stat230-project

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Code

```
# install.packages('foreign')
library(foreign)
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(stringr)
library(kableExtra)
```

```
## Warning: package 'kableExtra' was built under R version 3.6.2
```

```
##
## Attaching package: 'kableExtra'
```

```
## The following object is masked from 'package:dplyr':
##
##     group_rows
```

```
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" ,
       "Pomerania without Swedish Pomerania" , "Silesia",
       "Mecklenburg-Schwerin" , "Schleswig-Holstein" )
```

```
table1_maker = function(a){
  only_a = na.omit(french_main) %>%
```

```
  filter( name %in% a) %>%
  group_by(name)

t1a = only_a %>%
  summarise(fpresence = first(fpresence),
            total_pop = first(totalpop1750 ) ) %>%
  arrange(desc(fpresence))
# t1a

# weighted average for panel a
# sum(((t1a$total_pop) / sum(t1a$total_pop)) * t1a$first)

########################
cc = only_a %>% summarise( s = first(ccodenoalr ) ,
             e1 =first( ccodenoalroff ) ,
             e2 = first(ccodenoalron )  )

cc2 = cbind(cc, str_remove(
  paste( str_remove( paste(cc$s, substr(cc$e1, 3, 4) , sep = '-') , '-$') , cc$e2, sep = ', ') ,
  '(, 0)$'))

colnames(cc2) = c("name" , "s", "e1"  , "e2", 'civil_code' )

cc3 = select(cc2, name, civil_code)


########################

serfdom = only_a %>% summarise( s = first(agreform1first ) ,
             e1 =first( agreform1off ) ,
             e2 = first(agreform1on )  )

serfdom2 = cbind(serfdom, str_remove(
  paste( str_remove( paste(serfdom$s, substr(serfdom$e1, 3, 4) , sep = '-') , '-$') , serfdom$e2, sep =
  '(, 0)$'))

colnames(serfdom2) = c("name" , "s", "e1"  , "e2", 'serfdom' )

serfdom3 = select(serfdom2, name, serfdom)
# serfdom3


########################

reform = only_a %>% summarise( s = first(agreform2first ) ,
             e1 =first( agreform2off ) ,
             e2 = first( agreform2on )  )

reform2 = cbind(reform, str_remove(
  paste( str_remove( paste(reform$s, substr(reform$e1, 3, 4) , sep = '-') , '-$') , reform$e2, sep = ',
  '(, 0)$'))

colnames(reform2) = c("name" , "s", "e1"  , "e2", 'reform' )
```

```
reform3 = select(reform2, name, reform)
#reform3



########################


guilds = only_a %>% summarise( s = first(guildsfirst ) ,
             e1 =first( guildsoff ) ,
             e2 = first( guildson )  )

guilds2 = cbind(guilds, str_remove(
  paste( str_remove( paste(guilds$s, substr(guilds$e1, 3, 4) , sep = '-') , '-$') , guilds$e2, sep = ',
  '(, 0)$'))

colnames(guilds2) = c("name" , "s", "e1"  , "e2", 'guilds' )

guilds3 = select(guilds2, name, guilds)
#guilds3



########################

reforms_1850 = na.omit(french_main) %>%
  filter( name %in% a) %>%
  filter( year == 1850) %>% select(name, yearsref)
colnames(reforms_1850 ) = c('name', 'yearsref_1850')

reforms_1900 = na.omit(french_main) %>%
  filter( name %in% a) %>%
  filter( year == 1900) %>% select(name, yearsref)
colnames(reforms_1900 ) = c('name', 'yearsref_1900')


########################
pop_weights_1750 = only_a %>%
  summarise(pop_weights_1750 = round( first(totalpop1750) , -3) /1000 )
# pop_weights_1750


final_a = left_join( left_join (left_join(
  left_join(left_join(left_join( left_join(t1a, cc3, by = 'name'),
           serfdom3, by = 'name'),
          reform3, by = 'name') , guilds3, by = 'name' ), reforms_1850 ,by = 'name' ),
  reforms_1900, by = 'name'
  ), pop_weights_1750, by = 'name' )

return_a = final_a
  avg_fpresence = round( sum( return_a$fpresence * return_a$total_pop / sum(return_a$total_pop ) ),
                         2 )
```

```
  avg_yearsref_1850 = round( sum( return_a$yearsref_1850 * return_a$total_pop / sum(return_a$total_pop )
                          2)
  avg_yearsref_1900 = round( sum( return_a$yearsref_1900 * return_a$total_pop / sum(return_a$total_pop )
                          2)
  avg = c('Average', avg_fpresence, rep('', 4) , avg_yearsref_1850 , avg_yearsref_1900, '' )
  return_a = select(return_a, -total_pop)

  result = rbind(  as.matrix(return_a), avg)
  rownames(result) = NULL
 return( result )
}



t1a = table1_maker(a)
t1a = t1a[c(2, 1, 5, 7, 3, 6, 4, 8, 9),]

t1b = table1_maker(b)


t1c = table1_maker(c)
t1c = t1c[c(1, 2, 4, 6, 3, 5, 7),]


# install.packages('reactable')
library(reactable)
```

```
## Warning: package 'reactable' was built under R version 3.6.2
```

```
col_table1 = c('Country','Years of French presence', 'Civil code', 'Abolition of serfdom', 'Agrarian re
colnames(t1a) = col_table1



library(stargazer)
```

```
##
## Please cite as:
```

```
##  Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary Statistics Tables.
```

```
##  R package version 5.2.3. https://CRAN.R-project.org/package=stargazer
```

```
stargazer(t1a,
          column.labels = col_table1,
          summary = FALSE,
          type = "text",
          out = "data_stargazer_txt.txt")
```

```
##
## ==========================================================================================
## Country                  Years of French presence  Civil code   Abolition of serfdom Agrarian reform
## ------------------------------------------------------------------------------------------
## Rhineland                          19                1802             1798              1804
## Bavarian Palatinate                19                1802             1798              1804
## Mark                               6              1810-15, 1900       1808              1825
```

```
## Westphalia without Mark            6            1810-15, 1900        1808            1825
## Brunswick                          6            1808-14, 1900    1808-18, 1834   1809-18, 1834
## Saxony Province                    6            1808-15, 1900        1808            1809
## Hessen-Kassel                      6            1808-14, 1900    1808-14, 1832   1809-14, 1832
## Hanover                            3            1808-13, 1900    1808-14, 1833   1809-14, 1833
## Average                          9.98
## ----------------------------------------------------------------------------------------------------
```

```
t1a %>%
  kbl() %>%
  kable_styling()
```

Country	Years of French presence	Civil code	Abolition of serfdom	Agrarian reform	Abolitio
Rhineland	19	1802	1798	1804	1795
Bavarian Palatinate	19	1802	1798	1804	1795
Mark	6	1810-15, 1900	1808	1825	1809
Westphalia without Mark	6	1810-15, 1900	1808	1825	1809
Brunswick	6	1808-14, 1900	1808-18, 1834	1809-18, 1834	1808-15
Saxony Province	6	1808-15, 1900	1808	1809	1809
Hessen-Kassel	6	1808-14, 1900	1808-14, 1832	1809-14, 1832	1808-16
Hanover	3	1808-13, 1900	1808-14, 1833	1809-14, 1833	1808-15
Average	9.98				

```
t1b %>%
  kbl() %>%
  kable_styling()
```

name	fpresence	civil_code	serfdom	reform	guilds	yearsref_1850	yearsref_19
Baden	0	1810	1783	1820	1862	34.25	81.25
Bavaria Old	0	1900	1808	1826	1868	16.50	49.50
Hessen-Darmstadt, right of the Rhine	0	1900	1811	1816	1866	18.25	51.75
Saxony	0	1865	1832	1832	1862	9.00	52.25
Wuerttemberg	0	1900	1817	1836	1862	11.75	46.25
Average	0					16.31	54.46

```
t1c %>%
  kbl() %>%
  kable_styling()
```

name	fpresence	civil_code	serfdom	reform	guilds	yearsref_1850	yearsref_
Brandenburg	0	1900	1811	1821	1810	27.0	64.50
East Prussia	0	1900	1811	1821	1810	27.0	64.50
Pomerania without Swedish Pomerania	0	1900	1811	1821	1810	27.0	64.50
Silesia	0	1900	1811	1821	1810	27.0	64.50
Mecklenburg-Schwerin	0	1900	1820	1862	1869	7.5	37.25
Schleswig-Holstein	0	1900	1805	1805	1867	22.5	55.75
Average	0					25.1	61.46