Appendix

Empirical application: details on data and design

To illustrate the usefulness of our new data we replicate the study by Fjelde and Hultman (2014) – henceforth F & H – that examines how ethnic ties between warring actors and civilian constituencies shape the risk that these civilians become the victim of collective targeting by enemy actors. Since the EOSV dataset provides explicit information about ethnic victim groups, we do not need to make inference regarding the ethnic identity of the victims based on the spatial location of the events. Rather than looking for co-variation in ethnic settlement patterns and sub-national patterns in the locations of one-sided violence, we study ethnic violence directly. The candidate list for ethnic groups at risk of ethnic violence is taken from the Ethnic Power Relations dataset (Vogt et al. 2015). Our unit of analysis is the ethno-political group, observed annually for all years where there is an ongoing armed conflict in the country (and throughout two years of inactivity). For our baseline model, we operationalize our dependent variable as a dichotomous indicator taking the value of 1 if there are at least 1 fatality from one-sided violence from that particular ethnic group and 0 otherwise. In an alternative application we focus on ethnic targeting, which requires that at least one of these ethnic casualties is the product of deliberate targeting of that particular group (see the article and codebook for further discussion). In line with F & H, we distinguish between civilian targeting by government and rebel groups.

To operationalize the independent variable, we follow F & H, and code the *Ethnic constituency of the government* as corresponding to those ethnic groups that according to the Ethnic Power Relations dataset have either dominant or monopoly status in the control of executive power in the country (Vogt et al. 2015). To identify the *Ethnic constituency of the rebel group*, we use the ACD2EPR data set that codes whether the rebel groups involved in armed intrastate conflict by the UCDP has ties to the particular ethnic group through recruiting significant parts of it’s fighting cadres from the group and/or making political claims on behalf of that particular group (Wucherpfennig et al. 2012).

We also include the control variables of relevance from the F & H study. To begin with, we control for GDP per capita and Size of the Population in the country: two robust predictors of the occurrence of political violence, that may also be associated with ethnic power constellations (United Nations 2015). We account for the conflict incompatibility, controlling for conflicts where the rebel group is demanding changes relating to the territorial integrity of the state. We also account for patterns of temporal correlation, both within each perpetrator category and across them. For the former, we construct a decay function of the time since past targeting of that ethnic group by the same actor type (i.e. separating between government and rebel perpetrated violence). For the latter we include a lagged variable of targeting by the adversary against that particular group. Both of these are based on the EOSV dataset. In line with the F & H study, we also control for the strength of the rebel group active in the armed conflict, using data from the Non-State Armed Actor dataset (Cunningham, Gleditsch and Salehyan 2009).1 We estimate logit models with robust standard errors, clustered at the ethnic group level.

The main results are reported in the article Table 5. In table 6 we show an additional table where we replicate the analyses in Table 5 on the sub-sample of ethnic conflicts only. This sub-set is identified based on the information in ACD2EPR on whether the rebel group makes claim on behalf of a particular ethnic group and recruits a significant number of rebel participants from this group (Wucherpfennig et al. 2012). The argument about wartime incentives for collective targeting along ethnic lines should be particularly strong in a context where ethnicity is a politically salient dimension of the armed conflict. The results are virtually the same as those reported in the main article.

Table 6.

Analyzing Ethnic Violence Patterns: only Ethnic Conflicts.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Ethnic | Ethnic | Ethnic | Ethnic |
|  | violence | violence | targeting | targeting |
|  | by rebels | by government | by rebels | by government |
| Government ethnic constituency | 0.600 |  | 1.092\* |  |
|  | (0.352) |  | (0.533) |  |
| Rebel ethnic constituency |  | 1.392\*\*\* |  | 1.906\*\*\* |
|  |  | (0.208) |  | (0.328) |
| Rebel strength | 0.142 | 0.505 | 0.173 | 0.503 |
|  | (0.361) | (0.368) | (0.508) | (0.430) |
| Territorial conflict | –0.187 | 0.129 | –0.514 | 0.191 |
|  | (0.220) | (0.201) | (0.504) | (0.306) |
| GDP cap,ln | 0.0190 | –0.212\*\* | 0.157 | –0.646\*\*\* |
|  | (0.0685) | (0.0775) | (0.162) | (0.125) |
| Population,ln | 0.000607 | –0.243\*\*\* | –0.110 | –0.214 |
|  | (0.0607) | (0.0734) | (0.149) | (0.113) |
| Time since past EOSV reb | 4.347\*\*\* |  | 3.861\*\*\* |  |
|  | (0.212) |  | (0.258) |  |
| Time since past EOSV gov |  | 4.116\*\*\* |  | 3.870\*\*\* |
|  |  | (0.256) |  | (0.276) |
| Ethnic violence gov, t-1 | 0.0197 |  |  |  |
|  | (0.341) |  |  |  |
| Ethnic violence reb, t-1 |  | –0.559 |  |  |
|  |  | (0.316) |  |  |
| Ethnic targeting gov, t-1 |  |  | 0.110 |  |
|  |  |  | (0.510) |  |
| Ethnic targeting reb, t-1 |  |  |  | 0.552 |
|  |  |  |  | (0.347) |
| \_cons | –4.154\*\*\* | 0.766 | –3.691 | 2.003 |
|  | (1.114) | (1.461) | (2.813) | (1.978) |
| ll | –613.7 | –514.1 | –400.8 | –368.6 |
| N | 4229 | 4229 | 4229 | 4229 |

Standard errors in parentheses.

\* , \*\* , \*\*\* .

In Tables 7 and 8, we replicate the analyses from Table 5 but subdivide the cases into African and non-African observations.2 While the main results generally hold, we note that the effect of Government constituencies on rebel ethnic one-sided violence only emerges in the African cases and not in the subsample from the other continents.

Table 7.

Analyzing Ethnic Violence Patterns by Region.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Ethnic violence by | | | |
|  | rebels | | government | |
|  | Africa | not Africa | Africa | not Africa |
| Government ethnic constituency | 1.355\*\* | 0.267 |  |  |
|  | (0.431) | (0.428) |  |  |
| Ethnic violence gov, t-1 | 0.568 | –0.356 |  |  |
|  | (0.424) | (0.476) |  |  |
| Time since past EOSV reb | 3.018\*\*\* | 4.853\*\*\* |  |  |
|  | (0.317) | (0.238) |  |  |
| Rebel ethnic constituency |  |  | 1.487\*\*\* | 1.441\*\*\* |
|  |  |  | (0.263) | (0.311) |
| Ethnic violence reb, t-1 |  |  | –0.273 | –0.969 |
|  |  |  | (0.396) | (0.537) |
| Time since past EOSV gov |  |  | 3.257\*\*\* | 4.581\*\*\* |
|  |  |  | (0.316) | (0.405) |
| Rebel strength | –0.438 | 0.221 | 0.608 | –0.396 |
|  | (0.456) | (0.444) | (0.395) | (0.744) |
| Territorial conflict | –0.244 | –0.0779 | 0.411 | 0.484 |
|  | (0.425) | (0.296) | (0.290) | (0.436) |
| GDP cap,ln | 0.0739 | 0.0184 | –0.270 | –0.129 |
|  | (0.149) | (0.0647) | (0.156) | (0.102) |
| Population,ln | –0.246\* | 0.0465 | –0.355\*\* | –0.175 |
|  | (0.123) | (0.0573) | (0.138) | (0.0946) |
| \_cons | 0.285 | –5.368\*\*\* | 3.627 | –1.695 |
|  | (1.904) | (1.289) | (2.324) | (2.063) |
| ll | –229.2 | –463.2 | –235.3 | –311.0 |
| N | 1029 | 3934 | 1029 | 3934 |

Standard errors in parentheses.

\* ,\*\* ,\*\*\* .

Table 8.

Analyzing Ethnic Targeting Patterns by Region.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Ethnic targeting by | | | |
|  | rebels | | government | |
|  | Africa | not Africa | Africa | not Africa |
| Government ethnic constituency | 1.444 | 0.871 |  |  |
|  | (0.770) | (0.577) |  |  |
| Ethnic targeting gov, t-1 | 0.784 | –0.394 |  |  |
|  | (0.529) | (0.811) |  |  |
| Time since past EOSV reb | 2.404\*\*\* | 4.525\*\*\* |  |  |
|  | (0.382) | (0.299) |  |  |
| Rebel ethnic constituency |  |  | 1.918\*\*\* | 1.863\*\*\* |
|  |  |  | (0.339) | (0.484) |
| Ethnic targeting reb, t-1 |  |  | 0.326 | 0.895 |
|  |  |  | (0.455) | (0.742) |
| Time since past EOSV gov |  |  | 2.876\*\*\* | 4.515\*\*\* |
|  |  |  | (0.368) | (0.351) |
| Rebel strength | 0.717 | 0.0402 | 0.256 | –1.514\*\* |
|  | (0.707) | (0.560) | (0.456) | (0.474) |
| Territorial conflict | –1.774 | 0.260 | 0.274 | 1.716\*\* |
|  | (0.973) | (0.589) | (0.390) | (0.629) |
| GDP cap,ln | –0.163 | –0.122 | –0.0790 | –0.799\*\*\* |
|  | (0.362) | (0.160) | (0.216) | (0.154) |
| Population,ln | 0.372 | –0.239 | –0.430\* | –0.375\* |
|  | (0.311) | (0.140) | (0.187) | (0.162) |
| \_cons | –9.266 | –0.437 | 3.311 | 3.760 |
|  | (4.967) | (2.737) | (3.042) | (2.811) |
| ll | –143.2 | –290.5 | –200.8 | –183.4 |
| N | 1029 | 3934 | 1029 | 3934 |

Standard errors in parentheses.

\* , \*\* , \*\*\* .

Finally in table 9 we report the descriptive statistics of the variables used in the main text.

Table 9.

Descriptive statistics.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Mean | Min. | Max. | Std.Dev. | Obs |
| Ethnic violence gov. | 0.05 | 0.00 | 1.00 | 0.21 | 6396 |
| Ethnic violence reb, | 0.05 | 0.00 | 1.00 | 0.22 | 6396 |
| Ethnic targeting gov, | 0.03 | 0.00 | 1.00 | 0.18 | 6396 |
| Ethnic targeting reb, | 0.03 | 0.00 | 1.00 | 0.16 | 6396 |
| Government ethnic constituency | 0.06 | 0.00 | 1.00 | 0.24 | 6396 |
| Rebel ethnic constituency | 0.16 | 0.00 | 1.00 | 0.36 | 6396 |
| Rebel strength | 0.10 | 0.00 | 1.00 | 0.30 | 5067 |
| Time since past EOSV gov | 0.09 | 0.00 | 1.00 | 0.25 | 6396 |
| Time since past EOSV reb | 0.09 | 0.00 | 1.00 | 0.25 | 6396 |
| GDP cap,ln | 6.95 | 4.32 | 10.72 | 1.33 | 6154 |
| Population,ln | 17.78 | 12.91 | 21.02 | 1.51 | 6166 |

Notes

21. The spatial controls for distance to capital, spatial lag of one-sided violence events, and civil war events in the proximity included in F & H analysis is less applicable to our current research design.

22. Note that in the analyses reported in Table 8 for the African countries (Model 1) we encounter a problem of complete separation due to the variable *Rebel strength*. These results, thus, have to be taken with a grain of salt.