Replication of Voigtländer and Voth (2012)

```
packages = c("dplyr", "readr", "haven", "estimatr",
             "conleyreg", "lmtest", "sandwich", "tibble",
             "quantreg", "stargazer")
sapply(packages, library, character.only = TRUE)
```

Load in the data:

```
nazi_data = read_dta("../datasets/5-voigtlander-voth/Dataset_QJE_Replicate_with_Cities(1).dta
```

Generate relevant variables:

```
nazi_final = nazi_data |>
  filter(judaica == 1 | comm1349 == 1) |>
  mutate(nazi_1928 = n285nsda / n285gs,
         ln_pop = log(n285pop),
         frac_jew = c25juden / c25pop,
         frac_prot = c25prot / c25pop)
```

The following code replicates Column 2 of Table VI according to VV's specifications with standard errors clustered at the county level. I then follow Kelly in dropping 7 outlier constituencies where the 1928 Nazi vote share exceeded 20 percent. I also re-estimate it as a median regression and report the results.

```
kreis_nr = nazi_final |>
  pull(kreis_nr)
mod1 = lm(nazi_1928 ~ pog1349 + ln_pop + frac_jew + frac_prot,
          data = nazi_final)
mod1_se = vcovCL(mod1, cluster = kreis_nr)
coeftest(mod1, vcov = mod1_se)
```

```
t test of coefficients:

              Estimate Std. Error t value Pr(>|t|)
(Intercept)  0.0339973  0.0194529  1.7477 0.081480 .
pog1349      0.0141899  0.0056678  2.5036 0.012791 *
ln_pop      -0.0025382  0.0021914 -1.1583 0.247619
frac_jew     0.1736486  0.1896456  0.9156 0.360541
frac_prot    0.0289827  0.0088425  3.2777 0.001162 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
kreis_nr1 = nazi_final |>
  filter(nazi_1928 < 0.2) |>
  pull(kreis_nr)
mod2 = lm(nazi_1928 ~ pog1349 + ln_pop + frac_jew + frac_prot,
          data = nazi_final |> filter(nazi_1928 < 0.2))
mod2_se = vcovCL(mod2, cluster = kreis_nr1)
coeftest(mod2, vcov = mod2_se)
```

```
t test of coefficients:

              Estimate Std. Error t value Pr(>|t|)
(Intercept) 0.00943162 0.01525985  0.6181  0.53698
pog1349     0.00655328 0.00462658  1.4164  0.15764
ln_pop      0.00096894 0.00153918  0.6295  0.52947
frac_jew    0.13760724 0.16395095  0.8393  0.40193
frac_prot   0.01361314 0.00626555  2.1727  0.03055 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mod3 = rq(nazi_1928 ~ pog1349 + ln_pop + frac_jew + frac_prot,
          data = nazi_final)
summary(mod3, se = "boot", R = 1000)
```

```
Call: rq(formula = nazi_1928 ~ pog1349 + ln_pop + frac_jew + frac_prot,
    data = nazi_final)

tau: [1] 0.5
```

```
Coefficients:
            Value    Std. Error t value  Pr(>|t|)
(Intercept) -0.00295  0.00953   -0.30940  0.75722
pog1349      0.00294  0.00270    1.08721  0.27776
ln_pop       0.00121  0.00105    1.15833  0.24759
frac_jew     0.07047  0.12121    0.58137  0.56140
frac_prot    0.01377  0.00472    2.91878  0.00376
```