

Preliminary Results

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Introduction

At the tail end of former President Trump’s term, the rise of social unrest within the United States became an undeniable reality of American life. The Black Lives Matter movement and the recent violent insurrection of pro-Trump supporters at the Capitol are just two of the campaigns by U.S. civilians of dissatisfaction with U.S. institutions and state actors. The events associated with these protests garnered international attention—mostly solidarity for the BLM movement and condemnation for the Capitol Hill riot—but the ugly truths surrounding social movements in other countries, especially autocratic nations where governmental abuses are most egregious, often fly under the radar. Given this, we are interested in investigating social unrest globally and developing a better understanding of the power that grassroots movements hold in challenging governments. It is imperative to recognize that civil resistance is also far from monolithic; oftentimes, the seeds of the most visible campaigns are sown in the form of smaller movements. For example, while media and academia have recognized the political potency of the 18-day occupation of Tahrir Square in 2011 that led to the removal of Egyptian President Hosni Mubarak, there has been scant attention given to the efficacy of the concurrent wave of labor strikes and road-blocking demonstrations in the country at large. Literature on labor strikes and other acts of omission is particularly thin, as this form of protest is less visible than many of its counterparts [1]. As alluded to previously, the extent to which ‘quieter’ protests are understood in authoritarian regimes is particularly abysmal. Existing studies showing the success of small, tactical movements at achieving political aims are limited to single-country analyses and only examine first-world countries [2]. The primary goals for this study are as follows:

- What are the most important determinants of a successful protest?
- What are the cumulative effects of repeated instances of social resistance against a given political target?
- Does the use of violence by a government lead to a ‘chilling effect’, whereby future protests are deterred?

Data

This paper uses the NAVCO 3.0 dataset assembled as part of the Nonviolent and Violent Campaigns and Outcomes (NAVCO) data project, the first and only project to collect systematic, global data on both violent insurgencies and nonviolent civil resistance campaigns [3]. This was done by manually coding variables of interest for events according to news reports. Coders used news wire reports from Agence France Presse (AFP), the world’s oldest and a leading international news agency, to access relevant articles. After binning the articles according to country and time period of interest, coders followed a rigorous set of instructions specified by Chenoweth, Pinckney, and Lewis to identify relevant events and appropriately translate text in articles to values usable for data analysis.

There are two reasonable choices for response variables: (i) the regime response to campaign activity (ii) the number of fatalities or injuries caused due to campaign activity. This paper will primarily focus on the former response variable, as the number of casualties is intrinsically tied to the number of participants involved in the

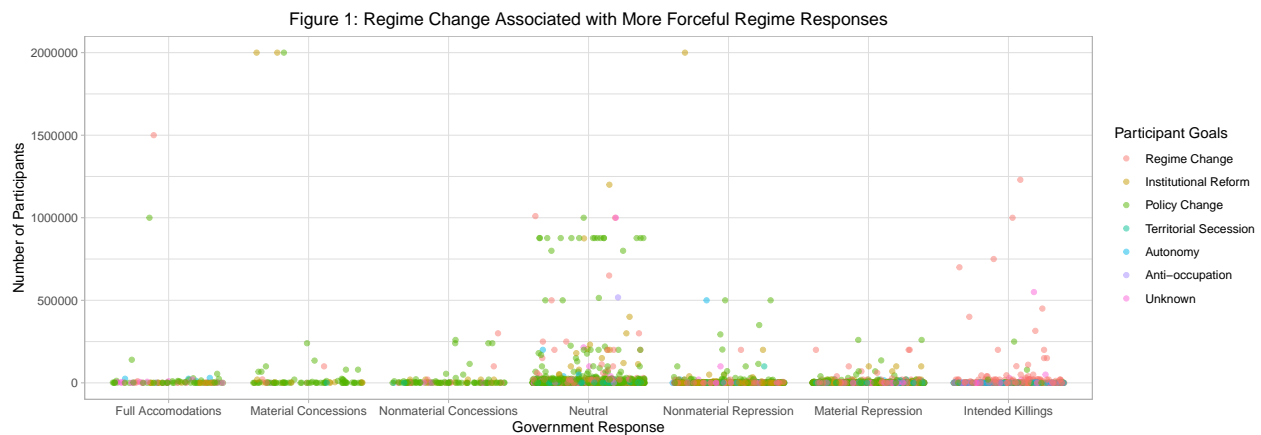
campaign and is only tangentially related to efficacy. The predictor variables fall into seven main categories: location, date, perpetrator characteristics, perpetrator goals, perpetrator methods, target characteristics, and economic impact. We will focus heavily on the subset of predictors related to the methods that perpetrators utilize. Existing literature suggests that tactical innovation and the use of variant methods is critical for the success of civil resistance [4]. However, it is unclear which innovations are effective, warranting an analysis of the comparative utility of different forms of protest. For the cumulative effects research goal, we created a variable to track the number and magnitude of events in the three months prior to a major concession. The designation of a three month time frame was chosen based on the notion that social resistance movements rarely generate continued attention beyond several months following their conclusions.

```
# reclean data to categorize NA values in continuous variables as zero (assume no or negligible values f
df_clean[is.na(df_clean$damage), c("damage")] <- "minor"
df_clean[is.na(df_clean$econ_impact), c("econ_impact")] <- "none"
df_clean[is.na(df_clean$fatal_casu), c("fatal_casu")] <- 0
df_clean[is.na(df_clean$injuries), c("injuries")] <- 0
df_clean[is.na(df_clean$num_partic_event), c("num_partic_event")] <- 0

# df_clean %>%
#   filter(!is.na(nv_categ), !is.na(nc_type), !is.na(nv_commission),
#          !is.na(nv_concentration))

## reorder variables actor_id, verb_10?, camp_goals, tactical_choice, st_posture
df_clean$actor_id <- factor(df_clean$actor_id, ordered = FALSE)
df_clean$camp_goals <- factor(df_clean$camp_goals, ordered = FALSE)
df_clean$actor_id <- factor(df_clean$actor_id, ordered = FALSE)
df_clean <- df_clean %>%
  dplyr::mutate(tactical_choice = factor(case_when(as.integer(tactical_choice) == 1 ~ 3.0, # violent (1.
                                                as.integer(tactical_choice) == 2 ~ 1.0, # non-violent (2) --> 1
                                                TRUE ~ 2.0), order = TRUE, levels = c(1, 2, 3))) # mixed(3) --> 2
```

Exploratory Data Analysis



There are several notable insights from this figure. Regime responses of the highest severity, in which the regime resorts to repression with the intent of killing participants, appear to be triggered by campaigns in which participants are requesting regime change. This trend seems highly plausible: direct challenges against autocratic regimes would be likely to cause governments to lash out expeditiously and forcefully. Figure 1 also seems to offer some evidence for the idea that large campaigns with greater than 50,000 participants tend to elicit neutral regime responses.

Methodology

Determinants of Protest Success

To model the factors that influence protest success the most, we opted for an ordinal logistic regression model, otherwise known as a cumulative logit model for ordinal responses. Protest success will be simply defined as the response used by the government, with full accomodation denoting the highest level of success and material and/or physical repression resulting in death denoting the lowest. The response variable has seven levels in total. Since we are examining a classification problem with ordered classes, it would not be appropriate to use a multinomial logistic regression model nor other similar models for nominal variables. Other classes of models, including the ordered probit model, are also commonly implemented for classification problems involving an ordinal response variable. In contrast to the ordered probit model, logistic regression affords greater interpretability; the coefficients β in logistic regression allow for natural interpretations in terms of log odds. Hence, the logit link function is preferable since the stated goals focus more on the interpretability of the predictors' relationships with the response. A cumulative logit model for an ordinal response with J levels is similar to a binary logistic model, as the levels 1 to j form a single category and the levels $j + 1$ to J form a second category. The log-odds of falling at or below the category comprised of levels 1 to j has a linear relationship with the predictors. The logits of the cumulative probabilities are therefore given by the following form:

$$\text{logit}(P(Y \leq j)) = \frac{P(Y \leq j)}{P(Y > j)} = \alpha_j + \beta x, \text{ for } j = 1, 2 \dots J - 1$$

The key assumption underpinning the ordinal logistic regression model is the proportional odds assumption, which implies that only a single set of coefficients is necessary for each covariate in the model. This is because the assumption states that the coefficients that describe the relationship between the lowest ordinal category versus all higher categories are the same as those that describe the relationship between the next lowest category and all higher categories, and so on. To determine how well each predictor upholds the proportional odds assumption, we created a function to calculate the log odds that governmental response was greater or equal to a given level of governmental response from individual logistic regressions with a single predictor. We then tested the equality of coefficients for a given predictor across its corresponding binary logistic regression models. The differences between the logits for each partition of the dependent variable should be similar for a given predictor regardless of that predictor's level if the proportional odds assumption holds. A visualization indicating the validity of the proportional odds assumption for our predictor set has been included in the appendix.

The base model containing relevant protest-level predictors is specified below:

$$\begin{aligned} \text{logit}(P(\text{Government Response} \leq j)) = & \beta_{0j} + \beta_1 I(\text{Scope}_i = \text{local}) \\ & + \beta_2 I(\text{Scope}_i = \text{subnational}) + \beta_3 I(\text{Scope}_i = \text{national}) \\ & + \beta_4 I(\text{Scope}_i = \text{international regional}) + \beta_5 I(\text{Scope}_i = \text{global}) \\ & + \beta_6 I(\text{ActorType}_i = \text{state}) + \beta_7 I(\text{ActorType}_i = \text{non - state}) \\ & + \beta_8 I(\text{ActorType}_i = \text{international}) + \beta_9 I(\text{ActorType}_i = \text{non - aligned}) \\ & + \beta_{10} I(\text{ActorType}_i = \text{local state actor}) + \beta_{11} I(\text{Goals}_i = \text{regime change}) \\ & + \beta_{12} I(\text{Goals}_i = \text{institutional reform}) + \beta_{13} I(\text{Goals}_i = \text{policy change}) \\ & + \beta_{14} I(\text{Goals}_i = \text{territorial secession}) + \beta_{15} I(\text{Goals}_i = \text{greater autonomy}) \\ & + \beta_{16} I(\text{Goals}_i = \text{anti - occupation}) + \beta_{17} I(\text{Tactic}_i = \text{violent}) \\ & + \beta_{18} I(\text{Tactic}_i = \text{non - violent}) + \beta_{19} I(\text{Tactic}_i = \text{mixed}) \\ & + \beta_{20} \text{NumParticipants} + \beta_{21} \text{Damage} + \beta_{22} \text{EconImpact} \\ & \text{for } j = 1, 2, 3, 4, 5, 6, 7 \end{aligned}$$

Cumulative Protest Effects

Protests do not occur in a vacuum; oftentimes, individual protests are part of a much larger campaign designed to bring about sweeping institutional change. Given this, we posit that there is likely to be a cumulative effect of protests on governmental response, whereby past protests influence the success of future ones within the same campaign. We will follow the inclusion rule used by Pinckney that approximates the definition of a campaign within the civil resistance literature. A campaign must consist of at least three distinct physical events separated by less than one year, with the events meaningfully linked through common actors or goals [5]. To categorize event-level data into campaigns, we will use the NAVCO 1.3 list of maximalist campaigns. Since NAVCO 3.0 is a disaggregated dataset that does not sort individual protests into campaigns, we will analyze the stated protest goals, target, actors, and timing of the events in our dataset and assign them to the campaigns to which they are most closely aligned. Protests that do not clearly seem to be part of any campaign will be discarded.

Once the data has been sorted into campaigns, we will use a weighted cumulative exposure (WCE) model. The WCE model has wide applications within the field of pharmacoepidemiology. In this case, the WCE model is advantageous for three reasons. First, it is able to capture the cumulative effect of past protests on governmental response. Second, it is able to weight the relative importance of past protests depending on their timing. Finally, information concerning the severity of an event can be integrated. We chose this model over recurrent event models such as the Anderson-Gill (AG) model, which suffer from the independence assumption. The AG model assumes that the instantaneous risk of experiencing an outcome of interest at time t remains the same irrespective of whether or not previous events have been experienced. This makes recurrent event independence a poor assumption for this problem. The WCE model is specified as follows:

$$WCE(u) = \sum_{t \leq u} w(u - t)X(t)$$

Here u is the current time when governmental response is evaluated, $t \leq u$ indexes times of protests preceding u , and $X(t)$ represents the past protest intensity at time t . Here intensity will be defined as the number of participants in the protest, as this is a reasonably valid way to measure the strength of a protest. Given that our ultimate response variable of interest is quantitative, we will follow the Danieli et al. procedure for implementing the WCE model to assess longitudinal changes in the outcome [6]. This WCE model will be incorporated into a linear effects mixed model, whereby we model governmental response Y , a repeated-over-time outcome, at the k^{th} protest for campaign i . The model will thus take the form below:

$$Y_i(t_{ik}) = \beta_0 + b_{i,0} + \beta_{WCE}WCE_i(t_{ik}) + \sum_{s=1}^p (\beta_s Z_{s,ik}) + \sum_{s=1}^r (b_{i,s} L_{s,ik}) + \epsilon_{ik}$$

β_0 represents the expected value of the governmental response to a campaign at time t_{ik} assuming that there were no prior protests in the campaign. This is the response that would be expected given that the values of all p fixed effect covariates were set to zero. $b_{i,0} \mathcal{N}(0, \sigma_b^2)$ represents the random intercept for campaign i . The fixed effect, β_{WCE} , represents the expected change in governmental response associated with a unit increase in the WCE metric. β_s represents the fixed effect of the covariates Z_s , while $b_{i,s}$ represents the random effect of a set of covariates L_s that are included in Z_s . These covariates L_s will be the grouping factors that we are seeking to control, namely the geographic scope of protests and the type of actor involved in the protest. We chose to use a mixed effects model because there is reason to believe that observations are not necessarily independent of one another. Protests are likely to ‘interact’ with one another. For example, an actor conducting multiple protests would be expected to be met with similar governmental responses for each protest. This model allows us to therefore capture variance in the dependent governmental response variable due to relevant clusters.

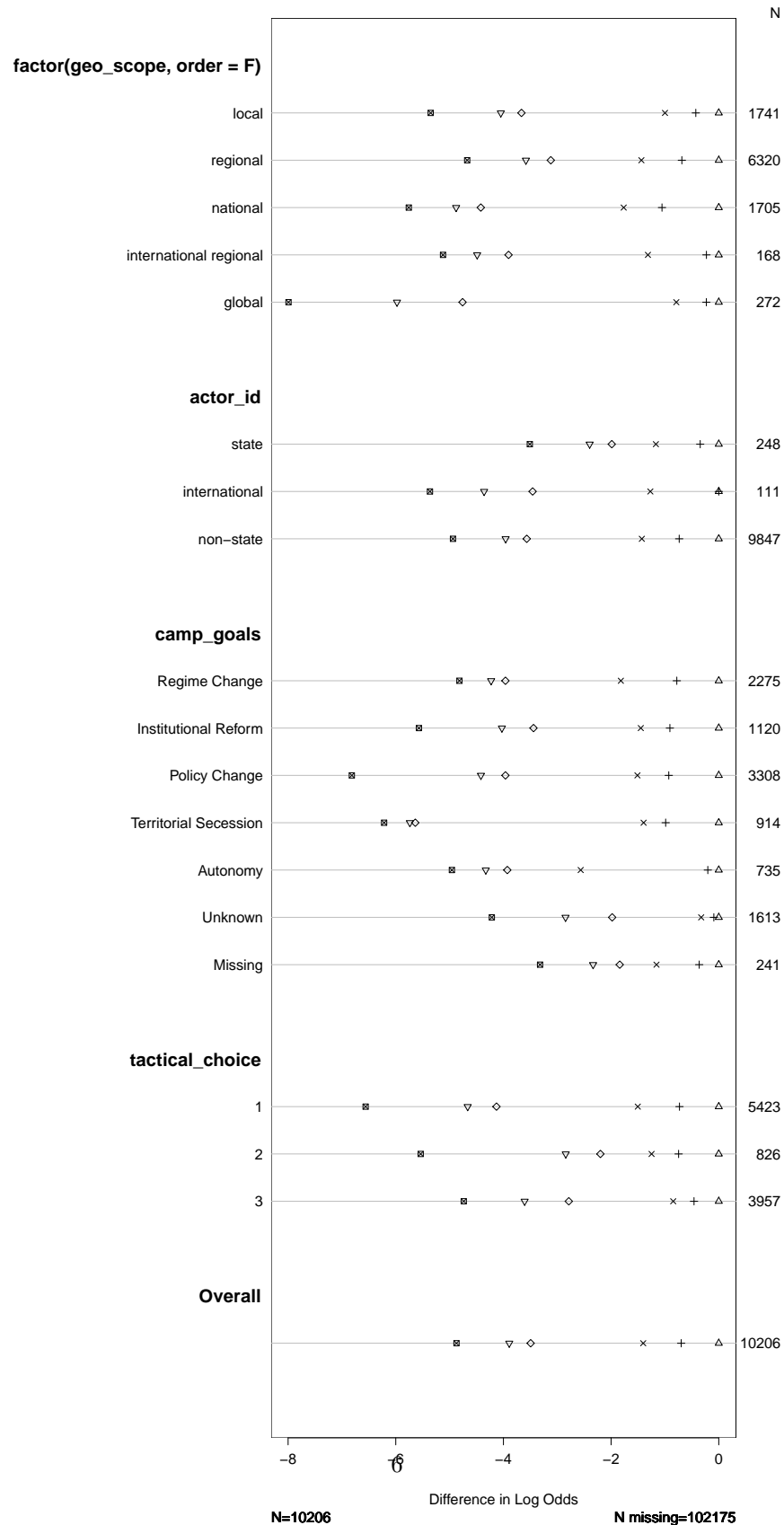
Chilling Effect

To determine whether or not a chilling effect stemming from severe governmental responses exists, we will be examining the frequency of protests a year prior to and following such a response. A severe response will be defined as any governmental response that is of level five, which corresponds to non-material and non-physical repression, or higher. A two proportions Z-test will be used to examine if the difference in protest frequencies is statistically significant. This hypothesis test is effective in comparing population proportion differences between two groups, and it is chosen over the Fisher-exact test because of the sufficiently large sample size.

Results

Protest Success

Figure 3: Proportional Odds Assumption Satisfied by Data



```
m_ord <- polr(st_posture ~ factor(geo_scope, order = F) + actor_id + camp_goals + tactical_choice,
  data = df_clean,
  #na.action = na.omit,
  Hess = TRUE)
summary(m_ord)
```

```
## Call:
## polr(formula = st_posture ~ factor(geo_scope, order = F) + actor_id +
##      camp_goals + tactical_choice, data = df_clean, Hess = TRUE)
##
## Coefficients:
##                                     Value Std. Error t value
## factor(geo_scope, order = F)regional      0.7735    0.05478  14.1185
## factor(geo_scope, order = F)national     -0.4655    0.06974  -6.6749
## factor(geo_scope, order = F)international regional  0.3819    0.15976   2.3906
## factor(geo_scope, order = F)global       -0.1201    0.13080  -0.9185
## actor_idnon-state      0.3202    0.25881   1.2373
## actor_idinternational    0.5202    0.34456   1.5098
## actor_idnonaligned      0.4596    0.74966   0.6130
## actor_idlocal state    -1.9232    1.22811  -1.5660
## camp_goalsInstitutional Reform  -0.8224    0.07606 -10.8127
## camp_goalsPolicy Change    -1.2955    0.06281 -20.6250
## camp_goalsTerritorial Secession -0.7848    0.08273  -9.4869
## camp_goalsAutonomy        -1.1153    0.09278 -12.0214
## camp_goalsAnti-occupation  -2.0448    0.39305  -5.2025
## camp_goalsUnknown         -1.4438    0.06969 -20.7178
## tactical_choice.L          2.1315    0.04107  51.9010
## tactical_choice.Q         -0.2152    0.06035  -3.5663
##
## Intercepts:
##                                     Value Std. Error t value
## Full Accomodations|Material Concessions  -5.6310    0.2769 -20.3333
## Material Concessions|Nonmaterial Concessions -4.8911    0.2716 -18.0072
## Nonmaterial Concessions|Neutral          -4.1575    0.2691 -15.4502
## Neutral|Nonmaterial Repression           -1.4377    0.2662  -5.4003
## Nonmaterial Repression|Material Repression -0.7844    0.2660  -2.9490
## Material Repression|Intended Killings      0.9791    0.2662   3.6780
##
## Residual Deviance: 24175.73
## AIC: 24219.73
## (102416 observations deleted due to missingness)
```

```
mod_output_df <- as.data.frame(summary(m_ord)$coefficients)
mod_output_df$p_value <- pnorm(abs(mod_output_df[, "t value"]), lower.tail = FALSE) * 2
mod_output_df[, c("Value", "p_value")]
```

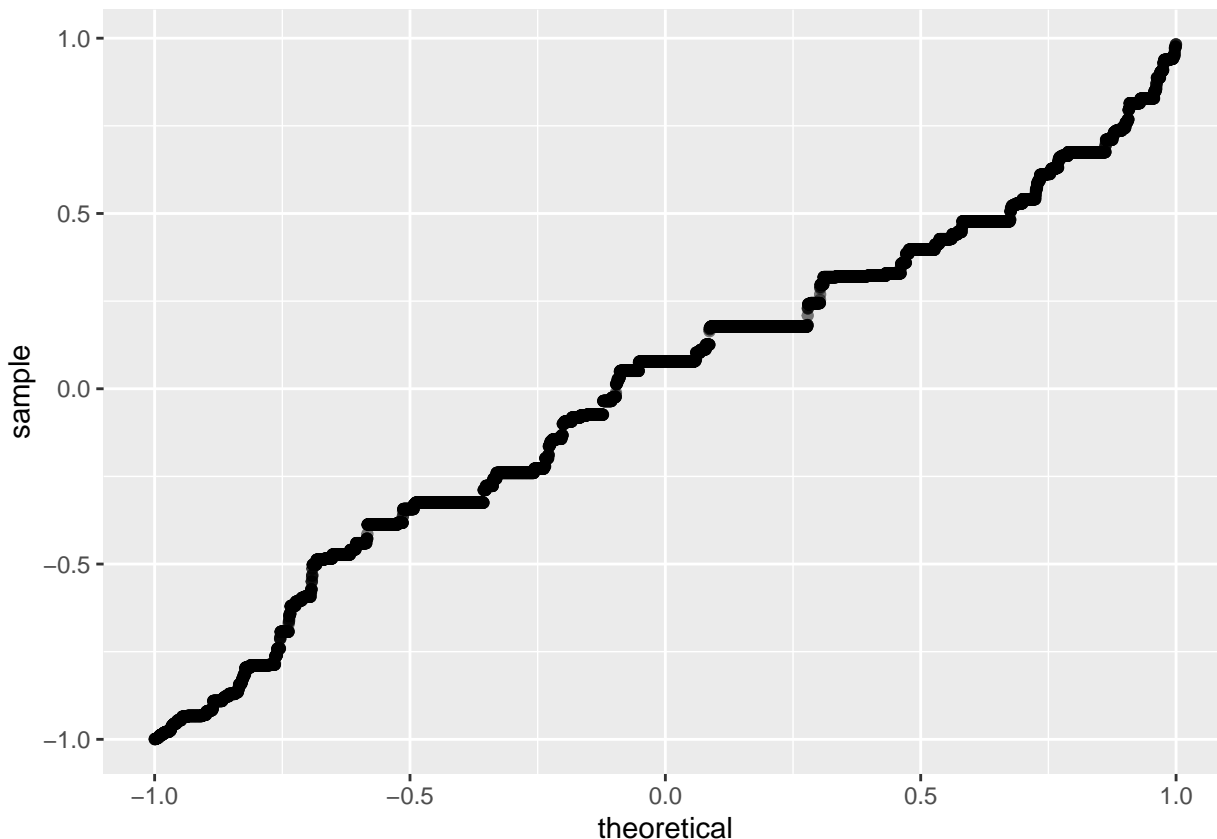
```
##                                     Value      p_value
## factor(geo_scope, order = F)regional      0.7734783 2.921515e-45
## factor(geo_scope, order = F)national     -0.4655204 2.473723e-11
## factor(geo_scope, order = F)international regional  0.3819241 1.682136e-02
## factor(geo_scope, order = F)global       -0.1201351 3.583731e-01
## actor_idnon-state      0.3202297 2.159738e-01
## actor_idinternational    0.5202144 1.310984e-01
## actor_idnonaligned      0.4595712 5.398501e-01
```

```
## actor_idlocal state -1.9232323 1.173458e-01
## camp_goalsInstitutional Reform -0.8224311 2.995882e-27
## camp_goalsPolicy Change -1.2955020 1.638654e-94
## camp_goalsTerritorial Secession -0.7848413 2.380953e-21
## camp_goalsAutonomy -1.1153169 2.742708e-33
## camp_goalsAnti-occupation -2.0448334 1.965923e-07
## camp_goalsUnknown -1.4438474 2.395803e-95
## tactical_choice.L 2.1314738 0.000000e+00
## tactical_choice.Q -0.2152418 3.621041e-04
## Full Accomodations|Material Concessions -5.6309534 6.531277e-92
## Material Concessions|Nonmaterial Concessions -4.8910580 1.709835e-72
## Nonmaterial Concessions|Neutral -4.1575006 7.519558e-54
## Neutral|Nonmaterial Repression -1.4376824 6.652579e-08
## Nonmaterial Repression|Material Repression -0.7844356 3.187817e-03
## Material Repression|Intended Killings 0.9791423 2.350933e-04
```

```
1-pchisq(deviance(m_ord), df.residual(m_ord))
```

```
## [1] 0
```

```
pres <- presid(m_ord)
ggplot(data.frame(y = pres), aes(sample = y)) +
  stat_qq(distribution = qunif, dparams = list(min = -1, max = 1), alpha = 0.5)
```



```
#resids(m)
#predict(m_ord, type = "probs")
#autoplot(resids(m_ord), what = "covariate", x = predict(m, type = "probs"))
#residuals(m_ord)
```


Cumulative Protests

```
df_pwp <- df_clean %>%
  group_by(country_name, year) %>%
  filter(target_3 %in% c("COP", "GOV", "JUD", "MIL", "LLY", "SPY", "LEG", "TOP")) %>%
  ungroup()

df_pwp <- df_pwp %>% filter(!is.na(tactical_choice) & !is.na(st_posture))

df_pwp$id <- df_pwp %>% group_by(country_name, year) %>%
  group_indices()

df_pwp <- df_pwp %>%
  ungroup() %>%
  arrange(id, date) %>%
  group_by(id) %>%
  dplyr::mutate(diff_time = as.double(date - lag(date))) # get time difference b/w protests

df_pwp$diff_time[is.na(df_pwp$diff_time)] <- 0
df_temp <- df_pwp %>% group_by(id) %>%
  dplyr::mutate(Stop = cumsum(diff_time) + 1)
df_pwp$Stop <- df_temp$Stop

# classify governmental responses into binary variable for concessions Y/N
df_pwp <- df_pwp %>%
  dplyr::mutate(concessions = if_else(st_posture == "Full Accomodations" |
                                     st_posture == "Material Concessions" |
                                     st_posture == "Nonmaterial Concessions", 1, 0))

# consolidate same-day protests
df_pwp <- df_pwp %>%
  group_by(id, date) %>%
  dplyr::mutate(num_protests_day = n()) %>%
  ungroup()

df_pwp <- df_pwp %>%
  group_by(id, date) %>%
  slice(which.min(st_posture)) %>%
  ungroup()

# filter to get final concession made in response to a campaign
df_wce_conc <- df_pwp %>%
  filter(concessions == 1) %>%
  group_by(id) %>%
  slice(n()) %>%
  ungroup()

df_wce <- rbind(df_pwp %>%
  filter(concessions == 0), df_wce_conc) %>%
  arrange(id, date) %>%
  group_by(id) %>%
```

```

dplyr::mutate(last_concession = min(which(concessions == 1 | row_number() == n())) %>%
  filter(row_number() <= last_concession) %>%
  dplyr::select(-last_concession)

# match start dates to match events with complete information
df_wce <- df_wce %>%
  group_by(id) %>%
  dplyr::mutate(Start = lag(Stop)) %>%
  ungroup()
df_wce$Start[is.na(df_wce$Start)] <- 0

# convert id to a double
df_wce$id <- as.double(df_wce$id)

# get number of protests
df_wce <- df_wce %>%
  group_by(id) %>%
  #filter(concessions == 1) %>%
  dplyr::mutate(enum = row_number()) %>%
  dplyr::mutate(enum = if_else(enum >= 8, 8, as.double(enum))) %>%
  ungroup()

# continent variable
df_wce <- df_wce %>%
  dplyr::mutate(region = case_when(country_name %in% c("algeria", "egypt",
    "kenya", "libya",
    "madagascar", "morocco",
    "sierra_leone", "south_sudan",
    "sudan", "tanzania", "tunisia") ~ "Africa",
    country_name %in% c("iraq", "jordan", "syria",
    "turkey", "yemen") ~ "Middle East",
    country_name %in% c("bahrain", "china",
    "india", "pakistan",
    "south_korea", "uzbekistan") ~ "Asia",
    country_name %in% c("estonia", "ukraine") ~ "Europe",
    TRUE ~ "Americas")) # Mexico, U.S.

df_wce$tactical_choice <- as.integer(df_wce$tactical_choice)

# checkWCE(as.data.frame(df_wce), id = "id", event = "concessions", start = "Start",
#           stop = "Stop", expos = "tactical_choice")

df_wce <- df_wce %>%
  dplyr::select(id, date, geo_scope, actor_id, camp_goals, tactical_choice, damage, econ_impact,
    fatal_casu, injuries,
    concessions, num_protests_day)
df_wce$damage <- as.double(df_wce$damage)
df_wce$econ_impact <- as.double(df_wce$econ_impact)
df_wce[is.na(df_wce$damage), c("damage")] <- 0
df_wce[is.na(df_wce$econ_impact), c("econ_impact")] <- 0
df_wce[is.na(df_wce$fatal_casu), c("fatal_casu")] <- 0
df_wce[is.na(df_wce$injuries), c("injuries")] <- 0
df_wce[is.na(df_wce$num_partic_event), c("num_partic_event")] <- 0

```

```

df_wce$doy <- as.double(strftime(df_wce$date, format = "%j"))

df_wce$geo_scope <- as.character(df_wce$geo_scope)
df_wce$actor_id <- as.character(df_wce$actor_id)
df_wce$camp_goals <- as.character(df_wce$camp_goals)

non_protest_day_maker <- function(df) {
  ly <- seq(from = 1992, to = 2012, by = 4) # years that are leap years
  year <- as.double(format(date, "%Y")) # extract year
  days_ly <- 1:366
  days_nly <- 1:365
  ly_indicator <- year %in% ly
  ly_newdays <- days_ly[!(1:366) %in% df$doy]
  nly_newdays <- days_nly[!(1:365) %in% df$doy]
  if(ly_indicator) {
    days_to_add <- days_ly[!(1:366) %in% df$doy]
  }
  else {
    days_to_add <- days_nly[!(1:365) %in% df$doy]
  }
  num_rows <- length(days_to_add)
  id <- df$id[1]
  zeros <- rep(0, num_rows)
  new_rows <- bind_cols(rep(id, num_rows), rep(as.Date("1982-01-13", format = "%m/%d/%y"), num_rows), r
                        rep("", num_rows), zeros, zeros, # camp_goals, tactical_choice, damage
                        zeros, zeros, zeros, # econ_impact, fatal_casu, injuries
                        zeros, zeros, # num_partic_event, concessions, num_protests_day
                        days_to_add) # doy
  colnames(new_rows) <- c("id", "date", "geo_scope", "actor_id", "camp_goals",
                        "tactical_choice", "damage", "econ_impact", "fatal_casu", "injuries",
                        "concessions", "num_protests_day", "doy")
  df_comb <- rbind(df, new_rows)
  return(df_comb)
}

## # A tibble: 131,766 x 11
## # Groups:   id [361]
##       id geo_scope tactical_choice damage econ_impact fatal_casu injuries
##   <dbl>   <dbl>         <dbl> <dbl>      <dbl>      <dbl>   <dbl>
## 1     1     1           1         0     0         0         0     0
## 2     1     1           1         0     0         0         0     0
## 3     1     1           1         0     0         0         0     0
## 4     1     1           1         0     0         0         0     0
## 5     1     1           1         0     0         0         0     0
## 6     1     1           1         0     0         0         0     0
## 7     1     1           1         0     0         0         0     0
## 8     1     1           1         0     0         0         0     0
## 9     1     1           1         0     0         0         0     0
## 10    1     1           1         0     0         0         0     0
## # ... with 131,756 more rows, and 4 more variables: concessions <dbl>,
## #   num_protests_day <dbl>, Start <dbl>, Stop <dbl>

## Data are in the right format for WCE estimation.
##

```

```

## Estimated right-constrained WCE function(s).
##
##          t1          t2          t3          t4          t5
## 1 knot(s) -0.07744516 -0.07646376 -0.07548994 -0.07452365 -0.07356488
## 2 knot(s) -0.11295800 -0.10970064 -0.10651215 -0.10339183 -0.10033900
## 3 knot(s) -0.10404129 -0.10153222 -0.09906777 -0.09664755 -0.09427117
##          t6          t7          t8          t9          t10
## 1 knot(s) -0.07261359 -0.07166976 -0.07073336 -0.06980435 -0.06888272
## 2 knot(s) -0.09735295 -0.09443301 -0.09157848 -0.08878866 -0.08606288
## 3 knot(s) -0.09193824 -0.08964837 -0.08740117 -0.08519625 -0.08303322
##          t11          t12          t13          t14          t15
## 1 knot(s) -0.06796843 -0.06706145 -0.06616175 -0.06526931 -0.06438411
## 2 knot(s) -0.08340043 -0.08080063 -0.07826278 -0.07578620 -0.07337019
## 3 knot(s) -0.08091169 -0.07883127 -0.07679156 -0.07479218 -0.07283274
##          t16          t17          t18          t19          t20
## 1 knot(s) -0.06350610 -0.06263526 -0.06177156 -0.06091498 -0.06006549
## 2 knot(s) -0.07101407 -0.06871713 -0.06647870 -0.06429808 -0.06217457
## 3 knot(s) -0.07091285 -0.06903211 -0.06719014 -0.06538654 -0.06362093
##          t21          t22          t23          t24          t25
## 1 knot(s) -0.05922305 -0.05838764 -0.05755924 -0.05673780 -0.05592331
## 2 knot(s) -0.06010750 -0.05809616 -0.05613986 -0.05423792 -0.05238965
## 3 knot(s) -0.06189291 -0.06020210 -0.05854810 -0.05693053 -0.05534899
##          t26          t27          t28          t29          t30
## 1 knot(s) -0.05511573 -0.05431505 -0.05352122 -0.05273422 -0.05195402
## 2 knot(s) -0.05059435 -0.04885133 -0.04715990 -0.04551938 -0.04392906
## 3 knot(s) -0.05380309 -0.05229245 -0.05081666 -0.04937535 -0.04796812
##          t31          t32          t33          t34          t35
## 1 knot(s) -0.05118059 -0.05041392 -0.04965395 -0.04890068 -0.04815406
## 2 knot(s) -0.04238826 -0.04089629 -0.03945246 -0.03805607 -0.03670644
## 3 knot(s) -0.04659458 -0.04525434 -0.04394701 -0.04267220 -0.04142953
##          t36          t37          t38          t39          t40
## 1 knot(s) -0.04741408 -0.04668069 -0.04595389 -0.04523362 -0.04451988
## 2 knot(s) -0.03540287 -0.03414468 -0.03293116 -0.03176164 -0.03063542
## 3 knot(s) -0.04021858 -0.03903899 -0.03789036 -0.03677230 -0.03568441
##          t41          t42          t43          t44          t45
## 1 knot(s) -0.04381262 -0.04311183 -0.04241747 -0.04172951 -0.04104792
## 2 knot(s) -0.02955181 -0.02851011 -0.02750965 -0.02654972 -0.02562964
## 3 knot(s) -0.03462631 -0.03359760 -0.03259791 -0.03162683 -0.03068397
##          t46          t47          t48          t49          t50
## 1 knot(s) -0.04037269 -0.03970377 -0.03904114 -0.03838477 -0.03773464
## 2 knot(s) -0.02474871 -0.02390624 -0.02310155 -0.02233394 -0.02160272
## 3 knot(s) -0.02976895 -0.02888138 -0.02802085 -0.02718700 -0.02637942
##          t51          t52          t53          t54          t55
## 1 knot(s) -0.03709071 -0.03645295 -0.03582135 -0.03519586 -0.03457646
## 2 knot(s) -0.02090720 -0.02024669 -0.01962050 -0.01902794 -0.01846831
## 3 knot(s) -0.02559772 -0.02484151 -0.02411041 -0.02340401 -0.02272194
##          t56          t57          t58          t59          t60
## 1 knot(s) -0.03396313 -0.03335583 -0.03275454 -0.03215922 -0.03156985
## 2 knot(s) -0.01794093 -0.01744510 -0.01698014 -0.01654535 -0.01614004
## 3 knot(s) -0.02206381 -0.02142921 -0.02081776 -0.02022908 -0.01966276
##          t61          t62          t63          t64          t65
## 1 knot(s) -0.03098640 -0.03040885 -0.02983715 -0.02927130 -0.02871124
## 2 knot(s) -0.01576352 -0.01541510 -0.01509409 -0.01479980 -0.01453154
## 3 knot(s) -0.01911842 -0.01859568 -0.01809413 -0.01761339 -0.01715307

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##		t66	t67	t68	t69	t70
## 1	knot(s)	-0.02815697	-0.02760845	-0.02706564	-0.02652853	-0.02599709
## 2	knot(s)	-0.01428861	-0.01407033	-0.01387600	-0.01370494	-0.01355644
## 3	knot(s)	-0.01671277	-0.01629212	-0.01589071	-0.01550815	-0.01514407
##		t71	t72	t73	t74	t75
## 1	knot(s)	-0.02547128	-0.02495108	-0.02443646	-0.02392738	-0.02342383
## 2	knot(s)	-0.01342983	-0.01332441	-0.01323950	-0.01317438	-0.01312839
## 3	knot(s)	-0.01479805	-0.01446973	-0.01415870	-0.01386457	-0.01358696
##		t76	t77	t78	t79	t80
## 1	knot(s)	-0.02292578	-0.02243319	-0.02194603	-0.02146428	-0.02098792
## 2	knot(s)	-0.01310083	-0.01309100	-0.01309821	-0.01312178	-0.01316101
## 3	knot(s)	-0.01332547	-0.01307971	-0.01284930	-0.01263384	-0.01243295
##		t81	t82	t83	t84	t85
## 1	knot(s)	-0.02051690	-0.02005121	-0.01959082	-0.01913569	-0.01868579
## 2	knot(s)	-0.01321522	-0.01328371	-0.01336578	-0.01346076	-0.01356795
## 3	knot(s)	-0.01224622	-0.01207328	-0.01191373	-0.01176717	-0.01163323
##		t86	t87	t88	t89	t90
## 1	knot(s)	-0.01824111	-0.01780161	-0.01736726	-0.01693803	-0.01651390
## 2	knot(s)	-0.01368665	-0.01381618	-0.01395585	-0.01410496	-0.01426282
## 3	knot(s)	-0.01151151	-0.01140162	-0.01130317	-0.01121577	-0.01113902
##		t91	t92	t93	t94	t95
## 1	knot(s)	-0.01609484	-0.01568082	-0.01527180	-0.01486777	-0.01446869
## 2	knot(s)	-0.01442875	-0.01460205	-0.01478203	-0.01496800	-0.01515927
## 3	knot(s)	-0.01107255	-0.01101595	-0.01096886	-0.01093100	-0.01090210
##		t96	t97	t98	t99	t100
## 1	knot(s)	-0.01407454	-0.01368528	-0.01330090	-0.01292135	-0.01254661
## 2	knot(s)	-0.01535515	-0.01555495	-0.01575797	-0.01596353	-0.01617094
## 3	knot(s)	-0.01088190	-0.01087014	-0.01086656	-0.01087090	-0.01088289
##		t101	t102	t103	t104	t105
## 1	knot(s)	-0.01217666	-0.01181145	-0.01145098	-0.01109520	-0.01074410
## 2	knot(s)	-0.01637950	-0.01658852	-0.01679731	-0.01700518	-0.01721145
## 3	knot(s)	-0.01090228	-0.01092879	-0.01096218	-0.01100218	-0.01104852
##		t106	t107	t108	t109	t110
## 1	knot(s)	-0.01039763	-0.01005578	-0.009718505	-0.00938579	-0.009057601
## 2	knot(s)	-0.01741541	-0.01761638	-0.017813673	-0.01800659	-0.018194439
## 3	knot(s)	-0.01110094	-0.01115919	-0.011223000	-0.01129211	-0.011366253
##		t111	t112	t113	t114	t115
## 1	knot(s)	-0.008733911	-0.008414692	-0.008099913	-0.007789549	-0.007483568
## 2	knot(s)	-0.018376535	-0.018552184	-0.018720696	-0.018881380	-0.019033544
## 3	knot(s)	-0.011445173	-0.011528608	-0.011616294	-0.011707971	-0.011803376
##		t116	t117	t118	t119	t120
## 1	knot(s)	-0.007181945	-0.006884649	-0.006591652	-0.006302927	-0.006018444
## 2	knot(s)	-0.019176499	-0.019309552	-0.019432014	-0.019543193	-0.019642398
## 3	knot(s)	-0.011902248	-0.012004324	-0.012109344	-0.012217045	-0.012327166
##		t121	t122	t123	t124	t125
## 1	knot(s)	-0.005738175	-0.005462093	-0.005190167	-0.00492237	-0.004658674
## 2	knot(s)	-0.019728938	-0.019802123	-0.019861261	-0.01990581	-0.019935845
## 3	knot(s)	-0.012439444	-0.012553618	-0.012669427	-0.01278661	-0.012904900
##		t126	t127	t128	t129	t130
## 1	knot(s)	-0.00439905	-0.004143469	-0.003891903	-0.003644324	-0.003400704
## 2	knot(s)	-0.01995157	-0.019953219	-0.019940996	-0.019915122	-0.019875816
## 3	knot(s)	-0.01302404	-0.013143769	-0.013263822	-0.013383940	-0.013503858
##		t131	t132	t133	t134	t135
## 1	knot(s)	-0.003161013	-0.002925223	-0.002693307	-0.002465235	-0.002240979

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## 2 knot(s) -0.019823294 -0.019757774 -0.019679474 -0.019588610 -0.019485402
## 3 knot(s) -0.013623317 -0.013742055 -0.013859808 -0.013976317 -0.014091319
##          t136          t137          t138          t139          t140
## 1 knot(s) -0.00202051 -0.001803801 -0.001590823 -0.001381547 -0.001175945
## 2 knot(s) -0.01937006 -0.019242816 -0.019103875 -0.018953458 -0.018791783
## 3 knot(s) -0.01420455 -0.014315754 -0.014424664 -0.014531020 -0.014634560
##          t141          t142          t143          t144          t145
## 1 knot(s) -0.0009739885 -0.0007756489 -0.000580898 -0.0003897072 -0.0002020481
## 2 knot(s) -0.0186190662 -0.0184355261 -0.018241380 -0.0180368452 -0.0178221392
## 3 knot(s) -0.0147350219 -0.0148321449 -0.014925667 -0.0150153256 -0.0151008598
##          t146          t147          t148          t149          t150
## 1 knot(s) -1.789239e-05  0.0001627885  0.0003400229  0.0005138394  0.0006842663
## 2 knot(s) -1.759748e-02 -0.0173630833 -0.0171191682 -0.0168659518 -0.0166036512
## 3 knot(s) -1.518201e-02 -0.0152585068 -0.0153300962 -0.0153965138 -0.0154574978
##          t151          t152          t153          t154          t155
## 1 knot(s)  0.0008513321  0.001015065  0.001175494  0.001332647  0.001486553
## 2 knot(s) -0.0163324842 -0.016052668 -0.015764420 -0.015467958 -0.015163499
## 3 knot(s) -0.0155127864 -0.015562118 -0.015605231 -0.015641863 -0.015671752
##          t156          t157          t158          t159          t160
## 1 knot(s)  0.001637239  0.001784735  0.001929069  0.00207027  0.002208365
## 2 knot(s) -0.014851260 -0.014531460 -0.014204315 -0.01387004 -0.013528862
## 3 knot(s) -0.015694638 -0.015710257 -0.015718349 -0.01571865 -0.015710902
##          t161          t162          t163          t164          t165
## 1 knot(s)  0.002343384  0.002475354  0.002604304  0.002730263  0.002853258
## 2 knot(s) -0.013180988 -0.012826640 -0.012466034 -0.012099389 -0.011726921
## 3 knot(s) -0.015694839 -0.015670202 -0.015636729 -0.015594157 -0.015542225
##          t166          t167          t168          t169          t170
## 1 knot(s)  0.002973319  0.003090474  0.003204751  0.003316179  0.003424786
## 2 knot(s) -0.011348848 -0.010965387 -0.010576757 -0.010183174 -0.009784855
## 3 knot(s) -0.015480671 -0.015409233 -0.015327650 -0.015235659 -0.015133000
##          t171          t172          t173          t174          t175
## 1 knot(s)  0.003530601  0.003633651  0.003733966  0.003831574  0.003926503
## 2 knot(s) -0.009382019 -0.008974883 -0.008563663 -0.008148578 -0.007729846
## 3 knot(s) -0.015019410 -0.014894627 -0.014758390 -0.014610437 -0.014450506
##          t176          t177          t178          t179          t180
## 1 knot(s)  0.004018782  0.004108439  0.004195503  0.004280002  0.004361964
## 2 knot(s) -0.007307682 -0.006882306 -0.006453933 -0.006022783 -0.005589072
## 3 knot(s) -0.014278335 -0.014093663 -0.013896228 -0.013685768 -0.013462021
##          t181          t182          t183          t184          t185
## 1 knot(s)  0.004441418  0.004518393  0.004592916  0.004665016  0.004734722
## 2 knot(s) -0.005153017 -0.004714836 -0.004274747 -0.003832967 -0.003389713
## 3 knot(s) -0.013224726 -0.012973620 -0.012708442 -0.012428931 -0.012134931
##          t186          t187          t188          t189          t190
## 1 knot(s)  0.004802054  0.004867037  0.004929691  0.004990038  0.005048101
## 2 knot(s) -0.002945204 -0.002499655 -0.002053285 -0.001606311 -0.001158951
## 3 knot(s) -0.011826718 -0.011504673 -0.011169179 -0.010820617 -0.010459370
##          t191          t192          t193          t194          t195
## 1 knot(s)  0.0051039018  0.0051574619  0.0052088036  0.0052579488  0.005304919
## 2 knot(s) -0.0007114222 -0.0002639416  0.0001832731  0.0006300045  0.001076035
## 3 knot(s) -0.0100858199 -0.0097003480 -0.0093033368 -0.0088951682 -0.008476224
##          t196          t197          t198          t199          t200
## 1 knot(s)  0.005349738  0.005392425  0.005433004  0.005471496  0.005507924
## 2 knot(s)  0.001521147  0.001965124  0.002407747  0.002848800  0.003288065
## 3 knot(s) -0.008046887 -0.007607539 -0.007158561 -0.006700337 -0.006233247

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##		t201	t202	t203	t204	t205	
## 1	knot(s)	0.005542309	0.005574674	0.005605040	0.005633429	0.005659863	
## 2	knot(s)	0.003725325	0.004160361	0.004592958	0.005022896	0.005449960	
## 3	knot(s)	-0.005757674	-0.005274000	-0.004782607	-0.004283877	-0.003778191	
##		t206	t207	t208	t209	t210	
## 1	knot(s)	0.005684365	0.005706956	0.005727658	0.005746494	0.005763484	
## 2	knot(s)	0.005873930	0.006294591	0.006711724	0.007125112	0.007534538	
## 3	knot(s)	-0.003265933	-0.002747484	-0.002223226	-0.001693541	-0.001158811	
##		t211	t212	t213	t214	t215	
## 1	knot(s)	0.0057786521	5.792019e-03	0.0058036073	0.005813439	0.005821535	
## 2	knot(s)	0.0079397836	8.340632e-03	0.0087368660	0.009128268	0.009514620	
## 3	knot(s)	-0.0006194188	-7.574537e-05	0.0004718268	0.001022916	0.001577139	
##		t216	t217	t218	t219	t220	
## 1	knot(s)	0.005827919	0.005832611	0.005835635	0.005837012	0.005836763	
## 2	knot(s)	0.009895705	0.010271305	0.010641204	0.011005183	0.011363026	
## 3	knot(s)	0.002134116	0.002693463	0.003254799	0.003817741	0.004381908	
##		t221	t222	t223	t224	t225	
## 1	knot(s)	0.005834912	0.005831480	0.005826489	0.005819960	0.005811917	
## 2	knot(s)	0.011714514	0.012059430	0.012397558	0.012728678	0.013052575	
## 3	knot(s)	0.004946917	0.005512387	0.006077936	0.006643181	0.007207740	
##		t226	t227	t228	t229	t230	
## 1	knot(s)	0.005802381	0.005791373	0.005778917	0.005765033	0.005749744	
## 2	knot(s)	0.013369031	0.013677827	0.013978747	0.014271573	0.014556088	
## 3	knot(s)	0.007771232	0.008333274	0.008893485	0.009451481	0.010006883	
##		t231	t232	t233	t234	t235	
## 1	knot(s)	0.005733072	0.005715039	0.005695666	0.005674977	0.005652992	
## 2	knot(s)	0.014832075	0.015099315	0.015357592	0.015606688	0.015846385	
## 3	knot(s)	0.010559306	0.011108370	0.011653692	0.012194890	0.012731582	
##		t236	t237	t238	t239	t240	
## 1	knot(s)	0.005629734	0.005605224	0.005579485	0.005552539	0.005524408	
## 2	knot(s)	0.016076467	0.016296715	0.016506913	0.016706842	0.016896286	
## 3	knot(s)	0.013263387	0.013789921	0.014310804	0.014825652	0.015334085	
##		t241	t242	t243	t244	t245	
## 1	knot(s)	0.005495113	0.005464677	0.005433122	0.005400469	0.005366741	
## 2	knot(s)	0.017075027	0.017242847	0.017399529	0.017544856	0.017678675	
## 3	knot(s)	0.015835720	0.016330174	0.016817067	0.017296015	0.017766638	
##		t246	t247	t248	t249	t250	
## 1	knot(s)	0.005331959	0.005296146	0.005259323	0.005221513	0.005182738	
## 2	knot(s)	0.017801091	0.017912275	0.018012397	0.018101628	0.018180138	
## 3	knot(s)	0.018228552	0.018681376	0.019124728	0.019558225	0.019981487	
##		t251	t252	t253	t254	t255	t256
## 1	knot(s)	0.005143019	0.005102378	0.005060838	0.00501842	0.004975147	0.00493104
## 2	knot(s)	0.018248097	0.018305676	0.018353044	0.01839037	0.018417832	0.01843559
## 3	knot(s)	0.020394130	0.020795772	0.021186033	0.02156453	0.021930878	0.02228470
##		t257	t258	t259	t260	t261	
## 1	knot(s)	0.004886121	0.004840413	0.004793937	0.004746716	0.00469877	
## 2	knot(s)	0.018443825	0.018442698	0.018432383	0.018413051	0.01838487	
## 3	knot(s)	0.022625610	0.022953228	0.023267172	0.023567059	0.02385251	
##		t262	t263	t264	t265	t266	
## 1	knot(s)	0.004650123	0.004600797	0.004550812	0.004500192	0.004448958	
## 2	knot(s)	0.018348015	0.018302652	0.018248952	0.018187087	0.018117226	
## 3	knot(s)	0.024123136	0.024378561	0.024618402	0.024842276	0.025049801	
##		t267	t268	t269	t270	t271	
## 1	knot(s)	0.004397132	0.004344736	0.004291793	0.004238323	0.00418435	

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## 2 knot(s) 0.018039540 0.017954199 0.017861373 0.017761233 0.01765395
## 3 knot(s) 0.025240596 0.025414278 0.025570465 0.025708775 0.02582883
##          t272          t273          t274          t275          t276          t277
## 1 knot(s) 0.004129895 0.00407498 0.004019627 0.003963858 0.003907695 0.00385116
## 2 knot(s) 0.017539692 0.01741863 0.017290938 0.017156783 0.017016335 0.01686977
## 3 knot(s) 0.025930237 0.02601262 0.026075607 0.026118803 0.026141965 0.02614539
##          t278          t279          t280          t281          t282
## 1 knot(s) 0.003794275 0.003737062 0.003679544 0.003621741 0.003563675
## 2 knot(s) 0.016717244 0.016558942 0.016395029 0.016225675 0.016051052
## 3 knot(s) 0.026129515 0.026094768 0.026041584 0.025970396 0.025881636
##          t283          t284          t285          t286          t287
## 1 knot(s) 0.00350537 0.003446847 0.003388128 0.003329234 0.003270188
## 2 knot(s) 0.01587133 0.015686676 0.015497264 0.015303263 0.015104845
## 3 knot(s) 0.02577574 0.025653134 0.025514258 0.025359543 0.025189420
##          t288          t289          t290          t291          t292
## 1 knot(s) 0.003211013 0.003151728 0.003092358 0.003032924 0.002973447
## 2 knot(s) 0.014902178 0.014695433 0.014484782 0.014270393 0.014052438
## 3 knot(s) 0.025004324 0.024804687 0.024590943 0.024363523 0.024122861
##          t293          t294          t295          t296          t297          t298
## 1 knot(s) 0.00291395 0.002854455 0.002794983 0.002735557 0.002676199 0.00261693
## 2 knot(s) 0.01383109 0.013606508 0.013378875 0.013148357 0.012915123 0.01267935
## 3 knot(s) 0.02386939 0.023603544 0.023325755 0.023036455 0.022736078 0.02242506
##          t299          t300          t301          t302          t303
## 1 knot(s) 0.002557773 0.00249875 0.002439882 0.002381191 0.002322701
## 2 knot(s) 0.012441193 0.01220084 0.011958447 0.011714195 0.011468249
## 3 knot(s) 0.022103823 0.02177281 0.021432455 0.021083186 0.020725437
##          t304          t305          t306          t307          t308
## 1 knot(s) 0.002264432 0.002206406 0.002148646 0.002091173 0.00203401
## 2 knot(s) 0.011220781 0.010971960 0.010721958 0.010470945 0.01021909
## 3 knot(s) 0.020359642 0.019986232 0.019605642 0.019218304 0.01882465
##          t309          t310          t311          t312          t313
## 1 knot(s) 0.001977178 0.001920700 0.001864597 0.001808891 0.001753605
## 2 knot(s) 0.009966565 0.009713539 0.009460183 0.009206667 0.008953162
## 3 knot(s) 0.018425117 0.018020133 0.017610133 0.017195550 0.016776817
##          t314          t315          t316          t317          t318
## 1 knot(s) 0.001698760 0.001644379 0.001590483 0.001537094 0.001484234
## 2 knot(s) 0.008699837 0.008446864 0.008194413 0.007942654 0.007691757
## 3 knot(s) 0.016354367 0.015928632 0.015500046 0.015069041 0.014636051
##          t319          t320          t321          t322          t323
## 1 knot(s) 0.001431926 0.001380191 0.001329051 0.001278529 0.001228645
## 2 knot(s) 0.007441892 0.007193231 0.006945943 0.006700199 0.006456168
## 3 knot(s) 0.014201508 0.013765846 0.013329497 0.012892894 0.012456471
##          t324          t325          t326          t327          t328
## 1 knot(s) 0.001179423 0.001130884 0.001083050 0.001035943 0.0009895858
## 2 knot(s) 0.006214023 0.005973931 0.005736065 0.005500595 0.0052676898
## 3 knot(s) 0.012020659 0.011585893 0.011152605 0.010721227 0.0102921938
##          t329          t330          t331          t332          t333
## 1 knot(s) 0.0009439992 0.0008992057 0.0008552272 0.0008120858 0.0007698034
## 2 knot(s) 0.0050375210 0.0048102586 0.0045860730 0.0043651346 0.0041476137
## 3 knot(s) 0.0098659372 0.0094428904 0.0090234863 0.0086081579 0.0081973381
##          t334          t335          t336          t337          t338
## 1 knot(s) 0.0007284021 0.0006879037 0.0006483302 0.0006097037 0.0005720462
## 2 knot(s) 0.0039336806 0.0037235057 0.0035172592 0.0033151117 0.0031172333
## 3 knot(s) 0.0077914598 0.0073909561 0.0069962597 0.0066078037 0.0062260210

```



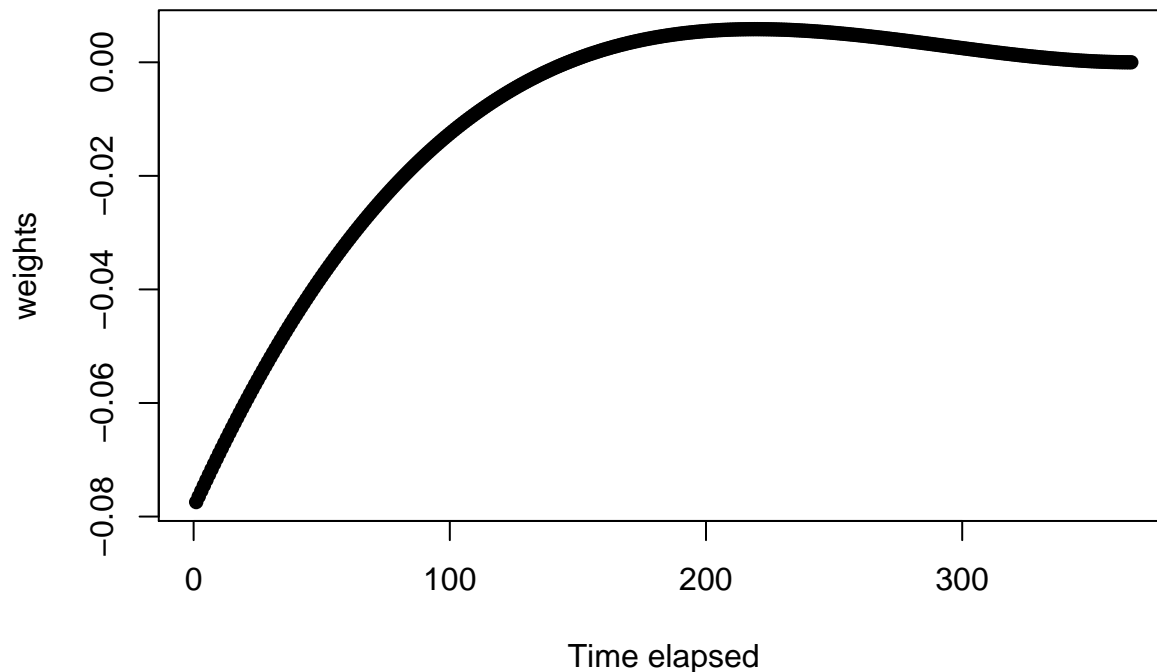
```

##          t339          t340          t341          t342          t343
## 1 knot(s) 0.0005353795 0.0004997258 0.0004651069 0.0004315449 0.0003990617
## 2 knot(s) 0.0029237945 0.0027349656 0.0025509170 0.0023718189 0.0021978417
## 3 knot(s) 0.0058513446 0.0054842073 0.0051250422 0.0047742821 0.0044323600
##          t344          t345          t346          t347          t348
## 1 knot(s) 0.0003676793 0.0003374198 0.000308305 0.000280357 0.0002535978
## 2 knot(s) 0.0020291558 0.0018659315 0.001708339 0.001556549 0.0014107319
## 3 knot(s) 0.0040997089 0.0037767617 0.003463951 0.003161711 0.0028704727
##          t349          t350          t351          t352          t353
## 1 knot(s) 0.0002280493 0.0002037335 0.0001806724 0.0001588880 0.0001384022
## 2 knot(s) 0.0012710575 0.0011376965 0.0010108191 0.0008905958 0.0007771968
## 3 knot(s) 0.0025906704 0.0023227367 0.0020671045 0.0018242068 0.0015944766
##          t354          t355          t356          t357          t358
## 1 knot(s) 0.0001192371 0.0001014147 8.495679e-05 6.988551e-05 5.622281e-05
## 2 knot(s) 0.0006707926 0.0005715534 4.796497e-04 3.952516e-04 3.185297e-04
## 3 knot(s) 0.0013783466 0.0011762500 9.886195e-04 8.158883e-04 6.584891e-04
##          t359          t360          t361          t362          t363
## 1 knot(s) 4.399067e-05 3.321106e-05 2.390598e-05 1.609740e-05 9.807298e-06
## 2 knot(s) 2.496542e-04 1.887955e-04 1.361239e-04 9.180977e-05 5.602346e-05
## 3 knot(s) 5.168550e-04 3.914189e-04 2.826138e-04 1.908725e-04 1.166280e-04
##          t364          t365          t366
## 1 knot(s) 5.057667e-06 1.870486e-06 2.677356e-07
## 2 knot(s) 2.893531e-05 1.071567e-05 1.534865e-06
## 3 knot(s) 6.031323e-05 2.236118e-05 3.204762e-06
##
## Number of events:
## [1] 152
##
## Partial log-Likelihoods:
##      1 knot(s) 2 knot(s) 3 knot(s)
## [1,] -402.9745 -401.2144 -400.7838
##
## BIC:
##      [,1]      [,2]      [,3]
## [1,] 851.164 852.6676 856.8303
##
## Matrix of coefficients estimates for the covariates:
##
##      geo_scope  damage econ_impact fatal_casu  injuries
## 1 knot(s) 1.001863 1.766362 0.6280429 -1.660867 -0.09707954
## 2 knot(s) 1.020745 1.776935 0.6407882 -1.634457 -0.09683001
## 3 knot(s) 1.019202 1.770585 0.6341245 -1.591565 -0.09792851
##      num_protests_day
## 1 knot(s) 0.7271106
## 2 knot(s) 0.7275962
## 3 knot(s) 0.7308862
##
## Matrix of standard error estimates for the covariates:
##
##      geo_scope  damage econ_impact fatal_casu  injuries
## 1 knot(s) 0.08881755 0.2230436 0.1553409 0.4433804 0.06286464
## 2 knot(s) 0.09038186 0.2229636 0.1545305 0.4429082 0.06139591
## 3 knot(s) 0.09028339 0.2225782 0.1547168 0.4449915 0.06135256
##      num_protests_day

```

```
## 1 knot(s)      0.1210450
## 2 knot(s)      0.1220517
## 3 knot(s)      0.1218315
##
## If you report these results, please cite Sylvestre MP, Abrahamowicz M. Flexible Modeling of the Effect of
## Hazard. Statistics in Medicine 2009; 28(27):3437-3453.
##
## *** Right-constrained estimated WCE function (Proportional hazards model).***
##
## Estimated coefficients for the covariates:
##      coef exp(coef) se(coef)      z      p
## geo_scope      1.0019      2.7234      0.0888 11.2800 0.0000
## damage          1.7664      5.8495      0.2230  7.9194 0.0000
## econ_impact      0.6280      1.8739      0.1553  4.0430 0.0001
## fatal_casu      -1.6609      0.1900      0.4434 -3.7459 0.0002
## injuries        -0.0971      0.9075      0.0629 -1.5443 0.1225
## num_protests_day  0.7271      2.0691      0.1210  6.0069 0.0000
##
## Partial log-likelihood: -402.9745  BIC: 851.164
##
## Number of events: 152
##
## Use plot(m_wce) to see the estimated weight function corresponding to this model.
##
## If you report these results, please cite Sylvestre MP, Abrahamowicz M. Flexible Modeling of the Effect of
## Hazard. Statistics in Medicine 2009; 28(27):3437-3453.
```

Best-fitting estimated weight function 1 knot(s) (BIC=851.16)



```
##      HR
## 1 knot(s) 0.02947624
```

```
## 2 knot(s) 0.04346708
## 3 knot(s) 0.06054597

## # A tibble: 131,766 x 11
## # Groups:   id [361]
##       id geo_scope tactical_choice damage econ_impact fatal_casu injuries
##   <dbl>   <dbl>         <dbl> <dbl>         <dbl>   <dbl>   <dbl>
## 1     1     1         1         0     0         0         0     0
## 2     1     1         1         0     0         0         0     0
## 3     1     1         1         0     0         0         0     0
## 4     1     1         1         0     0         0         0     0
## 5     1     1         1         0     0         0         0     0
## 6     1     1         1         0     0         0         0     0
## 7     1     1         1         0     0         0         0     0
## 8     1     1         1         0     0         0         0     0
## 9     1     1         1         0     0         0         0     0
## 10    1     1         1         0     0         0         0     0
## # ... with 131,756 more rows, and 4 more variables: concessions <dbl>,
## #   num_protests_day <dbl>, Start <dbl>, Stop <dbl>
```

PWP Model

```
# match start dates to match events with complete information
df_pwp_final <- df_pwp

# convert id to a double
df_pwp_final$id <- as.double(df_pwp_final$id)

# get number of protests that led to concessions
df_pwp_final <- df_pwp_final %>%
  group_by(id) %>%
  dplyr::mutate(row_count = row_number()) %>%
  filter(concessions == 1 | row_count == max(row_count)) %>%
  # dplyr::mutate(enum = if_else(concessions == 1,
  #                               row_number(),
  #                               as.integer(0))) %>%
  dplyr::mutate(enum = row_number()) %>%
  dplyr::mutate(enum = if_else(enum >= 8, 8, as.double(enum))) %>%
  ungroup()

# match start dates to events with complete info
df_pwp_final <- df_pwp_final %>%
  group_by(id) %>%
  dplyr::mutate(Start = lag(Stop)) %>%
  ungroup()
df_pwp_final$Start[is.na(df_pwp_final$Start)] <- 0

# continent variable
df_pwp_final <- df_pwp_final %>%
  dplyr::mutate(region = case_when(country_name %in% c("algeria", "egypt",
                                                       "kenya", "libya",
                                                       "madagascar", "morocco",
                                                       "sierra_leone", "south_sudan",
```

```

country_name %in% c("sudan", "tanzania", "tunisia") ~ "Africa",
country_name %in% c("iraq", "jordan", "syria",
                    "turkey", "yemen") ~ "Middle East",
country_name %in% c("bahrain", "china",
                    "india", "pakistan",
                    "south_korea", "uzbekistan") ~ "Asia",
country_name %in% c("estonia", "ukraine") ~ "Europe",
TRUE ~ "Americas")) # Mexico, U.S.

pwp1 <- coxph(Surv(Stop, concessions) ~ cluster(id) + strata(enum) + factor(tactical_choice, order = F) +
              + region * strata(enum) + factor(geo_scope, order = F) * strata(enum) +
              factor(camp_goals, order = F) * strata(enum),
              data = df_pwp_final)

```

```

## Warning in fitter(X, Y, istrat, offset, init, control, weights = weights, : Ran
## out of iterations and did not converge

```

```
summary(pwp1)
```

```

## Call:
## coxph(formula = Surv(Stop, concessions) ~ strata(enum) + factor(tactical_choice,
##   order = F) + region + factor(geo_scope, order = F) + factor(camp_goals,
##   order = F) + strata(enum):factor(tactical_choice, order = F) +
##   strata(enum):region + strata(enum):factor(geo_scope, order = F) +
##   strata(enum):factor(camp_goals, order = F), data = df_pwp_final,
##   cluster = id)
##
##   n= 814, number of events= 492
##   (21 observations deleted due to missingness)
##
##
##                                     coef
## factor(tactical_choice, order = F)2 -2.149e+00
## factor(tactical_choice, order = F)3 -1.927e+00
## regionAmericas                      -5.196e-01
## regionAsia                          -5.415e-02
## regionEurope                        6.258e-01
## regionMiddle East                  -4.284e-02
## factor(geo_scope, order = F)regional -6.361e-02
## factor(geo_scope, order = F)national 3.995e-01
## factor(geo_scope, order = F)international regional -8.997e-01
## factor(geo_scope, order = F)global    -4.057e+00
## factor(camp_goals, order = F)Institutional Reform 6.358e-01
## factor(camp_goals, order = F)Policy Change        6.993e-01
## factor(camp_goals, order = F)Territorial Secession 8.075e-01
## factor(camp_goals, order = F)Autonomy             1.470e+00
## factor(camp_goals, order = F)Anti-occupation      -4.336e+00
## factor(camp_goals, order = F)Unknown              -1.182e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 -5.041e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 1.005e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)2 4.216e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)2 2.315e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)2 -9.061e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)2 -5.988e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)2 1.366e+00

```

```

## strata(enum)enum=2:factor(tactical_choice, order = F)3 -8.606e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 9.057e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3 -1.796e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)3 -3.197e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)3 0.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 -4.558e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)3 8.395e-02
## strata(enum)enum=2:regionAmericas -3.848e-02
## strata(enum)enum=3:regionAmericas -9.490e-01
## strata(enum)enum=4:regionAmericas 6.130e-01
## strata(enum)enum=5:regionAmericas 3.339e+00
## strata(enum)enum=6:regionAmericas 8.388e+00
## strata(enum)enum=7:regionAmericas 1.691e+01
## strata(enum)enum=8:regionAmericas 7.125e+00
## strata(enum)enum=2:regionAsia -5.271e-02
## strata(enum)enum=3:regionAsia 1.075e-01
## strata(enum)enum=4:regionAsia -4.875e-01
## strata(enum)enum=5:regionAsia 2.713e+00
## strata(enum)enum=6:regionAsia 1.253e+01
## strata(enum)enum=7:regionAsia 5.966e+00
## strata(enum)enum=8:regionAsia 3.903e-02
## strata(enum)enum=2:regionEurope -1.242e+00
## strata(enum)enum=3:regionEurope -1.910e-01
## strata(enum)enum=4:regionEurope -7.360e-01
## strata(enum)enum=5:regionEurope -4.648e+00
## strata(enum)enum=6:regionEurope 0.000e+00
## strata(enum)enum=7:regionEurope 0.000e+00
## strata(enum)enum=8:regionEurope 0.000e+00
## strata(enum)enum=2:regionMiddle East -1.226e+00
## strata(enum)enum=3:regionMiddle East 4.664e-01
## strata(enum)enum=4:regionMiddle East -2.991e-01
## strata(enum)enum=5:regionMiddle East 5.358e-01
## strata(enum)enum=6:regionMiddle East 6.314e+00
## strata(enum)enum=7:regionMiddle East 3.477e+00
## strata(enum)enum=8:regionMiddle East 9.145e-01
## strata(enum)enum=2:factor(geo_scope, order = F)regional 2.821e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional -6.792e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional -3.856e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional 1.707e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional 6.673e+00
## strata(enum)enum=7:factor(geo_scope, order = F)regional -2.943e+00
## strata(enum)enum=8:factor(geo_scope, order = F)regional 1.799e+00
## strata(enum)enum=2:factor(geo_scope, order = F)national -1.306e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national -6.168e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national -2.969e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national -1.338e+00
## strata(enum)enum=6:factor(geo_scope, order = F)national -2.987e+00
## strata(enum)enum=7:factor(geo_scope, order = F)national -5.749e+00
## strata(enum)enum=8:factor(geo_scope, order = F)national 1.152e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 3.889e+00
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 1.465e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 2.086e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 0.000e+00

```

```

## strata(enum)enum=7:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global -4.005e-01
## strata(enum)enum=3:factor(geo_scope, order = F)global 2.506e+00
## strata(enum)enum=4:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 5.198e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform -6.112e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform -1.085e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 9.303e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 1.693e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform -7.753e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform -4.438e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform -4.744e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change -8.215e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change -1.388e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 2.768e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change -1.933e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change -9.801e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change -5.409e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change -9.864e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 4.234e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession -6.594e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession -1.487e+01
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy -4.742e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy -1.805e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 8.149e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy -1.089e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy -1.326e+01
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 3.896e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 5.709e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 1.984e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 1.501e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown -7.791e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 3.201e+00
## exp(coef)
## factor(tactical_choice, order = F)2 1.166e-01
## factor(tactical_choice, order = F)3 1.456e-01

```

```

## regionAmericas 5.948e-01
## regionAsia 9.473e-01
## regionEurope 1.870e+00
## regionMiddle East 9.581e-01
## factor(geo_scope, order = F)regional 9.384e-01
## factor(geo_scope, order = F)national 1.491e+00
## factor(geo_scope, order = F)international regional 4.067e-01
## factor(geo_scope, order = F)global 1.729e-02
## factor(camp_goals, order = F)Institutional Reform 1.888e+00
## factor(camp_goals, order = F)Policy Change 2.012e+00
## factor(camp_goals, order = F)Territorial Secession 2.242e+00
## factor(camp_goals, order = F)Autonomy 4.351e+00
## factor(camp_goals, order = F)Anti-occupation 1.309e-02
## factor(camp_goals, order = F)Unknown 8.885e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 6.041e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 2.732e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)2 6.779e+01
## strata(enum)enum=5:factor(tactical_choice, order = F)2 1.013e+01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 1.161e-04
## strata(enum)enum=7:factor(tactical_choice, order = F)2 2.508e-03
## strata(enum)enum=8:factor(tactical_choice, order = F)2 3.918e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 4.229e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 2.474e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)3 1.660e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)3 4.088e-02
## strata(enum)enum=6:factor(tactical_choice, order = F)3 1.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.048e-02
## strata(enum)enum=8:factor(tactical_choice, order = F)3 1.088e+00
## strata(enum)enum=2:regionAmericas 9.623e-01
## strata(enum)enum=3:regionAmericas 3.871e-01
## strata(enum)enum=4:regionAmericas 1.846e+00
## strata(enum)enum=5:regionAmericas 2.818e+01
## strata(enum)enum=6:regionAmericas 4.395e+03
## strata(enum)enum=7:regionAmericas 2.217e+07
## strata(enum)enum=8:regionAmericas 1.243e+03
## strata(enum)enum=2:regionAsia 9.487e-01
## strata(enum)enum=3:regionAsia 1.114e+00
## strata(enum)enum=4:regionAsia 6.142e-01
## strata(enum)enum=5:regionAsia 1.508e+01
## strata(enum)enum=6:regionAsia 2.756e+05
## strata(enum)enum=7:regionAsia 3.901e+02
## strata(enum)enum=8:regionAsia 1.040e+00
## strata(enum)enum=2:regionEurope 2.888e-01
## strata(enum)enum=3:regionEurope 8.261e-01
## strata(enum)enum=4:regionEurope 4.790e-01
## strata(enum)enum=5:regionEurope 9.584e-03
## strata(enum)enum=6:regionEurope 1.000e+00
## strata(enum)enum=7:regionEurope 1.000e+00
## strata(enum)enum=8:regionEurope 1.000e+00
## strata(enum)enum=2:regionMiddle East 2.934e-01
## strata(enum)enum=3:regionMiddle East 1.594e+00
## strata(enum)enum=4:regionMiddle East 7.414e-01
## strata(enum)enum=5:regionMiddle East 1.709e+00
## strata(enum)enum=6:regionMiddle East 5.525e+02

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## strata(enum)enum=7:regionMiddle East 3.237e+01
## strata(enum)enum=8:regionMiddle East 2.495e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional 1.326e+00
## strata(enum)enum=3:factor(geo_scope, order = F)regional 5.070e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional 6.801e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional 1.186e+00
## strata(enum)enum=6:factor(geo_scope, order = F)regional 7.910e+02
## strata(enum)enum=7:factor(geo_scope, order = F)regional 5.271e-02
## strata(enum)enum=8:factor(geo_scope, order = F)regional 6.046e+00
## strata(enum)enum=2:factor(geo_scope, order = F)national 8.776e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national 5.396e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national 7.431e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national 2.624e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national 5.043e-02
## strata(enum)enum=7:factor(geo_scope, order = F)national 3.185e-03
## strata(enum)enum=8:factor(geo_scope, order = F)national 3.165e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 4.884e+01
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 4.328e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 8.049e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 6.700e-01
## strata(enum)enum=3:factor(geo_scope, order = F)global 1.225e+01
## strata(enum)enum=4:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 1.808e+02
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 5.427e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 8.971e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 2.535e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 5.438e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 4.606e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 1.182e-02
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 6.222e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 4.398e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 2.495e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 1.319e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 1.448e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 5.540e-05
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 4.477e-03
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 3.729e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 1.527e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.368e-03
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 3.497e-07
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 6.224e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 1.645e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 2.259e+00

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## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 3.365e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 1.736e-06
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 1.476e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 1.770e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 1.219e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 4.488e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 4.134e-04
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 2.456e+01
## se(coef)
## factor(tactical_choice, order = F)2 2.839e-01
## factor(tactical_choice, order = F)3 2.345e-01
## regionAmericas 2.278e-01
## regionAsia 1.124e-01
## regionEurope 1.936e-01
## regionMiddle East 1.440e-01
## factor(geo_scope, order = F)regional 9.878e-02
## factor(geo_scope, order = F)national 1.049e-01
## factor(geo_scope, order = F)international regional 5.260e-01
## factor(geo_scope, order = F)global 7.010e-01
## factor(camp_goals, order = F)Institutional Reform 1.480e-01
## factor(camp_goals, order = F)Policy Change 1.066e-01
## factor(camp_goals, order = F)Territorial Secession 3.821e-01
## factor(camp_goals, order = F)Autonomy 2.068e-01
## factor(camp_goals, order = F)Anti-occupation 5.343e+00
## factor(camp_goals, order = F)Unknown 2.376e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 7.281e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 7.261e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)2 1.022e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)2 8.890e-01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 7.552e-01
## strata(enum)enum=7:factor(tactical_choice, order = F)2 1.160e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)2 1.016e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 7.048e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 5.229e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3 2.717e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)3 4.171e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)3 0.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.122e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)3 4.555e-01
## strata(enum)enum=2:regionAmericas 4.668e-01
## strata(enum)enum=3:regionAmericas 7.260e-01
## strata(enum)enum=4:regionAmericas 7.512e-01
## strata(enum)enum=5:regionAmericas 2.580e+00
## strata(enum)enum=6:regionAmericas 4.151e+02

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## strata(enum)enum=7:regionAmericas	2.224e+02
## strata(enum)enum=8:regionAmericas	4.869e-01
## strata(enum)enum=2:regionAsia	2.595e-01
## strata(enum)enum=3:regionAsia	3.038e-01
## strata(enum)enum=4:regionAsia	4.677e-01
## strata(enum)enum=5:regionAsia	7.610e-01
## strata(enum)enum=6:regionAsia	7.573e-01
## strata(enum)enum=7:regionAsia	7.076e-01
## strata(enum)enum=8:regionAsia	2.223e-01
## strata(enum)enum=2:regionEurope	3.981e-01
## strata(enum)enum=3:regionEurope	4.360e-01
## strata(enum)enum=4:regionEurope	7.466e-01
## strata(enum)enum=5:regionEurope	6.039e+00
## strata(enum)enum=6:regionEurope	0.000e+00
## strata(enum)enum=7:regionEurope	0.000e+00
## strata(enum)enum=8:regionEurope	0.000e+00
## strata(enum)enum=2:regionMiddle East	3.425e-01
## strata(enum)enum=3:regionMiddle East	3.937e-01
## strata(enum)enum=4:regionMiddle East	4.717e-01
## strata(enum)enum=5:regionMiddle East	7.812e-01
## strata(enum)enum=6:regionMiddle East	1.280e+00
## strata(enum)enum=7:regionMiddle East	9.424e-01
## strata(enum)enum=8:regionMiddle East	1.005e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional	2.223e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional	2.799e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional	3.882e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional	7.007e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional	7.300e-01
## strata(enum)enum=7:factor(geo_scope, order = F)regional	6.770e-01
## strata(enum)enum=8:factor(geo_scope, order = F)regional	2.214e-01
## strata(enum)enum=2:factor(geo_scope, order = F)national	2.415e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national	2.838e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national	4.125e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national	6.214e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national	8.488e-01
## strata(enum)enum=7:factor(geo_scope, order = F)national	7.717e-01
## strata(enum)enum=8:factor(geo_scope, order = F)national	2.386e-01
## strata(enum)enum=2:factor(geo_scope, order = F)international regional	1.092e+00
## strata(enum)enum=3:factor(geo_scope, order = F)international regional	1.027e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional	1.094e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global	4.976e+00
## strata(enum)enum=3:factor(geo_scope, order = F)global	1.013e+00
## strata(enum)enum=4:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global	1.015e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform	3.388e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform	4.097e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform	4.462e-01

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## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 1.001e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 8.461e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 6.880e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 3.936e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 2.300e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 2.835e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 3.987e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 6.038e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 7.109e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 7.601e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 2.555e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 5.931e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 6.011e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 3.365e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 7.228e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 7.254e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 1.030e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 1.115e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 7.159e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 2.592e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 5.343e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 4.261e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 4.722e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 5.567e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 4.370e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.160e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 6.990e-01
## robust se
## factor(tactical_choice, order = F)2 2.139e-01
## factor(tactical_choice, order = F)3 3.387e-01
## regionAmericas 1.558e-01
## regionAsia 1.107e-01
## regionEurope 2.328e-01
## regionMiddle East 2.191e-01
## factor(geo_scope, order = F)regional 1.143e-01
## factor(geo_scope, order = F)national 1.049e-01
## factor(geo_scope, order = F)international regional 4.234e-01
## factor(geo_scope, order = F)global 6.648e-01
## factor(camp_goals, order = F)Institutional Reform 1.638e-01
## factor(camp_goals, order = F)Policy Change 1.317e-01
## factor(camp_goals, order = F)Territorial Secession 4.601e-01
## factor(camp_goals, order = F)Autonomy 3.697e-01

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## factor(camp_goals, order = F)Anti-occupation	1.012e+00
## factor(camp_goals, order = F)Unknown	2.598e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2	6.582e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2	8.910e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)2	3.297e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)2	6.591e-01
## strata(enum)enum=6:factor(tactical_choice, order = F)2	5.674e-01
## strata(enum)enum=7:factor(tactical_choice, order = F)2	2.432e-01
## strata(enum)enum=8:factor(tactical_choice, order = F)2	1.751e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)3	7.582e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3	5.244e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3	4.874e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)3	1.006e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)3	0.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3	1.162e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)3	8.389e-01
## strata(enum)enum=2:regionAmericas	3.919e-01
## strata(enum)enum=3:regionAmericas	6.315e-01
## strata(enum)enum=4:regionAmericas	7.666e-01
## strata(enum)enum=5:regionAmericas	4.085e-01
## strata(enum)enum=6:regionAmericas	5.423e-01
## strata(enum)enum=7:regionAmericas	5.889e-01
## strata(enum)enum=8:regionAmericas	6.840e-01
## strata(enum)enum=2:regionAsia	2.174e-01
## strata(enum)enum=3:regionAsia	3.186e-01
## strata(enum)enum=4:regionAsia	4.589e-01
## strata(enum)enum=5:regionAsia	6.418e-01
## strata(enum)enum=6:regionAsia	5.317e-01
## strata(enum)enum=7:regionAsia	5.879e-01
## strata(enum)enum=8:regionAsia	2.656e-01
## strata(enum)enum=2:regionEurope	3.341e-01
## strata(enum)enum=3:regionEurope	3.309e-01
## strata(enum)enum=4:regionEurope	5.941e-01
## strata(enum)enum=5:regionEurope	1.016e+00
## strata(enum)enum=6:regionEurope	0.000e+00
## strata(enum)enum=7:regionEurope	0.000e+00
## strata(enum)enum=8:regionEurope	0.000e+00
## strata(enum)enum=2:regionMiddle East	4.368e-01
## strata(enum)enum=3:regionMiddle East	4.909e-01
## strata(enum)enum=4:regionMiddle East	3.815e-01
## strata(enum)enum=5:regionMiddle East	8.687e-01
## strata(enum)enum=6:regionMiddle East	8.342e-01
## strata(enum)enum=7:regionMiddle East	1.055e+00
## strata(enum)enum=8:regionMiddle East	1.093e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional	2.102e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional	2.819e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional	3.495e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional	5.542e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional	5.830e-01
## strata(enum)enum=7:factor(geo_scope, order = F)regional	5.036e-01
## strata(enum)enum=8:factor(geo_scope, order = F)regional	2.835e-01
## strata(enum)enum=2:factor(geo_scope, order = F)national	1.923e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national	2.735e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national	3.746e-01

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## strata(enum)enum=5:factor(geo_scope, order = F)national 5.035e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national 7.920e-01
## strata(enum)enum=7:factor(geo_scope, order = F)national 7.013e-01
## strata(enum)enum=8:factor(geo_scope, order = F)national 2.406e-01
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 4.516e-01
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 1.055e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 4.585e-01
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 1.028e+00
## strata(enum)enum=3:factor(geo_scope, order = F)global 1.350e+00
## strata(enum)enum=4:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 1.997e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 2.945e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 4.373e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 3.395e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 4.454e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 7.216e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 5.311e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 4.023e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 2.168e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 2.883e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 3.280e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 4.424e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 5.275e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 6.662e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 4.021e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 8.909e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.075e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 1.003e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 4.393e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 6.544e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 2.619e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 3.183e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 1.064e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 5.504e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.012e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 5.373e-01

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## strata(enum)enum=3:factor(camp_goals, order = F)Unknown	4.070e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown	1.020e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown	8.719e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown	0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown	2.432e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown	8.692e-01
##	z
## factor(tactical_choice, order = F)2	-10.043
## factor(tactical_choice, order = F)3	-5.689
## regionAmericas	-3.335
## regionAsia	-0.489
## regionEurope	2.688
## regionMiddle East	-0.196
## factor(geo_scope, order = F)regional	-0.557
## factor(geo_scope, order = F)national	3.810
## factor(geo_scope, order = F)international regional	-2.125
## factor(geo_scope, order = F)global	-6.103
## factor(camp_goals, order = F)Institutional Reform	3.881
## factor(camp_goals, order = F)Policy Change	5.308
## factor(camp_goals, order = F)Territorial Secession	1.755
## factor(camp_goals, order = F)Autonomy	3.977
## factor(camp_goals, order = F)Anti-occupation	-4.282
## factor(camp_goals, order = F)Unknown	-0.455
## strata(enum)enum=2:factor(tactical_choice, order = F)2	-0.766
## strata(enum)enum=3:factor(tactical_choice, order = F)2	1.128
## strata(enum)enum=4:factor(tactical_choice, order = F)2	12.789
## strata(enum)enum=5:factor(tactical_choice, order = F)2	3.513
## strata(enum)enum=6:factor(tactical_choice, order = F)2	-15.969
## strata(enum)enum=7:factor(tactical_choice, order = F)2	-24.620
## strata(enum)enum=8:factor(tactical_choice, order = F)2	7.798
## strata(enum)enum=2:factor(tactical_choice, order = F)3	-1.135
## strata(enum)enum=3:factor(tactical_choice, order = F)3	1.727
## strata(enum)enum=4:factor(tactical_choice, order = F)3	-3.684
## strata(enum)enum=5:factor(tactical_choice, order = F)3	-3.179
## strata(enum)enum=6:factor(tactical_choice, order = F)3	NA
## strata(enum)enum=7:factor(tactical_choice, order = F)3	-3.923
## strata(enum)enum=8:factor(tactical_choice, order = F)3	0.100
## strata(enum)enum=2:regionAmericas	-0.098
## strata(enum)enum=3:regionAmericas	-1.503
## strata(enum)enum=4:regionAmericas	0.800
## strata(enum)enum=5:regionAmericas	8.173
## strata(enum)enum=6:regionAmericas	15.467
## strata(enum)enum=7:regionAmericas	28.721
## strata(enum)enum=8:regionAmericas	10.417
## strata(enum)enum=2:regionAsia	-0.242
## strata(enum)enum=3:regionAsia	0.338
## strata(enum)enum=4:regionAsia	-1.062
## strata(enum)enum=5:regionAsia	4.227
## strata(enum)enum=6:regionAsia	23.558
## strata(enum)enum=7:regionAsia	10.149
## strata(enum)enum=8:regionAsia	0.147
## strata(enum)enum=2:regionEurope	-3.718
## strata(enum)enum=3:regionEurope	-0.577
## strata(enum)enum=4:regionEurope	-1.239

## strata(enum)enum=5:regionEurope	-4.573
## strata(enum)enum=6:regionEurope	NA
## strata(enum)enum=7:regionEurope	NA
## strata(enum)enum=8:regionEurope	NA
## strata(enum)enum=2:regionMiddle East	-2.807
## strata(enum)enum=3:regionMiddle East	0.950
## strata(enum)enum=4:regionMiddle East	-0.784
## strata(enum)enum=5:regionMiddle East	0.617
## strata(enum)enum=6:regionMiddle East	7.570
## strata(enum)enum=7:regionMiddle East	3.295
## strata(enum)enum=8:regionMiddle East	0.837
## strata(enum)enum=2:factor(geo_scope, order = F)regional	1.342
## strata(enum)enum=3:factor(geo_scope, order = F)regional	-2.409
## strata(enum)enum=4:factor(geo_scope, order = F)regional	-1.103
## strata(enum)enum=5:factor(geo_scope, order = F)regional	0.308
## strata(enum)enum=6:factor(geo_scope, order = F)regional	11.446
## strata(enum)enum=7:factor(geo_scope, order = F)regional	-5.844
## strata(enum)enum=8:factor(geo_scope, order = F)regional	6.347
## strata(enum)enum=2:factor(geo_scope, order = F)national	-0.679
## strata(enum)enum=3:factor(geo_scope, order = F)national	-2.255
## strata(enum)enum=4:factor(geo_scope, order = F)national	-0.792
## strata(enum)enum=5:factor(geo_scope, order = F)national	-2.657
## strata(enum)enum=6:factor(geo_scope, order = F)national	-3.772
## strata(enum)enum=7:factor(geo_scope, order = F)national	-8.198
## strata(enum)enum=8:factor(geo_scope, order = F)national	4.789
## strata(enum)enum=2:factor(geo_scope, order = F)international regional	8.610
## strata(enum)enum=3:factor(geo_scope, order = F)international regional	1.389
## strata(enum)enum=4:factor(geo_scope, order = F)international regional	4.549
## strata(enum)enum=5:factor(geo_scope, order = F)international regional	NA
## strata(enum)enum=6:factor(geo_scope, order = F)international regional	NA
## strata(enum)enum=7:factor(geo_scope, order = F)international regional	NA
## strata(enum)enum=8:factor(geo_scope, order = F)international regional	NA
## strata(enum)enum=2:factor(geo_scope, order = F)global	-0.390
## strata(enum)enum=3:factor(geo_scope, order = F)global	1.856
## strata(enum)enum=4:factor(geo_scope, order = F)global	NA
## strata(enum)enum=5:factor(geo_scope, order = F)global	NA
## strata(enum)enum=6:factor(geo_scope, order = F)global	NA
## strata(enum)enum=7:factor(geo_scope, order = F)global	NA
## strata(enum)enum=8:factor(geo_scope, order = F)global	26.026
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform	-2.075
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform	-0.248
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform	2.740
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform	3.802
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform	-1.074
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform	-8.357
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform	-1.179
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change	-3.790
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change	-4.816
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change	0.844
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change	-4.368
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change	-18.580
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change	-8.118
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change	-2.453
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession	0.475

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## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession -6.136
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession -14.818
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy -1.079
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy -2.759
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 3.112
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy -3.422
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy -12.462
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy NA
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 0.708
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 0.000
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 1.063
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 0.488
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 1.472
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown -8.936
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown NA
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 0.000
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 3.683
## Pr(>|z|)
## factor(tactical_choice, order = F)2 < 2e-16
## factor(tactical_choice, order = F)3 1.27e-08
## regionAmericas 0.000854
## regionAsia 0.624837
## regionEurope 0.007188
## regionMiddle East 0.844990
## factor(geo_scope, order = F)regional 0.577830
## factor(geo_scope, order = F)national 0.000139
## factor(geo_scope, order = F)international regional 0.033618
## factor(geo_scope, order = F)global 1.04e-09
## factor(camp_goals, order = F)Institutional Reform 0.000104
## factor(camp_goals, order = F)Policy Change 1.11e-07
## factor(camp_goals, order = F)Territorial Secession 0.079284
## factor(camp_goals, order = F)Autonomy 6.97e-05
## factor(camp_goals, order = F)Anti-occupation 1.85e-05
## factor(camp_goals, order = F)Unknown 0.649162
## strata(enum)enum=2:factor(tactical_choice, order = F)2 0.443725
## strata(enum)enum=3:factor(tactical_choice, order = F)2 0.259347
## strata(enum)enum=4:factor(tactical_choice, order = F)2 < 2e-16
## strata(enum)enum=5:factor(tactical_choice, order = F)2 0.000443
## strata(enum)enum=6:factor(tactical_choice, order = F)2 < 2e-16
## strata(enum)enum=7:factor(tactical_choice, order = F)2 < 2e-16
## strata(enum)enum=8:factor(tactical_choice, order = F)2 6.29e-15
## strata(enum)enum=2:factor(tactical_choice, order = F)3 0.256359
## strata(enum)enum=3:factor(tactical_choice, order = F)3 0.084115
## strata(enum)enum=4:factor(tactical_choice, order = F)3 0.000230

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## strata(enum)enum=5:factor(tactical_choice, order = F)3 0.001479
## strata(enum)enum=6:factor(tactical_choice, order = F)3 NA
## strata(enum)enum=7:factor(tactical_choice, order = F)3 8.74e-05
## strata(enum)enum=8:factor(tactical_choice, order = F)3 0.920288
## strata(enum)enum=2:regionAmericas 0.921788
## strata(enum)enum=3:regionAmericas 0.132912
## strata(enum)enum=4:regionAmericas 0.423918
## strata(enum)enum=5:regionAmericas 3.00e-16
## strata(enum)enum=6:regionAmericas < 2e-16
## strata(enum)enum=7:regionAmericas < 2e-16
## strata(enum)enum=8:regionAmericas < 2e-16
## strata(enum)enum=2:regionAsia 0.808438
## strata(enum)enum=3:regionAsia 0.735685
## strata(enum)enum=4:regionAsia 0.288131
## strata(enum)enum=5:regionAsia 2.37e-05
## strata(enum)enum=6:regionAsia < 2e-16
## strata(enum)enum=7:regionAsia < 2e-16
## strata(enum)enum=8:regionAsia 0.883157
## strata(enum)enum=2:regionEurope 0.000201
## strata(enum)enum=3:regionEurope 0.563733
## strata(enum)enum=4:regionEurope 0.215416
## strata(enum)enum=5:regionEurope 4.81e-06
## strata(enum)enum=6:regionEurope NA
## strata(enum)enum=7:regionEurope NA
## strata(enum)enum=8:regionEurope NA
## strata(enum)enum=2:regionMiddle East 0.005000
## strata(enum)enum=3:regionMiddle East 0.342096
## strata(enum)enum=4:regionMiddle East 0.432957
## strata(enum)enum=5:regionMiddle East 0.537356
## strata(enum)enum=6:regionMiddle East 3.74e-14
## strata(enum)enum=7:regionMiddle East 0.000985
## strata(enum)enum=8:regionMiddle East 0.402782
## strata(enum)enum=2:factor(geo_scope, order = F)regional 0.179567
## strata(enum)enum=3:factor(geo_scope, order = F)regional 0.015987
## strata(enum)enum=4:factor(geo_scope, order = F)regional 0.269882
## strata(enum)enum=5:factor(geo_scope, order = F)regional 0.758099
## strata(enum)enum=6:factor(geo_scope, order = F)regional < 2e-16
## strata(enum)enum=7:factor(geo_scope, order = F)regional 5.10e-09
## strata(enum)enum=8:factor(geo_scope, order = F)regional 2.19e-10
## strata(enum)enum=2:factor(geo_scope, order = F)national 0.497121
## strata(enum)enum=3:factor(geo_scope, order = F)national 0.024110
## strata(enum)enum=4:factor(geo_scope, order = F)national 0.428123
## strata(enum)enum=5:factor(geo_scope, order = F)national 0.007885
## strata(enum)enum=6:factor(geo_scope, order = F)national 0.000162
## strata(enum)enum=7:factor(geo_scope, order = F)national 2.45e-16
## strata(enum)enum=8:factor(geo_scope, order = F)national 1.68e-06
## strata(enum)enum=2:factor(geo_scope, order = F)international regional < 2e-16
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 0.164814
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 5.40e-06
## strata(enum)enum=5:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=6:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=7:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=8:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=2:factor(geo_scope, order = F)global 0.696788

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## strata(enum)enum=3:factor(geo_scope, order = F)global 0.063446
## strata(enum)enum=4:factor(geo_scope, order = F)global NA
## strata(enum)enum=5:factor(geo_scope, order = F)global NA
## strata(enum)enum=6:factor(geo_scope, order = F)global NA
## strata(enum)enum=7:factor(geo_scope, order = F)global NA
## strata(enum)enum=8:factor(geo_scope, order = F)global < 2e-16
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 0.037957
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 0.803966
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 0.006148
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 0.000144
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 0.282636
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform < 2e-16
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 0.238275
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 0.000151
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 1.46e-06
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 0.398713
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 1.25e-05
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change < 2e-16
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 4.72e-16
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 0.014161
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 0.634629
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 8.47e-10
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession < 2e-16
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 0.280394
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 0.005806
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 0.001858
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 0.000622
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy < 2e-16
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy NA
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 0.479067
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.000000
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 0.287994
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 0.625862
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 0.140894
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown < 2e-16
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown NA
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.000000
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 0.000230
##
## factor(tactical_choice, order = F)2 ***
## factor(tactical_choice, order = F)3 ***
## regionAmericas ***
## regionAsia
## regionEurope **

```

```

## regionMiddle East
## factor(geo_scope, order = F)regional
## factor(geo_scope, order = F)national ***
## factor(geo_scope, order = F)international regional *
## factor(geo_scope, order = F)global ***
## factor(camp_goals, order = F)Institutional Reform ***
## factor(camp_goals, order = F)Policy Change ***
## factor(camp_goals, order = F)Territorial Secession .
## factor(camp_goals, order = F)Autonomy ***
## factor(camp_goals, order = F)Anti-occupation ***
## factor(camp_goals, order = F)Unknown
## strata(enum)enum=2:factor(tactical_choice, order = F)2
## strata(enum)enum=3:factor(tactical_choice, order = F)2
## strata(enum)enum=4:factor(tactical_choice, order = F)2 ***
## strata(enum)enum=5:factor(tactical_choice, order = F)2 ***
## strata(enum)enum=6:factor(tactical_choice, order = F)2 ***
## strata(enum)enum=7:factor(tactical_choice, order = F)2 ***
## strata(enum)enum=8:factor(tactical_choice, order = F)2 ***
## strata(enum)enum=2:factor(tactical_choice, order = F)3
## strata(enum)enum=3:factor(tactical_choice, order = F)3
## strata(enum)enum=4:factor(tactical_choice, order = F)3 ***
## strata(enum)enum=5:factor(tactical_choice, order = F)3 **
## strata(enum)enum=6:factor(tactical_choice, order = F)3
## strata(enum)enum=7:factor(tactical_choice, order = F)3 ***
## strata(enum)enum=8:factor(tactical_choice, order = F)3
## strata(enum)enum=2:regionAmericas
## strata(enum)enum=3:regionAmericas
## strata(enum)enum=4:regionAmericas
## strata(enum)enum=5:regionAmericas ***
## strata(enum)enum=6:regionAmericas ***
## strata(enum)enum=7:regionAmericas ***
## strata(enum)enum=8:regionAmericas ***
## strata(enum)enum=2:regionAsia
## strata(enum)enum=3:regionAsia
## strata(enum)enum=4:regionAsia
## strata(enum)enum=5:regionAsia ***
## strata(enum)enum=6:regionAsia ***
## strata(enum)enum=7:regionAsia ***
## strata(enum)enum=8:regionAsia
## strata(enum)enum=2:regionEurope ***
## strata(enum)enum=3:regionEurope
## strata(enum)enum=4:regionEurope
## strata(enum)enum=5:regionEurope ***
## strata(enum)enum=6:regionEurope
## strata(enum)enum=7:regionEurope
## strata(enum)enum=8:regionEurope
## strata(enum)enum=2:regionMiddle East **
## strata(enum)enum=3:regionMiddle East
## strata(enum)enum=4:regionMiddle East
## strata(enum)enum=5:regionMiddle East
## strata(enum)enum=6:regionMiddle East ***
## strata(enum)enum=7:regionMiddle East ***
## strata(enum)enum=8:regionMiddle East
## strata(enum)enum=2:factor(geo_scope, order = F)regional

```

```

## strata(enum)enum=3:factor(geo_scope, order = F)regional *
## strata(enum)enum=4:factor(geo_scope, order = F)regional
## strata(enum)enum=5:factor(geo_scope, order = F)regional
## strata(enum)enum=6:factor(geo_scope, order = F)regional ***
## strata(enum)enum=7:factor(geo_scope, order = F)regional ***
## strata(enum)enum=8:factor(geo_scope, order = F)regional ***
## strata(enum)enum=2:factor(geo_scope, order = F)national
## strata(enum)enum=3:factor(geo_scope, order = F)national *
## strata(enum)enum=4:factor(geo_scope, order = F)national
## strata(enum)enum=5:factor(geo_scope, order = F)national **
## strata(enum)enum=6:factor(geo_scope, order = F)national ***
## strata(enum)enum=7:factor(geo_scope, order = F)national ***
## strata(enum)enum=8:factor(geo_scope, order = F)national ***
## strata(enum)enum=2:factor(geo_scope, order = F)international regional ***
## strata(enum)enum=3:factor(geo_scope, order = F)international regional
## strata(enum)enum=4:factor(geo_scope, order = F)international regional ***
## strata(enum)enum=5:factor(geo_scope, order = F)international regional
## strata(enum)enum=6:factor(geo_scope, order = F)international regional
## strata(enum)enum=7:factor(geo_scope, order = F)international regional
## strata(enum)enum=8:factor(geo_scope, order = F)international regional
## strata(enum)enum=2:factor(geo_scope, order = F)global
## strata(enum)enum=3:factor(geo_scope, order = F)global .
## strata(enum)enum=4:factor(geo_scope, order = F)global
## strata(enum)enum=5:factor(geo_scope, order = F)global
## strata(enum)enum=6:factor(geo_scope, order = F)global
## strata(enum)enum=7:factor(geo_scope, order = F)global
## strata(enum)enum=8:factor(geo_scope, order = F)global ***
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform *
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform **
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform ***
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform ***
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change ***
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change ***
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change ***
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change ***
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change ***
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change *
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession ***
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession ***
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy **
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy **
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy ***
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy ***
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy

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```

## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown      ***
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown      ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## exp(coef)
## factor(tactical_choice, order = F)2      1.166e-01
## factor(tactical_choice, order = F)3      1.456e-01
## regionAmericas                          5.948e-01
## regionAsia                              9.473e-01
## regionEurope                            1.870e+00
## regionMiddle East                       9.581e-01
## factor(geo_scope, order = F)regional      9.384e-01
## factor(geo_scope, order = F)national      1.491e+00
## factor(geo_scope, order = F)international regional 4.067e-01
## factor(geo_scope, order = F)global        1.729e-02
## factor(camp_goals, order = F)Institutional Reform 1.888e+00
## factor(camp_goals, order = F)Policy Change 2.012e+00
## factor(camp_goals, order = F)Territorial Secession 2.242e+00
## factor(camp_goals, order = F)Autonomy     4.351e+00
## factor(camp_goals, order = F)Anti-occupation 1.309e-02
## factor(camp_goals, order = F)Unknown      8.885e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 6.041e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 2.732e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)2 6.779e+01
## strata(enum)enum=5:factor(tactical_choice, order = F)2 1.013e+01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 1.161e-04
## strata(enum)enum=7:factor(tactical_choice, order = F)2 2.508e-03
## strata(enum)enum=8:factor(tactical_choice, order = F)2 3.918e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 4.229e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 2.474e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)3 1.660e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)3 4.088e-02
## strata(enum)enum=6:factor(tactical_choice, order = F)3 1.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.048e-02
## strata(enum)enum=8:factor(tactical_choice, order = F)3 1.088e+00
## strata(enum)enum=2:regionAmericas        9.623e-01
## strata(enum)enum=3:regionAmericas        3.871e-01
## strata(enum)enum=4:regionAmericas        1.846e+00
## strata(enum)enum=5:regionAmericas        2.818e+01
## strata(enum)enum=6:regionAmericas        4.395e+03

```

```

## strata(enum)enum=7:regionAmericas 2.217e+07
## strata(enum)enum=8:regionAmericas 1.243e+03
## strata(enum)enum=2:regionAsia 9.487e-01
## strata(enum)enum=3:regionAsia 1.114e+00
## strata(enum)enum=4:regionAsia 6.142e-01
## strata(enum)enum=5:regionAsia 1.508e+01
## strata(enum)enum=6:regionAsia 2.756e+05
## strata(enum)enum=7:regionAsia 3.901e+02
## strata(enum)enum=8:regionAsia 1.040e+00
## strata(enum)enum=2:regionEurope 2.888e-01
## strata(enum)enum=3:regionEurope 8.261e-01
## strata(enum)enum=4:regionEurope 4.790e-01
## strata(enum)enum=5:regionEurope 9.584e-03
## strata(enum)enum=6:regionEurope 1.000e+00
## strata(enum)enum=7:regionEurope 1.000e+00
## strata(enum)enum=8:regionEurope 1.000e+00
## strata(enum)enum=2:regionMiddle East 2.934e-01
## strata(enum)enum=3:regionMiddle East 1.594e+00
## strata(enum)enum=4:regionMiddle East 7.414e-01
## strata(enum)enum=5:regionMiddle East 1.709e+00
## strata(enum)enum=6:regionMiddle East 5.525e+02
## strata(enum)enum=7:regionMiddle East 3.237e+01
## strata(enum)enum=8:regionMiddle East 2.495e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional 1.326e+00
## strata(enum)enum=3:factor(geo_scope, order = F)regional 5.070e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional 6.801e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional 1.186e+00
## strata(enum)enum=6:factor(geo_scope, order = F)regional 7.910e+02
## strata(enum)enum=7:factor(geo_scope, order = F)regional 5.271e-02
## strata(enum)enum=8:factor(geo_scope, order = F)regional 6.046e+00
## strata(enum)enum=2:factor(geo_scope, order = F)national 8.776e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national 5.396e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national 7.431e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national 2.624e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national 5.043e-02
## strata(enum)enum=7:factor(geo_scope, order = F)national 3.185e-03
## strata(enum)enum=8:factor(geo_scope, order = F)national 3.165e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 4.884e+01
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 4.328e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 8.049e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 6.700e-01
## strata(enum)enum=3:factor(geo_scope, order = F)global 1.225e+01
## strata(enum)enum=4:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 1.808e+02
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 5.427e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 8.971e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 2.535e+00

```

```

## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 5.438e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 4.606e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 1.182e-02
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 6.222e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 4.398e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 2.495e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 1.319e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 1.448e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 5.540e-05
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 4.477e-03
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 3.729e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 1.527e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.368e-03
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 3.497e-07
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 6.224e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 1.645e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 2.259e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 3.365e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 1.736e-06
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 1.476e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 1.770e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 1.219e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 4.488e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 4.134e-04
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 2.456e+01
## exp(-coef)
## factor(tactical_choice, order = F)2 8.573e+00
## factor(tactical_choice, order = F)3 6.868e+00
## regionAmericas 1.681e+00
## regionAsia 1.056e+00
## regionEurope 5.348e-01
## regionMiddle East 1.044e+00
## factor(geo_scope, order = F)regional 1.066e+00
## factor(geo_scope, order = F)national 6.707e-01
## factor(geo_scope, order = F)international regional 2.459e+00
## factor(geo_scope, order = F)global 5.783e+01
## factor(camp_goals, order = F)Institutional Reform 5.295e-01
## factor(camp_goals, order = F)Policy Change 4.969e-01
## factor(camp_goals, order = F)Territorial Secession 4.460e-01
## factor(camp_goals, order = F)Autonomy 2.298e-01

```

```

## factor(camp_goals, order = F)Anti-occupation 7.637e+01
## factor(camp_goals, order = F)Unknown 1.125e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)2 1.655e+00
## strata(enum)enum=3:factor(tactical_choice, order = F)2 3.661e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)2 1.475e-02
## strata(enum)enum=5:factor(tactical_choice, order = F)2 9.873e-02
## strata(enum)enum=6:factor(tactical_choice, order = F)2 8.614e+03
## strata(enum)enum=7:factor(tactical_choice, order = F)2 3.988e+02
## strata(enum)enum=8:factor(tactical_choice, order = F)2 2.552e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)3 2.365e+00
## strata(enum)enum=3:factor(tactical_choice, order = F)3 4.042e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3 6.024e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)3 2.446e+01
## strata(enum)enum=6:factor(tactical_choice, order = F)3 1.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 9.543e+01
## strata(enum)enum=8:factor(tactical_choice, order = F)3 9.195e-01
## strata(enum)enum=2:regionAmericas 1.039e+00
## strata(enum)enum=3:regionAmericas 2.583e+00
## strata(enum)enum=4:regionAmericas 5.417e-01
## strata(enum)enum=5:regionAmericas 3.548e-02
## strata(enum)enum=6:regionAmericas 2.275e-04
## strata(enum)enum=7:regionAmericas 4.510e-08
## strata(enum)enum=8:regionAmericas 8.048e-04
## strata(enum)enum=2:regionAsia 1.054e+00
## strata(enum)enum=3:regionAsia 8.980e-01
## strata(enum)enum=4:regionAsia 1.628e+00
## strata(enum)enum=5:regionAsia 6.633e-02
## strata(enum)enum=6:regionAsia 3.628e-06
## strata(enum)enum=7:regionAsia 2.564e-03
## strata(enum)enum=8:regionAsia 9.617e-01
## strata(enum)enum=2:regionEurope 3.463e+00
## strata(enum)enum=3:regionEurope 1.210e+00
## strata(enum)enum=4:regionEurope 2.088e+00
## strata(enum)enum=5:regionEurope 1.043e+02
## strata(enum)enum=6:regionEurope 1.000e+00
## strata(enum)enum=7:regionEurope 1.000e+00
## strata(enum)enum=8:regionEurope 1.000e+00
## strata(enum)enum=2:regionMiddle East 3.408e+00
## strata(enum)enum=3:regionMiddle East 6.272e-01
## strata(enum)enum=4:regionMiddle East 1.349e+00
## strata(enum)enum=5:regionMiddle East 5.852e-01
## strata(enum)enum=6:regionMiddle East 1.810e-03
## strata(enum)enum=7:regionMiddle East 3.089e-02
## strata(enum)enum=8:regionMiddle East 4.007e-01
## strata(enum)enum=2:factor(geo_scope, order = F)regional 7.542e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional 1.972e+00
## strata(enum)enum=4:factor(geo_scope, order = F)regional 1.470e+00
## strata(enum)enum=5:factor(geo_scope, order = F)regional 8.431e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional 1.264e-03
## strata(enum)enum=7:factor(geo_scope, order = F)regional 1.897e+01
## strata(enum)enum=8:factor(geo_scope, order = F)regional 1.654e-01
## strata(enum)enum=2:factor(geo_scope, order = F)national 1.139e+00
## strata(enum)enum=3:factor(geo_scope, order = F)national 1.853e+00
## strata(enum)enum=4:factor(geo_scope, order = F)national 1.346e+00

```



```

## strata(enum)enum=5:factor(geo_scope, order = F)national 3.810e+00
## strata(enum)enum=6:factor(geo_scope, order = F)national 1.983e+01
## strata(enum)enum=7:factor(geo_scope, order = F)national 3.139e+02
## strata(enum)enum=8:factor(geo_scope, order = F)national 3.159e-01
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 2.048e-02
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 2.310e-01
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 1.242e-01
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 1.493e+00
## strata(enum)enum=3:factor(geo_scope, order = F)global 8.161e-02
## strata(enum)enum=4:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 5.530e-03
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 1.843e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 1.115e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 3.944e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 1.839e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 2.171e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 8.460e+01
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 1.607e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 2.274e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 4.008e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 7.582e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 6.907e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 1.805e+04
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 2.234e+02
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 2.682e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 6.548e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 7.310e+02
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 2.859e+06
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 1.607e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 6.080e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 4.427e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 2.971e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 5.761e+05
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 6.773e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 5.650e-01

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## strata(enum)enum=3:factor(camp_goals, order = F)Unknown      8.200e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown      2.228e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown      2.419e+03
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown      1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown      1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown      4.071e-02
## lower .95
## factor(tactical_choice, order = F)2      7.669e-02
## factor(tactical_choice, order = F)3      7.497e-02
## regionAmericas      4.383e-01
## regionAsia      7.625e-01
## regionEurope      1.185e+00
## regionMiddle East      6.235e-01
## factor(geo_scope, order = F)regional      7.500e-01
## factor(geo_scope, order = F)national      1.214e+00
## factor(geo_scope, order = F)international regional      1.774e-01
## factor(geo_scope, order = F)global      4.699e-03
## factor(camp_goals, order = F)Institutional Reform      1.370e+00
## factor(camp_goals, order = F)Policy Change      1.554e+00
## factor(camp_goals, order = F)Territorial Secession      9.099e-01
## factor(camp_goals, order = F)Autonomy      2.108e+00
## factor(camp_goals, order = F)Anti-occupation      1.800e-03
## factor(camp_goals, order = F)Unknown      5.340e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2      1.663e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2      4.765e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)2      3.552e+01
## strata(enum)enum=5:factor(tactical_choice, order = F)2      2.783e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)2      3.818e-05
## strata(enum)enum=7:factor(tactical_choice, order = F)2      1.557e-03
## strata(enum)enum=8:factor(tactical_choice, order = F)2      2.780e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3      9.569e-02
## strata(enum)enum=3:factor(tactical_choice, order = F)3      8.851e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3      6.386e-02
## strata(enum)enum=5:factor(tactical_choice, order = F)3      5.694e-03
## strata(enum)enum=6:factor(tactical_choice, order = F)3      1.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3      1.075e-03
## strata(enum)enum=8:factor(tactical_choice, order = F)3      2.101e-01
## strata(enum)enum=2:regionAmericas      4.464e-01
## strata(enum)enum=3:regionAmericas      1.123e-01
## strata(enum)enum=4:regionAmericas      4.109e-01
## strata(enum)enum=5:regionAmericas      1.266e+01
## strata(enum)enum=6:regionAmericas      1.518e+03
## strata(enum)enum=7:regionAmericas      6.991e+06
## strata(enum)enum=8:regionAmericas      3.252e+02
## strata(enum)enum=2:regionAsia      6.195e-01
## strata(enum)enum=3:regionAsia      5.964e-01
## strata(enum)enum=4:regionAsia      2.498e-01
## strata(enum)enum=5:regionAsia      4.285e+00
## strata(enum)enum=6:regionAsia      9.720e+04
## strata(enum)enum=7:regionAsia      1.232e+02
## strata(enum)enum=8:regionAsia      6.179e-01
## strata(enum)enum=2:regionEurope      1.500e-01
## strata(enum)enum=3:regionEurope      4.319e-01
## strata(enum)enum=4:regionEurope      1.495e-01

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## strata(enum)enum=5:regionEurope 1.308e-03
## strata(enum)enum=6:regionEurope 1.000e+00
## strata(enum)enum=7:regionEurope 1.000e+00
## strata(enum)enum=8:regionEurope 1.000e+00
## strata(enum)enum=2:regionMiddle East 1.247e-01
## strata(enum)enum=3:regionMiddle East 6.091e-01
## strata(enum)enum=4:regionMiddle East 3.510e-01
## strata(enum)enum=5:regionMiddle East 3.114e-01
## strata(enum)enum=6:regionMiddle East 1.077e+02
## strata(enum)enum=7:regionMiddle East 4.091e+00
## strata(enum)enum=8:regionMiddle East 2.929e-01
## strata(enum)enum=2:factor(geo_scope, order = F)regional 8.782e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional 2.918e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional 3.428e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional 4.003e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional 2.523e+02
## strata(enum)enum=7:factor(geo_scope, order = F)regional 1.964e-02
## strata(enum)enum=8:factor(geo_scope, order = F)regional 3.469e+00
## strata(enum)enum=2:factor(geo_scope, order = F)national 6.021e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national 3.157e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national 3.566e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national 9.783e-02
## strata(enum)enum=6:factor(geo_scope, order = F)national 1.068e-02
## strata(enum)enum=7:factor(geo_scope, order = F)national 8.058e-04
## strata(enum)enum=8:factor(geo_scope, order = F)national 1.975e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 2.015e+01
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 5.476e-01
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 3.277e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 8.936e-02
## strata(enum)enum=3:factor(geo_scope, order = F)global 8.691e-01
## strata(enum)enum=4:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 1.223e+02
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 3.047e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 3.807e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 1.303e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 2.271e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 1.120e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 4.174e-03
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 2.828e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 2.876e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 1.418e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 6.934e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 6.083e-02
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 1.970e-05
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 1.213e-03
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 1.696e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 2.664e-01

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## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.664e-04
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 4.895e-08
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 2.631e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 4.561e-02
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 1.352e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 1.804e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 2.156e-07
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 5.020e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.375e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 6.174e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 5.492e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 6.083e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 7.486e-05
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 6.208e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 4.471e+00
## upper .95
## factor(tactical_choice, order = F)2 1.774e-01
## factor(tactical_choice, order = F)3 2.828e-01
## regionAmericas 8.072e-01
## regionAsia 1.177e+00
## regionEurope 2.951e+00
## regionMiddle East 1.472e+00
## factor(geo_scope, order = F)regional 1.174e+00
## factor(geo_scope, order = F)national 1.831e+00
## factor(geo_scope, order = F)international regional 9.327e-01
## factor(geo_scope, order = F)global 6.364e-02
## factor(camp_goals, order = F)Institutional Reform 2.603e+00
## factor(camp_goals, order = F)Policy Change 2.605e+00
## factor(camp_goals, order = F)Territorial Secession 5.525e+00
## factor(camp_goals, order = F)Autonomy 8.980e+00
## factor(camp_goals, order = F)Anti-occupation 9.525e-02
## factor(camp_goals, order = F)Unknown 1.479e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)2 2.194e+00
## strata(enum)enum=3:factor(tactical_choice, order = F)2 1.566e+01
## strata(enum)enum=4:factor(tactical_choice, order = F)2 1.294e+02
## strata(enum)enum=5:factor(tactical_choice, order = F)2 3.686e+01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 3.530e-04
## strata(enum)enum=7:factor(tactical_choice, order = F)2 4.039e-03
## strata(enum)enum=8:factor(tactical_choice, order = F)2 5.522e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 1.869e+00
## strata(enum)enum=3:factor(tactical_choice, order = F)3 6.913e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)3 4.315e-01

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## strata(enum)enum=5:factor(tactical_choice, order = F)3 2.935e-01
## strata(enum)enum=6:factor(tactical_choice, order = F)3 1.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.022e-01
## strata(enum)enum=8:factor(tactical_choice, order = F)3 5.631e+00
## strata(enum)enum=2:regionAmericas 2.074e+00
## strata(enum)enum=3:regionAmericas 1.335e+00
## strata(enum)enum=4:regionAmericas 8.294e+00
## strata(enum)enum=5:regionAmericas 6.276e+01
## strata(enum)enum=6:regionAmericas 1.272e+04
## strata(enum)enum=7:regionAmericas 7.033e+07
## strata(enum)enum=8:regionAmericas 4.748e+03
## strata(enum)enum=2:regionAsia 1.453e+00
## strata(enum)enum=3:regionAsia 2.079e+00
## strata(enum)enum=4:regionAsia 1.510e+00
## strata(enum)enum=5:regionAsia 5.304e+01
## strata(enum)enum=6:regionAsia 7.815e+05
## strata(enum)enum=7:regionAsia 1.235e+03
## strata(enum)enum=8:regionAsia 1.750e+00
## strata(enum)enum=2:regionEurope 5.559e-01
## strata(enum)enum=3:regionEurope 1.580e+00
## strata(enum)enum=4:regionEurope 1.535e+00
## strata(enum)enum=5:regionEurope 7.025e-02
## strata(enum)enum=6:regionEurope 1.000e+00
## strata(enum)enum=7:regionEurope 1.000e+00
## strata(enum)enum=8:regionEurope 1.000e+00
## strata(enum)enum=2:regionMiddle East 6.907e-01
## strata(enum)enum=3:regionMiddle East 4.173e+00
## strata(enum)enum=4:regionMiddle East 1.566e+00
## strata(enum)enum=5:regionMiddle East 9.378e+00
## strata(enum)enum=6:regionMiddle East 2.834e+03
## strata(enum)enum=7:regionMiddle East 2.562e+02
## strata(enum)enum=8:regionMiddle East 2.126e+01
## strata(enum)enum=2:factor(geo_scope, order = F)regional 2.002e+00
## strata(enum)enum=3:factor(geo_scope, order = F)regional 8.810e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional 1.349e+00
## strata(enum)enum=5:factor(geo_scope, order = F)regional 3.514e+00
## strata(enum)enum=6:factor(geo_scope, order = F)regional 2.480e+03
## strata(enum)enum=7:factor(geo_scope, order = F)regional 1.414e-01
## strata(enum)enum=8:factor(geo_scope, order = F)regional 1.054e+01
## strata(enum)enum=2:factor(geo_scope, order = F)national 1.279e+00
## strata(enum)enum=3:factor(geo_scope, order = F)national 9.224e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national 1.549e+00
## strata(enum)enum=5:factor(geo_scope, order = F)national 7.040e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national 2.381e-01
## strata(enum)enum=7:factor(geo_scope, order = F)national 1.259e-02
## strata(enum)enum=8:factor(geo_scope, order = F)national 5.072e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 1.184e+02
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 3.421e+01
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 1.977e+01
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 1.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 5.023e+00

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## strata(enum)enum=3:factor(geo_scope, order = F)global 1.728e+02
## strata(enum)enum=4:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 2.675e+02
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 9.666e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 2.114e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 4.932e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 1.302e+01
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 1.895e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 3.347e-02
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 1.369e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 6.726e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 4.390e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 2.509e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 3.445e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 1.558e-04
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 1.652e-02
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 8.201e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 8.754e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.124e-02
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 2.499e-06
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 1.472e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 5.930e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 3.774e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 6.280e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 1.398e-05
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 4.343e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 7.274e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 5.073e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 2.708e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 3.311e+01
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 2.283e-03
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.611e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 1.349e+02
##
## Concordance= 0.71 (se = 0.029 )
## Likelihood ratio test= 439.8 on 128 df, p=<2e-16
## Wald test = 5.753e+15 on 128 df, p=<2e-16
## Score (logrank) test = 428.9 on 128 df, p=<2e-16, Robust = 149.3 p=0.1
##

```

```
## (Note: the likelihood ratio and score tests assume independence of
## observations within a cluster, the Wald and robust score tests do not).
```

```
df_pwp_final
```

```
## # A tibble: 835 x 42
##   country_name date      geo_scope localities actor_id cameo_actor_3
##   <chr>         <date>    <ord>    <chr>      <fct>    <chr>
## 1 algeria      1991-12-07 regional El-Oued    non-sta~ REB
## 2 algeria      1992-05-10 local     a police ~ non-sta~ UAF
## 3 algeria      1994-01-19 regional Algiers    non-sta~ OPP
## 4 algeria      1994-01-26 regional Algiers    non-sta~ OPP
## 5 algeria      1994-10-05 regional Kabylie r~ non-sta~ ACT
## 6 algeria      1995-04-23 regional Kabylia R~ non-sta~ OPP
## 7 algeria      1997-11-13 regional Algiers    non-sta~ OPP
## 8 algeria      1998-10-13 national Algeria    non-sta~ ACT
## 9 algeria      1998-10-19 national Algeria    non-sta~ ACT
## 10 algeria     1998-11-17 national Algeria    non-sta~ ACT
## # ... with 825 more rows, and 36 more variables: cameo_actor_6 <chr>,
## #   cameo_actor_9 <chr>, event_actor_list <chr>, verb_10 <ord>, verb_100 <dbl>,
## #   verb_1000 <dbl>, target_3 <chr>, target_6 <chr>, target_9 <chr>,
## #   camp_goals <fct>, tactical_choice <ord>, nv_categ <fct>, nc_type <fct>,
## #   nv_commission <fct>, nv_concentration <fct>, nv_tactic_ns <chr>,
## #   v_tactic_ns <chr>, st_posture <ord>, damage <ord>, econ_impact <ord>,
## #   econ_impact_aux <chr>, year <dbl>, month <dbl>, day <dbl>,
## #   fatal_casu <dbl>, injuries <dbl>, num_partic_event <dbl>, id <dbl>,
## #   diff_time <dbl>, Stop <dbl>, concessions <dbl>, num_protests_day <int>,
## #   row_count <int>, enum <dbl>, Start <dbl>, region <chr>
```

```
pwp1$coefficients
```

```
##               factor(tactical_choice, order = F)2
##               -2.14867600
##               factor(tactical_choice, order = F)3
##               -1.92687778
##               regionAmericas
##               -0.51956349
##               regionAsia
##               -0.05415431
##               regionEurope
##               0.62577927
##               regionMiddle East
##               -0.04284443
##               factor(geo_scope, order = F)regional
##               -0.06360948
##               factor(geo_scope, order = F)national
##               0.39948306
##               factor(geo_scope, order = F)international regional
##               -0.89966136
##               factor(geo_scope, order = F)global
##               -4.05747638
##               factor(camp_goals, order = F)Institutional Reform
##               0.63575809
##               factor(camp_goals, order = F)Policy Change
##               0.69927136
```

```

##          factor(camp_goals, order = F)Territorial Secession
##                                     0.80747593
##          factor(camp_goals, order = F)Autonomy
##                                     1.47042060
##          factor(camp_goals, order = F)Anti-occupation
##                                     -4.33554273
##          factor(camp_goals, order = F)Unknown
##                                     -0.11819653
## strata(enum)enum=2:factor(tactical_choice, order = F)2
##                                     -0.50409089
## strata(enum)enum=3:factor(tactical_choice, order = F)2
##                                     1.00498201
## strata(enum)enum=4:factor(tactical_choice, order = F)2
##                                     4.21635537
## strata(enum)enum=5:factor(tactical_choice, order = F)2
##                                     2.31533248
## strata(enum)enum=6:factor(tactical_choice, order = F)2
##                                     -9.06115110
## strata(enum)enum=7:factor(tactical_choice, order = F)2
##                                     -5.98837415
## strata(enum)enum=8:factor(tactical_choice, order = F)2
##                                     1.36552627
## strata(enum)enum=2:factor(tactical_choice, order = F)3
##                                     -0.86058771
## strata(enum)enum=3:factor(tactical_choice, order = F)3
##                                     0.90572625
## strata(enum)enum=4:factor(tactical_choice, order = F)3
##                                     -1.79569839
## strata(enum)enum=5:factor(tactical_choice, order = F)3
##                                     -3.19703219
## strata(enum)enum=6:factor(tactical_choice, order = F)3
##                                     0.00000000
## strata(enum)enum=7:factor(tactical_choice, order = F)3
##                                     -4.55837088
## strata(enum)enum=8:factor(tactical_choice, order = F)3
##                                     0.08395173
##          strata(enum)enum=2:regionAmericas
##                                     -0.03848008
##          strata(enum)enum=3:regionAmericas
##                                     -0.94902667
##          strata(enum)enum=4:regionAmericas
##                                     0.61302357
##          strata(enum)enum=5:regionAmericas
##                                     3.33870347
##          strata(enum)enum=6:regionAmericas
##                                     8.38831121
##          strata(enum)enum=7:regionAmericas
##                                     16.91442133
##          strata(enum)enum=8:regionAmericas
##                                     7.12496200
##          strata(enum)enum=2:regionAsia
##                                     -0.05271335
##          strata(enum)enum=3:regionAsia
##                                     0.10754522

```



```

## strata(enum)enum=4:regionAsia
## -0.48750179
## strata(enum)enum=5:regionAsia
## 2.71309847
## strata(enum)enum=6:regionAsia
## 12.52674960
## strata(enum)enum=7:regionAsia
## 5.96632962
## strata(enum)enum=8:regionAsia
## 0.03903232
## strata(enum)enum=2:regionEurope
## -1.24201173
## strata(enum)enum=3:regionEurope
## -0.19102274
## strata(enum)enum=4:regionEurope
## -0.73597555
## strata(enum)enum=5:regionEurope
## -4.64762562
## strata(enum)enum=6:regionEurope
## 0.00000000
## strata(enum)enum=7:regionEurope
## 0.00000000
## strata(enum)enum=8:regionEurope
## 0.00000000
## strata(enum)enum=2:regionMiddle East
## -1.22606406
## strata(enum)enum=3:regionMiddle East
## 0.46641036
## strata(enum)enum=4:regionMiddle East
## -0.29914763
## strata(enum)enum=5:regionMiddle East
## 0.53580033
## strata(enum)enum=6:regionMiddle East
## 6.31436760
## strata(enum)enum=7:regionMiddle East
## 3.47733271
## strata(enum)enum=8:regionMiddle East
## 0.91447437
## strata(enum)enum=2:factor(geo_scope, order = F)regional
## 0.28213427
## strata(enum)enum=3:factor(geo_scope, order = F)regional
## -0.67922502
## strata(enum)enum=4:factor(geo_scope, order = F)regional
## -0.38556761
## strata(enum)enum=5:factor(geo_scope, order = F)regional
## 0.17067798
## strata(enum)enum=6:factor(geo_scope, order = F)regional
## 6.67332578
## strata(enum)enum=7:factor(geo_scope, order = F)regional
## -2.94299303
## strata(enum)enum=8:factor(geo_scope, order = F)regional
## 1.79943216
## strata(enum)enum=2:factor(geo_scope, order = F)national
## -0.13055905

```

```

##          strata(enum)enum=3:factor(geo_scope, order = F)national
##                                     -0.61684350
##          strata(enum)enum=4:factor(geo_scope, order = F)national
##                                     -0.29687066
##          strata(enum)enum=5:factor(geo_scope, order = F)national
##                                     -1.33774913
##          strata(enum)enum=6:factor(geo_scope, order = F)national
##                                     -2.98719898
##          strata(enum)enum=7:factor(geo_scope, order = F)national
##                                     -5.74915693
##          strata(enum)enum=8:factor(geo_scope, order = F)national
##                                     1.15219893
## strata(enum)enum=2:factor(geo_scope, order = F)international regional
##                                     3.88854090
## strata(enum)enum=3:factor(geo_scope, order = F)international regional
##                                     1.46512941
## strata(enum)enum=4:factor(geo_scope, order = F)international regional
##                                     2.08558935
## strata(enum)enum=5:factor(geo_scope, order = F)international regional
##                                     0.00000000
## strata(enum)enum=6:factor(geo_scope, order = F)international regional
##                                     0.00000000
## strata(enum)enum=7:factor(geo_scope, order = F)international regional
##                                     0.00000000
## strata(enum)enum=8:factor(geo_scope, order = F)international regional
##                                     0.00000000
##          strata(enum)enum=2:factor(geo_scope, order = F)global
##                                     -0.40051677
##          strata(enum)enum=3:factor(geo_scope, order = F)global
##                                     2.50583103
##          strata(enum)enum=4:factor(geo_scope, order = F)global
##                                     0.00000000
##          strata(enum)enum=5:factor(geo_scope, order = F)global
##                                     0.00000000
##          strata(enum)enum=6:factor(geo_scope, order = F)global
##                                     0.00000000
##          strata(enum)enum=7:factor(geo_scope, order = F)global
##                                     0.00000000
##          strata(enum)enum=8:factor(geo_scope, order = F)global
##                                     5.19764056
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform
##                                     -0.61116337
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform
##                                     -0.10854761
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform
##                                     0.93029256
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform
##                                     1.69342574
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform
##                                     -0.77529487
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform
##                                     -4.43798224
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform
##                                     -0.47443426

```

```

##      strata(enum)enum=2:factor(camp_goals, order = F)Policy Change
##                                     -0.82145047
##      strata(enum)enum=3:factor(camp_goals, order = F)Policy Change
##                                     -1.38835521
##      strata(enum)enum=4:factor(camp_goals, order = F)Policy Change
##                                     0.27683168
##      strata(enum)enum=5:factor(camp_goals, order = F)Policy Change
##                                     -1.93260777
##      strata(enum)enum=6:factor(camp_goals, order = F)Policy Change
##                                     -9.80092910
##      strata(enum)enum=7:factor(camp_goals, order = F)Policy Change
##                                     -5.40878992
##      strata(enum)enum=8:factor(camp_goals, order = F)Policy Change
##                                     -0.98640466
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession
##                                     0.42337971
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession
##                                     0.00000000
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession
##                                     0.00000000
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession
##                                     -6.59444025
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession
##                                     -14.86611420
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession
##                                     0.00000000
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession
##                                     0.00000000
##      strata(enum)enum=2:factor(camp_goals, order = F)Autonomy
##                                     -0.47420144
##      strata(enum)enum=3:factor(camp_goals, order = F)Autonomy
##                                     -1.80506322
##      strata(enum)enum=4:factor(camp_goals, order = F)Autonomy
##                                     0.81492800
##      strata(enum)enum=5:factor(camp_goals, order = F)Autonomy
##                                     -1.08905325
##      strata(enum)enum=6:factor(camp_goals, order = F)Autonomy
##                                     -13.26397232
##      strata(enum)enum=7:factor(camp_goals, order = F)Autonomy
##                                     0.00000000
##      strata(enum)enum=8:factor(camp_goals, order = F)Autonomy
##                                     0.38960985
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation
##                                     0.00000000
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation
##                                     0.00000000
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation
##                                     0.00000000
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation
##                                     0.00000000
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation
##                                     0.00000000
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation
##                                     0.00000000
##

```

```
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation
## 0.00000000
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown
## 0.57089770
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown
## 0.19842502
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown
## 1.50140652
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown
## -7.79108585
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown
## 0.00000000
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown
## 0.00000000
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown
## 3.20118818
```

```
pwp1$
```

```
## NULL
```

```
df_pwp_final
```

```
## # A tibble: 835 x 42
## country_name date geo_scope localities actor_id cameo_actor_3
## <chr> <date> <ord> <chr> <fct> <chr>
## 1 algeria 1991-12-07 regional El-Oued non-sta~ REB
## 2 algeria 1992-05-10 local a police ~ non-sta~ UAF
## 3 algeria 1994-01-19 regional Algiers non-sta~ OPP
## 4 algeria 1994-01-26 regional Algiers non-sta~ OPP
## 5 algeria 1994-10-05 regional Kabylie r~ non-sta~ ACT
## 6 algeria 1995-04-23 regional Kabylia R~ non-sta~ OPP
## 7 algeria 1997-11-13 regional Algiers non-sta~ OPP
## 8 algeria 1998-10-13 national Algeria non-sta~ ACT
## 9 algeria 1998-10-19 national Algeria non-sta~ ACT
## 10 algeria 1998-11-17 national Algeria non-sta~ ACT
## # ... with 825 more rows, and 36 more variables: cameo_actor_6 <chr>,
## # cameo_actor_9 <chr>, event_actor_list <chr>, verb_10 <ord>, verb_100 <dbl>,
## # verb_1000 <dbl>, target_3 <chr>, target_6 <chr>, target_9 <chr>,
## # camp_goals <fct>, tactical_choice <ord>, nv_categ <fct>, nc_type <fct>,
## # nv_commission <fct>, nv_concentration <fct>, nv_tactic_ns <chr>,
## # v_tactic_ns <chr>, st_posture <ord>, damage <ord>, econ_impact <ord>,
## # econ_impact_aux <chr>, year <dbl>, month <dbl>, day <dbl>,
## # fatal_casu <dbl>, injuries <dbl>, num_partic_event <dbl>, id <dbl>,
## # diff_time <dbl>, Stop <dbl>, concessions <dbl>, num_protests_day <int>,
## # row_count <int>, enum <dbl>, Start <dbl>, region <chr>
```

```
pwp1
```

```
## Call:
## coxph(formula = Surv(Stop, concessions) ~ strata(enum) + factor(tactical_choice,
## order = F) + region + factor(geo_scope, order = F) + factor(camp_goals,
## order = F) + strata(enum):factor(tactical_choice, order = F) +
## strata(enum):region + strata(enum):factor(geo_scope, order = F) +
## strata(enum):factor(camp_goals, order = F), data = df_pwp_final,
## cluster = id)
```

```

##
## coef
## factor(tactical_choice, order = F)2 -2.149e+00
## factor(tactical_choice, order = F)3 -1.927e+00
## regionAmericas -5.196e-01
## regionAsia -5.415e-02
## regionEurope 6.258e-01
## regionMiddle East -4.284e-02
## factor(geo_scope, order = F)regional -6.361e-02
## factor(geo_scope, order = F)national 3.995e-01
## factor(geo_scope, order = F)international regional -8.997e-01
## factor(geo_scope, order = F)global -4.057e+00
## factor(camp_goals, order = F)Institutional Reform 6.358e-01
## factor(camp_goals, order = F)Policy Change 6.993e-01
## factor(camp_goals, order = F)Territorial Secession 8.075e-01
## factor(camp_goals, order = F)Autonomy 1.470e+00
## factor(camp_goals, order = F)Anti-occupation -4.336e+00
## factor(camp_goals, order = F)Unknown -1.182e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 -5.041e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 1.005e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)2 4.216e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)2 2.315e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)2 -9.061e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)2 -5.988e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)2 1.366e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 -8.606e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 9.057e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3 -1.796e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)3 -3.197e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)3 0.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 -4.558e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)3 8.395e-02
## strata(enum)enum=2:regionAmericas -3.848e-02
## strata(enum)enum=3:regionAmericas -9.490e-01
## strata(enum)enum=4:regionAmericas 6.130e-01
## strata(enum)enum=5:regionAmericas 3.339e+00
## strata(enum)enum=6:regionAmericas 8.388e+00
## strata(enum)enum=7:regionAmericas 1.691e+01
## strata(enum)enum=8:regionAmericas 7.125e+00
## strata(enum)enum=2:regionAsia -5.271e-02
## strata(enum)enum=3:regionAsia 1.075e-01
## strata(enum)enum=4:regionAsia -4.875e-01
## strata(enum)enum=5:regionAsia 2.713e+00
## strata(enum)enum=6:regionAsia 1.253e+01
## strata(enum)enum=7:regionAsia 5.966e+00
## strata(enum)enum=8:regionAsia 3.903e-02
## strata(enum)enum=2:regionEurope -1.242e+00
## strata(enum)enum=3:regionEurope -1.910e-01
## strata(enum)enum=4:regionEurope -7.360e-01
## strata(enum)enum=5:regionEurope -4.648e+00
## strata(enum)enum=6:regionEurope 0.000e+00
## strata(enum)enum=7:regionEurope 0.000e+00
## strata(enum)enum=8:regionEurope 0.000e+00
## strata(enum)enum=2:regionMiddle East -1.226e+00

```

```

## strata(enum)enum=3:regionMiddle East 4.664e-01
## strata(enum)enum=4:regionMiddle East -2.991e-01
## strata(enum)enum=5:regionMiddle East 5.358e-01
## strata(enum)enum=6:regionMiddle East 6.314e+00
## strata(enum)enum=7:regionMiddle East 3.477e+00
## strata(enum)enum=8:regionMiddle East 9.145e-01
## strata(enum)enum=2:factor(geo_scope, order = F)regional 2.821e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional -6.792e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional -3.856e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional 1.707e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional 6.673e+00
## strata(enum)enum=7:factor(geo_scope, order = F)regional -2.943e+00
## strata(enum)enum=8:factor(geo_scope, order = F)regional 1.799e+00
## strata(enum)enum=2:factor(geo_scope, order = F)national -1.306e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national -6.168e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national -2.969e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national -1.338e+00
## strata(enum)enum=6:factor(geo_scope, order = F)national -2.987e+00
## strata(enum)enum=7:factor(geo_scope, order = F)national -5.749e+00
## strata(enum)enum=8:factor(geo_scope, order = F)national 1.152e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 3.889e+00
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 1.465e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 2.086e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global -4.005e-01
## strata(enum)enum=3:factor(geo_scope, order = F)global 2.506e+00
## strata(enum)enum=4:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 5.198e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform -6.112e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform -1.085e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 9.303e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 1.693e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform -7.753e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform -4.438e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform -4.744e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change -8.215e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change -1.388e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 2.768e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change -1.933e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change -9.801e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change -5.409e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change -9.864e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 4.234e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession -6.594e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession -1.487e+01
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 0.000e+00

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## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy -4.742e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy -1.805e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 8.149e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy -1.089e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy -1.326e+01
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 3.896e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 5.709e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 1.984e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 1.501e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown -7.791e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 3.201e+00
## exp(coef)
## factor(tactical_choice, order = F)2 1.166e-01
## factor(tactical_choice, order = F)3 1.456e-01
## regionAmericas 5.948e-01
## regionAsia 9.473e-01
## regionEurope 1.870e+00
## regionMiddle East 9.581e-01
## factor(geo_scope, order = F)regional 9.384e-01
## factor(geo_scope, order = F)national 1.491e+00
## factor(geo_scope, order = F)international regional 4.067e-01
## factor(geo_scope, order = F)global 1.729e-02
## factor(camp_goals, order = F)Institutional Reform 1.888e+00
## factor(camp_goals, order = F)Policy Change 2.012e+00
## factor(camp_goals, order = F)Territorial Secession 2.242e+00
## factor(camp_goals, order = F)Autonomy 4.351e+00
## factor(camp_goals, order = F)Anti-occupation 1.309e-02
## factor(camp_goals, order = F)Unknown 8.885e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 6.041e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 2.732e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)2 6.779e+01
## strata(enum)enum=5:factor(tactical_choice, order = F)2 1.013e+01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 1.161e-04
## strata(enum)enum=7:factor(tactical_choice, order = F)2 2.508e-03
## strata(enum)enum=8:factor(tactical_choice, order = F)2 3.918e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 4.229e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 2.474e+00
## strata(enum)enum=4:factor(tactical_choice, order = F)3 1.660e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)3 4.088e-02
## strata(enum)enum=6:factor(tactical_choice, order = F)3 1.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.048e-02
## strata(enum)enum=8:factor(tactical_choice, order = F)3 1.088e+00
## strata(enum)enum=2:regionAmericas 9.623e-01

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## strata(enum)enum=3:regionAmericas	3.871e-01
## strata(enum)enum=4:regionAmericas	1.846e+00
## strata(enum)enum=5:regionAmericas	2.818e+01
## strata(enum)enum=6:regionAmericas	4.395e+03
## strata(enum)enum=7:regionAmericas	2.217e+07
## strata(enum)enum=8:regionAmericas	1.243e+03
## strata(enum)enum=2:regionAsia	9.487e-01
## strata(enum)enum=3:regionAsia	1.114e+00
## strata(enum)enum=4:regionAsia	6.142e-01
## strata(enum)enum=5:regionAsia	1.508e+01
## strata(enum)enum=6:regionAsia	2.756e+05
## strata(enum)enum=7:regionAsia	3.901e+02
## strata(enum)enum=8:regionAsia	1.040e+00
## strata(enum)enum=2:regionEurope	2.888e-01
## strata(enum)enum=3:regionEurope	8.261e-01
## strata(enum)enum=4:regionEurope	4.790e-01
## strata(enum)enum=5:regionEurope	9.584e-03
## strata(enum)enum=6:regionEurope	1.000e+00
## strata(enum)enum=7:regionEurope	1.000e+00
## strata(enum)enum=8:regionEurope	1.000e+00
## strata(enum)enum=2:regionMiddle East	2.934e-01
## strata(enum)enum=3:regionMiddle East	1.594e+00
## strata(enum)enum=4:regionMiddle East	7.414e-01
## strata(enum)enum=5:regionMiddle East	1.709e+00
## strata(enum)enum=6:regionMiddle East	5.525e+02
## strata(enum)enum=7:regionMiddle East	3.237e+01
## strata(enum)enum=8:regionMiddle East	2.495e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional	1.326e+00
## strata(enum)enum=3:factor(geo_scope, order = F)regional	5.070e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional	6.801e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional	1.186e+00
## strata(enum)enum=6:factor(geo_scope, order = F)regional	7.910e+02
## strata(enum)enum=7:factor(geo_scope, order = F)regional	5.271e-02
## strata(enum)enum=8:factor(geo_scope, order = F)regional	6.046e+00
## strata(enum)enum=2:factor(geo_scope, order = F)national	8.776e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national	5.396e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national	7.431e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national	2.624e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national	5.043e-02
## strata(enum)enum=7:factor(geo_scope, order = F)national	3.185e-03
## strata(enum)enum=8:factor(geo_scope, order = F)national	3.165e+00
## strata(enum)enum=2:factor(geo_scope, order = F)international regional	4.884e+01
## strata(enum)enum=3:factor(geo_scope, order = F)international regional	4.328e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional	8.049e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional	1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional	1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional	1.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional	1.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global	6.700e-01
## strata(enum)enum=3:factor(geo_scope, order = F)global	1.225e+01
## strata(enum)enum=4:factor(geo_scope, order = F)global	1.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global	1.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global	1.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global	1.000e+00


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## strata(enum)enum=8:factor(geo_scope, order = F)global 1.808e+02
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 5.427e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 8.971e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 2.535e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 5.438e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 4.606e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 1.182e-02
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 6.222e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 4.398e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 2.495e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 1.319e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 1.448e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 5.540e-05
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 4.477e-03
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 3.729e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 1.527e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.368e-03
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 3.497e-07
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 6.224e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 1.645e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 2.259e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 3.365e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 1.736e-06
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 1.476e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 1.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 1.770e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 1.219e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 4.488e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 4.134e-04
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 2.456e+01
## se(coef)
## factor(tactical_choice, order = F)2 2.839e-01
## factor(tactical_choice, order = F)3 2.345e-01
## regionAmericas 2.278e-01
## regionAsia 1.124e-01
## regionEurope 1.936e-01
## regionMiddle East 1.440e-01
## factor(geo_scope, order = F)regional 9.878e-02
## factor(geo_scope, order = F)national 1.049e-01
## factor(geo_scope, order = F)international regional 5.260e-01
## factor(geo_scope, order = F)global 7.010e-01

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## factor(camp_goals, order = F)Institutional Reform 1.480e-01
## factor(camp_goals, order = F)Policy Change 1.066e-01
## factor(camp_goals, order = F)Territorial Secession 3.821e-01
## factor(camp_goals, order = F)Autonomy 2.068e-01
## factor(camp_goals, order = F)Anti-occupation 5.343e+00
## factor(camp_goals, order = F)Unknown 2.376e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 7.281e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 7.261e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)2 1.022e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)2 8.890e-01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 7.552e-01
## strata(enum)enum=7:factor(tactical_choice, order = F)2 1.160e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)2 1.016e+00
## strata(enum)enum=2:factor(tactical_choice, order = F)3 7.048e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 5.229e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3 2.717e+00
## strata(enum)enum=5:factor(tactical_choice, order = F)3 4.171e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)3 0.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.122e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)3 4.555e-01
## strata(enum)enum=2:regionAmericas 4.668e-01
## strata(enum)enum=3:regionAmericas 7.260e-01
## strata(enum)enum=4:regionAmericas 7.512e-01
## strata(enum)enum=5:regionAmericas 2.580e+00
## strata(enum)enum=6:regionAmericas 4.151e+02
## strata(enum)enum=7:regionAmericas 2.224e+02
## strata(enum)enum=8:regionAmericas 4.869e-01
## strata(enum)enum=2:regionAsia 2.595e-01
## strata(enum)enum=3:regionAsia 3.038e-01
## strata(enum)enum=4:regionAsia 4.677e-01
## strata(enum)enum=5:regionAsia 7.610e-01
## strata(enum)enum=6:regionAsia 7.573e-01
## strata(enum)enum=7:regionAsia 7.076e-01
## strata(enum)enum=8:regionAsia 2.223e-01
## strata(enum)enum=2:regionEurope 3.981e-01
## strata(enum)enum=3:regionEurope 4.360e-01
## strata(enum)enum=4:regionEurope 7.466e-01
## strata(enum)enum=5:regionEurope 6.039e+00
## strata(enum)enum=6:regionEurope 0.000e+00
## strata(enum)enum=7:regionEurope 0.000e+00
## strata(enum)enum=8:regionEurope 0.000e+00
## strata(enum)enum=2:regionMiddle East 3.425e-01
## strata(enum)enum=3:regionMiddle East 3.937e-01
## strata(enum)enum=4:regionMiddle East 4.717e-01
## strata(enum)enum=5:regionMiddle East 7.812e-01
## strata(enum)enum=6:regionMiddle East 1.280e+00
## strata(enum)enum=7:regionMiddle East 9.424e-01
## strata(enum)enum=8:regionMiddle East 1.005e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional 2.223e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional 2.799e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional 3.882e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional 7.007e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional 7.300e-01
## strata(enum)enum=7:factor(geo_scope, order = F)regional 6.770e-01

```

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## strata(enum)enum=8:factor(geo_scope, order = F)regional 2.214e-01
## strata(enum)enum=2:factor(geo_scope, order = F)national 2.415e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national 2.838e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national 4.125e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national 6.214e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national 8.488e-01
## strata(enum)enum=7:factor(geo_scope, order = F)national 7.717e-01
## strata(enum)enum=8:factor(geo_scope, order = F)national 2.386e-01
## strata(enum)enum=2:factor(geo_scope, order = F)international regional 1.092e+00
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 1.027e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 1.094e+00
## strata(enum)enum=5:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional 0.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global 4.976e+00
## strata(enum)enum=3:factor(geo_scope, order = F)global 1.013e+00
## strata(enum)enum=4:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global 0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global 1.015e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 3.388e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 4.097e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 4.462e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 1.001e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 8.461e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform 6.880e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 3.936e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 2.300e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 2.835e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 3.987e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 6.038e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 7.109e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 7.601e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 2.555e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 5.931e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 6.011e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 3.365e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 7.228e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 7.254e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 1.030e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 1.115e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 7.159e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 2.592e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 5.343e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 0.000e+00

```

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## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 4.261e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 4.722e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 5.567e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 4.370e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.160e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 6.990e-01
## robust se
## factor(tactical_choice, order = F)2 2.139e-01
## factor(tactical_choice, order = F)3 3.387e-01
## regionAmericas 1.558e-01
## regionAsia 1.107e-01
## regionEurope 2.328e-01
## regionMiddle East 2.191e-01
## factor(geo_scope, order = F)regional 1.143e-01
## factor(geo_scope, order = F)national 1.049e-01
## factor(geo_scope, order = F)international regional 4.234e-01
## factor(geo_scope, order = F)global 6.648e-01
## factor(camp_goals, order = F)Institutional Reform 1.638e-01
## factor(camp_goals, order = F)Policy Change 1.317e-01
## factor(camp_goals, order = F)Territorial Secession 4.601e-01
## factor(camp_goals, order = F)Autonomy 3.697e-01
## factor(camp_goals, order = F)Anti-occupation 1.012e+00
## factor(camp_goals, order = F)Unknown 2.598e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)2 6.582e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)2 8.910e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)2 3.297e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)2 6.591e-01
## strata(enum)enum=6:factor(tactical_choice, order = F)2 5.674e-01
## strata(enum)enum=7:factor(tactical_choice, order = F)2 2.432e-01
## strata(enum)enum=8:factor(tactical_choice, order = F)2 1.751e-01
## strata(enum)enum=2:factor(tactical_choice, order = F)3 7.582e-01
## strata(enum)enum=3:factor(tactical_choice, order = F)3 5.244e-01
## strata(enum)enum=4:factor(tactical_choice, order = F)3 4.874e-01
## strata(enum)enum=5:factor(tactical_choice, order = F)3 1.006e+00
## strata(enum)enum=6:factor(tactical_choice, order = F)3 0.000e+00
## strata(enum)enum=7:factor(tactical_choice, order = F)3 1.162e+00
## strata(enum)enum=8:factor(tactical_choice, order = F)3 8.389e-01
## strata(enum)enum=2:regionAmericas 3.919e-01
## strata(enum)enum=3:regionAmericas 6.315e-01
## strata(enum)enum=4:regionAmericas 7.666e-01
## strata(enum)enum=5:regionAmericas 4.085e-01
## strata(enum)enum=6:regionAmericas 5.423e-01
## strata(enum)enum=7:regionAmericas 5.889e-01
## strata(enum)enum=8:regionAmericas 6.840e-01
## strata(enum)enum=2:regionAsia 2.174e-01
## strata(enum)enum=3:regionAsia 3.186e-01
## strata(enum)enum=4:regionAsia 4.589e-01
## strata(enum)enum=5:regionAsia 6.418e-01
## strata(enum)enum=6:regionAsia 5.317e-01
## strata(enum)enum=7:regionAsia 5.879e-01

```

## strata(enum)enum=8:regionAsia	2.656e-01
## strata(enum)enum=2:regionEurope	3.341e-01
## strata(enum)enum=3:regionEurope	3.309e-01
## strata(enum)enum=4:regionEurope	5.941e-01
## strata(enum)enum=5:regionEurope	1.016e+00
## strata(enum)enum=6:regionEurope	0.000e+00
## strata(enum)enum=7:regionEurope	0.000e+00
## strata(enum)enum=8:regionEurope	0.000e+00
## strata(enum)enum=2:regionMiddle East	4.368e-01
## strata(enum)enum=3:regionMiddle East	4.909e-01
## strata(enum)enum=4:regionMiddle East	3.815e-01
## strata(enum)enum=5:regionMiddle East	8.687e-01
## strata(enum)enum=6:regionMiddle East	8.342e-01
## strata(enum)enum=7:regionMiddle East	1.055e+00
## strata(enum)enum=8:regionMiddle East	1.093e+00
## strata(enum)enum=2:factor(geo_scope, order = F)regional	2.102e-01
## strata(enum)enum=3:factor(geo_scope, order = F)regional	2.819e-01
## strata(enum)enum=4:factor(geo_scope, order = F)regional	3.495e-01
## strata(enum)enum=5:factor(geo_scope, order = F)regional	5.542e-01
## strata(enum)enum=6:factor(geo_scope, order = F)regional	5.830e-01
## strata(enum)enum=7:factor(geo_scope, order = F)regional	5.036e-01
## strata(enum)enum=8:factor(geo_scope, order = F)regional	2.835e-01
## strata(enum)enum=2:factor(geo_scope, order = F)national	1.923e-01
## strata(enum)enum=3:factor(geo_scope, order = F)national	2.735e-01
## strata(enum)enum=4:factor(geo_scope, order = F)national	3.746e-01
## strata(enum)enum=5:factor(geo_scope, order = F)national	5.035e-01
## strata(enum)enum=6:factor(geo_scope, order = F)national	7.920e-01
## strata(enum)enum=7:factor(geo_scope, order = F)national	7.013e-01
## strata(enum)enum=8:factor(geo_scope, order = F)national	2.406e-01
## strata(enum)enum=2:factor(geo_scope, order = F)international regional	4.516e-01
## strata(enum)enum=3:factor(geo_scope, order = F)international regional	1.055e+00
## strata(enum)enum=4:factor(geo_scope, order = F)international regional	4.585e-01
## strata(enum)enum=5:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)international regional	0.000e+00
## strata(enum)enum=2:factor(geo_scope, order = F)global	1.028e+00
## strata(enum)enum=3:factor(geo_scope, order = F)global	1.350e+00
## strata(enum)enum=4:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=5:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=6:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=7:factor(geo_scope, order = F)global	0.000e+00
## strata(enum)enum=8:factor(geo_scope, order = F)global	1.997e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform	2.945e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform	4.373e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform	3.395e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform	4.454e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform	7.216e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform	5.311e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform	4.023e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change	2.168e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change	2.883e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change	3.280e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change	4.424e-01

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## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change 5.275e-01
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 6.662e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 4.021e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 8.909e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 1.075e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession 1.003e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 4.393e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 6.544e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 2.619e-01
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 3.183e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy 1.064e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 5.504e-01
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.012e+00
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation 0.000e+00
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 5.373e-01
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 4.070e-01
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 1.020e+00
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown 8.719e-01
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown 0.000e+00
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 2.432e-01
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 8.692e-01
## z
## factor(tactical_choice, order = F)2 -10.043
## factor(tactical_choice, order = F)3 -5.689
## regionAmericas -3.335
## regionAsia -0.489
## regionEurope 2.688
## regionMiddle East -0.196
## factor(geo_scope, order = F)regional -0.557
## factor(geo_scope, order = F)national 3.810
## factor(geo_scope, order = F)international regional -2.125
## factor(geo_scope, order = F)global -6.103
## factor(camp_goals, order = F)Institutional Reform 3.881
## factor(camp_goals, order = F)Policy Change 5.308
## factor(camp_goals, order = F)Territorial Secession 1.755
## factor(camp_goals, order = F)Autonomy 3.977
## factor(camp_goals, order = F)Anti-occupation -4.282
## factor(camp_goals, order = F)Unknown -0.455
## strata(enum)enum=2:factor(tactical_choice, order = F)2 -0.766
## strata(enum)enum=3:factor(tactical_choice, order = F)2 1.128
## strata(enum)enum=4:factor(tactical_choice, order = F)2 12.789
## strata(enum)enum=5:factor(tactical_choice, order = F)2 3.513
## strata(enum)enum=6:factor(tactical_choice, order = F)2 -15.969
## strata(enum)enum=7:factor(tactical_choice, order = F)2 -24.620

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## strata(enum)enum=8:factor(tactical_choice, order = F)2	7.798
## strata(enum)enum=2:factor(tactical_choice, order = F)3	-1.135
## strata(enum)enum=3:factor(tactical_choice, order = F)3	1.727
## strata(enum)enum=4:factor(tactical_choice, order = F)3	-3.684
## strata(enum)enum=5:factor(tactical_choice, order = F)3	-3.179
## strata(enum)enum=6:factor(tactical_choice, order = F)3	NA
## strata(enum)enum=7:factor(tactical_choice, order = F)3	-3.923
## strata(enum)enum=8:factor(tactical_choice, order = F)3	0.100
## strata(enum)enum=2:regionAmericas	-0.098
## strata(enum)enum=3:regionAmericas	-1.503
## strata(enum)enum=4:regionAmericas	0.800
## strata(enum)enum=5:regionAmericas	8.173
## strata(enum)enum=6:regionAmericas	15.467
## strata(enum)enum=7:regionAmericas	28.721
## strata(enum)enum=8:regionAmericas	10.417
## strata(enum)enum=2:regionAsia	-0.242
## strata(enum)enum=3:regionAsia	0.338
## strata(enum)enum=4:regionAsia	-1.062
## strata(enum)enum=5:regionAsia	4.227
## strata(enum)enum=6:regionAsia	23.558
## strata(enum)enum=7:regionAsia	10.149
## strata(enum)enum=8:regionAsia	0.147
## strata(enum)enum=2:regionEurope	-3.718
## strata(enum)enum=3:regionEurope	-0.577
## strata(enum)enum=4:regionEurope	-1.239
## strata(enum)enum=5:regionEurope	-4.573
## strata(enum)enum=6:regionEurope	NA
## strata(enum)enum=7:regionEurope	NA
## strata(enum)enum=8:regionEurope	NA
## strata(enum)enum=2:regionMiddle East	-2.807
## strata(enum)enum=3:regionMiddle East	0.950
## strata(enum)enum=4:regionMiddle East	-0.784
## strata(enum)enum=5:regionMiddle East	0.617
## strata(enum)enum=6:regionMiddle East	7.570
## strata(enum)enum=7:regionMiddle East	3.295
## strata(enum)enum=8:regionMiddle East	0.837
## strata(enum)enum=2:factor(geo_scope, order = F)regional	1.342
## strata(enum)enum=3:factor(geo_scope, order = F)regional	-2.409
## strata(enum)enum=4:factor(geo_scope, order = F)regional	-1.103
## strata(enum)enum=5:factor(geo_scope, order = F)regional	0.308
## strata(enum)enum=6:factor(geo_scope, order = F)regional	11.446
## strata(enum)enum=7:factor(geo_scope, order = F)regional	-5.844
## strata(enum)enum=8:factor(geo_scope, order = F)regional	6.347
## strata(enum)enum=2:factor(geo_scope, order = F)national	-0.679
## strata(enum)enum=3:factor(geo_scope, order = F)national	-2.255
## strata(enum)enum=4:factor(geo_scope, order = F)national	-0.792
## strata(enum)enum=5:factor(geo_scope, order = F)national	-2.657
## strata(enum)enum=6:factor(geo_scope, order = F)national	-3.772
## strata(enum)enum=7:factor(geo_scope, order = F)national	-8.198
## strata(enum)enum=8:factor(geo_scope, order = F)national	4.789
## strata(enum)enum=2:factor(geo_scope, order = F)international regional	8.610
## strata(enum)enum=3:factor(geo_scope, order = F)international regional	1.389
## strata(enum)enum=4:factor(geo_scope, order = F)international regional	4.549
## strata(enum)enum=5:factor(geo_scope, order = F)international regional	NA

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## strata(enum)enum=6:factor(geo_scope, order = F)international regional      NA
## strata(enum)enum=7:factor(geo_scope, order = F)international regional      NA
## strata(enum)enum=8:factor(geo_scope, order = F)international regional      NA
## strata(enum)enum=2:factor(geo_scope, order = F)global                      -0.390
## strata(enum)enum=3:factor(geo_scope, order = F)global                      1.856
## strata(enum)enum=4:factor(geo_scope, order = F)global                      NA
## strata(enum)enum=5:factor(geo_scope, order = F)global                      NA
## strata(enum)enum=6:factor(geo_scope, order = F)global                      NA
## strata(enum)enum=7:factor(geo_scope, order = F)global                      NA
## strata(enum)enum=8:factor(geo_scope, order = F)global                      26.026
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform      -2.075
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform      -0.248
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform       2.740
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform       3.802
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform      -1.074
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform      -8.357
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform      -1.179
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change              -3.790
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change              -4.816
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change               0.844
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change              -4.368
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change             -18.580
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change              -8.118
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change              -2.453
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession     0.475
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession     -6.136
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession    -14.818
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession      NA
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy                  -1.079
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy                  -2.759
## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy                   3.112
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy                  -3.422
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy                  -12.462
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy                  NA
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy                   0.708
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation            0.000
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation            NA
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation            NA
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation            NA
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation            NA
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation            NA
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation            NA
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown                    1.063
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown                    0.488
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown                    1.472
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown                   -8.936
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown                    NA
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown                    0.000
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown                    3.683
##
##
## factor(tactical_choice, order = F)2                                     p
##                                                                    < 2e-16

```



```

## factor(tactical_choice, order = F)3 1.27e-08
## regionAmericas 0.000854
## regionAsia 0.624837
## regionEurope 0.007188
## regionMiddle East 0.844990
## factor(geo_scope, order = F)regional 0.577830
## factor(geo_scope, order = F)national 0.000139
## factor(geo_scope, order = F)international regional 0.033618
## factor(geo_scope, order = F)global 1.04e-09
## factor(camp_goals, order = F)Institutional Reform 0.000104
## factor(camp_goals, order = F)Policy Change 1.11e-07
## factor(camp_goals, order = F)Territorial Secession 0.079284
## factor(camp_goals, order = F)Autonomy 6.97e-05
## factor(camp_goals, order = F)Anti-occupation 1.85e-05
## factor(camp_goals, order = F)Unknown 0.649162
## strata(enum)enum=2:factor(tactical_choice, order = F)2 0.443725
## strata(enum)enum=3:factor(tactical_choice, order = F)2 0.259347
## strata(enum)enum=4:factor(tactical_choice, order = F)2 < 2e-16
## strata(enum)enum=5:factor(tactical_choice, order = F)2 0.000443
## strata(enum)enum=6:factor(tactical_choice, order = F)2 < 2e-16
## strata(enum)enum=7:factor(tactical_choice, order = F)2 < 2e-16
## strata(enum)enum=8:factor(tactical_choice, order = F)2 6.29e-15
## strata(enum)enum=2:factor(tactical_choice, order = F)3 0.256359
## strata(enum)enum=3:factor(tactical_choice, order = F)3 0.084115
## strata(enum)enum=4:factor(tactical_choice, order = F)3 0.000230
## strata(enum)enum=5:factor(tactical_choice, order = F)3 0.001479
## strata(enum)enum=6:factor(tactical_choice, order = F)3 NA
## strata(enum)enum=7:factor(tactical_choice, order = F)3 8.74e-05
## strata(enum)enum=8:factor(tactical_choice, order = F)3 0.920288
## strata(enum)enum=2:regionAmericas 0.921788
## strata(enum)enum=3:regionAmericas 0.132912
## strata(enum)enum=4:regionAmericas 0.423918
## strata(enum)enum=5:regionAmericas 3.00e-16
## strata(enum)enum=6:regionAmericas < 2e-16
## strata(enum)enum=7:regionAmericas < 2e-16
## strata(enum)enum=8:regionAmericas < 2e-16
## strata(enum)enum=2:regionAsia 0.808438
## strata(enum)enum=3:regionAsia 0.735685
## strata(enum)enum=4:regionAsia 0.288131
## strata(enum)enum=5:regionAsia 2.37e-05
## strata(enum)enum=6:regionAsia < 2e-16
## strata(enum)enum=7:regionAsia < 2e-16
## strata(enum)enum=8:regionAsia 0.883157
## strata(enum)enum=2:regionEurope 0.000201
## strata(enum)enum=3:regionEurope 0.563733
## strata(enum)enum=4:regionEurope 0.215416
## strata(enum)enum=5:regionEurope 4.81e-06
## strata(enum)enum=6:regionEurope NA
## strata(enum)enum=7:regionEurope NA
## strata(enum)enum=8:regionEurope NA
## strata(enum)enum=2:regionMiddle East 0.005000
## strata(enum)enum=3:regionMiddle East 0.342096
## strata(enum)enum=4:regionMiddle East 0.432957
## strata(enum)enum=5:regionMiddle East 0.537356

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## strata(enum)enum=6:regionMiddle East 3.74e-14
## strata(enum)enum=7:regionMiddle East 0.000985
## strata(enum)enum=8:regionMiddle East 0.402782
## strata(enum)enum=2:factor(geo_scope, order = F)regional 0.179567
## strata(enum)enum=3:factor(geo_scope, order = F)regional 0.015987
## strata(enum)enum=4:factor(geo_scope, order = F)regional 0.269882
## strata(enum)enum=5:factor(geo_scope, order = F)regional 0.758099
## strata(enum)enum=6:factor(geo_scope, order = F)regional < 2e-16
## strata(enum)enum=7:factor(geo_scope, order = F)regional 5.10e-09
## strata(enum)enum=8:factor(geo_scope, order = F)regional 2.19e-10
## strata(enum)enum=2:factor(geo_scope, order = F)national 0.497121
## strata(enum)enum=3:factor(geo_scope, order = F)national 0.024110
## strata(enum)enum=4:factor(geo_scope, order = F)national 0.428123
## strata(enum)enum=5:factor(geo_scope, order = F)national 0.007885
## strata(enum)enum=6:factor(geo_scope, order = F)national 0.000162
## strata(enum)enum=7:factor(geo_scope, order = F)national 2.45e-16
## strata(enum)enum=8:factor(geo_scope, order = F)national 1.68e-06
## strata(enum)enum=2:factor(geo_scope, order = F)international regional < 2e-16
## strata(enum)enum=3:factor(geo_scope, order = F)international regional 0.164814
## strata(enum)enum=4:factor(geo_scope, order = F)international regional 5.40e-06
## strata(enum)enum=5:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=6:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=7:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=8:factor(geo_scope, order = F)international regional NA
## strata(enum)enum=2:factor(geo_scope, order = F)global 0.696788
## strata(enum)enum=3:factor(geo_scope, order = F)global 0.063446
## strata(enum)enum=4:factor(geo_scope, order = F)global NA
## strata(enum)enum=5:factor(geo_scope, order = F)global NA
## strata(enum)enum=6:factor(geo_scope, order = F)global NA
## strata(enum)enum=7:factor(geo_scope, order = F)global NA
## strata(enum)enum=8:factor(geo_scope, order = F)global < 2e-16
## strata(enum)enum=2:factor(camp_goals, order = F)Institutional Reform 0.037957
## strata(enum)enum=3:factor(camp_goals, order = F)Institutional Reform 0.803966
## strata(enum)enum=4:factor(camp_goals, order = F)Institutional Reform 0.006148
## strata(enum)enum=5:factor(camp_goals, order = F)Institutional Reform 0.000144
## strata(enum)enum=6:factor(camp_goals, order = F)Institutional Reform 0.282636
## strata(enum)enum=7:factor(camp_goals, order = F)Institutional Reform < 2e-16
## strata(enum)enum=8:factor(camp_goals, order = F)Institutional Reform 0.238275
## strata(enum)enum=2:factor(camp_goals, order = F)Policy Change 0.000151
## strata(enum)enum=3:factor(camp_goals, order = F)Policy Change 1.46e-06
## strata(enum)enum=4:factor(camp_goals, order = F)Policy Change 0.398713
## strata(enum)enum=5:factor(camp_goals, order = F)Policy Change 1.25e-05
## strata(enum)enum=6:factor(camp_goals, order = F)Policy Change < 2e-16
## strata(enum)enum=7:factor(camp_goals, order = F)Policy Change 4.72e-16
## strata(enum)enum=8:factor(camp_goals, order = F)Policy Change 0.014161
## strata(enum)enum=2:factor(camp_goals, order = F)Territorial Secession 0.634629
## strata(enum)enum=3:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=4:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=5:factor(camp_goals, order = F)Territorial Secession 8.47e-10
## strata(enum)enum=6:factor(camp_goals, order = F)Territorial Secession < 2e-16
## strata(enum)enum=7:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=8:factor(camp_goals, order = F)Territorial Secession NA
## strata(enum)enum=2:factor(camp_goals, order = F)Autonomy 0.280394
## strata(enum)enum=3:factor(camp_goals, order = F)Autonomy 0.005806

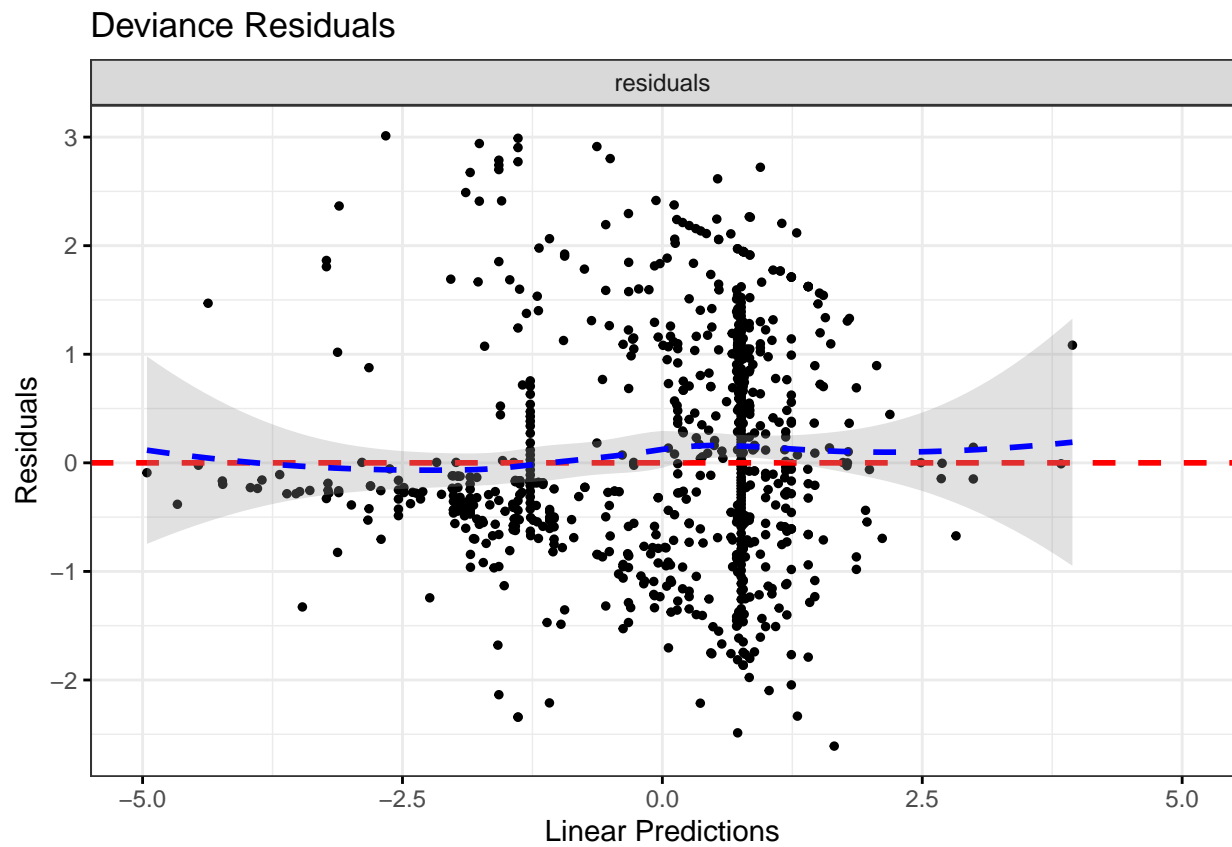
```

```

## strata(enum)enum=4:factor(camp_goals, order = F)Autonomy 0.001858
## strata(enum)enum=5:factor(camp_goals, order = F)Autonomy 0.000622
## strata(enum)enum=6:factor(camp_goals, order = F)Autonomy < 2e-16
## strata(enum)enum=7:factor(camp_goals, order = F)Autonomy NA
## strata(enum)enum=8:factor(camp_goals, order = F)Autonomy 0.479067
## strata(enum)enum=2:factor(camp_goals, order = F)Anti-occupation 1.000000
## strata(enum)enum=3:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=4:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=5:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=6:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=7:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=8:factor(camp_goals, order = F)Anti-occupation NA
## strata(enum)enum=2:factor(camp_goals, order = F)Unknown 0.287994
## strata(enum)enum=3:factor(camp_goals, order = F)Unknown 0.625862
## strata(enum)enum=4:factor(camp_goals, order = F)Unknown 0.140894
## strata(enum)enum=5:factor(camp_goals, order = F)Unknown < 2e-16
## strata(enum)enum=6:factor(camp_goals, order = F)Unknown NA
## strata(enum)enum=7:factor(camp_goals, order = F)Unknown 1.000000
## strata(enum)enum=8:factor(camp_goals, order = F)Unknown 0.000230
##
## Likelihood ratio test=439.8 on 128 df, p=< 2.2e-16
## n= 814, number of events= 492
## (21 observations deleted due to missingness)
ggcoxdiagnostics(pwp1, type = "deviance", linear.predictions = T) +
  labs(title = "Deviance Residuals",
        x = "Linear Predictions",
        y = "Residuals") +
  xlim(c(-5,5))

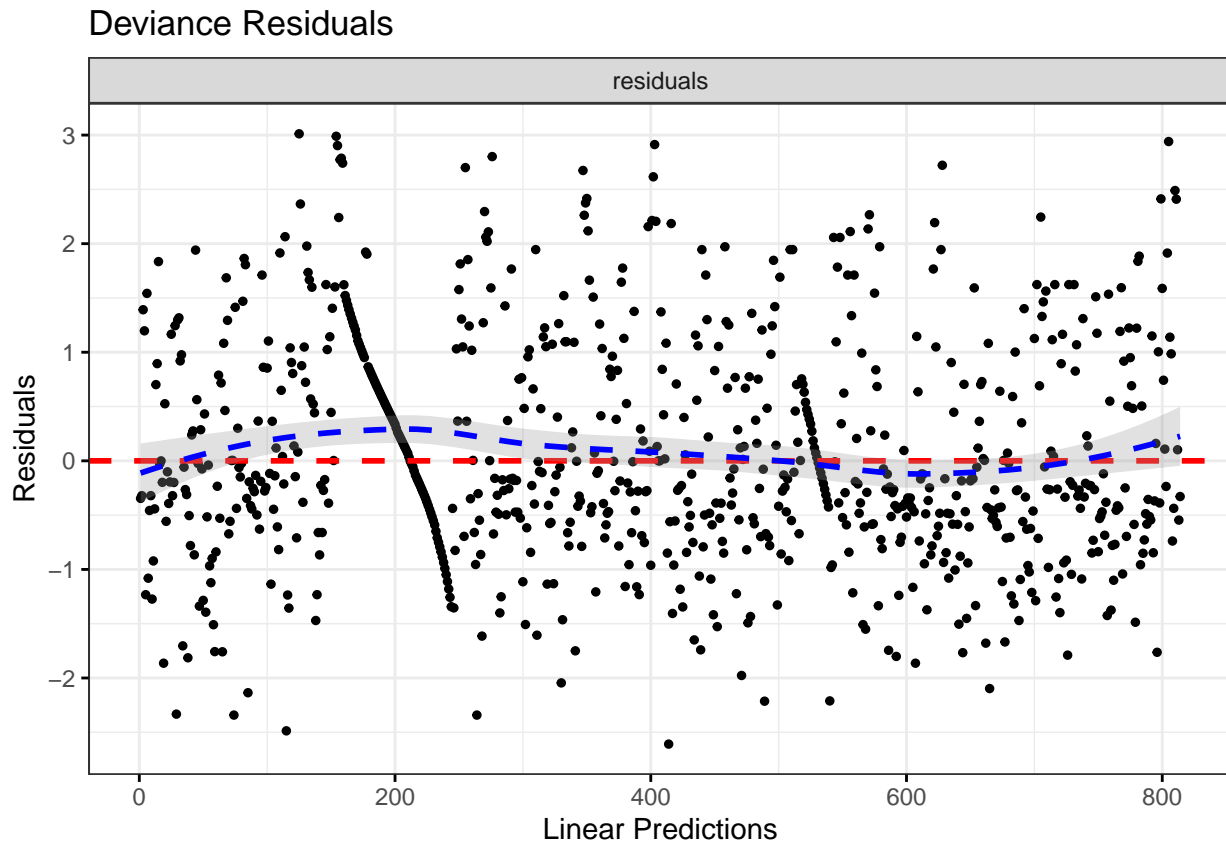
## `geom_smooth()` using formula 'y ~ x'
## Warning: Removed 10 rows containing non-finite values (stat_smooth).
## Warning: Removed 10 rows containing missing values (geom_point).

```



```
ggcoxdiagnostics(pwp1, type = "deviance", linear.predictions = F) +  
  labs(title = "Deviance Residuals",  
        x = "Linear Predictions",  
        y = "Residuals")
```

```
## `geom_smooth()` using formula 'y ~ x'
```



Chilling Effect

```
df_chill <- df_clean %>%
  filter(target_3 %in% c("COP", "GOV", "JUD", "MIL", "LLY", "SPY", "LEG", "TOP")) %>%
  dplyr::mutate(repress = as.double(st_posture) %in% 5:7) %>%
  group_by(repress) %>%
  dplyr::mutate(repress_id = as.double(row_number())) %>%
  dplyr::mutate(repress_id = if_else(repress, repress_id, 0)) %>%
  ungroup()
```

```
df_chill_condense <- df_chill[, c("country_name", "date")]
# functions to tell if events fell within a year of a repressive response
prior_detector <- function(repress_id, date, country){
  temp <- df_chill_condense %>%
    filter(country_name == country)
  dates <- temp$date
  fun <- sum(date - 365 < dates & date > dates)
  num <- ifelse(repress_id > 0, fun, 0)
  return(num)
}

# near_detector <- function(repress_id, date, country){
#   temp <- df_chill_condense %>%
#     filter(country_name == country)
#   dates <- temp$date
```

```

# fun1 <- sum(date - 365 < dates & date > dates)
# fun2 <- sum(date < dates & date + 365 > dates)
# num1 <- ifelse(repress_id > 0, fun1, 0)
# num2 <- ifelse(repress_id > 0, fun2, 0)
# return(list(num1, num2))
# }

post_detector <- function(repress_id, date, country){
  temp <- df_chill_condense %>%
    filter(country_name == country)
  dates <- temp$date
  fun <- sum(date < dates & date + 365 > dates)
  num <- ifelse(repress_id > 0, fun, 0)
  return(num)
}

prior_detector <- Vectorize(prior_detector)
post_detector <- Vectorize(post_detector)

# vectorize? Takes a couple minutes to run
df_chill_final <- df_chill %>%
  dplyr::mutate(prior = prior_detector(repress_id, date, country_name)) %>%
  dplyr::mutate(post = post_detector(repress_id, date, country_name))

df_chill_fn <- df_chill_final %>%
  filter(repress_id > 0)

# chilling effect eda
df_chill_eda <- df_chill_fn %>%
  pivot_longer(cols = c("prior", "post"),
               names_to = "Timing",
               values_to = "freq_protests")

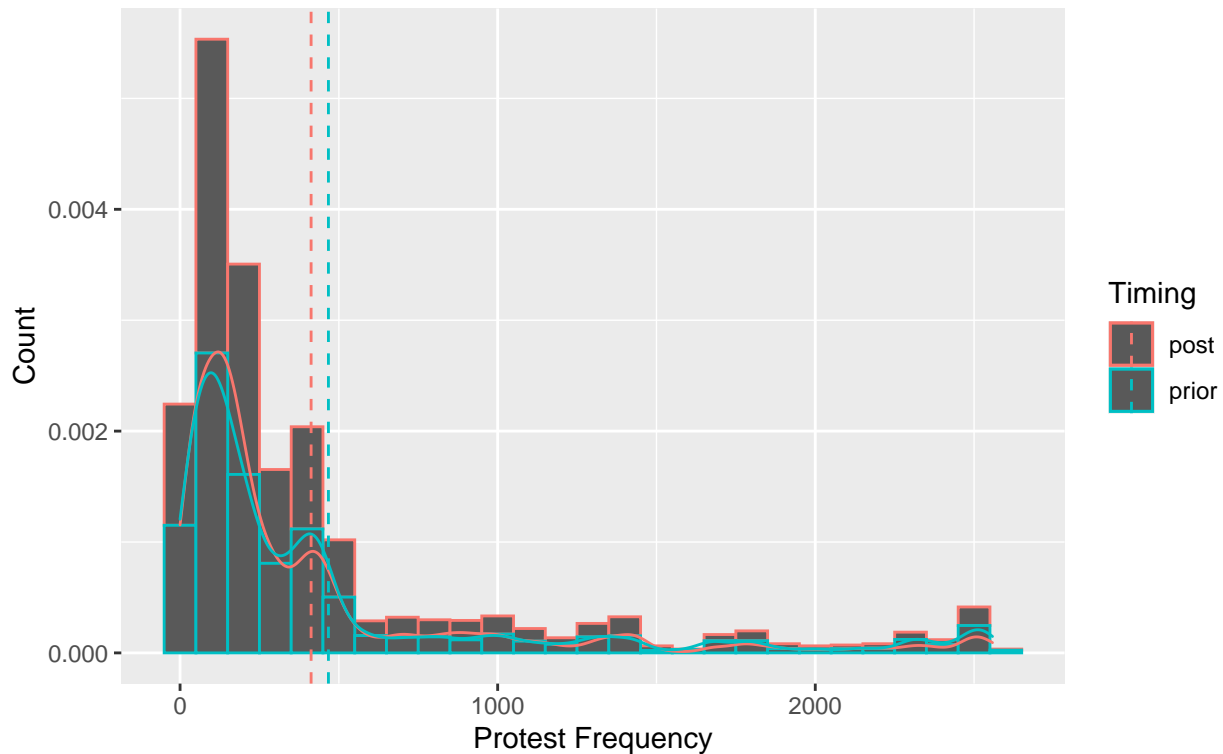
mu <- ddply(df_chill_eda, "Timing", summarise, grp.mean = mean(freq_protests))
mu

## Timing grp.mean
## 1 post 412.6197
## 2 prior 467.1515

ggplot(df_chill_eda, aes(x = freq_protests, color = Timing)) +
  geom_histogram(aes(y = ..density..), binwidth = 100) +
  geom_density(alpha = 0.2) +
  geom_vline(data = mu, aes(xintercept = grp.mean, color = Timing),
             linetype = "dashed") +
  labs(title = "Higher Incidence of Low Protest Frequencies Following Severe Responses",
       subtitle = "However, Densities Look Similar and Difference Between Means is Moderate",
       x = "Protest Frequency",
       y = "Count")

```

Higher Incidence of Low Protest Frequencies Following Severe Response However, Densities Look Similar and Difference Between Means is Moderate



```
# create continent variable
df_chill_glm <- df_chill_eda %>%
  dplyr::mutate(region = case_when(country_name %in% c("algeria", "egypt",
    "kenya", "libya",
    "madagascar", "morocco",
    "sierra_leone", "south_sudan",
    "sudan", "tanzania", "tunisia") ~ "Africa",
    country_name %in% c("iraq", "jordan", "syria",
    "turkey", "yemen") ~ "Middle East",
    country_name %in% c("bahrain", "china",
    "india", "pakistan",
    "south_korea", "uzbekistan") ~ "Asia",
    country_name %in% c("estonia", "ukraine") ~ "Europe",
    TRUE ~ "Americas")) # Mexico, U.S.
```

```
# Poisson Model
m_chill_poiss <- glm(freq_protests ~ Timing + region + geo_scope +
  actor_id + camp_goals + tactical_choice + st_posture + year,
  data = df_chill_glm, family = poisson)
summary(m_chill_poiss)
```

```
##
## Call:
## glm(formula = freq_protests ~ Timing + region + geo_scope + actor_id +
##   camp_goals + tactical_choice + st_posture + year, family = poisson,
##   data = df_chill_glm)
##
```

```

## Deviance Residuals:
##      Min       1Q   Median       3Q      Max
## -50.212  -10.137   -1.440    6.562   56.440
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)    -1.870e+02  2.600e-01 -719.22  <2e-16 ***
## Timingprior      1.255e-01  9.395e-04  133.53  <2e-16 ***
## regionAmericas  -1.159e-01  3.550e-03  -32.63  <2e-16 ***
## regionAsia       2.401e-01  1.893e-03  126.87  <2e-16 ***
## regionEurope    -6.233e-01  9.710e-03  -64.19  <2e-16 ***
## regionMiddle East  7.512e-01  1.525e-03  492.47  <2e-16 ***
## geo_scope.L      2.829e-01  5.403e-03   52.35  <2e-16 ***
## geo_scope.Q      1.113e-01  4.541e-03   24.51  <2e-16 ***
## geo_scope.C     -8.086e-02  4.321e-03  -18.71  <2e-16 ***
## geo_scope^4     -5.103e-02  3.047e-03  -16.75  <2e-16 ***
## actor_idnon-state -1.481e-01  1.022e-02  -14.50  <2e-16 ***
## actor_idinternational -6.603e-01  1.655e-02  -39.89  <2e-16 ***
## actor_idnonaligned -1.037e+00  8.049e-02  -12.89  <2e-16 ***
## camp_goalsInstitutional Reform -6.598e-01  2.158e-03 -305.81  <2e-16 ***
## camp_goalsPolicy Change -7.382e-01  1.868e-03 -395.13  <2e-16 ***
## camp_goalsTerritorial Secession -5.405e-01  2.226e-03 -242.84  <2e-16 ***
## camp_goalsAutonomy -1.232e+00  2.468e-03 -499.33  <2e-16 ***
## camp_goalsAnti-occupation -8.811e-01  2.037e-02  -43.26  <2e-16 ***
## camp_goalsUnknown -6.634e-01  1.700e-03 -390.37  <2e-16 ***
## tactical_choice.L -1.071e-01  9.092e-04 -117.75  <2e-16 ***
## tactical_choice.Q  2.110e-02  1.831e-03   11.52  <2e-16 ***
## st_posture.L     1.965e-01  1.589e-03  123.66  <2e-16 ***
## st_posture.Q     9.451e-02  1.212e-03   77.99  <2e-16 ***
## year            9.619e-02  1.294e-04  743.54  <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for poisson family taken to be 1)
##
##      Null deviance: 5711207  on 10313  degrees of freedom
## Residual deviance: 2028572  on 10290  degrees of freedom
##      (62 observations deleted due to missingness)
## AIC: 2102719
##
## Number of Fisher Scoring iterations: 5
# significant evidence of overdispersion
dispersiontest(m_chill_pois)

##
## Overdispersion test
##
## data:  m_chill_pois
## z = 53.609, p-value < 2.2e-16
## alternative hypothesis: true dispersion is greater than 1
## sample estimates:
## dispersion
## 199.5395

```


Negative Binomial Model

```
m_chill_nb <- glm.nb(freq_protests ~ Timing + region + geo_scope +
                      actor_id + camp_goals + tactical_choice + st_posture + year,
                      data = df_chill_glm)
df_chill_glm
```

```
## # A tibble: 10,376 x 38
```

```
##   country_name date      geo_scope localities actor_id cameo_actor_3
##   <chr>         <date>    <ord>    <chr>      <fct>    <chr>
## 1 algeria      1991-05-29 regional Algiers    non-sta~ OPP
## 2 algeria      1991-05-29 regional Algiers    non-sta~ OPP
## 3 algeria      1991-06-04 regional Algiers    non-sta~ ACT
## 4 algeria      1991-06-04 regional Algiers    non-sta~ ACT
## 5 algeria      1991-06-04 regional Suk-Ahras  non-sta~ REB
## 6 algeria      1991-06-04 regional Suk-Ahras  non-sta~ REB
## 7 algeria      1991-06-24 regional Bordj el ~ non-sta~ REB
## 8 algeria      1991-06-24 regional Bordj el ~ non-sta~ REB
## 9 algeria      1991-06-26 local    May 1st S~ non-sta~ REB
## 10 algeria     1991-06-26 local    May 1st S~ non-sta~ REB
## # ... with 10,366 more rows, and 32 more variables: cameo_actor_6 <chr>,
## #   cameo_actor_9 <chr>, event_actor_list <chr>, verb_10 <ord>, verb_100 <dbl>,
## #   verb_1000 <dbl>, target_3 <chr>, target_6 <chr>, target_9 <chr>,
## #   camp_goals <fct>, tactical_choice <ord>, nv_categ <fct>, nc_type <fct>,
## #   nv_commission <fct>, nv_concentration <fct>, nv_tactic_ns <chr>,
## #   v_tactic_ns <chr>, st_posture <ord>, damage <ord>, econ_impact <ord>,
## #   econ_impact_aux <chr>, year <dbl>, month <dbl>, day <dbl>,
## #   fatal_casu <dbl>, injuries <dbl>, num_partic_event <dbl>, repress <lgl>,
## #   repress_id <dbl>, Timing <chr>, freq_protests <dbl>, region <chr>
```

```
summary(m_chill_nb)
```

```
##
```

```
## Call:
```

```
## glm.nb(formula = freq_protests ~ Timing + region + geo_scope +
##       actor_id + camp_goals + tactical_choice + st_posture + year,
##       data = df_chill_glm, init.theta = 1.585501507, link = log)
##
```

```
## Deviance Residuals:
```

```
##      Min       1Q   Median       3Q      Max
## -4.5755  -0.9067  -0.1776   0.4101   3.9819
##
```

```
## Coefficients:
```

```
##               Estimate Std. Error z value Pr(>|z|)
## (Intercept)    -1.640e+02  2.696e+00 -60.837  < 2e-16 ***
## Timingprior    -3.620e-03  1.570e-02  -0.231  0.81758
## regionAmericas -9.872e-02  4.027e-02  -2.451  0.01424 *
## regionAsia      2.435e-01  2.315e-02  10.519  < 2e-16 ***
## regionEurope   -6.373e-01  8.045e-02  -7.921  2.36e-15 ***
## regionMiddle East 5.817e-01  2.077e-02  28.012  < 2e-16 ***
## geo_scope.L      2.144e-01  7.232e-02  2.964  0.00304 **
## geo_scope.Q       7.751e-02  6.171e-02  1.256  0.20909
## geo_scope.C      -7.428e-02  5.822e-02  -1.276  0.20201
## geo_scope^4       4.251e-02  4.336e-02  0.980  0.32700
## actor_idnon-state -4.095e-02  1.380e-01  -0.297  0.76663
```

```

## actor_idinternational      -4.678e-01  1.794e-01  -2.607  0.00913 **
## actor_idnonaligned        -1.035e+00  5.846e-01  -1.770  0.07666 .
## camp_goalsInstitutional Reform -7.642e-01  2.977e-02 -25.665 < 2e-16 ***
## camp_goalsPolicy Change     -7.669e-01  2.638e-02 -29.072 < 2e-16 ***
## camp_goalsTerritorial Secession -4.737e-01  3.220e-02 -14.713 < 2e-16 ***
## camp_goalsAutonomy         -1.063e+00  3.215e-02 -33.070 < 2e-16 ***
## camp_goalsAnti-occupation    -8.326e-01  2.564e-01  -3.247  0.00116 **
## camp_goalsUnknown          -6.719e-01  2.540e-02 -26.449 < 2e-16 ***
## tactical_choice.L          -5.087e-02  1.633e-02  -3.115  0.00184 **
## tactical_choice.Q          -1.848e-02  2.375e-02  -0.778  0.43664
## st_posture.L               1.519e-01  2.171e-02   6.997  2.61e-12 ***
## st_posture.Q               5.189e-02  1.598e-02   3.247  0.00117 **
## year                       8.479e-02  1.342e-03  63.158 < 2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for Negative Binomial(1.5855) family taken to be 1)
##
## Null deviance: 23991 on 10313 degrees of freedom
## Residual deviance: 11427 on 10290 degrees of freedom
## (62 observations deleted due to missingness)
## AIC: 137254
##
## Number of Fisher Scoring iterations: 1
##
##
## Theta: 1.5855
## Std. Err.: 0.0206
##
## 2 x log-likelihood: -137203.5170

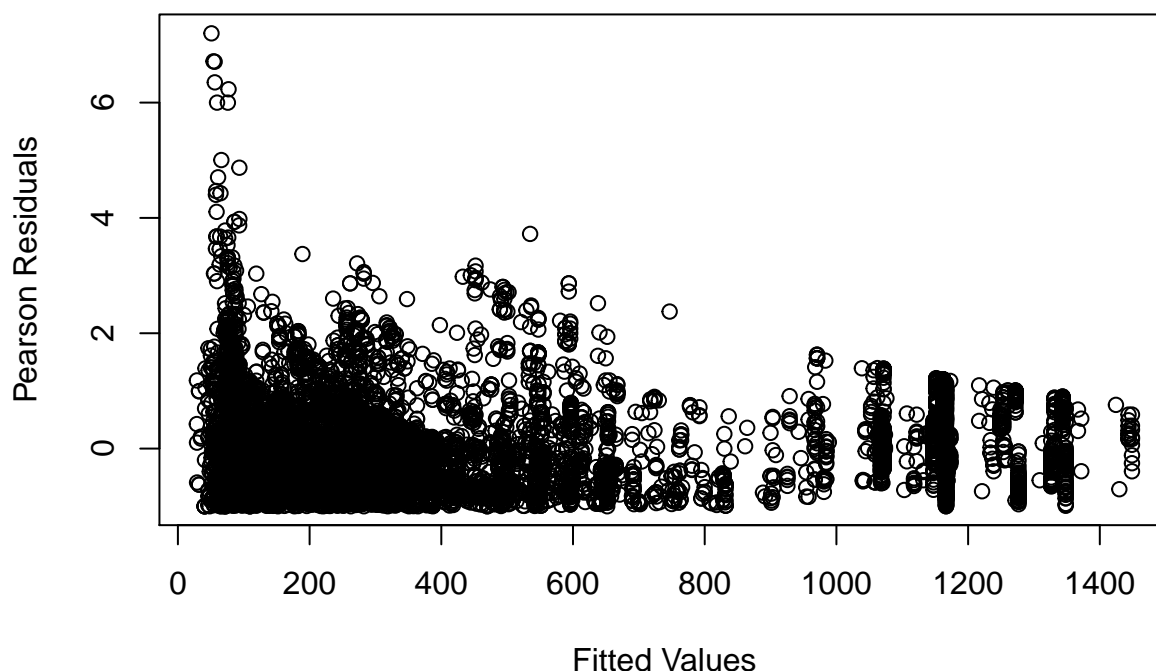
```

```

plot(m_chill_nb$fitted.values,m_chill_nb$residuals, xlab = "Fitted Values", ylab = "Pearson Residuals",

```

Residual Plot Shows No Pattern in Residuals

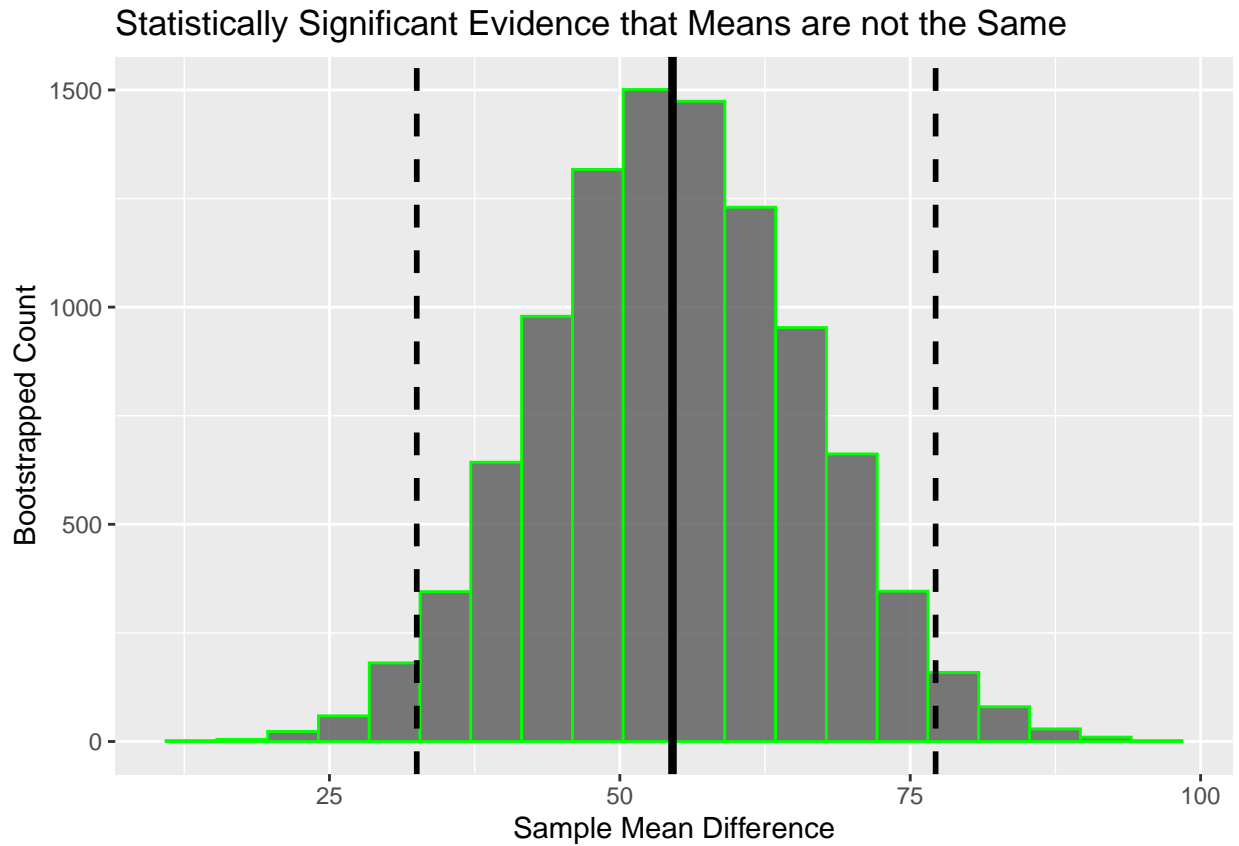


```
# t test for difference between two populations, may be biased  
t.test(x = df_chill_fn$prior, y = df_chill_fn$post)
```

```
##  
##  Welch Two Sample t-test  
##  
## data:  df_chill_fn$prior and df_chill_fn$post  
## t = 4.7806, df = 10217, p-value = 1.772e-06  
## alternative hypothesis: true difference in means is not equal to 0  
## 95 percent confidence interval:  
##  32.17188 76.89173  
## sample estimates:  
## mean of x mean of y  
## 467.1515 412.6197
```

```
# bootstrap the mean difference of the two samples  
bootstrapped <- two.boot(df_chill_fn$prior, df_chill_fn$post, mean, 10000)  
  
bootstrapped_mean_diff <- data.frame(bootstrapped$t)  
colnames(bootstrapped_mean_diff) <- "mean_diffs"  
  
ggplot(bootstrapped_mean_diff, aes(x = mean_diffs)) +  
  geom_histogram(color = "green", bins = 20, alpha = 0.8) +  
  geom_vline(xintercept = bootstrapped$t0, size = 1.5) +  
  geom_vline(xintercept = quantile(bootstrapped_mean_diff$mean_diffs, 0.025), size = 1,  
             linetype = "dashed") +  
  geom_vline(xintercept = quantile(bootstrapped_mean_diff$mean_diffs, 0.975), size = 1,  
             linetype = "dashed") +  
  labs(title = "Statistically Significant Evidence that Means are not the Same",  
       x = "Sample Mean Difference",
```

```
y = "Bootstrapped Count")
```



References

- [1] Chenoweth E, Pinckney J, Lewis O. "Days of rage: Introducing the NAVCO 3.0 dataset." SAGE. Journal of Peace Research. 55 (4): 524-534.
- [2] Huet-Vaughn E. "Quiet Riot: Estimating a Causal Effect of Protest Violence." Working Paper. 1-41.
- [3] Chenoweth E.
- [4] McAdam D. "Tactical Innovation and the Pace of Insurgency." American Sociological Association. American Sociological Review. 48 (6): 735-754.
- [5]
- [6] Danieli C, Sheppard T, Costello R, Dixon W, Abrahamowicz M. "Modeling of cumulative effects of time-varying drug exposures on within-subject changes in a continuous outcome." SSMR. 29(9): 2554-2568.