

Constitutions

2022-10-30

R Markdown

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.2 --
## v ggplot2 3.3.6      v purrr  0.3.5
## v tibble  3.1.8      v dplyr  1.0.10
## v tidyr   1.2.1      v stringr 1.4.1
## v readr   2.1.2      v forcats 0.5.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(dplyr)
library(infer)
```

```
constitution <- read_csv("ccpcnc_v4_small.csv")
```

```
## Warning: One or more parsing issues, see 'problems()' for details
```

```
## Rows: 21341 Columns: 1194
## -- Column specification -----
## Delimiter: ","
## chr  (22): country, regions, hosname, hosterm, hogterm, depname, agterm, lh...
## dbl  (1172): cowcode, year, wg, sample_deviation_type, syst, systid, systyear...
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
constitution <- constitution |>
  drop_na(em) |>
  select(country:evnttype, em:emother_98) |>
  filter(year > "1988")
```

```
liberal <- read_csv("V-Dem.csv")
```

```
## Rows: 27380 Columns: 1818
## -- Column specification -----
## Delimiter: ","
## chr    (3): country_name, country_text_id, histname
```

```
## dbl (1814): country_id, year, project, historical, codingstart, codingend, ...
## date (1): historical_date
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
liberal <- liberal |>
  select(country_name, year, v2x_libdem, v2mecenefm,
         v2mecenefi, v2mecrit, v2mebias) |>
  filter(year > "1988")
```

Finding differences in country names to prevent errors in inner_join

```
#unique(liberal$country_name)
#unique(constitution$country)
```

```
liberal <- liberal |>
  rename(country = country_name)
```

##Filtering out duplicate data in constitution

```
##This filters out all Serbia data, why isn't the "and" function (&) not working
constitution <- constitution |>
  filter(country != "Serbia" & year != "2006")
```

##Left Join

```
joined <- constitution |>
  left_join(liberal) |>
  select(country, year, v2x_libdem, em, emdecl, emappr_1, emappr_2)
```

Joining, by = c("country", "year")

##Summarizing variables

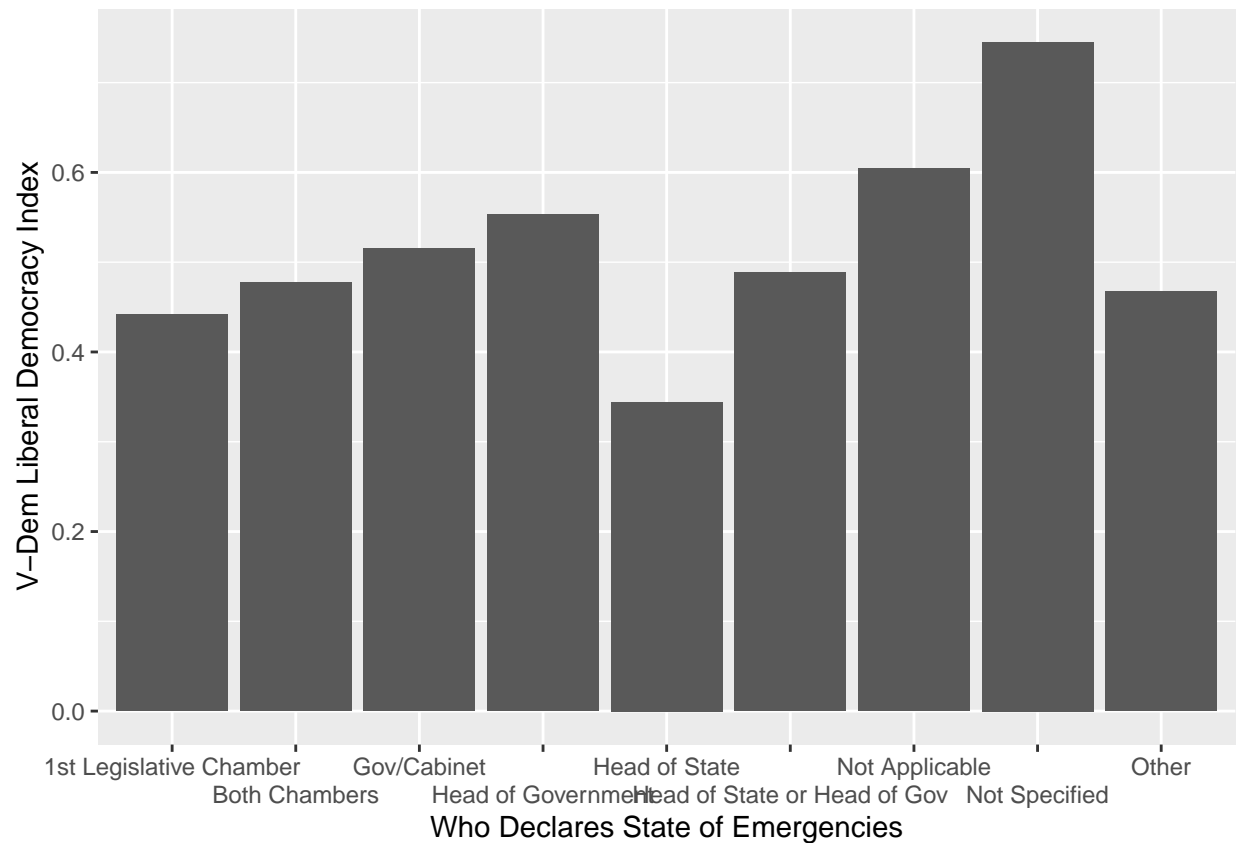
```
joined <- joined |>
  mutate(emdecl = case_when(
    emdecl == 1 ~ "Head of State",
    emdecl == 2 ~ "Head of Government",
    emdecl == 3 ~ "Head of State or Head of Gov",
    emdecl == 4 ~ "Gov/Cabinet",
    emdecl == 5 ~ "1st Legislative Chamber",
    emdecl == 6 ~ "2nd Legislative Chamber",
    emdecl == 7 ~ "Both Chambers",
    emdecl == 90 ~ "Left to law",
    emdecl == 96 ~ "Other",
    emdecl == 97 ~ "Unknown",
    emdecl == 98 ~ "Not Specified",
    emdecl == 99 ~ "Not Applicable"
  ))
```

```
target_data <- joined |>
  group_by(emdecl) |>
  summarize(mean_liberal = mean(v2x_libdem, na.rm = TRUE)) #/>
  #pivot_wider(names_from = emdecl, values_from = mean_liberal)
target_data
```

```
## # A tibble: 9 x 2
##   emdecl          mean_liberal
##   <chr>          <dbl>
## 1 1st Legislative Chamber      0.441
## 2 Both Chambers              0.477
## 3 Gov/Cabinet                0.516
## 4 Head of Government         0.553
## 5 Head of State              0.344
## 6 Head of State or Head of Gov 0.489
## 7 Not Applicable             0.604
## 8 Not Specified              0.745
## 9 Other                     0.468
```

Bar Plot

```
target_data |>
  ggplot(aes(x = emdecl, y = mean_liberal)) +
  geom_bar(stat = "identity") +
  scale_x_discrete(guide = guide_axis(n.dodge=2)) +
  labs(x = "Who Declares State of Emergencies",
       y = "V-Dem Liberal Democracy Index")
```



```
joined <- joined |>
  mutate(em = case_when(
    em == 1 ~ "Provision",
    em == 2 ~ "No Provision",
    em == 96 ~ "Other",
    em == 97 ~ "unknown")
  )
target_data2 <- joined |>
  group_by(em) |>
  summarize(mean_liberal = mean(v2x_libdem, na.rm = TRUE)) |>
  filter(!row_number() %in% (2))
target_data2
```

```
## # A tibble: 2 x 2
##   em          mean_liberal
##   <chr>          <dbl>
## 1 No Provision      0.579
## 2 Provision        0.391
```

```
target_data2 |>
  ggplot(aes(x = em, y = mean_liberal)) +
  geom_bar(stat = "identity") +
  labs(x = "Provision on Calling a State of Emergency in the Constitution",
       y = "V-Dem Liberal Democracy Index",
       title = "Effect of Having a Provision About State of Emergencies on Liberal Democracy")
```

