

Replication Project

Daijin Zhou 23364635

Paper title:

Movement versus Party: The Electoral Effects
of Anti-Far Right Protests in Greece

Background of Research Question

- The way social protest affects electoral outcomes remains a lacuna. This article helps fill this gap by examining how social protest against far right actors affects their electoral standing.
- The article uses the findings to discuss the varying impact of protest across electoral cycles.
- The research is divided into two phases. At the first stage of our statistical modeling, linear regression models were used to explain the electoral results of the GD per municipality, for each national election beginning May 2012. At the second stage of study, they investigated more refined models, to test the key protest dynamics of tango and timing, which we expect drive the electoral results of the GD.

First stage of study

- Main Research Question
 - How do social protests against far right actors affect their electoral standing?
- Hypothesis
 - H0: Social protests against far right actors do NOT affect “electoral results of the GD.
 - H1: Social protests against far right actors affect “electoral results of the GD.
- Data

- Variable description
 - Dependent variable: the main dependent variable (DV) is the electoral results of GD, measured as the percentage of votes received by the GD per municipality.
 - Independent variable: the main IV is the trichotomous variable of anti-far right protest described above.

- Replication of codes and table 1

```

1 # Table I: Basic linear models explaining electoral results of the GD
  (Regions as random effects; DV is the electoral results)
2 lmer12oMay <- lmer(ekloges_PERCENTAGE_May_2012_GD ~ ekloges_
  PERCENTAGE_2009_GD + N_AntifaEvent_notzero2_Oc09_May12 + avg_age
  + log_population + prop_ksenoi + (1|code_perif), data=dta)
3 lmer12o <- lmer(ekloges_PERCENTAGE_Jun_2012_GD ~ ekloges_
  PERCENTAGE_2009_GD + N_AntifaEvent_notzero2_Oc09_Jul12 + avg_
  age + log_population + prop_ksenoi + (1|code_perif), data=dta)
4 lmer15o <- lmer(ekloges_PERCENTAGE_Jan_2015_GD ~ ekloges_PERCENTAGE_
  Jun_2012_GD + N_AntifaEvent_notzero2_Jul12_Ja15 + avg_age +
  log_population + prop_ksenoi + (1|code_perif), data=dta)
5 lmer_15So <- lmer(ekloges_PERCENTAGE_Sep_2015_GD ~ ekloges_
  PERCENTAGE_Jan_2015_GD + N_AntifaEvent_notzero2_Ja15_Sp15 + avg_
  age + log_population + prop_ksenoi + (1|code_perif), data=dta)
6 lmer19o <- lmer(ekloges_PERCENTAGE_Jul_2019_GD ~ ekloges_PERCENTAGE_
  Sep_2015_GD + N_AntifaEvent_notzero2_Sp15_Ju19 + avg_age +
  log_population + prop_ksenoi + (1|code_perif), data=dta)
7 tab_model(lmer12oMay, lmer12o, lmer15o, lmer_15So, lmer19o)
8 lmer12oMay <- NULL; lmer12o <- NULL; lmer15o <- NULL; lmer_15So <-
  NULL; lmer19o <- NULL # housekeeping

```

| | ekloges_PERCENTAGE_May_2012_GD | | | ekloges_PERCENTAGE_Jun_2012_GD | | | ekloges_PERCENTAGE_Jan_2015_GD | | | ekloges_PERCENTAGE_Sep_2015_GD | | | ekloges_PERCENTAGE_Jul_2019_GD | | |
|--|--------------------------------|---------------|------------------|--------------------------------|---------------|------------------|--------------------------------|---------------|------------------|--------------------------------|--------------|------------------|--------------------------------|--------------|------------------|
| Predictors | Estimates | CI | p | Estimates | CI | p | Estimates | CI | p | Estimates | CI | p | Estimates | CI | p |
| (Intercept) | 5.59 | 1.04 – 10.13 | 0.016 | 5.47 | 1.58 – 9.36 | 0.006 | -3.45 | -5.60 – -1.30 | 0.002 | 3.20 | 1.15 – 5.25 | 0.002 | 1.08 | -0.14 – 2.29 | 0.082 |
| ekloges_PERCENTAGE_2009_GD | 5.68 | 3.77 – 7.58 | <0.001 | 5.38 | 3.75 – 7.02 | <0.001 | | | | | | | | | |
| N_AntifaEvent_notzero2_Oc09_May12 [1] | -0.75 | -1.36 – -0.15 | 0.015 | | | | | | | | | | | | |
| N_AntifaEvent_notzero2_Oc09_May12 [2] | -1.09 | -1.82 – -0.35 | 0.004 | | | | | | | | | | | | |
| avg_age | -0.07 | -0.14 – -0.00 | 0.044 | -0.07 | -0.13 – -0.01 | 0.022 | 0.03 | -0.01 – 0.06 | 0.149 | -0.03 | -0.06 – 0.00 | 0.059 | -0.02 | -0.04 – 0.00 | 0.100 |
| log_population | 0.24 | 0.01 – 0.47 | 0.037 | 0.27 | 0.08 – 0.47 | 0.005 | 0.33 | 0.22 – 0.44 | <0.001 | -0.05 | -0.15 – 0.05 | 0.350 | -0.01 | -0.08 – 0.05 | 0.632 |
| prop_ksenoi | 0.07 | 0.02 – 0.12 | 0.004 | 0.03 | -0.01 – 0.07 | 0.182 | 0.01 | -0.01 – 0.03 | 0.386 | 0.03 | 0.01 – 0.05 | 0.015 | 0.01 | -0.01 – 0.02 | 0.325 |
| N_AntifaEvent_notzero2_Oc09_Ju12 [1] | | | | -0.64 | -1.15 – -0.14 | 0.013 | | | | | | | | | |
| N_AntifaEvent_notzero2_Oc09_Ju12 [2] | | | | -0.81 | -1.40 – -0.23 | 0.007 | | | | | | | | | |
| ekloges_PERCENTAGE_Jun_2012_GD | | | | | | | 0.76 | 0.71 – 0.82 | <0.001 | | | | | | |
| N_AntifaEvent_notzero2_Ju12_Ja15 [1] | | | | | | | -0.00 | -0.29 – 0.28 | 0.974 | | | | | | |
| N_AntifaEvent_notzero2_Ju12_Ja15 [2] | | | | | | | -0.36 | -0.66 – -0.06 | 0.019 | | | | | | |
| ekloges_PERCENTAGE_Jan_2015_GD | | | | | | | | | | 0.90 | 0.84 – 0.96 | <0.001 | | | |
| N_AntifaEvent_notzero2_Ja15_Sp15 [1] | | | | | | | | | | 0.08 | -0.29 – 0.45 | 0.668 | | | |
| N_AntifaEvent_notzero2_Ja15_Sp15 [2] | | | | | | | | | | 0.01 | -0.37 – 0.40 | 0.942 | | | |
| ekloges_PERCENTAGE_Sep_2015_GD | | | | | | | | | | | | | 0.38 | 0.34 – 0.41 | <0.001 |
| N_AntifaEvent_notzero2_Sp15_Ju19 [1] | | | | | | | | | | | | | -0.05 | -0.19 – 0.09 | 0.503 |
| N_AntifaEvent_notzero2_Sp15_Ju19 [2] | | | | | | | | | | | | | -0.03 | -0.21 – 0.16 | 0.773 |
| Random Effects | | | | | | | | | | | | | | | |
| σ^2 | 2.58 | | | 1.83 | | | 0.62 | | | 0.56 | | | 0.17 | | |
| τ_{00} | 2.34 | code_perif | | 2.10 | code_perif | | 0.36 | code_perif | | 0.36 | code_perif | | 0.24 | code_perif | |
| ICC | 0.48 | | | 0.53 | | | 0.37 | | | 0.39 | | | 0.58 | | |
| N | 74 | code_perif | | 74 | code_perif | | 74 | code_perif | | 74 | code_perif | | 74 | code_perif | |
| Observations | 322 | | | 322 | | | 322 | | | 322 | | | 322 | | |
| Marginal R ² / Conditional R ² | 0.207 / 0.584 | | | 0.211 / 0.633 | | | 0.787 / 0.865 | | | 0.806 / 0.881 | | | 0.635 / 0.846 | | |

- Results (Original Table 1)

- Model 1: A linear mixed-effects model was built for each of the national elections from May 2012 onward. These results are not only statistically, but also practically, significant: with a national yield of around 7% in the elections of May 2012, the impact of frequent anti-far right protests corresponds to a reduction of around one-sixth of the electoral power of GD.

Model 2: The effect of anti-far right protest is similar to that of Model 1: municipalities with protest events yield significantly lower results for the GD compared to the municipalities with no events. our analysis shows a direct relationship between social movement mobilization and electoral outcomes: protests against the far right took a toll on its electoral result.

- My extension

- Extension idea: Fit linear regression model instead of mixed effects models.

```

1 # Fit linear regression model instead of mixed effects models
2 lm12oMay <- lm(ekloges_PERCENTAGE_May_2012_GD ~ ekloges_PERCENTAGE_2009_GD + N_AntifaEvent_notzero2_Oc09_May12 + avg_age + log_population + prop_ksenoi, data=dta)

```

```

3 lm12o <- lm(ekloges_PERCENTAGE_Jun_2012_GD ~ ekloges_PERCENTAGE_2009
  _GD + N_AntifaEvent_notzero2_Oc09_Ju12 + avg_age + log_population
  + prop_ksenoi , data=dta)
4 lm15o <- lm(ekloges_PERCENTAGE_Jan_2015_GD ~ ekloges_PERCENTAGE_Jun_2012
  _GD + N_AntifaEvent_notzero2_Ju12_Ja15 + avg_age + log_population
  + prop_ksenoi , data=dta)
5 lm_15So <- lm(ekloges_PERCENTAGE_Sep_2015_GD ~ ekloges_PERCENTAGE_Jan_
  2015_GD + N_AntifaEvent_notzero2_Ja15_Sp15 + avg_age + log_population
  + prop_ksenoi , data=dta)
6 lm19o <- lm(ekloges_PERCENTAGE_Jul_2019_GD ~ ekloges_PERCENTAGE_Sep_2015
  _GD + N_AntifaEvent_notzero2_Sp15_Ju19 + avg_age + log_population
  + prop_ksenoi , data=dta)
7
8 # Generate LaTeX table
9 stargazer(lm12oMay, lm12o, lm15o, lm_15So, lm19o,
10           title="Extension for Linear Regression Models",
11           align=TRUE,
12           type="latex",
13           out="lm_results_1.tex",
14           font.size="small"
15 )
16
17 #####

```

- Results: It can be seen from the regression results that the coefficients of Model 1 and Model 2 are statistically significant, but the R square is small, indicating that the model fitting effect is not good.

Second stage of study - Tango

- Branching Research Question
 - How do Tango events affect “electoral results of the GD?”
- Hypothesis
 - H0: Tango events do NOT affect “electoral results of the GD.
 - H1: Tango events affect “electoral results of the GD.
- Data
 - Variable description
 - Dependent variable: the main dependent variable (DV) is the electoral results of GD, measured as the percentage of votes received by the GD per municipality.
 - Independent variable: The main IV is a binary variable—Tango events (Yes 1 or No 0)
 - Tango events: events especially against for GD events

Table 1: Extension for Linear Regression Models

| | <i>Dependent variable:</i> | | | | |
|------------------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|
| | May_2012 (1) | Jun_2012 (2) | Jan_2015 (3) | Sep_2015 (4) | Jul_2019 (5) |
| ekloges_PERCENTAGE_2009_GD | 7.746*** (0.986) | 7.017*** (0.879) | | | |
| N_AntifaEvent_notzero2_Oc09_May121 | -0.989** (0.382) | | | | |
| N_AntifaEvent_notzero2_Oc09_May122 | -1.315*** (0.458) | | | | |
| N_AntifaEvent_notzero2_Oc09_Ju121 | | -0.670** (0.338) | | | |
| N_AntifaEvent_notzero2_Oc09_Ju122 | | -1.208*** (0.387) | | | |
| ekloges_PERCENTAGE_Jun_2012_GD | | | 0.758*** (0.025) | | |
| N_AntifaEvent_notzero2_Ju12_Ja151 | | | -0.017 (0.168) | | |
| N_AntifaEvent_notzero2_Ju12_Ja152 | | | -0.501*** (0.168) | | |
| ekloges_PERCENTAGE_Jan_2015_GD | | | | 0.950*** (0.028) | |
| N_AntifaEvent_notzero2_Ja15_Sp151 | | | | 0.051 (0.219) | |
| N_AntifaEvent_notzero2_Ja15_Sp152 | | | | 0.237 (0.218) | |
| ekloges_PERCENTAGE_Sep_2015_GD | | | | | 0.377*** (0.017) |
| N_AntifaEvent_notzero2_Sp15_Ju191 | | | | | -0.044 (0.094) |
| N_AntifaEvent_notzero2_Sp15_Ju192 | | | | | -0.009 (0.116) |
| avg_age | -0.010 (0.038) | -0.015 (0.034) | 0.030* (0.017) | -0.032** (0.016) | -0.051*** (0.011) |
| log_population | 0.415*** (0.120) | 0.449*** (0.107) | 0.385*** (0.057) | -0.213*** (0.053) | -0.046 (0.035) |
| prop_ksenoi | 0.109*** (0.026) | 0.069*** (0.023) | -0.006 (0.012) | 0.032*** (0.011) | -0.005 (0.008) |
| Constant | 0.480 (2.384) | 0.824 (2.122) | -4.009*** (1.052) | 4.413*** (1.025) | 2.991*** (0.669) |
| Observations | 322 | 322 | 322 | 322 | 322 |
| R ² | 0.308 | 0.311 | 0.794 | 0.817 | 0.667 |
| Adjusted R ² | 0.295 | 0.298 | 0.790 | 0.813 | 0.660 |
| Residual Std. Error (df = 315) | 2.192 | 1.958 | 0.976 | 0.952 | 0.619 |
| F Statistic (df = 6; 315) | 23.407*** | 23.673*** | 201.749*** | 233.657*** | 104.944*** |

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Standard errors in parentheses.

- Replication of codes and table 2

```

1 lmer12MT01 <- lmer(ekloges_PERCENTAGE_May_2012_GD ~ ekloges_
  PERCENTAGE_2009_GD + N_AntifaEvent_Oc09_May12_Tango01 + avg_age +
  log_population + prop_ksenoi + (1|code_perif), data=dta)
2 lmer15T01 <- lmer(ekloges_PERCENTAGE_Jan_2015_GD ~ ekloges_
  PERCENTAGE_Jun_2012_GD + N_AntifaEvent_Ju12_Ja15_Tango01 + avg_
  age + log_population + prop_ksenoi + (1|code_perif), data=dta)
3 lmer19T01 <- lmer(ekloges_PERCENTAGE_Jul_2019_GD ~ ekloges_
  PERCENTAGE_Sep_2015_GD + N_AntifaEvent_Sp15_Ju19_Tango01 + avg_
  age + log_population + prop_ksenoi + (1|code_perif), data=dta)
4 tab_model(lmer12MT01, lmer15T01, lmer19T01)
5 lmer12MT01 <- NULL; lmer15T01 <- NULL; lmer19T01 <- NULL #
  housekeeping

```

| | ekloges_PERCENTAGE_May_2012_GD | | | ekloges_PERCENTAGE_Jan_2015_GD | | | ekloges_PERCENTAGE_Jul_2019_GD | | |
|--|--------------------------------|---------------|------------------|--------------------------------|---------------|------------------|--------------------------------|--------------|------------------|
| Predictors | Estimates | CI | p | Estimates | CI | p | Estimates | CI | p |
| (Intercept) | 5.97 | 1.42 – 10.53 | 0.010 | -3.54 | -5.72 – -1.37 | 0.001 | 1.00 | -0.21 – 2.22 | 0.104 |
| ekloges PERCENTAGE 2009 GD | 5.75 | 3.84 – 7.67 | <0.001 | | | | | | |
| N AntifaEvent Oc09 May12 Tango01 | -0.91 | -1.64 – -0.18 | 0.015 | | | | | | |
| avg age | -0.07 | -0.14 – 0.00 | 0.054 | 0.03 | 0.00 – 0.07 | 0.047 | -0.02 | -0.03 – 0.00 | 0.110 |
| log population | 0.17 | -0.04 – 0.39 | 0.117 | 0.28 | 0.18 – 0.39 | <0.001 | -0.01 | -0.07 – 0.05 | 0.684 |
| prop ksenoi | 0.07 | 0.02 – 0.12 | 0.004 | 0.01 | -0.01 – 0.04 | 0.231 | 0.01 | -0.01 – 0.02 | 0.281 |
| ekloges PERCENTAGE Jun 2012 GD | | | | 0.77 | 0.71 – 0.82 | <0.001 | | | |
| N AntifaEvent Ju12 Ja15 Tango01 | | | | -0.09 | -0.34 – 0.16 | 0.486 | | | |
| ekloges PERCENTAGE Sep 2015 GD | | | | | | | 0.37 | 0.34 – 0.41 | <0.001 |
| N AntifaEvent Sp15 Ju19 Tango01 | | | | | | | -0.05 | -0.22 – 0.12 | 0.533 |
| Random Effects | | | | | | | | | |
| σ^2 | 2.63 | | | 0.63 | | | 0.17 | | |
| τ_{00} | 2.31 code_perif | | | 0.38 code_perif | | | 0.24 code_perif | | |
| ICC | 0.47 | | | 0.38 | | | 0.58 | | |
| N | 74 code_perif | | | 74 code_perif | | | 74 code_perif | | |
| Observations | 322 | | | 322 | | | 322 | | |
| Marginal R ² / Conditional R ² | 0.209 / 0.579 | | | 0.783 / 0.865 | | | 0.637 / 0.847 | | |

- Results (Original Table 2)

- The results (Original Table 2) suggest that, for the elections of May 2012, municipalities with at least one tango event had much lower electoral outcomes for the GD compared to municipalities with no tango events.

- My extension

- Extension idea: Fit linear regression model instead of mixed effects models.

```

1 # Fit linear regression model instead of mixed effects models
2 lm12MT01 <- lm(ekloges_PERCENTAGE_May_2012_GD ~ ekloges_PERCENTAGE_2009
  _GD + N_AntifaEvent_Oc09_May12_Tango01 + avg_age + log_population +
  prop_ksenoi, data=dta)
3 lm15T01 <- lm(ekloges_PERCENTAGE_Jan_2015_GD ~ ekloges_PERCENTAGE_Jun_
  2012_GD + N_AntifaEvent_Jul12_Ja15_Tango01 + avg_age + log_
  population + prop_ksenoi, data=dta)
4 lm19T01 <- lm(ekloges_PERCENTAGE_Jul_2019_GD ~ ekloges_PERCENTAGE_Sep_
  2015_GD + N_AntifaEvent_Sp15_Ju19_Tango01 + avg_age + log_population
  + prop_ksenoi, data=dta)

```

- Results: It can be seen from the regression results that the coefficients of Model 1 are statistically significant, but the R square is small, indicating that the model fitting effect is not good.

Second stage of study - Timing

- Branching Research Question
 - How does Timing of protest events affect electoral results of the GD?
- Hypothesis
 - H0: Timing of protest events does NOT affect electoral results of the GD.
 - H1: Timing of protest events affects electoral results of the GD.
- Data
 - Variable description
 - Dependent variable: the main dependent variable (DV) is the electoral results of GD, measured as the percentage of votes received by the GD per municipality.
 - Independent variable: The main IV is a categorical variable describing the temporal proximity to the parliamentary election.
- Replication of codes and table 3

```

1 lmer12M <- lmer(ekloges_PERCENTAGE_May_2012_GD ~ ekloges_
  PERCENTAGE_2009_GD + N_AntifaEvent_Oc09_May12_AB + avg_age + log_
  population + prop_ksenoi + (1|code_perif), data=dta)
2 lmer15 <- lmer(ekloges_PERCENTAGE_Jan_2015_GD ~ ekloges_
  PERCENTAGE_Jun_2012_GD + N_AntifaEvent_Jul12_Ja15_AB + avg_age
  + log_population + prop_ksenoi + (1|code_perif), data=dta)
3 lmer19 <- lmer(ekloges_PERCENTAGE_Jul_2019_GD ~ ekloges_
  PERCENTAGE_Sep_2015_GD + N_AntifaEvent_Sp15_Ju19_AB + avg_age
  + log_population + prop_ksenoi + (1|code_perif), data=dta)

```

Table 2: Extension for Linear Regression Models

| | <i>Dependent variable:</i> | | |
|----------------------------------|----------------------------|------------------------|------------------------|
| | <i>May_2012</i> (1) | <i>Jan_2015</i> (2) | <i>Jul_2019</i> (3) |
| ekloges_PERCENTAGE_2009_GD | 7.518*** (0.993) | | |
| N_AntifaEvent_Oc09_May12_Tango01 | -1.307*** (0.451) | | |
| ekloges_PERCENTAGE_Jun_2012_GD | | 0.759*** (0.026) | |
| N_AntifaEvent_Ju12_Ja15_Tango01 | | -0.160 (0.146) | |
| ekloges_PERCENTAGE_Sep_2015_GD | | | 0.376*** (0.017) |
| N_AntifaEvent_Sp15_Ju19_Tango01 | | | -0.031 (0.118) |
| avg_age | -0.007 (0.038) | 0.040** (0.017) | -0.051*** (0.010) |
| log_population | 0.340*** (0.114) | 0.328*** (0.054) | -0.045 (0.033) |
| prop_ksenoi | 0.110*** (0.026) | -0.002 (0.012) | -0.004 (0.007) |
| Constant | 0.970 (2.378) | -4.044*** (1.075) | 2.949*** (0.666) |
| Observations | 322 | 322 | 322 |
| R ² | 0.301 | 0.787 | 0.666 |
| Adjusted R ² | 0.290 | 0.784 | 0.661 |
| Residual Std. Error (df = 316) | 2.200 | 0.990 | 0.618 |
| F Statistic (df = 5; 316) | 27.246*** | 233.736*** | 126.228*** |

Note: *p<0.1; **p<0.05; ***p<0.01


```

4 tab_model(lmer12M , lmer15 , lmer19 )
5 lmer12M <- NULL; lmer15 <- NULL; lmer19 <- NULL #
housekeeping

```

| | ekloges_PERCENTAGE_May_2012_GD | | | ekloges_PERCENTAGE_Jan_2015_GD | | | ekloges_PERCENTAGE_Jul_2019_GD | | |
|--|--------------------------------|---------------|------------------|--------------------------------|---------------|------------------|--------------------------------|--------------|------------------|
| Predictors | Estimates | CI | p | Estimates | CI | p | Estimates | CI | p |
| (Intercept) | 5.71 | 1.16 – 10.27 | 0.014 | -3.40 | -5.56 – -1.24 | 0.002 | 1.09 | -0.13 – 2.31 | 0.080 |
| ekloges PERCENTAGE 2009 GD | 5.59 | 3.67 – 7.50 | <0.001 | | | | | | |
| N_AntifaEvent_Oc09_May12_AB0-1 | -0.64 | -1.36 – 0.08 | 0.083 | | | | | | |
| N_AntifaEvent_Oc09_May12_AB1-0 | -1.08 | -2.03 – -0.12 | 0.027 | | | | | | |
| N_AntifaEvent_Oc09_May12_AB1-1 | -1.01 | -1.74 – -0.29 | 0.006 | | | | | | |
| avg age | -0.07 | -0.14 – -0.00 | 0.042 | 0.03 | -0.01 – 0.06 | 0.146 | -0.02 | -0.04 – 0.00 | 0.101 |
| log population | 0.23 | 0.01 – 0.46 | 0.044 | 0.32 | 0.21 – 0.43 | <0.001 | -0.02 | -0.08 – 0.04 | 0.585 |
| prop ksenoi | 0.07 | 0.02 – 0.12 | 0.004 | 0.01 | -0.01 – 0.03 | 0.339 | 0.01 | -0.01 – 0.02 | 0.340 |
| ekloges PERCENTAGE Jun 2012 GD | | | | 0.76 | 0.71 – 0.82 | <0.001 | | | |
| N_AntifaEvent_Ju12_Ja15_AB0-1 | | | | -0.10 | -0.36 – 0.16 | 0.452 | | | |
| N_AntifaEvent_Ju12_Ja15_AB1-0 | | | | -0.42 | -2.07 – 1.23 | 0.615 | | | |
| N_AntifaEvent_Ju12_Ja15_AB1-1 | | | | -0.40 | -0.74 – -0.05 | 0.025 | | | |
| ekloges PERCENTAGE Sep 2015 GD | | | | | | | 0.38 | 0.34 – 0.41 | <0.001 |
| N_AntifaEvent_Sp15_Ju19_AB0-1 | | | | | | | -0.07 | -0.22 – 0.07 | 0.332 |
| N_AntifaEvent_Sp15_Ju19_AB1-0 | | | | | | | 0.08 | -0.23 – 0.39 | 0.615 |
| N_AntifaEvent_Sp15_Ju19_AB1-1 | | | | | | | -0.01 | -0.19 – 0.17 | 0.931 |
| Random Effects | | | | | | | | | |
| σ^2 | 2.59 | | | 0.62 | | | 0.17 | | |
| τ_{00} | 2.33 | code_perif | | 0.37 | code_perif | | 0.23 | code_perif | |
| ICC | 0.47 | | | 0.37 | | | 0.58 | | |
| N | 74 | code_perif | | 74 | code_perif | | 74 | code_perif | |
| Observations | 322 | | | 322 | | | 322 | | |
| Marginal R ² / Conditional R ² | 0.206 / 0.582 | | | 0.786 / 0.865 | | | 0.637 / 0.847 | | |

- Results (Original Table 3)

- The results (see Original Table 3) for May 2012 suggest that organizing at least one proximate protest event against the far right, compared to organizing no events at all, corresponds to a smaller electoral outcome for the GD, similar in magnitude to that identified by previous models which was around one-sixth of the 7% of the national vote.

The evidence presented shows that the synchronization of protest and electoral cycles makes protest more effective: protests against the far right taking place right before the next election are much more effective than those temporally more distant.

- My extension

- Extension idea: Fit linear regression model instead of mixed effects models.

```

1 lm12M <- lm(ekloges_PERCENTAGE_May_2012_GD ~ ekloges_PERCENTAGE_
  2009_GD + N_AntifaEvent_Oc09_May12_AB + avg_age + log_population +
  prop_ksenoi, data=dta)
2 lm15 <- lm(ekloges_PERCENTAGE_Jan_2015_GD ~ ekloges_PERCENTAGE_Jun_
  2012_GD + N_AntifaEvent_Ju12_Ja15_AB + avg_age + log_population+
  prop_ksenoi, data=dta)
3 lm19 <- lm(ekloges_PERCENTAGE_Jul_2019_GD ~ ekloges_PERCENTAGE_Sep_
  2015_GD + N_AntifaEvent_Sp15_Ju19_AB + avg_age + log_population +
  prop_ksenoi, data=dta)

```

- Results: It can be seen from the regression results that the all of the coefficients of Models are not statistically significant.

Table 3: Extension for Linear Regression Models

| | <i>Dependent variable:</i> | | |
|--------------------------------|----------------------------|----------------------|----------------------|
| | May_2012 | Jan_2015 | Jul_2019 |
| | (1) | (2) | (3) |
| ekloges_PERCENTAGE_2009_GD | 7.645*** (0.992) | | |
| N_AntifaEvent_Oc09_May12_AB0-1 | -0.677 (0.464) | | |
| N_AntifaEvent_Oc09_May12_AB1-0 | -1.591*** (0.577) | | |
| N_AntifaEvent_Oc09_May12_AB1-1 | -1.244*** (0.454) | | |
| ekloges_PERCENTAGE_Jun_2012_GD | | 0.754*** (0.026) | |
| N_AntifaEvent_Ju12_Ja15_AB0-1 | | -0.168 (0.152) | |
| N_AntifaEvent_Ju12_Ja15_AB1-0 | | -0.731 (0.988) | |
| N_AntifaEvent_Ju12_Ja15_AB1-1 | | -0.503** (0.197) | |
| ekloges_PERCENTAGE_Sep_2015_GD | | | 0.379*** (0.017) |
| N_AntifaEvent_Sp15_Ju19_AB0-1 | | | -0.072 (0.096) |
| N_AntifaEvent_Sp15_Ju19_AB1-0 | | | 0.019 (0.219) |
| N_AntifaEvent_Sp15_Ju19_AB1-1 | | | 0.043 (0.119) |
| avg_age | -0.009 (0.038) | 0.032* (0.017) | -0.051*** (0.011) |
| log_population | 0.409*** (0.120) | 0.375*** (0.058) | -0.052 (0.035) |
| prop_ksenoi | 0.110*** (0.026) | -0.005 (0.012) | -0.005 (0.008) |
| Constant | 0.545 (2.379) | -3.992*** (1.061) | 2.997*** (0.670) |
| Observations | 322 | 322 | 322 |
| R ² | 0.312 | 0.791 | 0.668 |
| Adjusted R ² | 0.296 | 0.786 | 0.660 |
| Residual Std. Error (df = 314) | 2.191 | 0.984 | 0.619 |
| F Statistic (df = 7; 314) | 20.322*** | 169.783*** | 90.067*** |

Note:

*p<0.1; **p<0.05; ***p<0.01