## table4

## Sharon Hui

4/16/2022

## Table 4

```
library(dplyr)
## Warning: package 'dplyr' was built under R version 3.6.2
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
library(foreign)
library(lfe)
## Warning: package 'lfe' was built under R version 3.6.2
## Loading required package: Matrix
library(lmtest)
## Loading required package: zoo
##
## Attaching package: 'zoo'
## The following objects are masked from 'package:base':
##
       as.Date, as.Date.numeric
##
##
## Attaching package: 'lmtest'
## The following object is masked from 'package:lfe':
##
       waldtest
##
library(car)
## Loading required package: carData
## Warning: package 'carData' was built under R version 3.6.2
```

```
##
## Attaching package: 'car'
## The following object is masked from 'package:dplyr':
##
       recode
library(tidyr)
## Warning: package 'tidyr' was built under R version 3.6.2
## Attaching package: 'tidyr'
## The following objects are masked from 'package:Matrix':
##
       expand, pack, unpack
library(plm)
##
## Attaching package: 'plm'
## The following object is masked from 'package:lfe':
##
##
       sargan
## The following objects are masked from 'package:dplyr':
##
       between, lag, lead
french_t5 = read.dta('french_t5.dta')
french_main = read.dta('french_main.dta')
a <- c("Rhineland", "Bavarian Palatinate", "Mark", "Westphalia without Mark",
       "Brunswick", "Saxony Province", "Hessen-Kassel", "Hanover")
b <- c("Baden", "Bavaria Old", "Hessen-Darmstadt, right of the Rhine",
      "Saxony", "Wuerttemberg")
c <- c( "Brandenburg" , "East Prussia" ,</pre>
       "Pomerania without Swedish Pomerania", "Silesia",
       "Mecklenburg-Schwerin" , "Schleswig-Holstein" )
keep = french_main %>%
 filter(year==1700 | year==1750 | year==1800 | year==1850 | year==1875 | year==1900 )
# without mark/ruhr
table4_1 = keep %>%
 filter(westelbe==1 & id!=2)
fe4_1 = felm(formula = urbrate ~ fpresence1750 + fpresence1800 +
               fpresence1850 + fpresence1875 + fpresence1900 +
               yr1700 + yr1750 + yr1800 + yr1850 + yr1875 | id | 0 | id,
     data = table4_1, weights = table4_1$totalpop1750)
coef1 <- coeftest(fe4_1)</pre>
data_count <- dim(drop_na(table4_1))[1]</pre>
state count <- length(unique(table4 1$name))</pre>
pval1 <- linearHypothesis(fe4_1, c("fpresence1850=0",</pre>
                                    "fpresence1875=0",
```

```
"fpresence1900=0"),
                           test = c("F"))$`Pr(>F)`[2]
pval2 <- 0
col1 <- c(rbind(coef1[1:5, 1], coef1[1:5, 2]))</pre>
col1 <- c(col1, 0, 0, data_count, state_count, pval1, pval2)</pre>
each_id = data.frame( value = c('Years French presence x 1750', 'SD Years French presence x 1750', 'Yea
for (i in unique(keep$id)){
  table4_1 = keep %>%
    filter(westelbe==1 & id!= i )
 fe4_1 = felm(formula = urbrate ~ fpresence1750 + fpresence1800 +
               fpresence1850 + fpresence1875 + fpresence1900 +
               yr1700 + yr1750 + yr1800 + yr1850 + yr1875 | id | 0 | id,
     data = table4_1, weights = table4_1$totalpop1750)
coef1 <- coeftest(fe4_1)</pre>
data count <- dim(drop na(table4 1))[1]
state_count <- length(unique(table4_1$name))</pre>
pval1 <- linearHypothesis(fe4_1, c("fpresence1850=0",</pre>
                                    "fpresence1875=0",
                                    "fpresence1900=0"),
                          test = c("F"))$`Pr(>F)`[2]
pval2 <- 0
col1 <- c(rbind(coef1[1:5, 1], coef1[1:5, 2]))</pre>
col1 <- c(col1, 0, 0, data_count, state_count, pval1, pval2)</pre>
  each_id = cbind(each_id, col1)
colnames(each_id ) = c('', paste('Removed ID', unique(keep$id)) )
each id
##
                                                 Removed ID 1 Removed ID 2
## 1
                   Years French presence x 1750 -0.10303771
                                                                 -0.5646331
## 2
                SD Years French presence x 1750
                                                   0.14926951
                                                                  0.2814492
## 3
                   Years French presence x 1800
                                                                -0.3238465
                                                   0.11829566
## 4
                SD Years French presence x 1800
                                                   0.12238765
                                                                  0.2488094
## 5
                   Years French presence x 1850
                                                   0.07174871
                                                                 -0.2351954
## 6
                SD Years French presence x 1850
                                                   0.20414901
                                                                  0.2752158
## 7
                   Years French presence x 1875
                                                  -0.01696376
                                                                  0.3240238
## 8
                SD Years French presence x 1875
                                                   0.38376691
                                                                  0.3242079
## 9
                   Years French presence x 1900
                                                   0.06718921
                                                                  0.5517881
## 10
                SD Years French presence x 1900
                                                   0.56496343
                                                                  0.4109023
## 11
                             Lagged Urbanization
                                                   0.00000000
                                                                  0.0000000
                         SD Lagged Urbanization
                                                   0.00000000
## 12
                                                                  0.0000000
## 13
                                    Observations 69.00000000
                                                                 68.000000
## 14
                                Number of states
                                                  12.00000000
                                                                 12.0000000
       p-value for joint signficance after 1800
                                                   0.69440248
                                                                  0.1281511
## 16 p-value for joint significance covariates
                                                   0.00000000
                                                                  0.000000
##
      Removed ID 3 Removed ID 4 Removed ID 5 Removed ID 6 Removed ID 7
## 1
        -0.4921256 -0.7176649157 -0.49220115 -0.47833507 -0.41606214
## 2
         0.2497122 0.5739082073
                                   0.24936607
                                                 0.24226759
                                                               0.21091631
## 3
        -0.2502154 \ -0.4521249650 \ -0.24767788 \ -0.23522819 \ -0.17307989
## 4
         0.2232278 0.5636478653
                                   0.22696919
                                                0.21780066
                                                               0.19317088
## 5
        -0.1587466 -0.3718022084 -0.16087328 -0.16092471 -0.08779979
## 6
         0.2539315 0.5945851057 0.25210707
                                                 0.24612723
                                                               0.21373077
```

```
## 7
         0.4049822
                     0.2897221059
                                     0.40272356
                                                  0.40252090
                                                                0.48120220
## 8
         0.3238562
                     0.6828573535
                                     0.32761628
                                                  0.32627525
                                                                0.31264282
##
  9
         0.6333376
                     0.5477802150
                                     0.63526086
                                                  0.62018886
                                                                0.71628966
         0.4118258
##
  10
                     0.7568346643
                                     0.40874116
                                                  0.41030214
                                                                0.39170348
##
  11
         0.0000000
                     0.000000000
                                     0.0000000
                                                  0.0000000
                                                                0.0000000
## 12
         0.0000000
                    0.000000000
                                     0.0000000
                                                  0.0000000
                                                                0.0000000
## 13
        69.000000 68.000000000
                                   69.0000000
                                                 68.0000000
                                                               68.0000000
## 14
        12.0000000 12.0000000000
                                   12.00000000
                                                 12.00000000
                                                               12.00000000
##
  15
         0.1007776
                     0.0003715274
                                     0.05087057
                                                  0.07507103
                                                                0.02359867
##
   16
         0.0000000
                     0.000000000
                                     0.0000000
                                                  0.0000000
                                                                0.0000000
##
      Removed ID 8 Removed ID 9 Removed ID 10 Removed ID 11 Removed ID 12
##
  1
       -0.49102373
                     -0.49102373
                                     -0.5441511
                                                  -0.49327336
                                                                  -0.6086993
##
  2
        0.24873434
                                     0.3009001
                                                                   0.2903823
                      0.24873434
                                                   0.24877023
## 3
       -0.24744414
                     -0.24744414
                                     -0.3099030
                                                  -0.24119663
                                                                  -0.3491867
## 4
        0.22513827
                      0.22513827
                                     0.2677884
                                                   0.22299932
                                                                   0.2693297
## 5
       -0.16029485
                     -0.16029485
                                     -0.2482350
                                                  -0.15672874
                                                                  -0.2498593
## 6
        0.25013256
                      0.25013256
                                     0.2898030
                                                   0.25123893
                                                                   0.3138815
##
  7
        0.40212597
                      0.40212597
                                     0.3340865
                                                   0.39699310
                                                                   0.2628885
## 8
        0.32562760
                      0.32562760
                                     0.3809938
                                                   0.33514369
                                                                   0.3654006
## 9
        0.63386885
                      0.63386885
                                     0.5238764
                                                   0.63143773
                                                                   0.4841314
## 10
        0.40751063
                      0.40751063
                                     0.4644150
                                                   0.42576342
                                                                   0.4665864
        0.0000000
                                     0.000000
                                                   0.0000000
                                                                   0.000000
## 11
                      0.0000000
## 12
        0.0000000
                      0.0000000
                                     0.000000
                                                   0.0000000
                                                                   0.000000
##
  13
       74.00000000
                     74.0000000
                                     68.0000000
                                                  69.0000000
                                                                  68.0000000
       13.0000000
                     13.0000000
##
  14
                                     12.0000000
                                                  12.00000000
                                                                  12.0000000
##
  15
        0.05323934
                      0.05323934
                                     0.1142419
                                                   0.08360583
                                                                   0.1183681
##
   16
        0.0000000
                      0.00000000
                                     0.0000000
                                                   0.00000000
                                                                   0.0000000
##
      Removed ID 13 Removed ID 14 Removed ID 15 Removed ID 16 Removed ID 17
## 1
      -0.3410253647
                       -0.49102373
                                      -0.49102373
                                                    -0.48905043
                                                                    -0.4476798
## 2
                                      0.24873434
       0.1451465605
                        0.24873434
                                                     0.26033379
                                                                     0.2271961
## 3
      -0.1198308761
                       -0.24744414
                                      -0.24744414
                                                    -0.25164761
                                                                    -0.2022129
## 4
       0.1328524440
                        0.22513827
                                      0.22513827
                                                     0.23479202
                                                                     0.2091492
## 5
       0.0280533320
                       -0.16029485
                                      -0.16029485
                                                    -0.15711458
                                                                    -0.1149373
## 6
       0.1212169195
                        0.25013256
                                      0.25013256
                                                     0.26366655
                                                                     0.2336895
##
  7
       0.6948794479
                        0.40212597
                                                     0.39681542
                                                                     0.4504650
                                      0.40212597
## 8
       0.1708917499
                        0.32562760
                                      0.32562760
                                                     0.34417862
                                                                     0.3231190
## 9
       1.0041688263
                        0.63386885
                                      0.63386885
                                                     0.62773332
                                                                     0.6853334
## 10
       0.1991806378
                                                     0.43035567
                                                                     0.4021978
                        0.40751063
                                      0.40751063
       0.000000000
##
  11
                        0.0000000
                                      0.0000000
                                                     0.0000000
                                                                     0.0000000
                                      0.0000000
##
  12
       0.000000000
                        0.0000000
                                                     0.0000000
                                                                     0.0000000
  13 68.0000000000
                       74.00000000
                                      74.00000000
                                                    68.0000000
                                                                    68.0000000
##
   14
      12.0000000000
                       13.00000000
                                      13.00000000
                                                    12.00000000
                                                                    12.0000000
##
   15
       0.0006678682
                        0.05323934
                                      0.05323934
                                                     0.06809304
                                                                     0.0301106
##
   16
       0.000000000
                        0.0000000
                                      0.0000000
                                                     0.0000000
                                                                     0.000000
##
      Removed ID 18 Removed ID 19
## 1
        -0.49102373
                       -0.49102373
##
  2
         0.24873434
                        0.24873434
## 3
        -0.24744414
                       -0.24744414
## 4
         0.22513827
                        0.22513827
##
  5
        -0.16029485
                       -0.16029485
         0.25013256
                        0.25013256
##
  6
## 7
         0.40212597
                        0.40212597
## 8
         0.32562760
                        0.32562760
## 9
         0.63386885
                        0.63386885
```

| ## | 10 | 0.40751063  | 0.40751063  |
|----|----|-------------|-------------|
| ## | 11 | 0.00000000  | 0.00000000  |
| ## | 12 | 0.00000000  | 0.00000000  |
| ## | 13 | 74.00000000 | 74.00000000 |
| ## | 14 | 13.00000000 | 13.00000000 |
| ## | 15 | 0.05323934  | 0.05323934  |
| ## | 16 | 0.00000000  | 0.00000000  |