# Third Pair Assignment

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# **Research Question**

Our Collaborative Research Paper aims at shedding some light on what the effects of ethnic fractionalization on political rights are. In this sense, we have two main hypothesis:

H1: The more ethnically fractionalized a country is, the higher its negative impact on political rights if income inequality is high.

H2: When income inequality is low, the impact of high ethnic fractionalization on political rights is expected to be positive.

For more information regarding the theoretical underpinnings of our research proposal, you can have a look at our second pair assignment, which can be found here: Assignment 2

#### Model

Our aim is to collect data on level of political rights, ethnic fractionalization, as well as income inequality for all countries in the world during the period 2002-2014. In this sense, we make use of a freedom of the press indicator as proxy for political rights, our dependent variable (DV). Nevertheless, we also want to make use of an organizational and associational freedom index as an alternative DV for a robustness check. Moreover, ethnic fractionalization and income inequality are our two main independent variables (IVs) of interest. When it comes to other control variables that we want to include in our model, those are GDP per capita, judiciary independence, governmental accountability and linguistic fractionalization. Again, for more information concerning the theoretical reasons behind this model specification, have a look at Assignment 2

#### Data sources

The variables that we are collecting for this research project come from three different data sources: the Quality of Government Standard Data, the World Development Indicators and the Worldwide Governance Indicators.

- Quality of Government (QoG) Standard Time-Series Data They are contained in the QoG Standard Time-Series Dataset, which includes data from 1946 to 2015, being the unit of analysis country-year.
   It compiles approximately 2500 variables, making it the largest dataset developed by the Quality of Government Institut at the University of Gothenburg, Sweden.
- World Development Indicators (WDI) They are a set of indicators developed by the World Bank, compiling "relevant, high-quality, and internationally comparable statistics about global development and the fight against poverty". They are organized around six main themes, which are world view, people, environment, economy, states and markets, and global links.
- Worldwide Governance Indicators (WGI) They are also developed by the World Bank. They consist of
  "six composite indicators of broad dimensions of governance covering over 200 countries since 1996: Voice
  and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness,
  Regulatory Quality, Rule of Law, and Control of Corruption". Moreover, they are obtained from 31
  different perception-based data sources, aiming at enabling meaningful cross-country comparisons over
  time.

### Data gathering

#### Quality of Government data

From the QoG Standard Time-Series Dataset we collected Freedom House's variables for freedom of the press and associational and organization freedom, indicators for ethnic and linguistic fractionalization, developed by Alesina et al. in 2003 (Alesina et al. 2003), as well as the World Economic Forum (WEF)'s judicial independence variable (Quality of Government Institute 2015).

#### World Development Indicators

As there is a WDI Package for R, we can the use the World Bank indicator codes in order to download automatically from the World Bank's APIs the variables that we are interested in. Those variables are two: the Gini coefficient, which measures income inequality (World Bank code: SI.POV.GINI), as well as GDP per capita (World Bank code: NY.GDP.PCAP.CD) (The World Bank 2014)

## Worldwide Governance Indicators

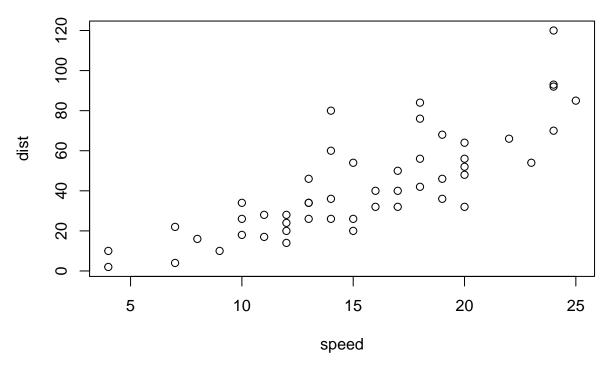
Unlike in the case of the WDI, there is no API. Therefore, we had to download and import into R the data in a csv file, contained in a zip file that we had to unzip. Since we are only interested in the Voice and Accountability variable for the years 2002-2014, we drop the other five variables (Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption) as well as the values that the variable Voice and Accountability takes for the remaining years (1996, 1998, 2000) (Kaufmann, Kraay, and Mastruzzi 2010).

# Descriptive and Inferential Statistics

#### summary(cars)

```
##
        speed
                         dist
##
    Min.
           : 4.0
                            : 2.00
    1st Qu.:12.0
                    1st Qu.: 26.00
    Median:15.0
                    Median : 36.00
##
    Mean
            :15.4
                            : 42.98
                    Mean
##
                    3rd Qu.: 56.00
    3rd Qu.:19.0
##
    Max.
           :25.0
                    Max.
                            :120.00
```

You can also embed plots, for example:



Note that the  $\mbox{echo} = \mbox{FALSE}$  parameter was added to the code chunk to prevent printing of the R code that generated the plot.

## **Bibliography**

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003. "Fractionalization." http://www.nber.org/papers/w9411.

 $\label{lem:comparison} Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi.\ 2010.\ "The Worldwide Governance Indicators: Methodological and Analytical Issues."$  $<math display="block">\label{lem:comparison} http://papers.srn.com/sol3/papers.cfm?abstract\_id=1682130.$ 

Quality of Government Institute. 2015. "QoG Standard Data." http://qog.pol.gu.se/data/datadownloads/qogstandarddata.

The World Bank. 2014. "World Development Indicators." http://data.worldbank.org/sites/default/files/wdi-2014-book.pdf.