

Dataset analysed: 'FBI Gun Data'.

Questions answered:

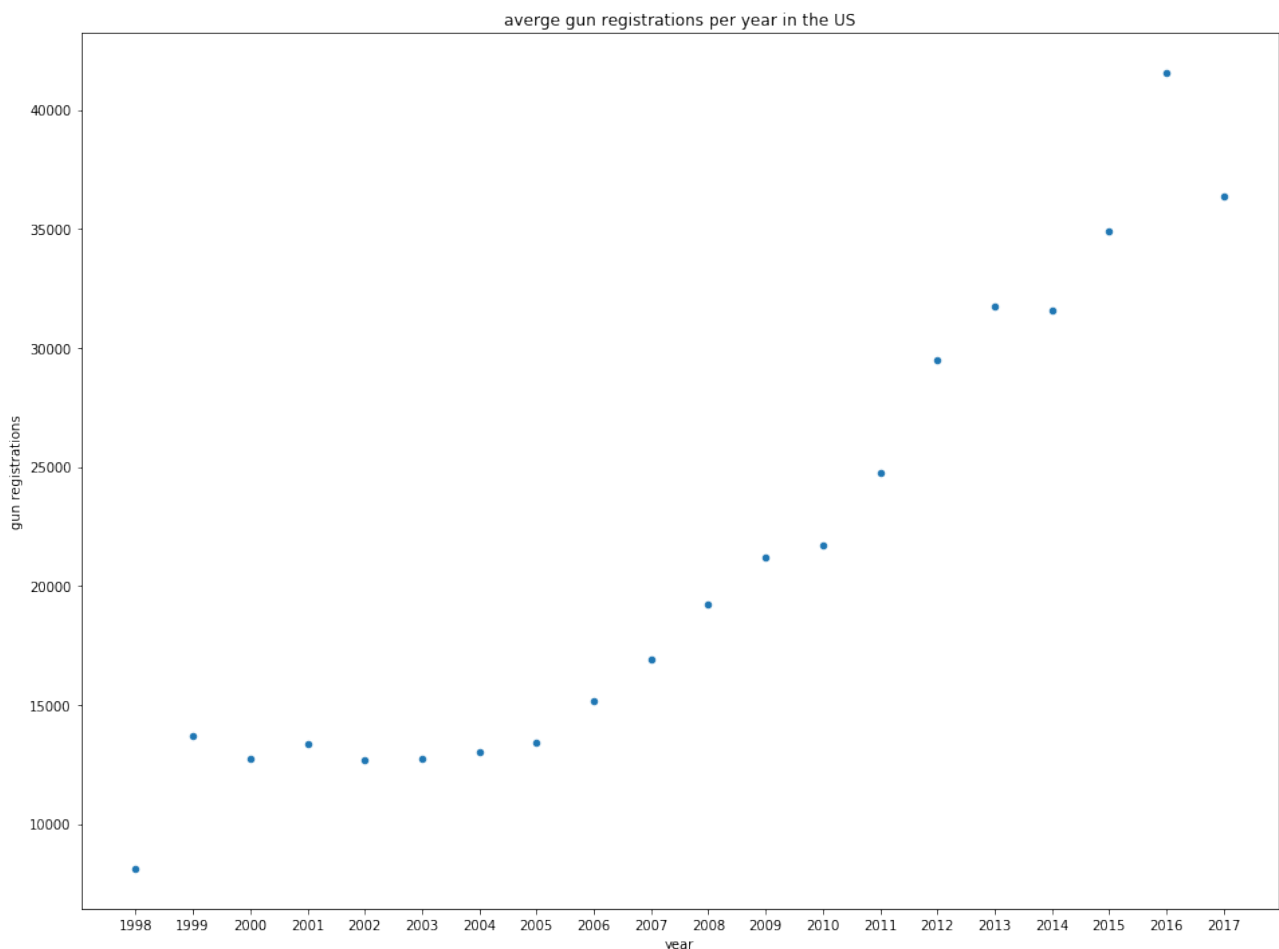
- a) 'Which states have had the highest growth in gun registrations?'
- b) 'What has been the overall trend in gun registrations since 1998?'
- c) 'Is there a correlation between gun per capita and ethnicity?'

Methods used:

- a) Main idea was to take total column for NCIS dataframe, and a columns for the different years, groupby state and year, and compute the quotient difference between total in 1998 and 2017 to get a good idea of the change. The states with the highest quotient difference between these years are those with have experienced the highest increase in gun registrations.
- b) Take the mean in gun registrations for each year and create a scatter plot.
- c) Divide the total gun registrations by population in each state to get gun per capita. Then compare ethnic proportions in states with high gun per capita to the national average.

Data wrangling: census data dataframe was transposed, index reset and columns renamed. Year column added to NCIS table. Dropped other US territories rows from 'df_17', strings turned to floats for columns relating to ethnic proportions in census data.

Graphs:



Ethnic Proportions of States with High Gun Per Capita versus National Average

