

Democratic Breakdown and Terrorism

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What explains the variation in terrorism across countries and years?

The most common finding in the terrorism literature is that terrorism is most common in democracies (Chenoweth 2013).

Several proposed reasons:

1. Competitive spaces (Chenoweth 2010)
2. Easy to coerce change through public opinion (Pape 2003)
3. Intransigence (Young and Dugan 2011)
4. Opportunity
 - civil liberties make organization easier (Eubank and Weinberg 1994)
 - press freedom makes terrorism more visible (Hoffman 2006)

Full, stable democracies are not the problem

Characteristics of a democracy:

- frequent, free, and competitive elections
- constrained executives
- protected civil and political freedoms

New democracies experience more terrorism (Piazza 2013).

The relationship between democratic-ness and terrorism is curvilinear (Abadie 2006).

What is it about struggling democracies?

- Less capable state apparatus
- Less developed grievance mechanisms
- Less economic development

None of these explain why citizens resort to violence instead of legal political action.

Political disillusionment and democratic breakdowns

Democratic breakdown:

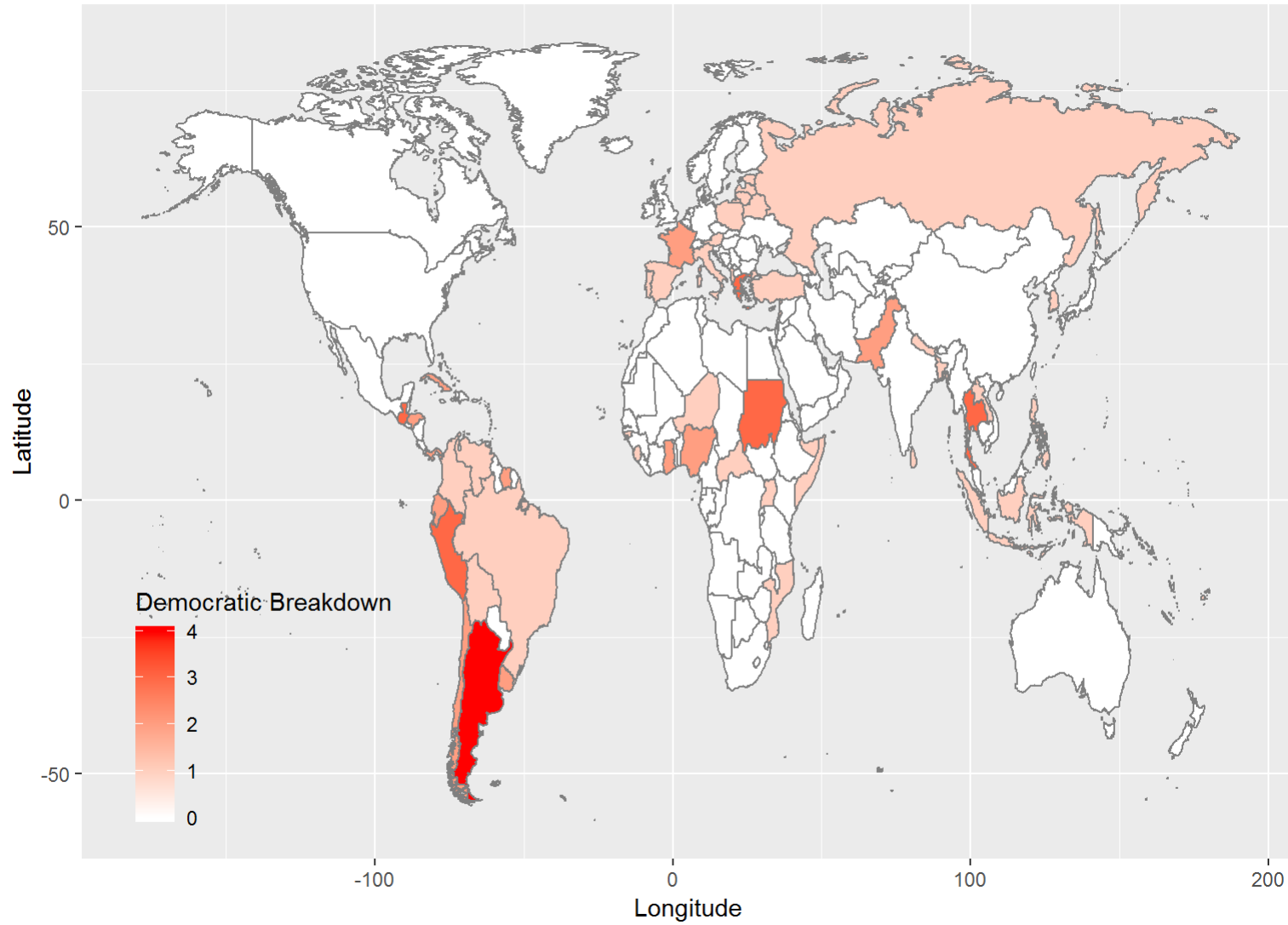
- A country that was coded a democracy in year $t - 1$ is no longer considered a democracy in year t (Boix, Miller, and Rosato 2013).

Most of the world's weak democracies have had previous democratic breakdowns.

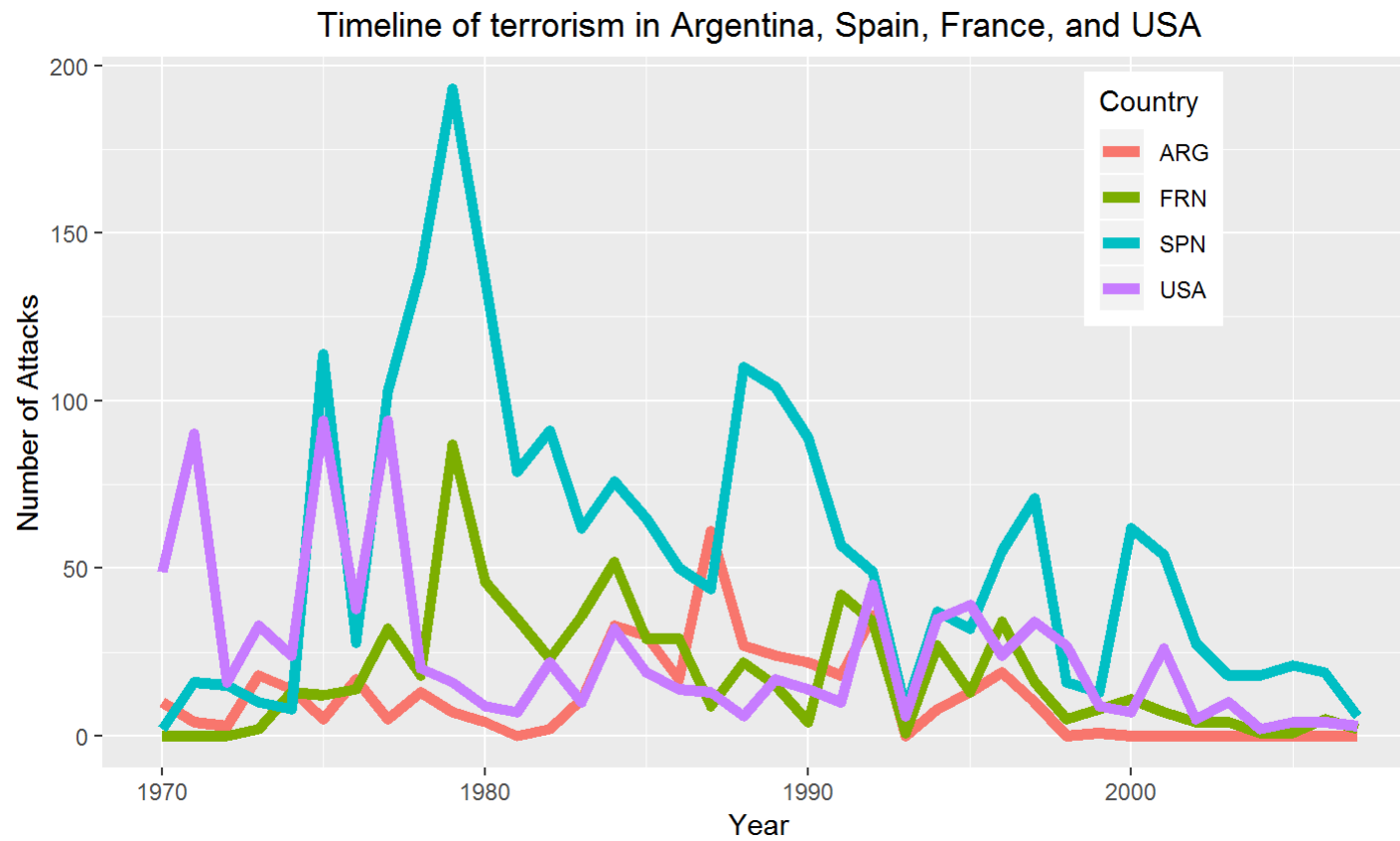
- political disillusionment
- lack of faith in legal political processes
- experience with freedoms being revoked

Once faith in legal processes is gone, citizens must resort to any means necessary to accomplish political goals.

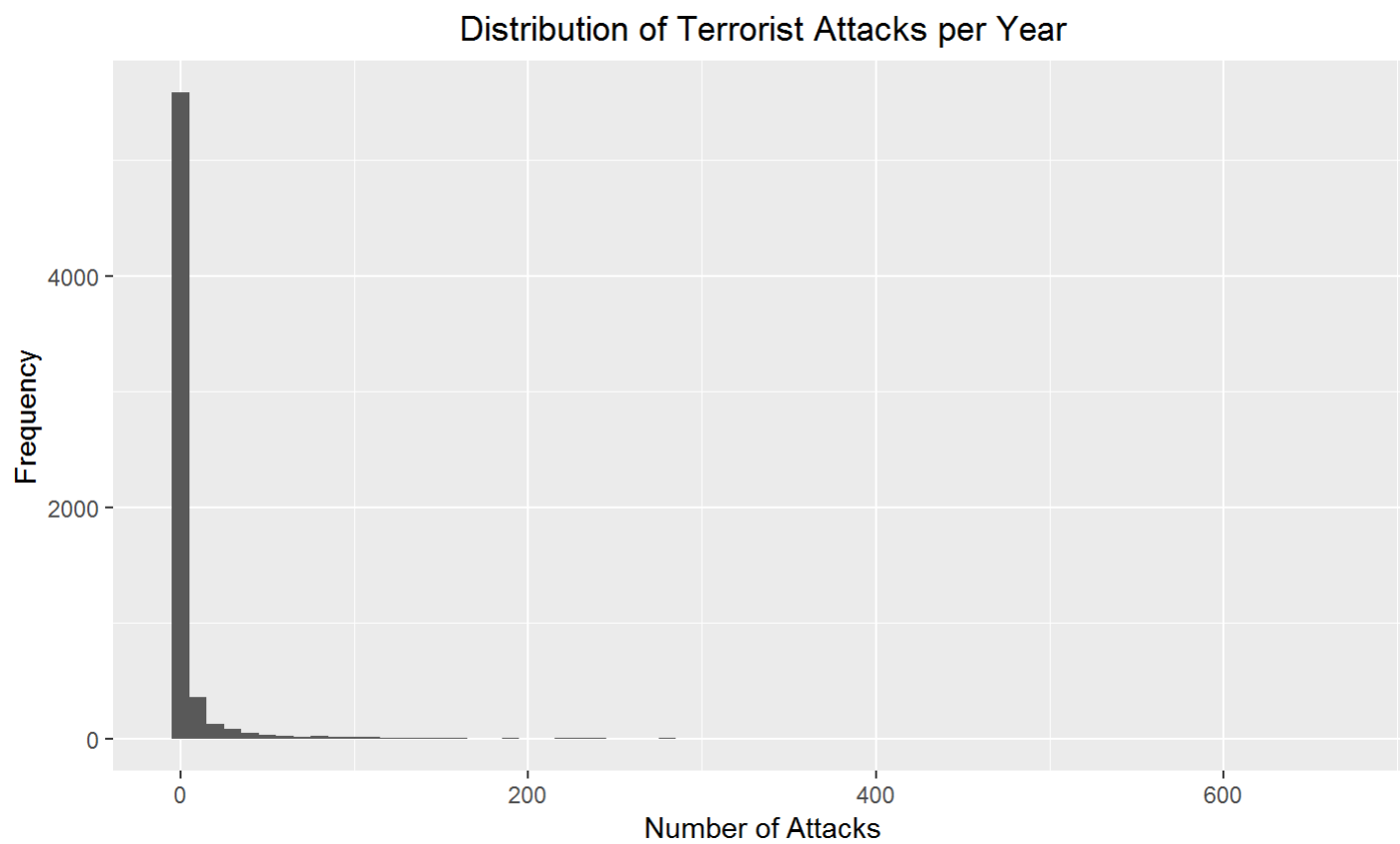
Map of Democratic Breakdowns



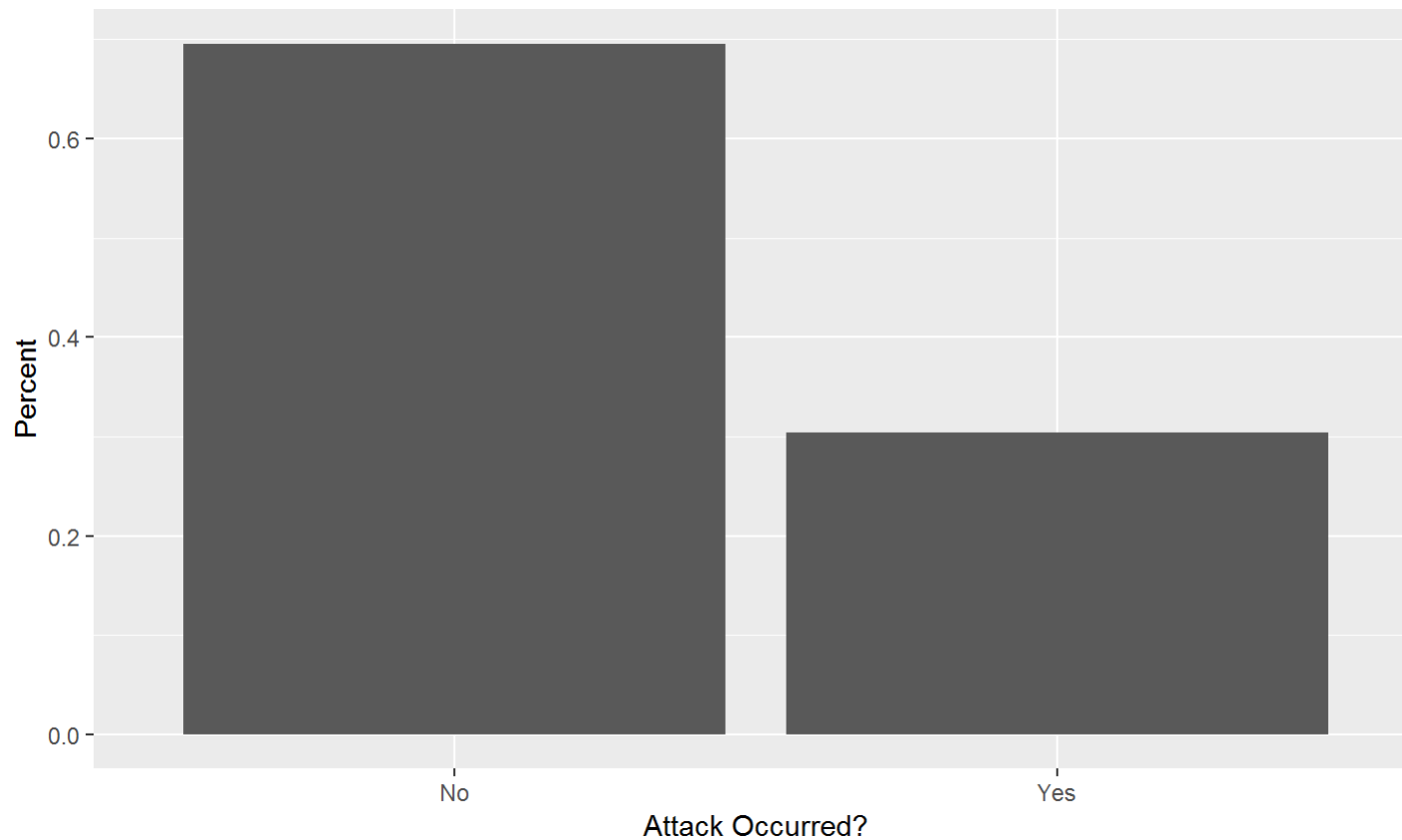
Terrorism Timelines



Distribution of Terrorist Attacks



Percent of Country-Years with Attack

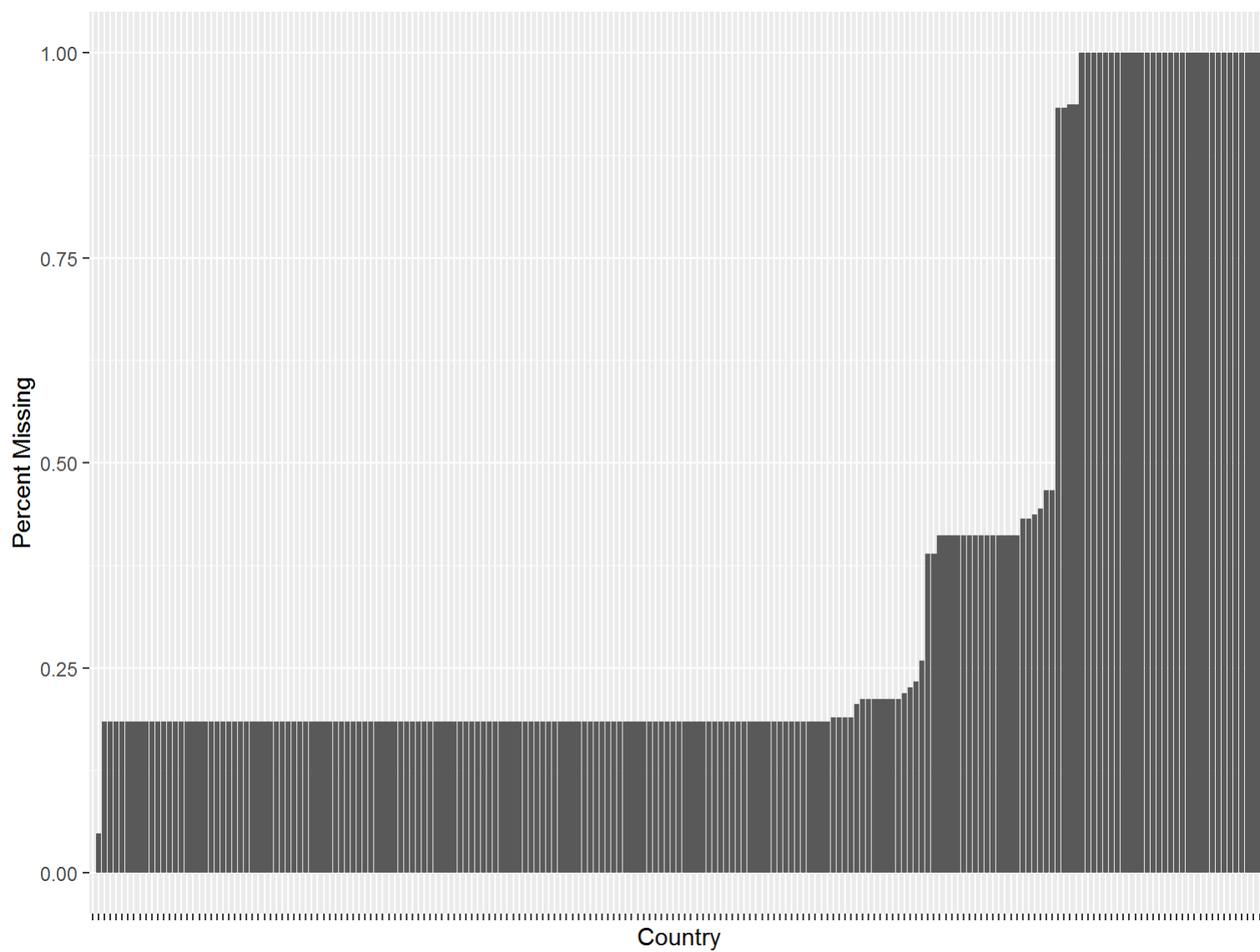


Must account for the abundance of rows with zero attacks.

Analytic Outline

1. Variables of Interest
2. Dealing with missing data
3. Estimating zero inflated negative binomial models
4. Extreme bounds analysis

Missing Data: Population



Missing Data: Everything Else

AMELIA II package in R using (Honaker, King, and Blackwell 2011)

Assume:

- The full data D is distributed multivariate normal $D \sim N(\mu, \Sigma)$ where μ is a vector of means and Σ is a covariance matrix.
- Data is missing at random (MAR)
- Expectation Maximization with Bootstrapping (EMB) algorithm
 - Bootstraps from a the posterior distribution of the likelihood function found from assuming the data is MAR and a flat prior assumption of the multivariate normal distribution.

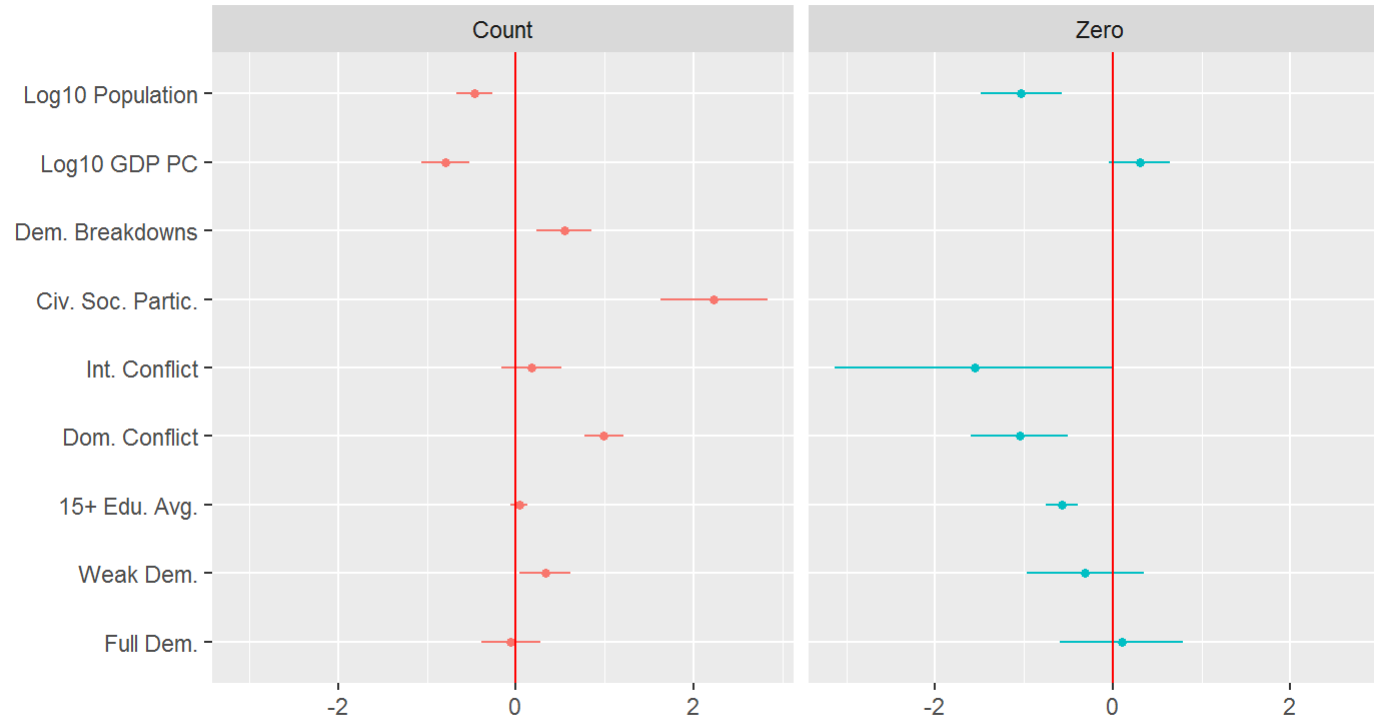
Zero-inflated negative binomial (ZINB) regression

Two-stages:

1. Logit to see the probability there are zero attacks
2. If there is an attack, negative binomial to estimate how many

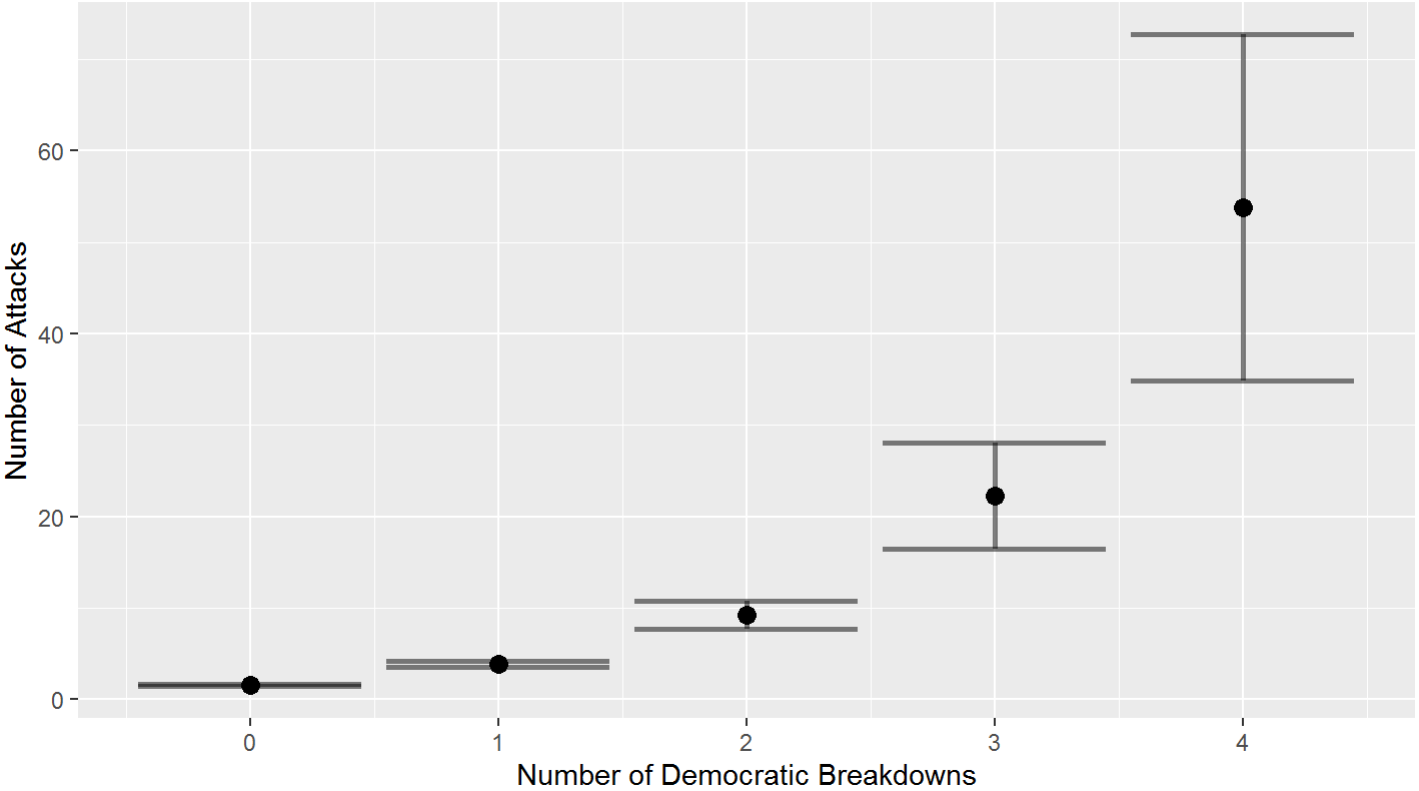
A regular negative binomial produces about the same results, but the ZINB more properly accounts for the over-representation of zeros.

Zero-Inflated Negative Binomial of Attacks in a Country-Year



N = 5,784. 168 countries.

Predicted number of terrorist attacks from negative binomial



Extreme Bounds Analysis (EBA)

$$y = \alpha_j + \beta_j v + \gamma_j F + \delta_j D + \epsilon$$

v : (optional) variable of focus to test its robustness

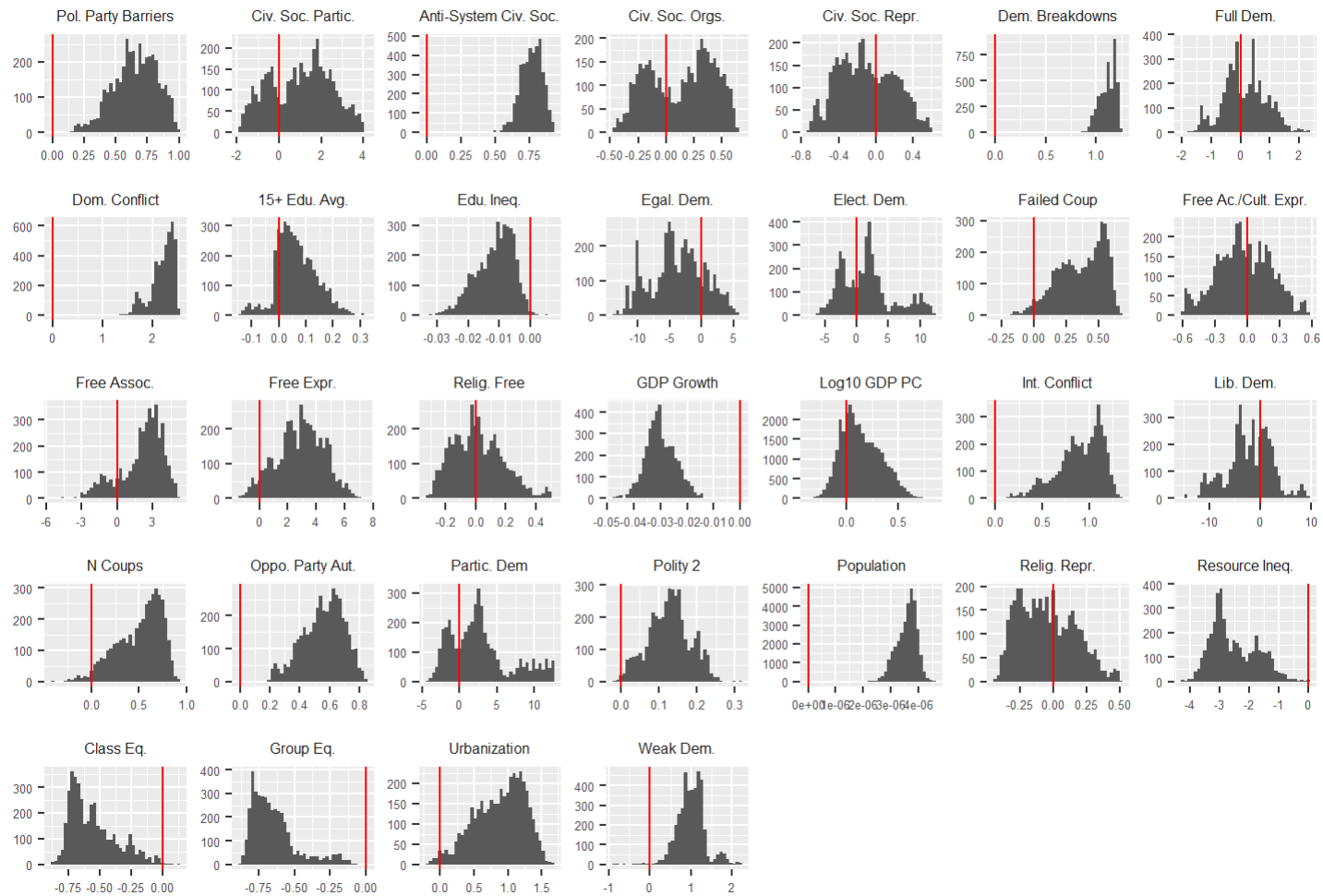
F : vector of 'free' variables integral to correct estimation and always included
 D : vector of 'doubtful' variables, a permutation of which is included in each regression

1. Iteratively estimate an OLS regression with a different permutations of the regressors predicting the outcome.
 - Restrict models based on a variance inflation factor ($\text{vif} < 7$) to avoid high multicollinearity.
 - Use heteroskedasticity robust standard errors
 - Weigh regressions according to the resultant \bar{R}^2
2. Interpret the distribution of coefficients from each model as a robustness measures of variable importance.

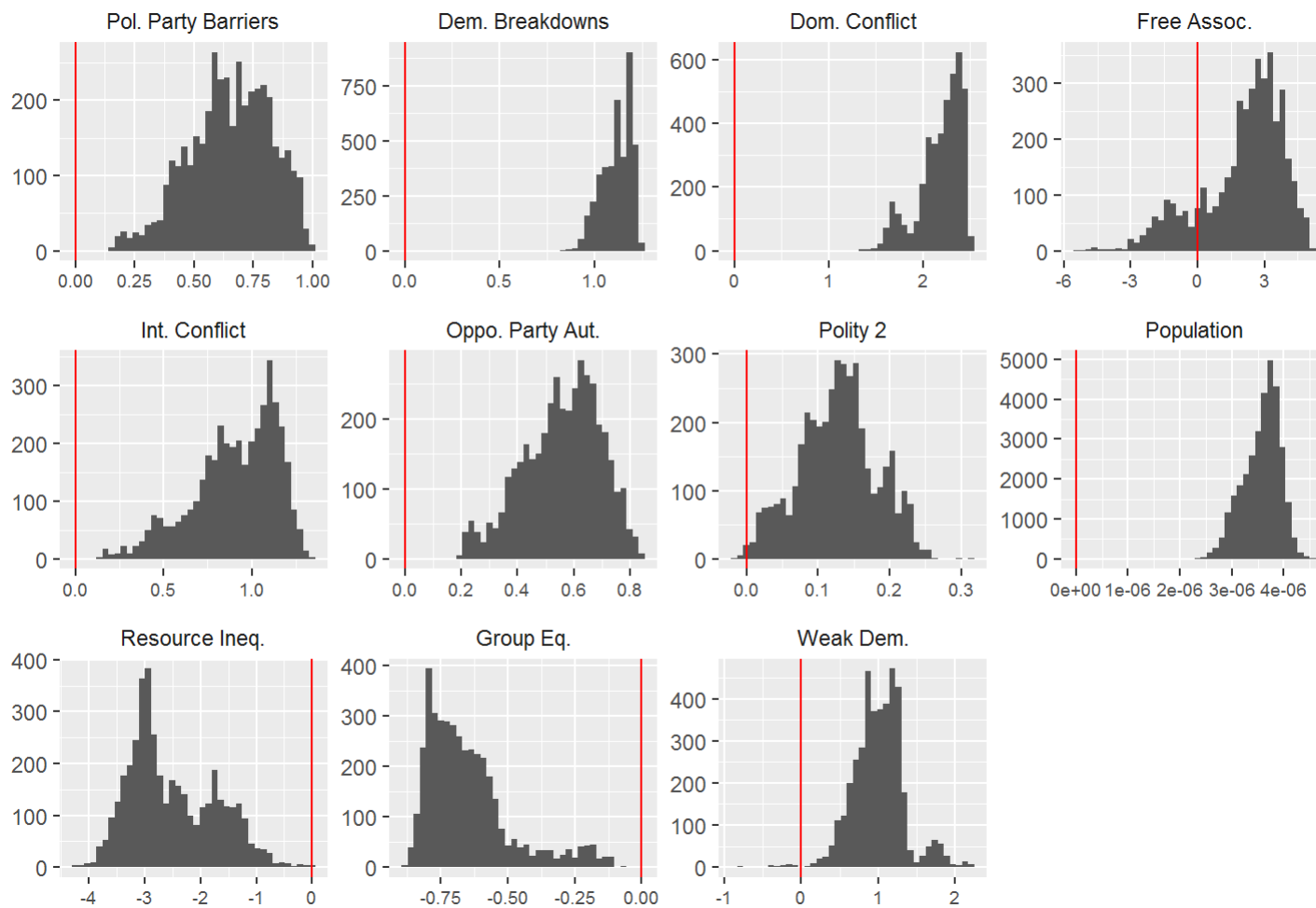
EBA Details

- 31,930 regressions
- Dependent Variable: Logge number of attacks
- Model: OLS
- Outcome: identified 10 variables that robustly associate with increased occurrence of terrorism

OLS EBA: All Coefficient Histograms



OLS EBA: Notable Coefficient Histograms



Implications

- A history of democratic breakdowns serves as a proxy for political disillusionment.
- Political disillusionment results in illegal political action because of loss of faith in legal political avenues.
- Other robust associations with terrorism occurrence include inequality (+), war (+), inequality (-), and weak democracies (-)
- Next steps involve building a predictive model based on these findings.
- Future research must disaggregate to gain more leverage on policy-relevant inferences.

References

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