 2013)  (Braithwaite et al. 2015)  (Chenoweth and Lewis 2013)  (Gleditsch and Rivera 2015)  (Regan and Norton 2005) |
| Youth bulge | \* |  | (Chenoweth and Ulfelder 2015) |
| Urbanization | \* |  | (Chenoweth and Ulfelder 2015) |
| Time trends | \* |  | (Chenoweth and Ulfelder 2015) |
| GDP/cap | No  No  No  No  No | -  -  + | (Cunningham 2013)  (Braithwaite et al. 2015)  (Chenoweth and Lewis 2013)  (Gleditsch and Rivera 2015)  (Regan and Norton 2005) |
| Poorer vs richer countries | - | + | (Brunnschweiler and Lujala 2019) |
| nonviolent campaign in neighboring country | + (only if no domestic experience)  +  \* | | (Braithwaite et al. 2015)  (Gleditsch and Rivera 2015)  (Chenoweth and Ulfelder 2015) |
| Ethnic and religious fractionalization | No  no | No  + | (Chenoweth and Lewis 2013)  (Regan and Norton 2005) |
|  | \* (ethnic discrimination) | | (Chenoweth and Ulfelder 2015) |
| **Oil revenues** | **No** | **+** | **(Chenoweth and Lewis 2013)** |
| **“Extractables”** | **No** | **-** | **(Regan and Norton 2005)** |

\* Factor adds predictive power to forecasting models.

**Table B: Variables, indicators, and expectations**

| Variables | Indicator | Data source | H1: Sleep | H2: Bark | H3: Bite |
| --- | --- | --- | --- | --- | --- |
| **Natural resources** |  |  |  |  |  |
| H1: Resource grievances increase both bark and bite | Location of oil or diamonds (dummy) | PETRODATA, DIADATA | - | + | + |
| H2: Political monopoly\*resources reverses effects | Resources\*(N monopoly groups/total N groups) (count \* count) | PETRODATA, DIADATA, GeoEPR | + | - | -- |
| H3: Lootable resources increase bite not bark | Alluvial diamonds (dummy) | DIADATA | - | no effect | + |
| **H4: Controls (Motive)** |  |  |  |  |  |
| Political exclusion | N discriminated groups/total N groups (count) | GeoEPR | - | + | ++ |
| Horizontal economic deprivation | Country mean – GDP/capita in grid cell (continuous) | PRIO-GRID | - | + | ++ |
| Prior violent state reaction to peaceful protest | Lethal state reaction to peaceful protest, past 5 years dummy | SCAD | - | - | + |
| **H4: Controls, Capacity (political)** |  |  |  |  |  |
| Group size | N members of largest group/ national population (count/ continuous) | GeoEPR | - | ++ | + |
| Urban areas | Urban areas /grid-cell area (dummy) | PRIO-GRID, based on ISAM-HYDE | No effect | + | - |
| Population density | Logged population total per populated cell/grid-cell area (continuous) | PRIO-GRID | - | ++ | + |
| Male youth bulge | Male youth (15-24), % of total male population (country level, continuous) | World Bank | - | + | + |
| Democracy | (country level, count) | Polity2 | No effect | + | - |
| **H4: Controls, Capacity (military)** |  |  |  |  |  |
| Topography | Mountainous terrain/grid-cell area (continuous) | PRIO-GRID | No effect | - | + |
| Economic development | Logged gross cell product/ capita (continuous) | PRIO-GRID | No effect | + | - |
| Cross-border settlements of ethnic groups | Transborder ethnic kin dummy | GeoEPR | - | No effect | + |
| Periphery | Distance to border (continuous) | PRIO-GRID | No effect | - | + |
| Security sector strength | Military personnel (country level) / population (1990-2007) (continuous) | COW National Material Capabilities | + | - | - |
| **Other controls** |  |  |  |  |  |
| Spatio-temporal lag | Weighted variable of protest in neighboring units, lagged by one year (count) | PRIO-GRID, UCDP GED, SCAD | - | + | + |
| Peace years | Cubic polynomial of years “sleeping” (count) | UCDP GED, SCAD |  |  |  |

**Table C: Sleep Bark Bite Protest Onset, 1990-2013, 8 neighbor spatial lag**

|  | (1) |  | (2) |  | (3) |  | (4) |  | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | bark | bite | bark | bite | bark | bite | bark | bite | | |
| RESOURCES |  |  |  |  |  |  |  |  | | |
| Resources | 0.112 | 0.160+ | 0.248 | 0.196+ | 0.407\* | 0.265\*\* |  |  | | |
|  | (0.57) | (1.73) | (1.30) | (1.96) | (2.26) | (2.86) |  |  | | |
|  |  |  |  |  |  |  |  |  | | |
|  |  |  |  |  |  |  |  |  | | |
| Res \* pol monopoly |  |  |  |  | -1.892\*\* | -1.065\*\* |  |  | | |
|  |  |  |  |  | (-3.18) | (-3.02) |  |  | | |
| Lootable |  |  |  |  |  |  | 0.448 | 0.544\*\*\* | | |
|  |  |  |  |  |  |  | (1.32) | (4.13) | | |
| MOTIVE |  |  |  |  |  |  |  |  | | |
|  |  |  |  |  |  |  |  |  | | |
| Pol monopoly |  |  |  |  | 0.286 | 0.734\*\*\* |  |  | | |
|  |  |  |  |  | (1.00) | (5.02) |  |  | | |
|  | (0.64) | (12.31) | (0.60) | (10.39) |  |  | (0.61) | (10.38) | | |
|  |  |  |  |  |  |  |  |  | | |
| Econ depr | 156.4\* | -149.9\*\*\* | 189.5+ | -260.5\*\*\* | 89.34 | -234.3\*\*\* | 188.4+ | -257.5\*\*\* | | |
|  | (2.26) | (-3.47) | (1.74) | (-5.81) | (0.91) | (-5.29) | (1.77) | (-5.75) | | |
|  |  |  |  |  |  |  |  |  | | |
| Violent state | 2.602\*\*\* | 1.370\*\*\* | 2.918\*\*\* | 1.529\*\*\* | 2.693\*\*\* | 1.376\*\*\* | 2.931\*\*\* | 1.553\*\*\* | | |
|  | (17.09) | (9.65) | (16.78) | (8.58) | (17.27) | (8.47) | (16.65) | (8.71) | | |
|  |  |  |  |  |  |  |  |  | | |
| POLITICAL CAPACITY | | | | | | | | |
| Group size | 0.00183 | -0.590\*\*\* | -0.161 | -0.978\*\*\* | -0.0801 | -1.161\*\*\* | -0.162 | -0.968\*\*\* | | |
|  | (0.01) | (-5.64) | (-0.62) | (-7.70) | (-0.31) | (-9.37) | (-0.63) | (-7.66) | | |
|  |  |  |  |  |  |  |  |  | | |
| Urban | 0.229\*\*\* | 0.151\*\*\* | 0.238\*\*\* | 0.162\*\*\* | 0.229\*\*\* | 0.147\*\*\* | 0.239\*\*\* | 0.162\*\*\* | | |
|  | (6.72) | (5.15) | (6.02) | (4.31) | (6.34) | (4.75) | (6.05) | (4.36) | | |
|  |  |  |  |  |  |  |  |  | | |
| Pop density | 0.489\*\*\* | 0.420\*\*\* | 0.508\*\*\* | 0.462\*\*\* | 0.503\*\*\* | 0.412\*\*\* | 0.515\*\*\* | 0.468\*\*\* | | |
|  | (10.03) | (21.68) | (9.82) | (19.52) | (10.61) | (20.27) | (10.09) | (19.78) | | |
|  |  |  |  |  |  |  |  |  | | |
| Male youth bulge |  |  | 0.254\*\*\* | 0.0426 | 0.202\*\*\* | 0.0896\*\*\* | 0.256\*\*\* | 0.0447 | | |
|  |  | (5.43) | (1.57) | (4.70) | (3.63) | (5.39) | (1.64) | | |
|  |  |  |  |  |  |  |  |  | | |
| Polity2 |  |  | 0.0327\*\* | -0.0161\*\* | 0.0384\*\*\* | -0.0178\*\*\* | 0.0314\*\* | -0.0174\*\* | | |
|  |  |  | (2.86) | (-2.60) | (3.58) | (-3.35) | (2.73) | (-2.79) | | |
|  |  |  |  |  |  |  |  |  | | |
| MILITARY CAPACITY | | | | | | | | | |
| Mountains | -0.283 | 0.140+ | -0.240 | 0.275\*\* | -0.298 | 0.385\*\*\* | -0.260 | 0.267\*\* | | |
|  | (-1.58) | (1.73) | (-1.17) | (2.80) | (-1.44) | (4.27) | (-1.26) | (2.72) | | |
|  |  |  |  |  |  |  |  |  | | |
| Border dist | 0.00104+ | 0.000292 | 0.00193\*\* | 0.000311 | 0.00175\*\* | 0.000318 | 0.00190\*\* | 0.000294 | | |
|  | (1.88) | (1.33) | (2.97) | (1.17) | (2.83) | (1.27) | (2.94) | (1.10) | | |
|  |  |  |  |  |  |  |  |  | | |
| Capital dist | -0.001\*\*\* | 0.0003\*\*\* | -0.001\*\*\* | 0.0001+ | -0.001\*\*\* | 0.0002\*\* | -0.001\*\*\* | 0.0002+ | | |
|  | (-4.55) | (3.84) | (-4.24) | (1.65) | (-4.33) | (3.12) | (-4.20) | (1.80) | | |
|  |  |  |  |  |  |  |  |  | | |
| Transborder ethnic | -0.0232\*\* | 0.0242\*\*\* | -0.0264\* | 0.0169\*\*\* | -0.0196+ | 0.0150\*\*\* | -0.0259\* | 0.0175\*\*\* | | |
| (-2.59) | (7.29) | (-2.47) | (4.17) | (-1.95) | (3.83) | (-2.43) | (4.33) | | |
|  |  |  |  |  |  |  |  |  | | |
| GDP/cap | 0.0895 | -0.0458+ | -0.00818 | -0.0195 | -0.00343 | -0.0532\* | 0.00265 | -0.0108 | | |
|  | (1.51) | (-1.91) | (-0.13) | (-0.70) | (-0.06) | (-2.06) | (0.04) | (-0.39) | | |
|  |  |  |  |  |  |  |  |  | | |
| Military personnel |  |  | -29.43+ | 24.49\*\*\* |  |  | -28.44+ | 24.54\*\*\* | | |
|  |  | (-1.77) | (4.98) |  |  | (-1.78) | (4.98) | | |
|  |  |  |  |  |  |  |  |  | | |
|  |  |  |  |  |  |  |  |  | | |
| Spatio temporal lag 8 | -0.151 | 3.169\*\*\* | -0.476 | 3.042\*\*\* | -0.543 | 3.327\*\*\* | -0.498 | 3.018\*\*\* | | |
| (-0.40) | (19.86) | (-1.03) | (16.21) | (-1.27) | (18.75) | (-1.08) | (16.15) | | |
|  |  |  |  |  |  |  |  | | |
| Constant | -4.231\*\*\* | -5.828\*\*\* | -10.91\*\*\* | -6.430\*\*\* | -9.752\*\*\* | -7.504\*\*\* | -10.81\*\*\* | -6.386\*\*\* | | |
|  | (-5.17) | (-17.46) | (-9.02) | (-9.31) | (-8.67) | (-11.67) | (-9.00) | (-9.27) | | |
| Observations | 183095 |  | 130963 |  | 154370 |  | 130963 |  | | |
| Aic | 31525.1 |  | 20872.3 |  | 24497.9 |  | 20863.2 |  | | |
| Bic | 31869.1 |  | 21263.6 |  | 24895.7 |  | 21254.5 |  | | |

*t* statistics in parentheses, + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

**Table D: Sleep Bark Bite Protest Onset, 1990-2013, wider definitions of group status**

|  | (1) |  | (2) |  | (3) |  | (4) |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | bark | bite | bark | Bite | bark | bite | bark | bite | |
| RESOURCES |  |  |  |  |  |  |  |  | |
| Resources | 0.119 | 0.135 | 0.239 | 0.162 | 0.395\* | 0.235\* |  |  | |
|  | (0.60) | (1.46) | (1.25) | (1.61) | (2.19) | (2.53) |  |  | |
|  |  |  |  |  |  |  |  |  | |
| Res \* mondom |  |  |  |  | -1.631\*\* | -0.479 |  |  | |
|  |  |  |  |  | (-2.62) | (-1.23) |  |  | |
| Lootable |  |  |  |  |  |  | 0.455 | 0.566\*\*\* | |
|  |  |  |  |  |  | (1.35) | (4.08) | |
|  |  |  |  |  |  |  |  |  | |
| MOTIVE |  |  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  |  |  | |
| Discr & powerless | -0.0594 | 0.293\*\*\* | 0.0854 | 0.379\*\*\* |  |  | 0.0953 | 0.380\*\*\* | |
| (-0.45) | (5.32) | (0.57) | (5.72) |  |  | (0.64) | (5.76) | |
|  |  |  |  |  |  |  |  |  | |
| Econ depr | 158.5\* | -136.9\*\* | 190.5+ | -266.2\*\*\* | 140.0 | -248.6\*\*\* | 189.4+ | -263.7\*\*\* | |
|  | (2.30) | (-2.81) | (1.74) | (-6.00) | (1.56) | (-5.80) | (1.78) | (-5.95) | |
|  |  |  |  |  |  |  |  |  | |
| Violent state | 2.587\*\*\* | 1.299\*\*\* | 2.911\*\*\* | 1.473\*\*\* | 2.689\*\*\* | 1.332\*\*\* | 2.925\*\*\* | 1.498\*\*\* | |
|  | (17.05) | (9.26) | (16.82) | (8.47) | (17.26) | (8.14) | (16.70) | (8.60) | |
|  |  |  |  |  |  |  |  |  | |
| POLITICAL CAPACITY | | | | | | | | |
| Group size | -0.0303 | -0.669\*\*\* | -0.161 | -0.992\*\*\* | 0.0779 | -1.008\*\*\* | -0.161 | -0.982\*\*\* | |
|  | (-0.12) | (-6.39) | (-0.62) | (-7.81) | (0.28) | (-7.46) | (-0.63) | (-7.76) | |
|  |  |  |  |  |  |  |  |  | |
| Urban | 0.230\*\*\* | 0.134\*\*\* | 0.240\*\*\* | 0.141\*\*\* | 0.229\*\*\* | 0.130\*\*\* | 0.240\*\*\* | 0.141\*\*\* | |
|  | (6.65) | (4.30) | (5.95) | (3.48) | (6.40) | (4.01) | (6.00) | (3.51) | |
|  |  |  |  |  |  |  |  |  | |
| Pop density | 0.487\*\*\* | 0.415\*\*\* | 0.508\*\*\* | 0.471\*\*\* | 0.513\*\*\* | 0.440\*\*\* | 0.515\*\*\* | 0.476\*\*\* | |
|  | (10.06) | (22.42) | (9.85) | (20.11) | (10.81) | (21.11) | (10.12) | (20.42) | |
|  |  |  |  |  |  |  |  |  | |
| Male youth bulge |  |  | 0.256\*\*\* | 0.0541+ | 0.203\*\*\* | 0.0900\*\*\* | 0.258\*\*\* | 0.0570+ | |
|  |  | (5.50) | (1.86) | (4.73) | (3.59) | (5.45) | (1.95) | |
|  |  |  |  |  |  |  |  |  | |
| Polity2 |  |  | 0.0347\*\* | -0.00880 | 0.0338\*\* | -0.0191\*\*\* | 0.0335\*\* | -0.0100 | |
|  |  |  | (2.97) | (-1.43) | (3.04) | (-3.60) | (2.86) | (-1.61) | |
|  |  |  |  |  |  |  |  |  | |
| MILITARY CAPACITY | | | | | | | | |
| Mountains | -0.268 | 0.227\*\* | -0.225 | 0.342\*\*\* | -0.318 | 0.387\*\*\* | -0.244 | 0.338\*\*\* | |
|  | (-1.51) | (2.92) | (-1.10) | (3.56) | (-1.56) | (4.37) | (-1.20) | (3.52) | |
|  |  |  |  |  |  |  |  |  | |
| Border dist | 0.00107+ | -0.0000137 | 0.00194\*\* | 0.0000633 | 0.00184\*\* | 0.000229 | 0.00190\*\* | 0.0000558 | |
|  | (1.89) | (-0.06) | (2.96) | (0.24) | (3.00) | (0.92) | (2.93) | (0.21) | |
|  |  |  |  |  |  |  |  |  | |
| Capital dist | -0.001\*\*\* | 0.0003\*\*\* | -0.001\*\*\* | 0.0001 | -0.001\*\*\* | 0.0002\*\*\* | -0.001\*\*\* | 0.0001 | |
|  | (-4.47) | (3.68) | (-4.20) | (1.48) | (-4.18) | (3.45) | (-4.18) | (1.63) | |
|  |  |  |  |  |  |  |  |  | |
| Transborder ethnic | -0.0232\*\* | 0.0252\*\*\* | -0.0260\* | 0.0182\*\*\* | -0.0131 | 0.0192\*\*\* | -0.0253\* | 0.0188\*\*\* | |
| (-2.58) | (7.94) | (-2.39) | (4.70) | (-1.28) | (4.74) | (-2.35) | (4.85) | |
|  |  |  |  |  |  |  |  |  | |
| GDP/cap | 0.0886 | -0.0373 | -0.00720 | -0.00206 | 0.00463 | -0.0279 | 0.00302 | 0.00575 | |
|  | (1.48) | (-1.56) | (-0.12) | (-0.07) | (0.08) | (-1.07) | (0.05) | (0.21) | |
|  |  |  |  |  |  |  |  |  | |
| Military personnel |  |  | -27.35 | 31.37\*\*\* |  |  | -26.42 | 31.32\*\*\* | |
|  |  | (-1.57) | (6.12) |  |  | (-1.57) | (6.12) | |
|  |  |  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  |  |  | |
| Spatio temporal lag 4 | -0.208 | 2.494\*\*\* | -0.457 | 2.303\*\*\* | -0.516 | 2.362\*\*\* | -0.472 | 2.283\*\*\* | |
| (-0.67) | (19.60) | (-1.23) | (15.22) | (-1.47) | (16.13) | (-1.26) | (15.15) | |
|  |  |  |  |  |  |  |  |  | |
| Constant | -4.204\*\*\* | -5.498\*\*\* | -10.94\*\*\* | -6.324\*\*\* | -9.737\*\*\* | -7.161\*\*\* | -10.86\*\*\* | -6.310\*\*\* | |
|  | (-5.15) | (-16.77) | (-9.07) | (-8.55) | (-8.55) | (-10.96) | (-9.03) | (-8.54) | |
| Observations | 183095 |  | 130963 |  | 154370 |  | 130963 |  | |
| Aic | 31857.9 |  | 21062.5 |  | 24639.5 |  | 21050.4 |  | |
| Bic | 32201.9 |  | 21453.8 |  | 25037.4 |  | 21441.7 |  | |

t-statistics in parenthses, + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

**Table E: Sleep Bark Bite Protest Onset, 1990-2013, Country Fixed Effects**

|  | | (1) |  | (2) |  | (3) |  |  | (4) |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | bark | bite | bark | Bite | bark |  | bite | bark | bite |
| RESOURCES |  | | | | | | | | | |
| Resources | | 0.194 | 0.0603 | 0.317 | 0.0864 | 0.434\* |  | 0.188\* |  |  |
|  | | (1.00) | (0.67) | (1.63) | (0.90) | (2.26) |  | (2.14) |  |  |
|  | |  |  |  |  |  |  |  |  |  |
| Res \* monopoly | |  |  |  |  | -1.786\*\* |  | -1.057\*\* |  |  |
|  | |  |  |  |  | (-2.79) |  | (-2.91) |  |  |
|  | |  |  |  |  |  |  |  |  |  |
| Lootable | |  |  |  |  |  |  |  | 0.573 | 0.252\* |
|  | |  |  |  |  |  |  |  | (1.61) | (2.01) |
| MOTIVE | |  |  |  |  |  |  |  |  |  |
| Pol monopoly | |  |  |  |  | 0.443 |  | 0.861\*\*\* |  |  |
|  |  |  |  | (0.84) |  | (5.84) |  |  |
|  | |  |  |  |  |  |  |  |  |  |
| Pol discr | | 0.535\* | 0.890\*\*\* | 0.258 | 0.765\*\*\* |  |  |  | 0.276 | 0.766\*\*\* |
|  | | (2.12) | (10.06) | (0.91) | (7.58) |  |  |  | (0.96) | (7.59) |
|  | |  |  |  |  |  |  |  |  |  |
| Econ depr | | 1652.5 | -198.2\*\*\* | -113.7 | -238.4\*\*\* | 116.9 |  | -201.9\*\*\* | -114.6 | -237.0\*\*\* |
|  | | (1.50) | (-3.54) | (-1.06) | (-3.98) | (0.14) |  | (-3.31) | (-1.15) | (-3.96) |
|  | |  |  |  |  |  |  |  |  |  |
| Violent state | | 2.688\*\*\* | 1.335\*\*\* | 2.862\*\*\* | 1.508\*\*\* | 2.668\*\*\* |  | 1.363\*\*\* | 2.870\*\*\* | 1.518\*\*\* |
|  | | (16.89) | (9.43) | (15.90) | (8.82) | (16.17) |  | (8.72) | (15.72) | (8.83) |
|  | |  |  |  |  |  |  |  |  |  |
| POLITICAL CAPACITY |  | | | | | | | | | |
| Group size | | -0.137 | -0.243 | 0.0406 | -0.500\* | -0.0712 |  | -0.644\*\* | -0.0180 | -0.491\* |
|  | | (-0.42) | (-1.30) | (0.11) | (-2.17) | (-0.20) |  | (-2.96) | (-0.05) | (-2.12) |
|  | |  |  |  |  |  |  |  |  |  |
| Urban | | 0.211\*\*\* | 0.221\*\*\* | 0.251\*\*\* | 0.260\*\*\* | 0.234\*\*\* |  | 0.231\*\*\* | 0.251\*\*\* | 0.259\*\*\* |
|  | | (5.98) | (5.69) | (5.94) | (5.36) | (6.47) |  | (5.61) | (6.00) | (5.38) |
|  | |  |  |  |  |  |  |  |  |  |
| Pop density | | 0.600\*\*\* | 0.462\*\*\* | 0.595\*\*\* | 0.509\*\*\* | 0.573\*\*\* |  | 0.474\*\*\* | 0.602\*\*\* | 0.510\*\*\* |
|  | | (11.37) | (18.26) | (10.15) | (16.24) | (9.79) |  | (17.11) | (10.36) | (16.43) |
|  | |  |  |  |  |  |  |  |  |  |
| Male youth bulge | |  |  | 0.298\*\*\* | 0.130\*\* | 0.256\*\*\* |  | 0.131\*\*\* | 0.293\*\*\* | 0.128\*\* |
|  |  | (4.43) | (2.85) | (4.55) |  | (3.55) | (4.42) | (2.82) |
|  | |  |  |  |  |  |  |  |  |  |
| Polity2 | |  |  | 0.0315+ | 0.0153 | 0.0301+ |  | 0.0210\* | 0.0300+ | 0.0150 |
|  | |  |  | (1.87) | (1.60) | (1.89) |  | (2.48) | (1.78) | (1.57) |
|  | |  |  |  |  |  |  |  |  |  |
| MILITARY CAPACITY |  | | | | | | | | | |
| Mountains | | -0.308 | 0.277\*\* | -0.211 | 0.616\*\*\* | -0.320 |  | 0.669\*\*\* | -0.249 | 0.607\*\*\* |
|  | | (-1.41) | (2.71) | (-0.84) | (5.29) | (-1.32) |  | (6.33) | (-0.98) | (5.20) |
|  | |  |  |  |  |  |  |  |  |  |
| Border dist | | 0.00274\*\* | -0.000196 | 0.00298\*\* | 0.0000360 | 0.00262\*\* |  | 0.0000205 | 0.00290\*\* | 0.0000203 |
|  | | (3.28) | (-0.80) | (3.20) | (0.12) | (2.93) |  | (0.08) | (3.09) | (0.07) |
|  | |  |  |  |  |  |  |  |  |  |
| Capital dist | | -0.0006\* | 0.0004\*\*\* | -0.0006\* | 0.0001 | -0.0006\* |  | 0.0004\*\*\* | -0.0007\* | 0.0001 |
|  | | (-2.52) | (3.69) | (-2.16) | (0.99) | (-2.30) |  | (3.37) | (-2.26) | (0.95) |
|  | |  |  |  |  |  |  |  |  |  |
| Transborder ethnic | | -0.0213+ | 0.00216 | -0.0100 | -0.00980+ | -0.0173 |  | -0.00195 | -0.0126 | -0.0103+ |
| (-1.71) | (0.42) | (-0.69) | (-1.65) | (-1.27) |  | (-0.36) | (-0.88) | (-1.73) |
|  | |  |  |  |  |  |  |  |  |  |
| GDP/cap | | 0.118 | -0.0238 | 0.0959 | -0.00663 | 0.0875 |  | -0.0343 | 0.0990 | -0.00503 |
|  | | (1.26) | (-0.62) | (0.99) | (-0.15) | (0.88) |  | (-0.83) | (1.02) | (-0.11) |
|  | |  |  |  |  |  |  |  |  |  |
| Military personnel | |  |  | -14.60 | -3.683 |  |  |  | -14.33 | -3.651 |
|  |  | (-0.55) | (-0.32) |  |  |  | (-0.54) | (-0.32) |
|  | |  |  |  |  |  |  |  |  |  |
| Spatio temporal lag 4 | | -0.496 | 1.600\*\*\* | -0.779+ | 1.024\*\*\* | -0.656+ |  | 1.280\*\*\* | -0.785\* | 1.025\*\*\* |
| (-1.51) | (11.53) | (-1.95) | (6.22) | (-1.77) |  | (8.31) | (-1.96) | (6.21) |
|  | |  |  |  |  |  |  |  |  |  |
| Constant | | -4.977\*\*\* | -5.737\*\*\* | -12.11\*\*\* | -8.243\*\*\* | -10.46\*\*\* |  | -8.909\*\*\* | -11.75\*\*\* | -8.155\*\*\* |
|  | | (-3.66) | (-10.41) | (-6.35) | (-6.79) | (-5.71) |  | (-8.99) | (-6.27) | (-6.80) |
| Observations | | 183095 |  | 130963 |  | 154370 |  |  | 130963 |  |
| Aic | | 30837.1 |  | 20262.0 |  | 23764.5 |  |  | 20260.8 |  |
| Bic | | 32051.2 |  | 21465.3 |  | 24978.0 |  |  | 21464.1 |  |

*t* statistics in parentheses, + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

**Table F: Sleep Bark Bite Onset, 1990-2013, Organized Forms of Dissident Collective Action Only**

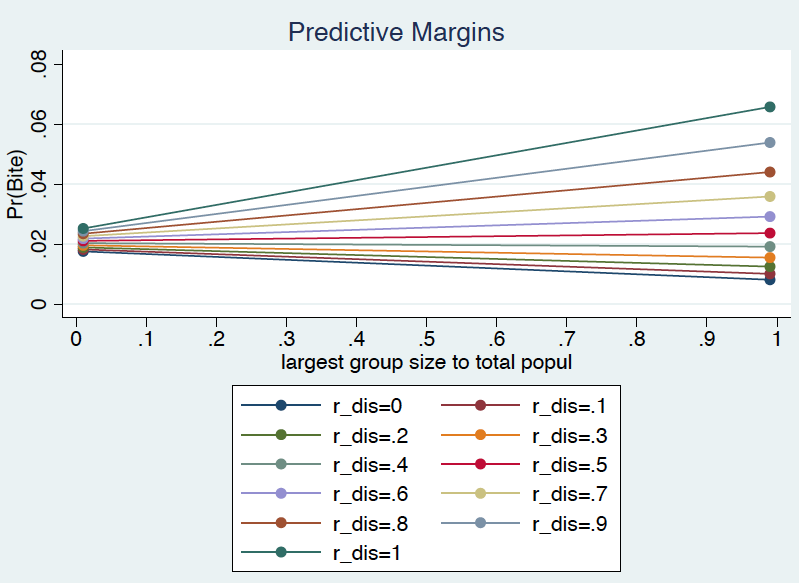
|  | (1) |  | (2) |  | (3) |  | (4) |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | bark | bite | bark | Bite | bark | bite | bark | bite |
| RESOURCES | | | | | | | | |
| Resources | 0.326 | 0.359\*\*\* | 0.444+ | 0.321\*\* | 0.477+ | 0.363\*\* |  |  |
|  | (1.20) | (3.33) | (1.73) | (2.67) | (1.88) | (3.08) |  |  |
|  |  |  |  |  |  |  |  |  |
| Res \* monopoly |  |  |  |  | -0.727 | -0.781\* |  |  |
|  |  |  |  |  | (-0.94) | (-2.08) |  |  |
|  |  |  |  |  |  |  |  |  |
| Lootable |  |  |  |  |  |  | 0.791+ | 0.876\*\*\* |
|  |  |  |  |  |  |  | (1.85) | (5.47) |
|  |  |  |  |  |  |  |  |  |
| MOTIVE |  |  |  |  |  |  |  |  |
| Pol monopoly |  |  |  |  | 0.0942 | 0.732\*\*\* |  |  |
|  |  |  |  |  | (0.20) | (3.70) |  |  |
| Pol discr | 0.312 | 1.255\*\*\* | 0.314 | 1.114\*\*\* |  |  | 0.326 | 1.099\*\*\* |
|  | (1.16) | (13.53) | (1.23) | (10.70) |  |  | (1.26) | (10.50) |
|  |  |  |  |  |  |  |  |  |
| Econ depr | -15.99 | -228.7\*\*\* | -99.28 | -272.9\*\*\* | -120.4 | -238.5\*\*\* | -93.33 | -267.2\*\*\* |
|  | (-0.20) | (-5.60) | (-0.96) | (-5.24) | (-1.22) | (-4.70) | (-0.89) | (-5.15) |
|  |  |  |  |  |  |  |  |  |
| Violent state | 2.719\*\*\* | 0.972\*\*\* | 2.867\*\*\* | 1.217\*\*\* | 2.726\*\*\* | 1.051\*\*\* | 2.903\*\*\* | 1.266\*\*\* |
|  | (13.50) | (4.17) | (12.15) | (4.22) | (12.41) | (3.80) | (12.04) | (4.38) |
|  |  |  |  |  |  |  |  |  |
| POLITICAL CAPACITY | | | | | | | | |
| Group size | 0.184 | -0.525\*\*\* | 0.0512 | -0.926\*\*\* | 0.0123 | -1.210\*\*\* | 0.0451 | -0.901\*\*\* |
|  | (0.56) | (-4.84) | (0.16) | (-6.47) | (0.04) | (-8.50) | (0.14) | (-6.37) |
|  |  |  |  |  |  |  |  |  |
| Urban | 0.274\*\*\* | -0.0160 | 0.287\*\*\* | 0.0532 | 0.251\*\*\* | 0.0182 | 0.289\*\*\* | 0.0564 |
|  | (8.33) | (-0.48) | (7.06) | (1.33) | (6.47) | (0.54) | (7.18) | (1.48) |
|  |  |  |  |  |  |  |  |  |
| pop density | 0.271\*\*\* | 0.329\*\*\* | 0.311\*\*\* | 0.351\*\*\* | 0.329\*\*\* | 0.301\*\*\* | 0.323\*\*\* | 0.360\*\*\* |
|  | (4.75) | (14.71) | (5.09) | (12.85) | (5.94) | (12.87) | (5.32) | (13.19) |
|  |  |  |  |  |  |  |  |  |
| male youth bulge |  |  | 0.308\*\*\* | -0.00221 | 0.259\*\*\* | 0.0722\* | 0.312\*\*\* | 0.00316 |
|  |  | (6.32) | (-0.07) | (5.27) | (2.33) | (6.14) | (0.09) |
|  |  |  |  |  |  |  |  |  |
| polity2 |  |  | 0.0450\*\* | -0.0540\*\*\* | 0.0585\*\*\* | -0.0570\*\*\* | 0.0422\*\* | -0.0565\*\*\* |
|  |  |  | (3.10) | (-7.20) | (4.37) | (-9.11) | (2.83) | (-7.47) |
|  |  |  |  |  |  |  |  |  |
| MILITARY CAPACITY | | | | | | | | |
| Mountains | 0.0143 | 0.574\*\*\* | 0.237 | 0.722\*\*\* | 0.0880 | 0.830\*\*\* | 0.209 | 0.717\*\*\* |
|  | (0.07) | (6.16) | (1.00) | (6.38) | (0.38) | (7.71) | (0.87) | (6.31) |
|  |  |  |  |  |  |  |  |  |
| Border dist | 0.00125 | 0.000401 | 0.00213\* | 0.000139 | 0.00227\*\* | 0.0000584 | 0.00207\* | 0.000127 |
|  | (1.63) | (1.50) | (2.35) | (0.43) | (2.80) | (0.19) | (2.28) | (0.39) |
|  |  |  |  |  |  |  |  |  |
| Capital dist | -0.002\*\*\* | 0.0004\*\*\* | -0.002\*\*\* | 0.0002+ | -0.002\*\*\* | 0.0003\*\*\* | -0.002\*\*\* | 0.0002+ |
|  | (-5.02) | (4.34) | (-4.46) | (1.73) | (-4.64) | (3.77) | (-4.45) | (1.94) |
|  |  |  |  |  |  |  |  |  |
| Transborder ethnic | -0.0395\*\* | 0.0330\*\*\* | -0.0369\* | 0.0253\*\*\* | -0.0319\* | 0.0232\*\*\* | -0.0351\* | 0.0265\*\*\* |
| (-2.97) | (8.42) | (-2.46) | (5.33) | (-2.20) | (5.00) | (-2.38) | (5.61) |
|  |  |  |  |  |  |  |  |  |
| GDP/cap | 0.0550 | -0.0697\*\* | -0.0557 | -0.0231 | -0.0474 | -0.0496 | -0.0388 | -0.0104 |
|  | (0.72) | (-2.65) | (-0.70) | (-0.70) | (-0.67) | (-1.57) | (-0.49) | (-0.32) |
|  |  |  |  |  |  |  |  |  |
| military personnel |  |  | -49.23\* | 30.84\*\*\* |  |  | -47.39\* | 30.61\*\*\* |
|  |  | (-2.33) | (6.11) |  |  | (-2.37) | (6.02) |
|  |  |  |  |  |  |  |  |  |
| spatio temporal lag 4 | -0.323 | 3.047\*\*\* | -0.804 | 3.013\*\*\* | -0.739 | 3.337\*\*\* | -0.837 | 2.982\*\*\* |
| (-0.74) | (21.10) | (-1.55) | (17.44) | (-1.52) | (20.74) | (-1.61) | (17.35) |
|  |  |  |  |  |  |  |  |  |
| Constant | -4.437\*\*\* | -6.727\*\*\* | -12.33\*\*\* | -6.176\*\*\* | -11.34\*\*\* | -7.630\*\*\* | -12.21\*\*\* | -6.166\*\*\* |
|  | (-4.37) | (-18.22) | (-8.75) | (-7.54) | (-8.42) | (-9.73) | (-8.51) | (-7.45) |
| Observations | 181731 |  | 130061 |  | 153292 |  | 130061 |  |
| Aic | 21809.3 |  | 14444.4 |  | 16809.0 |  | 14424.0 |  |
| Bic | 22153.1 |  | 14835.5 |  | 17206.6 |  | 14815.1 |  |

*t* statistics in parentheses, + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

**Table G: Sleep Bark Bite Onset, 1990-2013, Sub-Saharan Africa Only**

|  | (1) |  | (2) |  | (3) |  | (4) |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | bark | bite | bark | bite | bark | bite | bark | bite |
| RESOURCES |  |  |  |  |  |  |  |  |
| Resources | 0.527\*\* | 0.408\*\*\* | 0.577\*\*\* | 0.335\*\* | 0.531\*\* | 0.395\*\*\* |  |  |
|  | (3.19) | (3.69) | (3.30) | (2.73) | (3.18) | (3.36) |  |  |
|  |  |  |  |  |  |  |  |  |
| Res \* monopoly |  |  |  |  | 0.696 | -0.775 |  |  |
|  |  |  |  |  | (0.66) | (-1.43) |  |  |
|  |  |  |  |  |  |  |  |  |
| Lootable |  |  |  |  |  |  | 0.474\* | 0.293\* |
|  |  |  |  |  |  |  | (2.23) | (2.38) |
| MOTIVE |  |  |  |  |  |  |  |  |
| Pol monopoly |  |  |  |  | -0.332 | 1.865\*\*\* |  |  |
|  |  |  |  |  | (-0.41) | (11.13) |  |  |
|  |  |  |  |  |  |  |  |  |
| Pol discr | 0.285 | 1.240\*\*\* | 0.168 | 0.930\*\*\* |  |  | 0.175 | 0.928\*\*\* |
|  | (1.07) | (12.66) | (0.62) | (8.54) |  |  | (0.64) | (8.53) |
|  |  |  |  |  |  |  |  |  |
| Econ depr | 2045.5\*\*\* | -1399.7\*\*\* | 529.1 | -2356\*\*\* | 839.8 | -1825.7\*\*\* | 729.5 | -2310.0\*\*\* |
|  | (4.99) | (-3.61) | (0.97) | (-4.39) | (1.62) | (-4.27) | (1.31) | (-4.21) |
|  |  |  |  |  |  |  |  |  |
| Violent state | 2.635\*\*\* | 1.282\*\*\* | 2.764\*\*\* | 1.448\*\*\* | 2.549\*\*\* | 1.233\*\*\* | 2.759\*\*\* | 1.449\*\*\* |
|  | (15.96) | (6.77) | (14.87) | (7.11) | (15.20) | (6.09) | (14.62) | (7.06) |
| POLITICAL CAPACITY | | | | | | | | | |
| Group size | -0.0697 | -1.034\*\*\* | -0.215 | -1.413\*\*\* | -0.234 | -1.299\*\*\* | -0.230 | -1.418\*\*\* |
|  | (-0.29) | (-6.26) | (-0.87) | (-7.42) | (-0.96) | (-7.78) | (-0.91) | (-7.45) |
|  |  |  |  |  |  |  |  |  |
| Urban | 0.206\*\*\* | 0.175\*\* | 0.235\*\*\* | 0.204\*\*\* | 0.201\*\*\* | 0.188\*\*\* | 0.231\*\*\* | 0.205\*\*\* |
|  | (3.43) | (3.16) | (3.75) | (3.33) | (3.66) | (3.48) | (3.66) | (3.31) |
|  |  |  |  |  |  |  |  |  |
| Pop density | 0.519\*\*\* | 0.494\*\*\* | 0.558\*\*\* | 0.607\*\*\* | 0.526\*\*\* | 0.464\*\*\* | 0.562\*\*\* | 0.609\*\*\* |
|  | (8.48) | (16.37) | (9.69) | (17.22) | (9.51) | (15.09) | (9.66) | (17.24) |
|  |  |  |  |  |  |  |  |  |
| Male youth bulge |  |  | 0.291\*\*\* | 0.000879 | 0.242\*\*\* | 0.0504 | 0.295\*\*\* | 0.00133 |
|  |  | (6.77) | (0.02) | (5.86) | (1.59) | (6.74) | (0.04) |
|  |  |  |  |  |  |  |  |  |
| Polity2 |  |  | 0.0265\* | 0.0102 | 0.0310\* | -0.00993 | 0.0256\* | 0.0100 |
|  |  |  | (2.06) | (1.23) | (2.56) | (-1.37) | (1.99) | (1.20) |
| MILITARY CAPACITY | | | | | | | | | |
| Mountains | -0.0951 | 0.268\* | -0.179 | 0.251+ | -0.166 | 0.474\*\*\* | -0.235 | 0.237+ |
|  | (-0.44) | (2.19) | (-0.81) | (1.95) | (-0.78) | (3.95) | (-1.06) | (1.84) |
|  |  |  |  |  |  |  |  |  |
| Border dist | 0.00172\* | 0.000227 | 0.00197\* | 0.000251 | 0.00170\* | 0.000232 | 0.00199\* | 0.000255 |
|  | (2.22) | (0.70) | (2.25) | (0.66) | (2.05) | (0.63) | (2.27) | (0.67) |
|  |  |  |  |  |  |  |  |  |
| Capital dist | -0.001\*\*\* | 0.0001 | -0.001\*\*\* | -0.0002 | -0.001\*\*\* | 0.00004 | -0.001\*\*\* | -0.001 |
|  | (-5.66) | (0.79) | (-4.28) | (-1.61) | (-4.71) | (0.41) | (-4.35) | (-1.63) |
|  |  |  |  |  |  |  |  |  |
| Transborder ethnic | -0.0164 | 0.0208+ | -0.0117 | 0.000523 | -0.0136 | 0.00343 | -0.0129 | 0.0000541 |
| (-0.68) | (1.76) | (-0.46) | (0.03) | (-0.54) | (0.26) | (-0.51) | (0.00) |
|  |  |  |  |  |  |  |  |  |
| GDP/cap | -0.118+ | -0.0375 | -0.0521 | -0.0874\* | -0.0794 | -0.0526 | -0.0555 | -0.0879\* |
|  | (-1.73) | (-1.01) | (-0.69) | (-2.18) | (-1.11) | (-1.37) | (-0.73) | (-2.20) |
|  |  |  |  |  |  |  |  |  |
| Military personnel |  |  | -10.91 | 145.1\*\*\* |  |  | -9.142 | 145.6\*\*\* |
|  |  | (-0.36) | (11.94) |  |  | (-0.30) | (12.04) |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Spatio temporal lag 4 | -0.409 | 1.939\*\*\* | -0.668 | 1.472\*\*\* | -0.519 | 2.121\*\*\* | -0.666 | 1.472\*\*\* |
| (-1.13) | (10.50) | (-1.63) | (6.91) | (-1.35) | (11.32) | (-1.62) | (6.92) |
|  |  |  |  |  |  |  |  |  |
| Constant | -7.349\*\*\* | -5.777\*\*\* | -12.48\*\*\* | -7.009\*\*\* | -11.60\*\*\* | -6.674\*\*\* | -12.58\*\*\* | -7.017\*\*\* |
|  | (-7.44) | (-11.39) | (-10.77) | (-7.81) | (-10.88) | (-8.05) | (-10.48) | (-7.85) |
| Observations | 95353 |  | 70555 |  | 83440 |  | 70555 |  |  |
| aic | 18277.5 |  | 13458.6 |  | 15748.7 |  | 13467.0 |  |  |
| bic | 18599.4 |  | 13825.2 |  | 16122.0 |  | 13833.6 |  |  |

*t* statistics in parentheses, + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

**Table H: SBB Onset and Group Size, 1990-2013 (resources in bold)**

|  |  |  |
| --- | --- | --- |
|  | (4) |  |
|  | bark | bite |
| MOTIVE |  |  |
| **Resources** | **0.414\*** | **0.289\*\*** |
|  | **(2.09)** | **(2.69)** |
|  |  |  |
| Discriminated | -0.729 | 0.426\*\*\* |
|  | (-1.59) | (3.31) |
|  |  |  |
| GDP/cap- country mean | -385.0\* | 219.3\*\*\* |
|  | (-2.57) | (4.77) |
|  |  |  |
| Violent state reaction | 3.151\*\*\* | 1.735\*\*\* |
|  | (18.74) | (10.14) |
| CAPACITY (political) | |  |
| Group size | -0.112 | -0.962\*\*\* |
|  | (-0.47) | (-7.88) |
|  |  |  |
| Discr\*size | 3.749\*\* | 2.042\*\*\* |
|  | (2.96) | (4.30) |
|  |  |  |
| Urban | 0.357\*\*\* | 0.213\*\*\* |
|  | (7.90) | (5.50) |
|  |  |  |
| Population density | 0.00113\*\* | 0.00149\*\*\* |
| (3.19) | (4.11) |
|  |  |  |
| Polity2 | 0.0271\* | -0.0239\*\*\* |
|  | (2.27) | (-4.11) |
| CAPACITY (military) | | |
| Mountains | 0.321 | 0.838\*\*\* |
|  | (1.53) | (8.86) |
| Military personnel | -81987.0+ | 1102.8 |
|  | (-1.87) | (0.19) |
| Border dist | 0.00106 | -0.000534+ |
|  | (1.53) | (-1.84) |
| Capital dist | -0.00219\*\*\* | -0.000695\*\*\* |
|  | (-7.94) | (-7.17) |
| Transborder ethnic kin | -0.0130 | 0.0226\*\*\* |
| (-1.40) | (5.74) |
| Ln(gdp/cap) | -0.149\* | -0.186\*\*\* |
|  | (-2.29) | (-7.33) |
| Constant | -5.624\*\*\* | -6.044\*\*\* |
|  | (-5.70) | (-15.83) |
| Spatio-temporal lag | 0.31 | 2.86\*\*\* |
| (0.95) | (20.87) |
| Time polynomial | yes |  |
| Observations | 131480 |  |
| Aic | 21800.9 |  |
| Bic | 22192.4 |  |

*t* statistics in parentheses, + *p* < 0.10, \* *p* < 0.05, \*\* *p* < 0.01,

\*\*\* *p* < 0.001