

TerrorismData

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Working directory in my computer

First, I will assign the working directory in my computer

Importing and creating dataset

I decided to work with the Terrorism data from [FiveThirtyEight](#), specifically the one containing the total fatalities from terrorism incidents in the EU countries that joined in 1986 or earlier, for each country from 1972 through 2014 (eu_terrorism_fatalities_by_country.csv)

Descriptive statistics

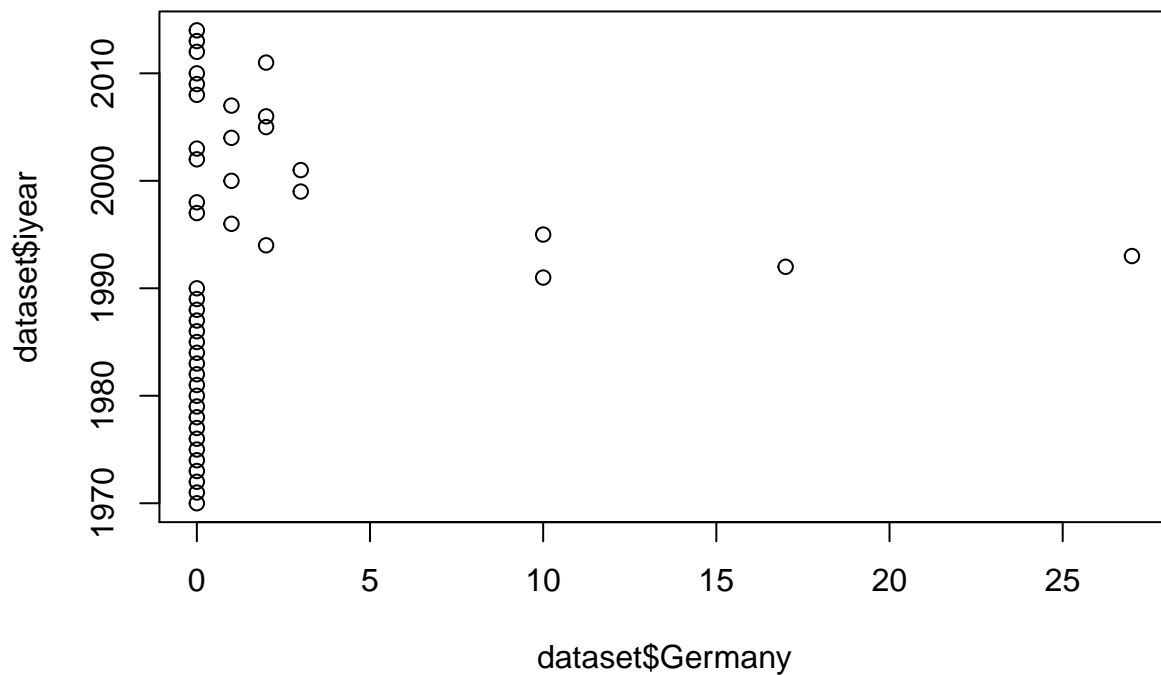
I did some random analysis on the cases of terrorism in general and regarding the mean and variance of attacks that happened in Germany

iyear	Belgium	Denmark	France
Min. :1970	Min. : 0.0000	Min. :0.00000	Min. : 0.000
1st Qu.:1981	1st Qu.: 0.0000	1st Qu.:0.00000	1st Qu.: 0.000
Median :1992	Median : 0.0000	Median :0.00000	Median : 3.000
Mean :1992	Mean : 0.9556	Mean :0.04444	Mean : 6.089
3rd Qu.:2003	3rd Qu.: 1.0000	3rd Qu.:0.00000	3rd Qu.: 8.000
Max. :2014	Max. :10.0000	Max. :1.00000	Max. :25.000
Germany Greece Ireland Italy			
Min. : 0.000	Min. : 0.000	Min. : 0.000	Min. : 0.000
1st Qu.: 0.000	1st Qu.: 0.000	1st Qu.: 0.000	1st Qu.: 0.000
Median : 0.000	Median : 1.000	Median : 1.000	Median : 1.000
Mean : 1.822	Mean : 5.711	Mean : 2.578	Mean : 9.356
3rd Qu.: 1.000	3rd Qu.: 4.000	3rd Qu.: 3.000	3rd Qu.: 12.000
Max. :27.000	Max. :92.000	Max. :34.000	Max. :125.000
Luxembourg Netherlands Portugal Spain			
Min. :0	Min. :0.0000	Min. :0.0000	Min. : 0.00
1st Qu.:0	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.: 2.00
Median :0	Median :0.0000	Median :0.0000	Median : 17.00
Mean :0	Mean :0.9111	Mean :0.7111	Mean : 28.56
3rd Qu.:0	3rd Qu.:1.0000	3rd Qu.:1.0000	3rd Qu.: 42.00
Max. :0	Max. :9.0000	Max. :8.0000	Max. :193.00
United.Kingdom			
Min. : 0.00			
1st Qu.: 4.00			
Median : 63.00			
Mean : 75.49			
3rd Qu.: 95.00			

Max. :372.00
 [1] 1.822222 [1] 25.14949

Plots

I decided to plot the German Data to analyse if there is any visual relation between the attacks in the country and the variable “iyears”



Analysis: subsetting datasets

Although not showing any clear trend, I decided to look if there was any increase of terrorist attacks after 2001, considering the 2001 terrorist attacks and the subsequent wars that resulted from it. In order to do so, I subset my data in two different periods: Before 2001 and After 2001 (with 2001 included):

iyear	Belgium	Denmark	France
Min. :2001	Min. :0.0000	Min. :0	Min. :0.0000
1st Qu.:2004	1st Qu.:0.0000	1st Qu.:0	1st Qu.:0.0000
Median :2008	Median :0.0000	Median :0	Median :0.0000
Mean :2008	Mean :0.3571	Mean :0	Mean :0.9286
3rd Qu.:2011	3rd Qu.:0.0000	3rd Qu.:0	3rd Qu.:0.7500
Max. :2014	Max. :4.0000	Max. :0	Max. :8.0000

Germany Greece Ireland Italy

Min. :0.0000 Min. :0.0 Min. :0.0000 Min. :0.0000
 1st Qu.:0.0000 1st Qu.:0.0 1st Qu.:0.0000 1st Qu.:0.0000
 Median :0.0000 Median :0.0 Median :0.0000 Median :0.0000
 Mean :0.7857 Mean :0.5 Mean :0.1429 Mean :0.2143
 3rd Qu.:1.7500 3rd Qu.:0.0 3rd Qu.:0.0000 3rd Qu.:0.0000
 Max. :3.0000 Max. :4.0 Max. :1.0000 Max. :1.0000
 Luxembourg Netherlands Portugal Spain
 Min. :0 Min. :0.0000 Min. :0 Min. : 0.00
 1st Qu.:0 1st Qu.:0.0000 1st Qu.:0 1st Qu.: 0.00
 Median :0 Median :0.0000 Median :0 Median : 1.00
 Mean :0 Mean :0.6429 Mean :0 Mean : 15.93
 3rd Qu.:0 3rd Qu.:0.0000 3rd Qu.:0 3rd Qu.: 3.00
 Max. :0 Max. :7.0000 Max. :0 Max. :193.00
 United.Kingdom
 Min. : 0.000
 1st Qu.: 0.000
 Median : 1.500
 Mean : 5.857
 3rd Qu.: 3.750
 Max. :57.000
 iyear Belgium Denmark France
 Min. :1970 Min. : 0.000 Min. :0.00000 Min. : 0.000
 1st Qu.:1978 1st Qu.: 0.000 1st Qu.:0.00000 1st Qu.: 3.000
 Median :1985 Median : 0.000 Median :0.00000 Median : 6.000
 Mean :1985 Mean : 1.226 Mean :0.06452 Mean : 8.419
 3rd Qu.:1992 3rd Qu.: 1.500 3rd Qu.:0.00000 3rd Qu.:16.000
 Max. :2000 Max. :10.000 Max. :1.00000 Max. :25.000
 Germany Greece Ireland Italy
 Min. : 0.00 Min. : 0.000 Min. : 0.000 Min. : 0.00
 1st Qu.: 0.00 1st Qu.: 1.000 1st Qu.: 1.000 1st Qu.: 0.00
 Median : 0.00 Median : 2.000 Median : 2.000 Median : 2.00
 Mean : 2.29 Mean : 8.065 Mean : 3.677 Mean : 13.48
 3rd Qu.: 0.50 3rd Qu.: 5.000 3rd Qu.: 4.500 3rd Qu.: 20.00
 Max. :27.00 Max. :92.000 Max. :34.000 Max. :125.00
 Luxembourg Netherlands Portugal Spain
 Min. :0 Min. :0.000 Min. :0.000 Min. : 0.00
 1st Qu.:0 1st Qu.:0.000 1st Qu.:0.000 1st Qu.: 14.00
 Median :0 Median :0.000 Median :0.000 Median : 29.00
 Mean :0 Mean :1.032 Mean :1.032 Mean : 34.26
 3rd Qu.:0 3rd Qu.:1.000 3rd Qu.:2.000 3rd Qu.: 45.00
 Max. :0 Max. :9.000 Max. :8.000 Max. :116.00
 United.Kingdom Min. : 3.0
 1st Qu.: 54.0
 Median : 81.0
 Mean :106.9
 3rd Qu.:112.5
 Max. :372.0

% of Attacks per year in Germany before and after 2001

After that, I decided to check whether the average percentage of attacks each year changed between these two periods that I analyzed in Germany:

[1] 0.7857143 [1] 2.290323

This basic analysis showed that the average % of attacks was higher in the period before 2001.

changing the data

Another theory would be to test whether big countries of the EU are more susceptible to terrorist attacks than small countries. In order to do that, I created two variables: Big_Countries and Small_Countries:

% of Attacks per year in small and big countries

After that, I decided to see whether the mean of attacks each year was different between the two groups:

[1] 2.901523 2.900051 2.898580 2.897111 2.895643 2.894177 2.892713 [8] 2.891249 2.889788 2.888327 2.886869
2.885411 2.883956 2.882501 [15] 2.881048 2.879597 2.878147 2.876699 2.875252 2.873806 2.872362 [22] 2.870919
2.869478 2.868038 2.866600 2.865163 2.863727 2.862293 [29] 2.860861 2.859430 2.858000 2.856572 2.855145
2.853719 2.852295 [36] 2.850873 2.849452 2.848032 2.846614 2.845197 2.843781 2.842367 [43] 2.840954 2.839543
2.838133 [1] 0.1187817 0.1187215 0.1186613 0.1186011 0.1185410 0.1184810 0.1184211 [8] 0.1183612 0.1183013
0.1182415 0.1181818 0.1181222 0.1180626 0.1180030 [15] 0.1179435 0.1178841 0.1178248 0.1177655 0.1177062
0.1176471 0.1175879 [22] 0.1175289 0.1174699 0.1174109 0.1173521 0.1172932 0.1172345 0.1171758 [29]
0.1171171 0.1170585 0.1170000 0.1169415 0.1168831 0.1168248 0.1167665 [36] 0.1167082 0.1166500 0.1165919
0.1165339 0.1164759 0.1164179 0.1163600 [43] 0.1163022 0.1162444 0.1161867

Based on this poor and biased analysis, we can say that living in a big country in Europe increases almost 3 times your chances of being a victim of a terrorist attack than living in a small country