NITI Aayog

Gross State Domestic Product Analysis (GSDP)

UpGrad 2019
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About Data

Data used for Analysis:

Source of Data: https://data.gov.in/ (an Open Government Data (OGD) platform of India)

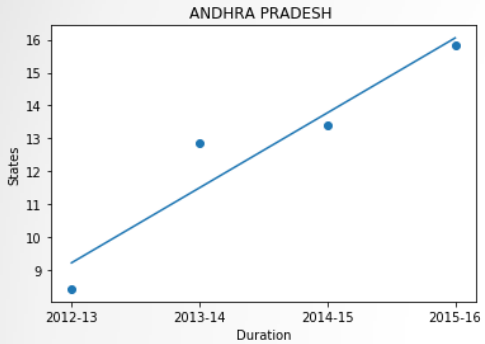
Data I-A: This dataset consists of the GSDP (Gross State Domestic Product) data for the states and union territories.
This dataset will be used to analyse and compare the GDPs of various Indian states (both total and per capita).

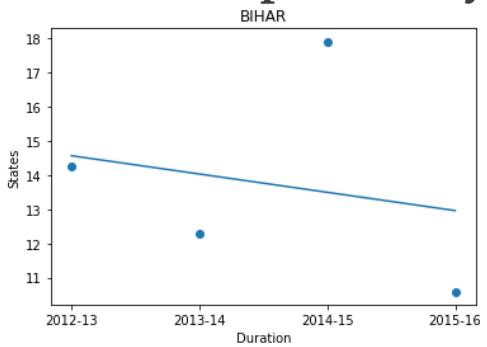
Data I-B: This dataset contains the distribution of GSDP among three sectors: the primary sector (agriculture), the secondary sector (industry) and the tertiary sector (services) along with taxes and subsidies. This dataset is statewise.
This dataset will be used to analyse which sectors such as agriculture, real estate, manufacturing, etc.). contribute the most to the GDP

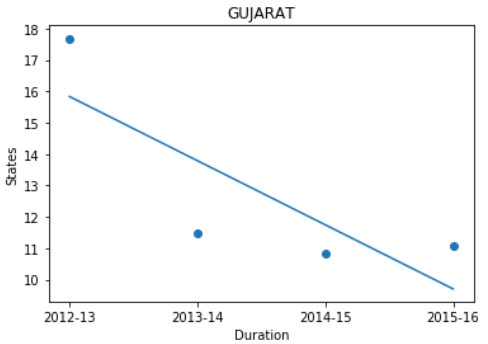
Data II: This dataset consists of the drop rate of every state.
This dataset will be used to analyse whether GDP per capita is related to dropout rates in schools and colleges.

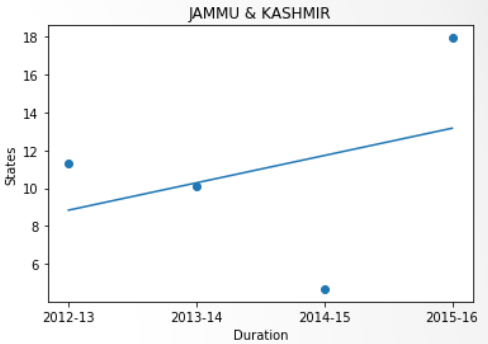
Part-I A: GDP Analysis of the Indian States

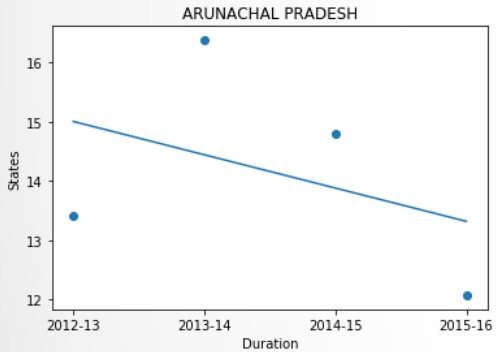
Growth rate over previous year for all States

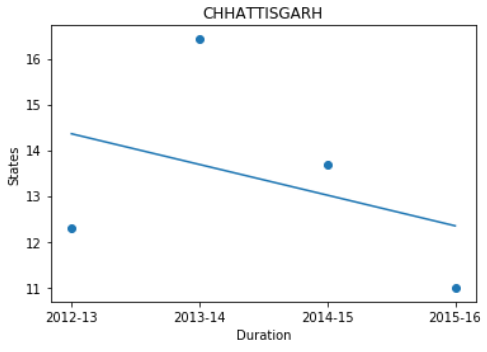


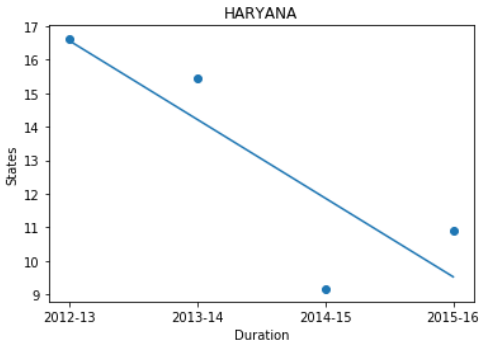


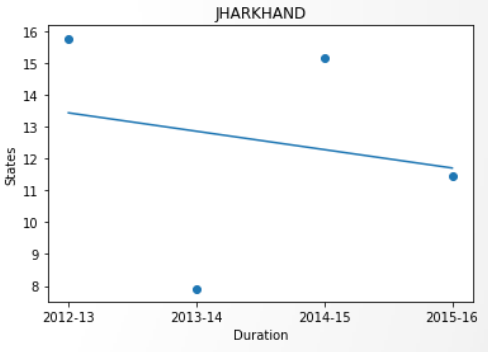


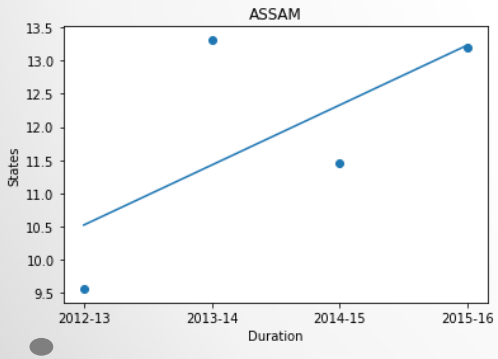


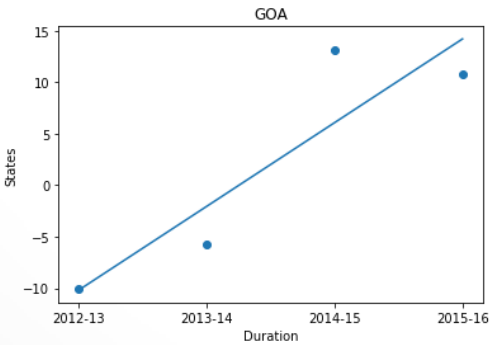


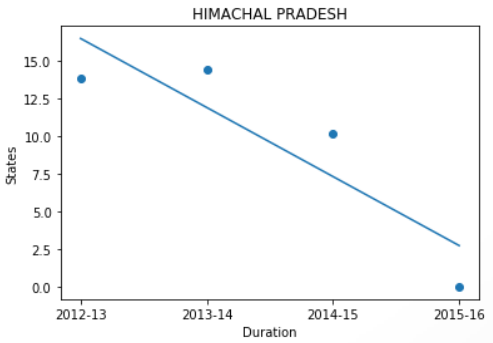


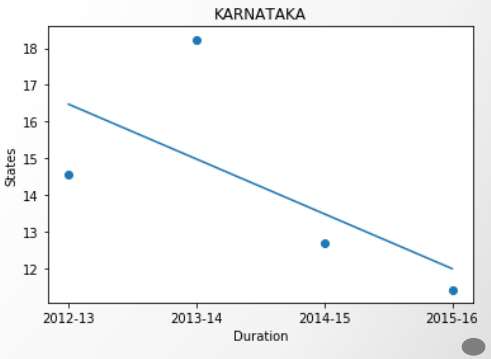




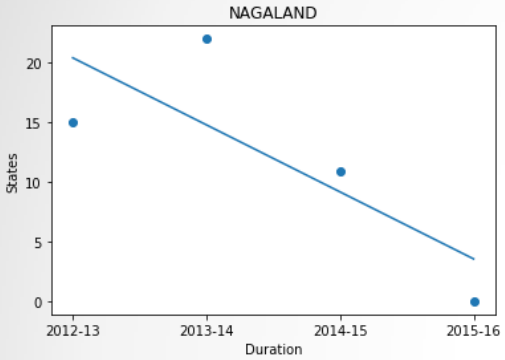


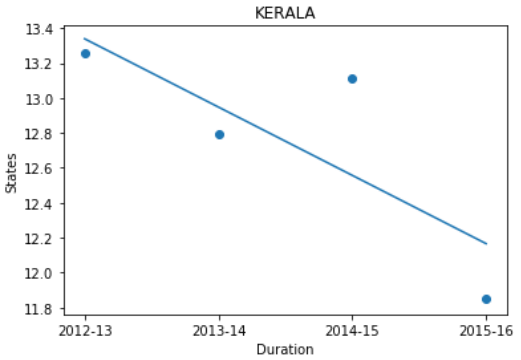


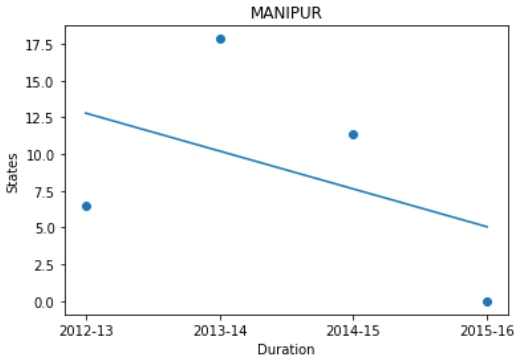


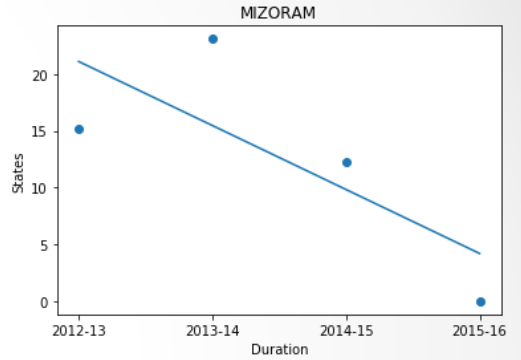


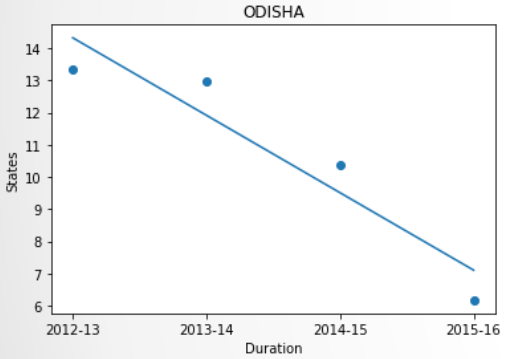
Part-I A: GDP Analysis of the Indian States

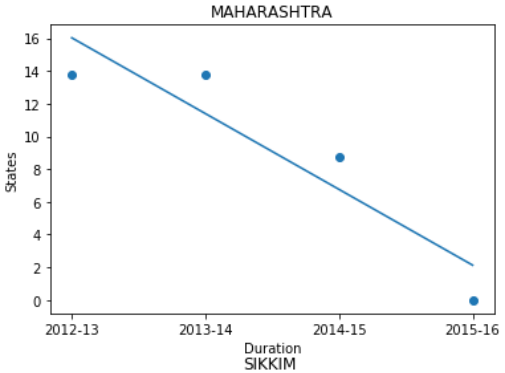


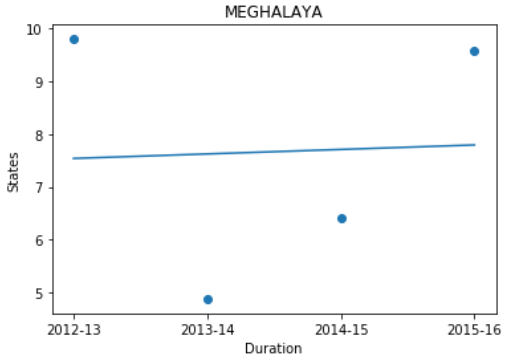


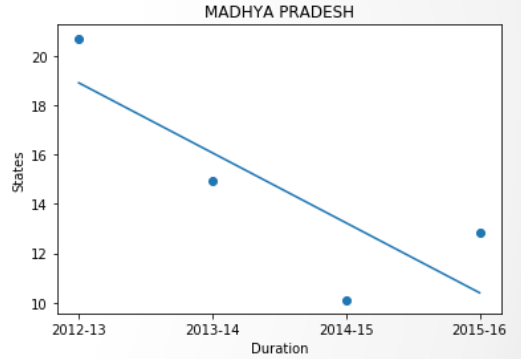


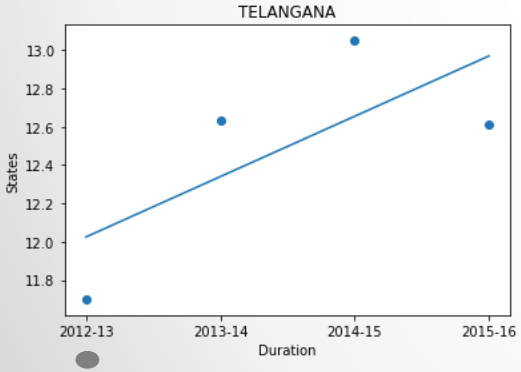


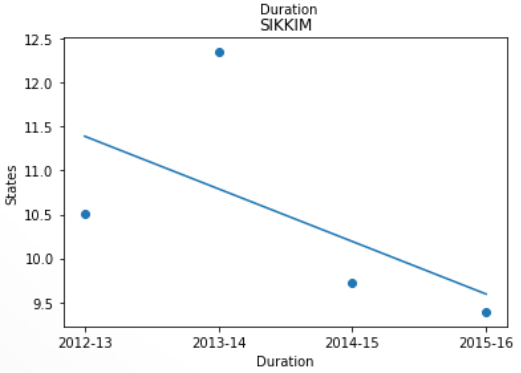


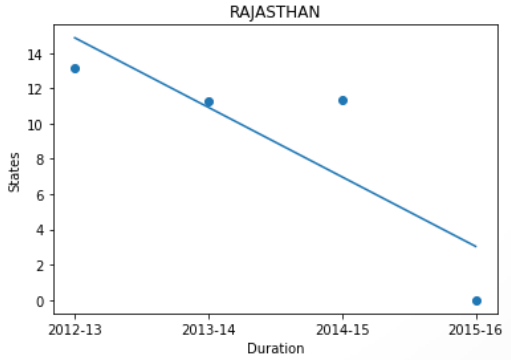


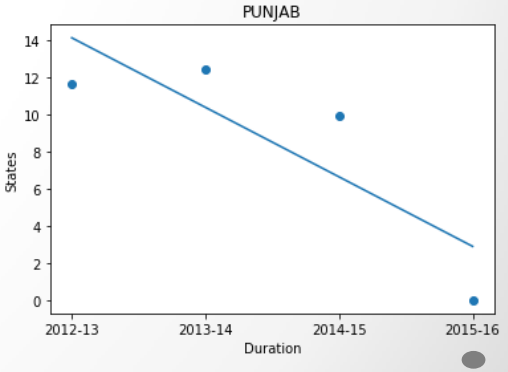






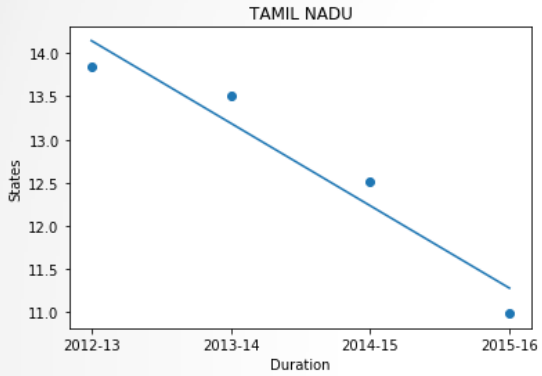


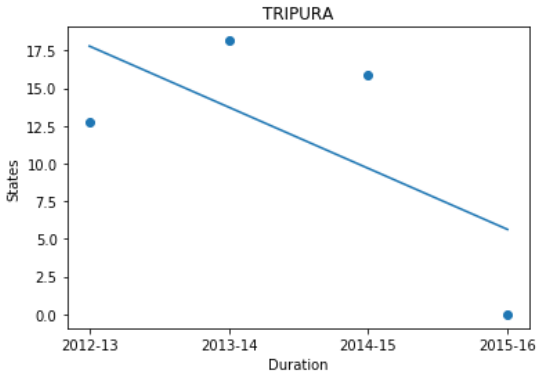


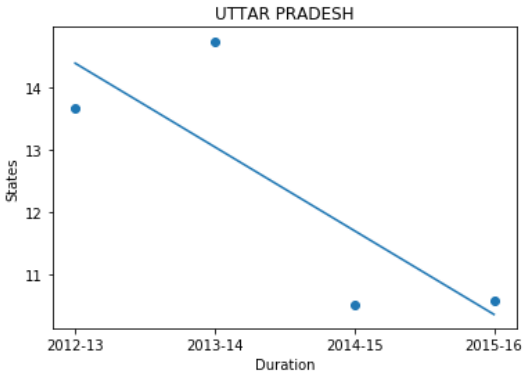


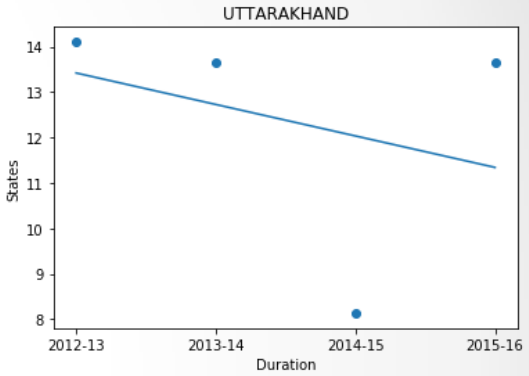
Part-I A: GDP Analysis of the Indian States

Growth rate over previous year for all States

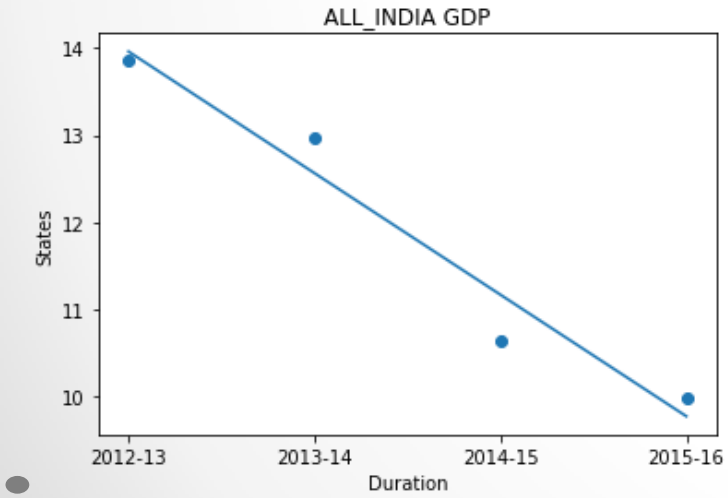








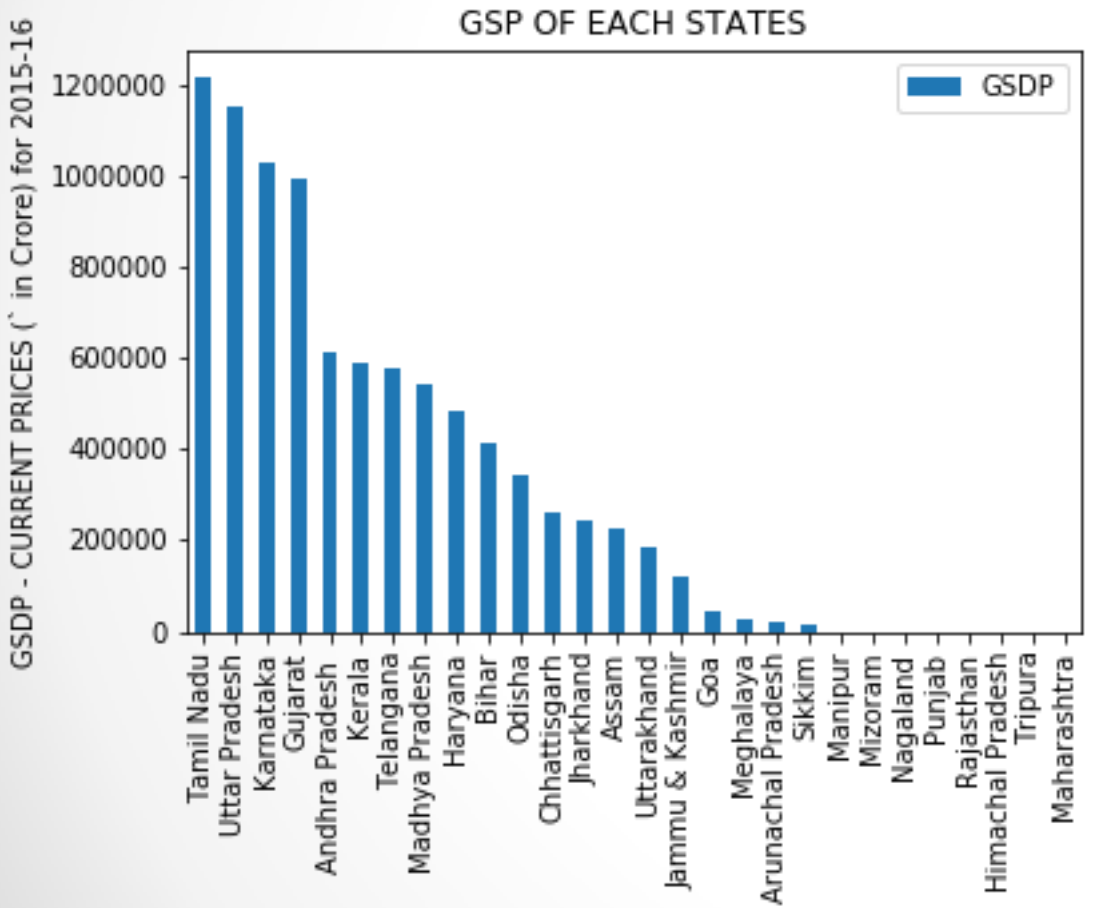
Growth rate over previous year across India



- The slope of the graph gives growth rate over the previous year
- The slope increases better the growth rate of the state
- Madhya Pradesh, Karnataka and Arunachal Pradesh are the top 3 fastest growing states. Goa, Meghalaya and Punjab are the 3 slowest growing states.
- Nation's growth is 11.86.
- Average growth rate of Kerala, home state is 12.75 which is higher than that of Nation's.

Part-I A: GDP Analysis of the Indian States

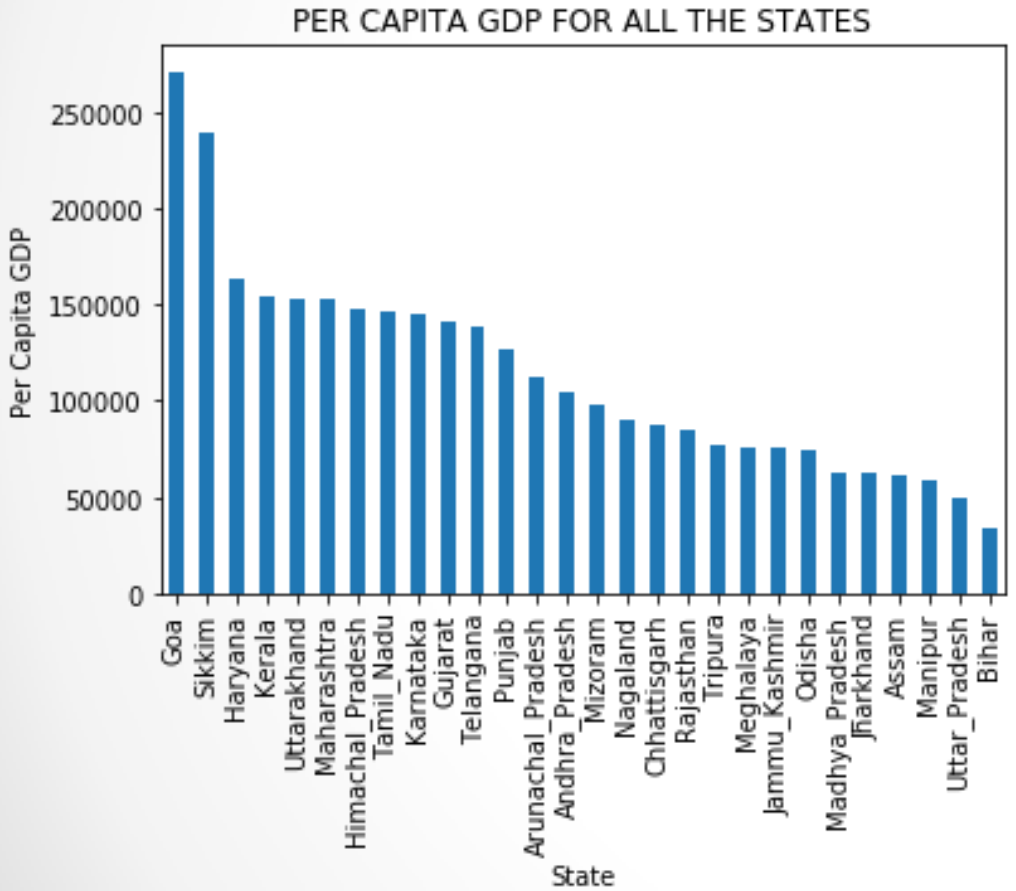
GDP of the states for the year 2015-16



- A bar plot is used for analysisng GDP of the states for the year 2015-16. The GDP of different states can be visualised easily and can be compared with the graph.
- Top 5 states: Maharashtra, TamilNadu, Uttar Pradesh, Karnataka and Gujarat
- Bottom 5 states: Arunachal Pradesh, Sikkhim, Manipur, Nagaland and Mizoram.
- States like Andhra Pradesh and Karnataka are doing consistently good throughtout the period.
- Manipur has been doing bad both in GDP and growth rate.
- Goa is growing at a smaller rate than any other states.

Part-I B: GDP Analysis on sub-sectors of states

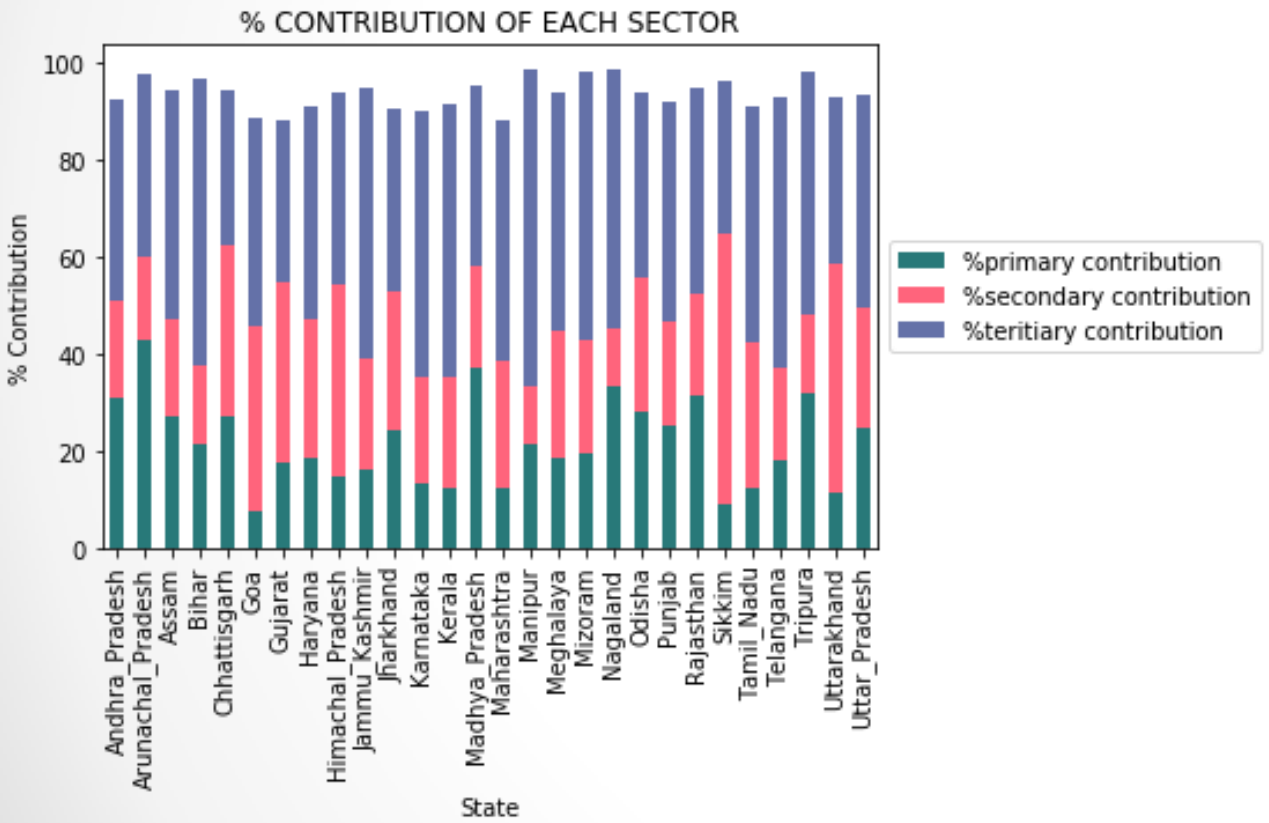
Per capita of all states



- Top 5 and the bottom 5 states based on the GDP per capita.
- Ratio of the highest per capita GDP to the lowest per capita GDP.
- Ratio of the highest per capita GDP to the lowest per capita GDP is 4.377.

Part-I B: GDP Analysis on sub-sectors of states

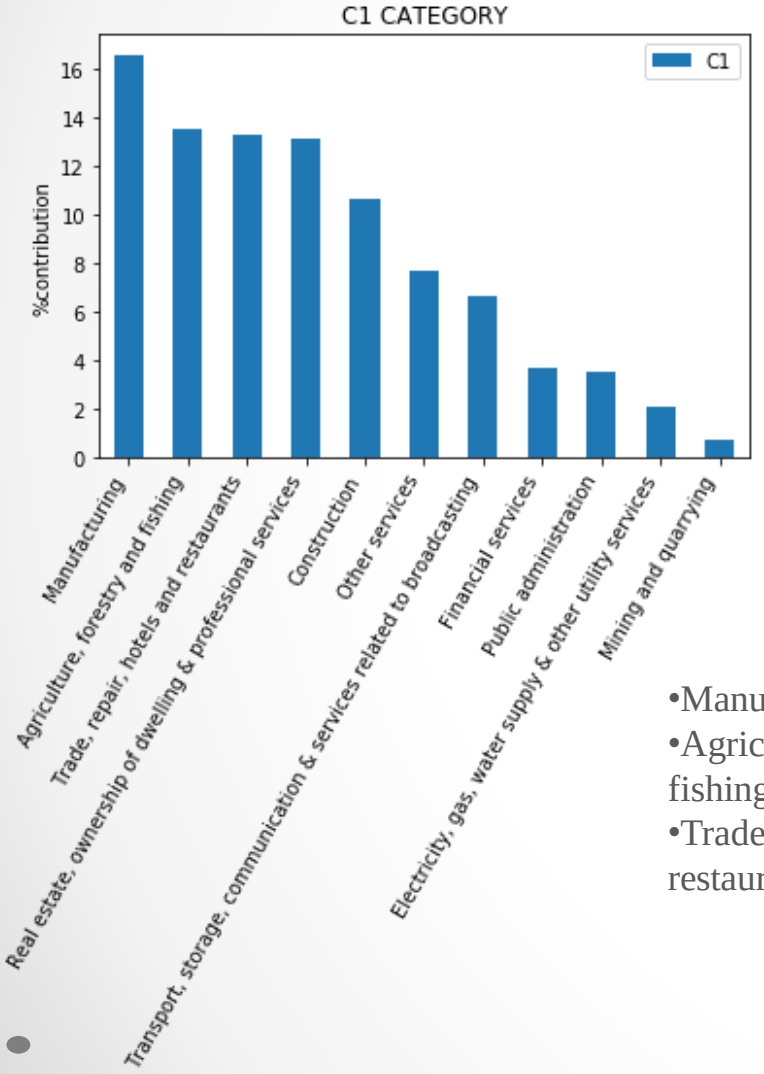
Percentage Contribution of each Sector to total GDP



- A stacked bar graph is used to plot the %contribution each sector for each states as it shows how total GDP is divided between each sector.
- The correlation between percentile rank of a state and percentage of primary sector contribution is negative which shows that as percentile rank increases the percentage of primary sector contribution to the total GDP decreases and vice versa.
- The correlation between percentile rank of a state and percentage of primary sector contribution is **-0.124**

Part-I B: GDP Analysis on sub-sectors of states

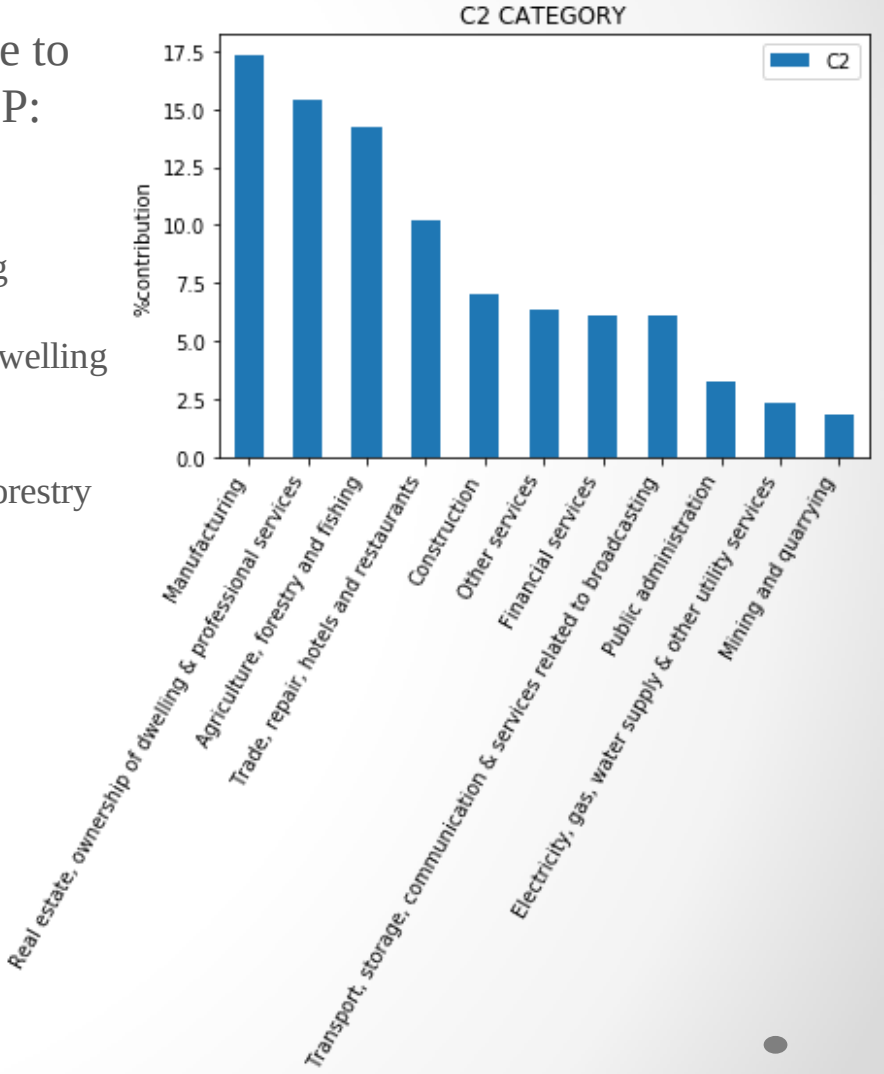
Contribution of sub-sectors of each Category (C1, C2, C3, C4)



Top 3 sub-sectors that contribute to approximately 80% of the GDP:

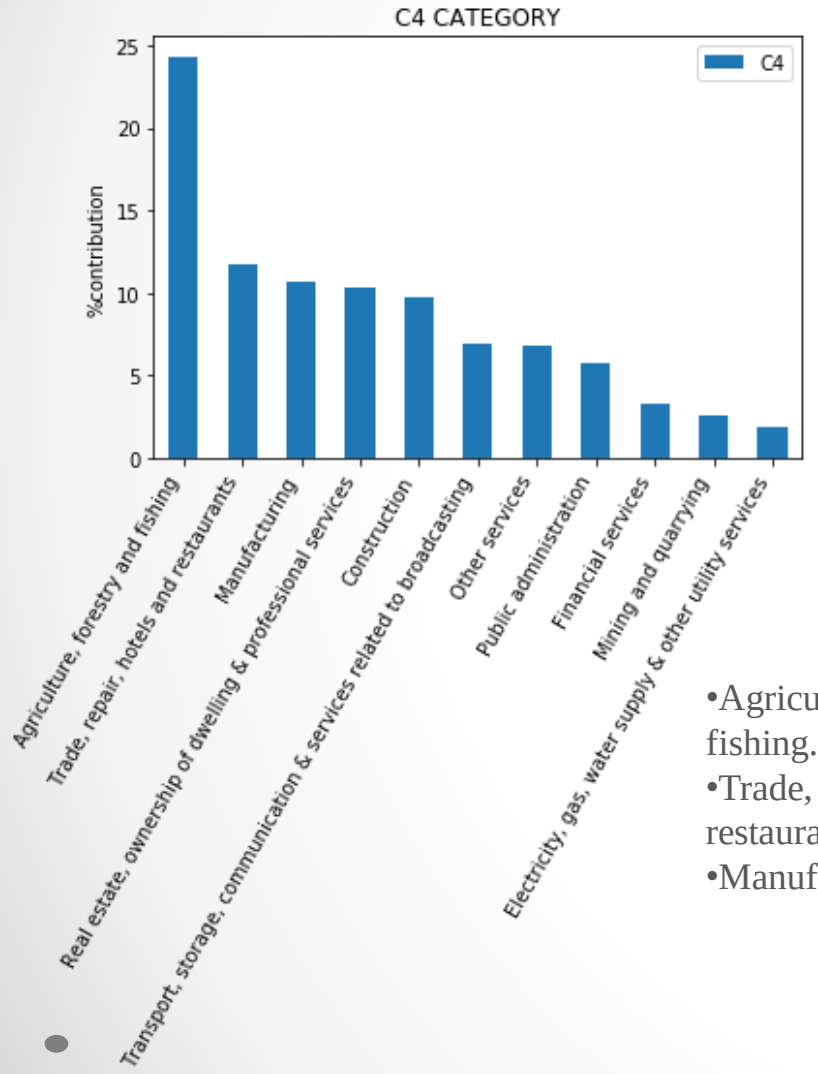
•Manufacturing
•Agriculture, forestry and fishing.
•Trade, repair, hotels and restaurants

•Manufacturing
•Real estate, ownership of dwelling & professional services
•Agriculture, forestry and fishing.



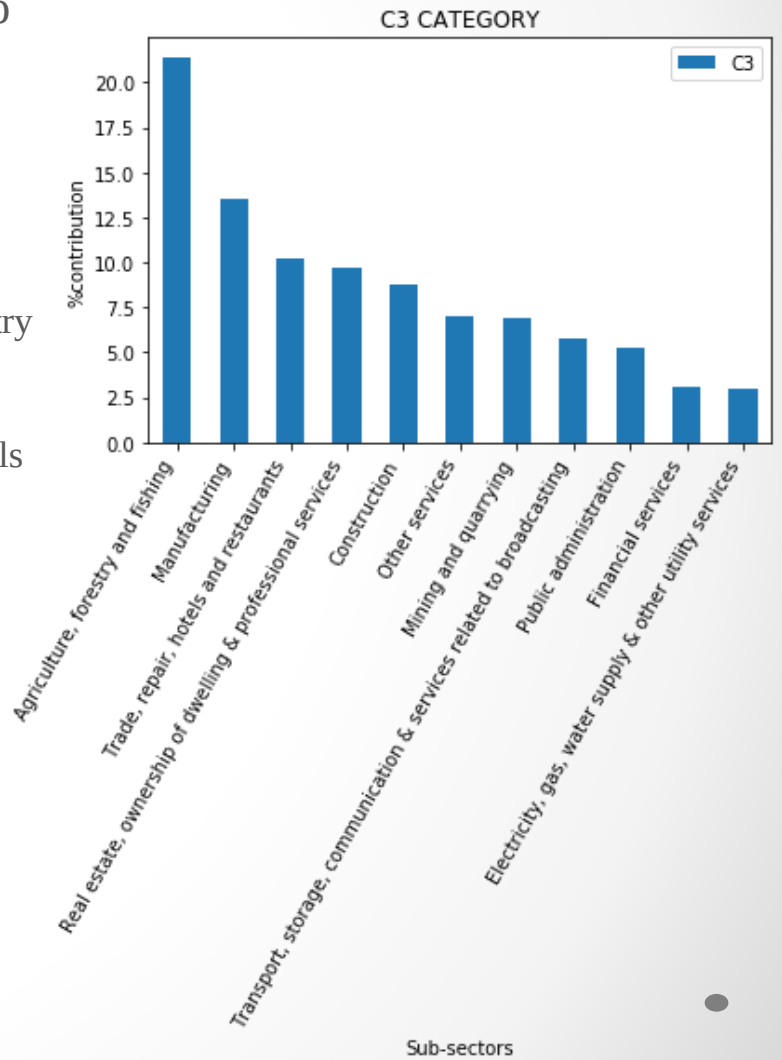
Part-I B: GDP Analysis on sub-sectors of states

Contribution of sub-sectors of each Category (C1, C2, C3, C4)



Top 3 sub-sectors that contribute to approximately 80% of the GDP:

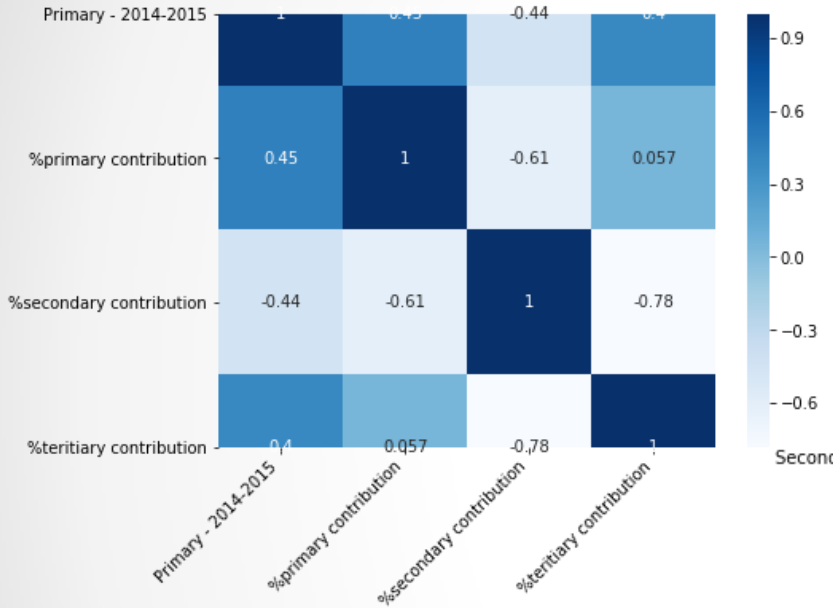
•Agriculture, forestry and fishing.
•Trade, repair, hotels and restaurants
•Manufacturing



•Agriculture, forestry and fishing.
•Manufacturing
•Trade, repair, hotels and restaurants

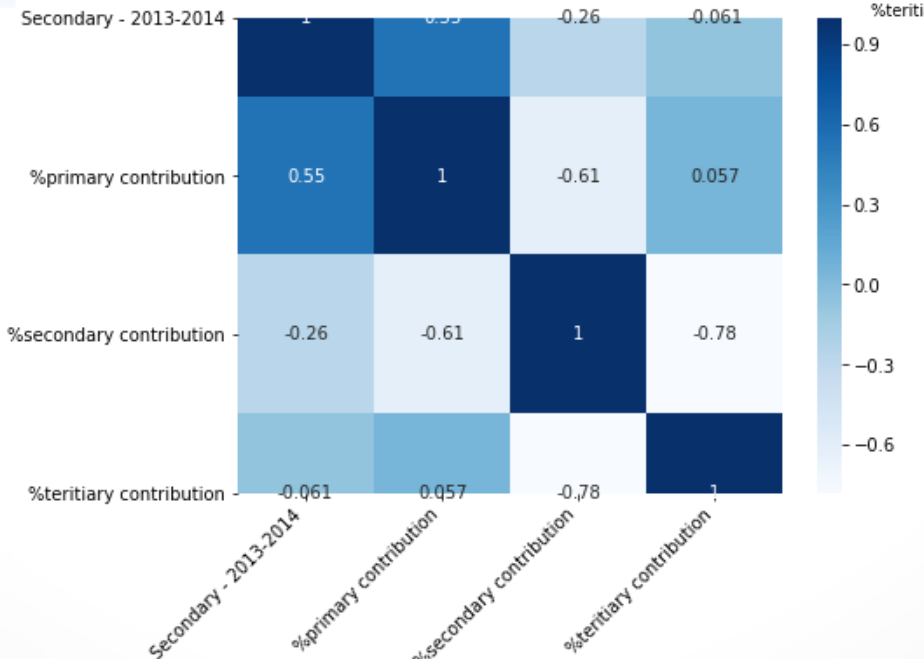
Part-II: GDP and Education Dropout Rates

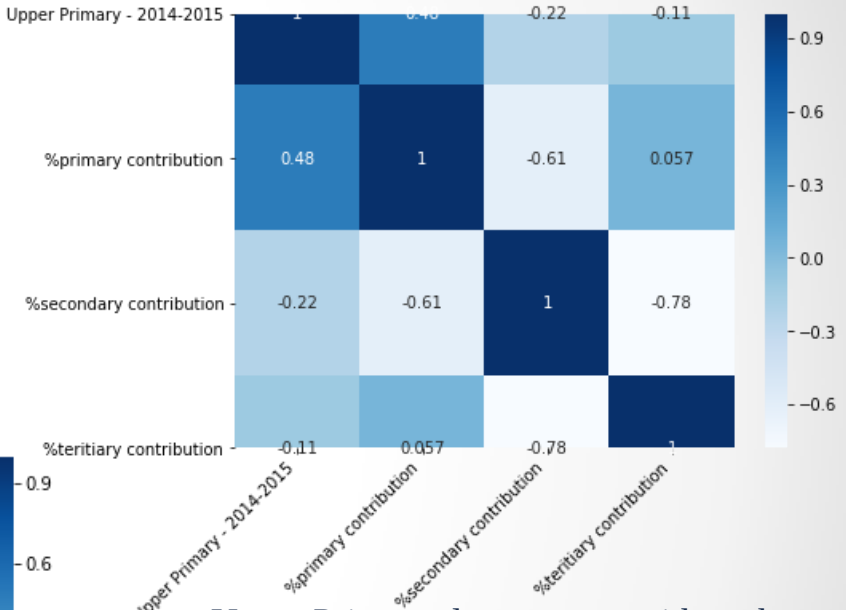
Correlation plot between dropout rates and %contribution of each sectors



Primary dropout rate with each sector

Secondary dropout rate with each sector

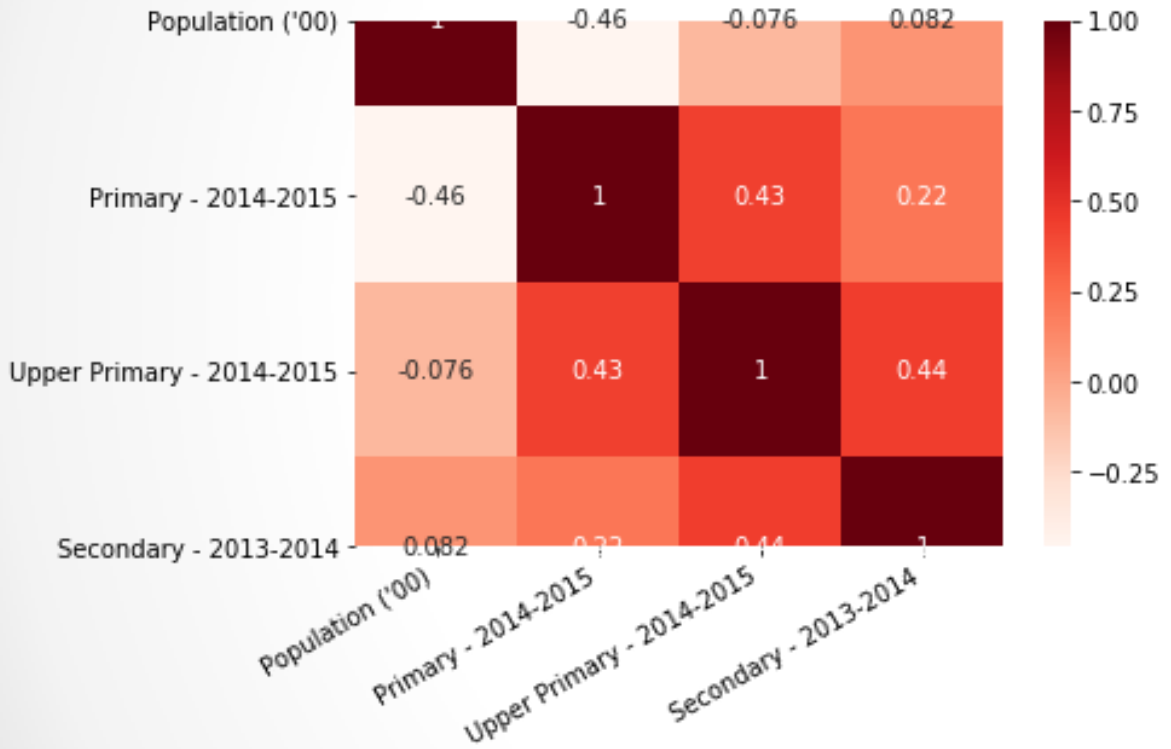




Upper Primary dropout rate with each sector

Part-II: GDP and Education Dropout Rates

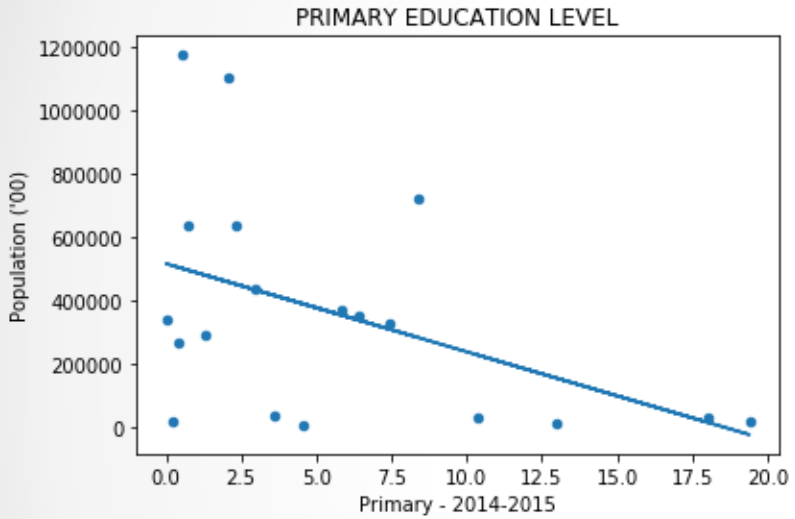
Correlation plot between population and dropout rates

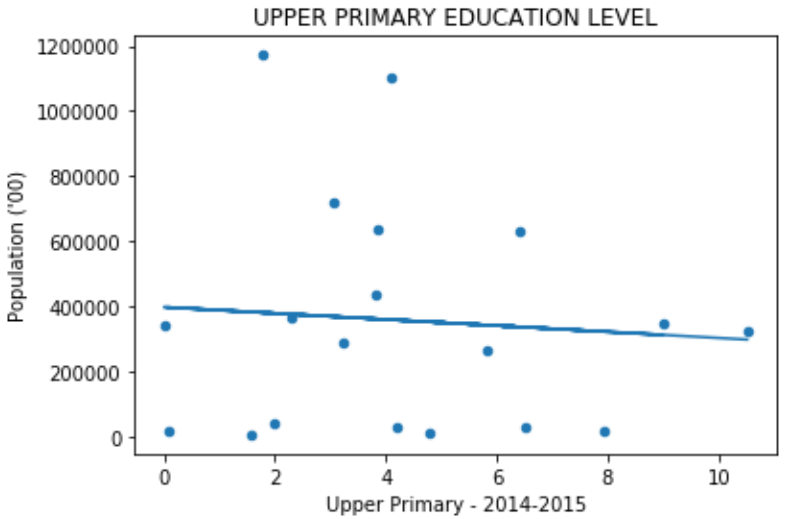


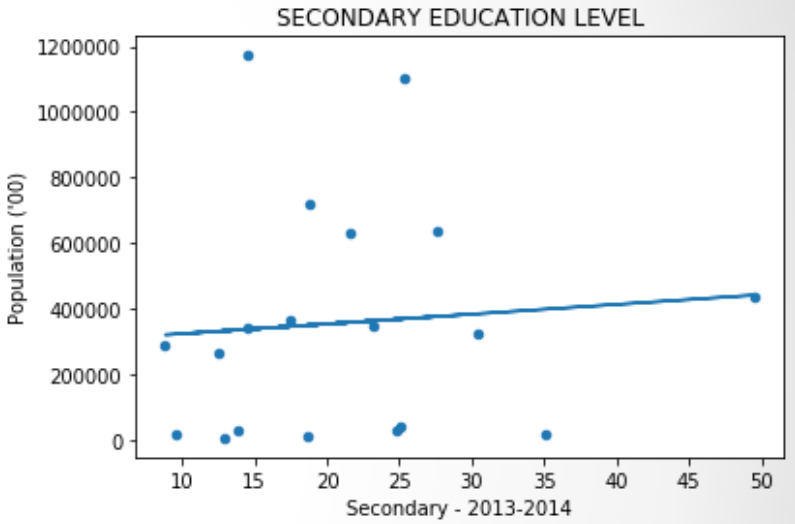
- The correlation between dropout rates and population is weak.
- The dropout does not depend much on population.
- There are also negative correlation which shows the dropout rate decreases as population increases and vice versa.

Part-II: GDP and Education Dropout Rates

The trend in the each education level







There is a negative trend in primary and upper primary dropout rate whereas secondary dropout rate has a negative trend.