

ASSIGNMENT- I

GDP ANALYSIS



PART-I: GDP Analysis of Indian states

PART-II: GDP and Education Drop-out Rates

Submitted by

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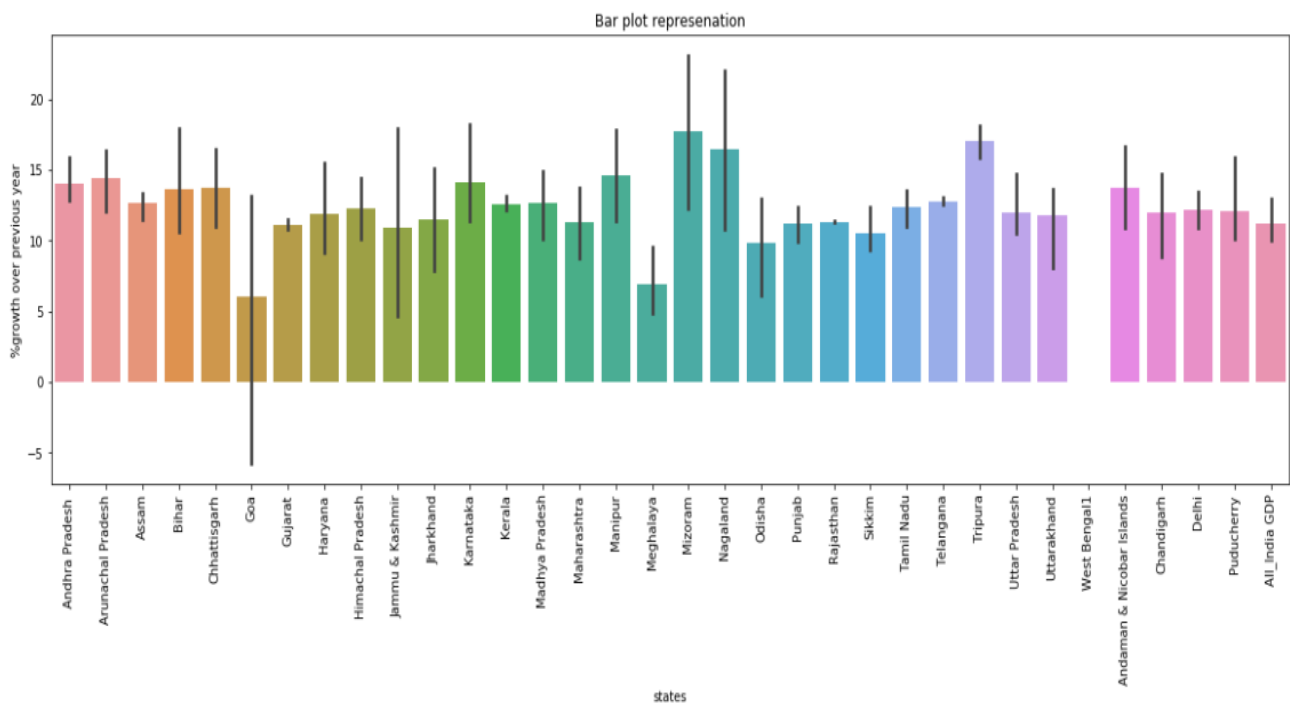
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GDP ANALYSIS

PART-I: GDP Analysis of Indian states

Part I-A:

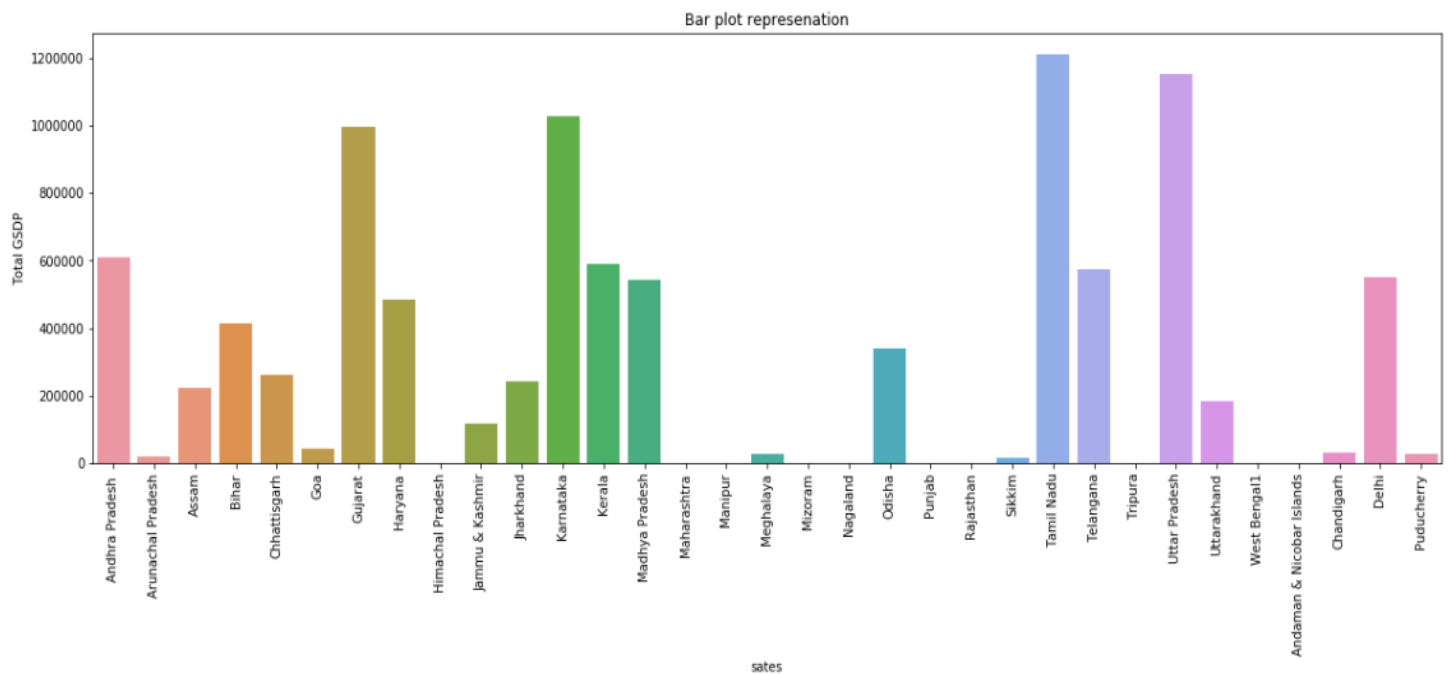
- From the source of data we see that the details have been present for the year 2013-14, 2014-15, 2015-16.
- Hence we have considered the data only for those specific years.
- Average growth of states over the three years:



Observations:

- Average growth rate for the three years individually of all states
- Highest growth rate and the lowest growth rate of all states
- States growing consistently fast are: Mizoram, Nagaland, and Tripura
- States that have been struggling are: Goa, Meghalaya, and Odisha

Analysis of Total GSDP for individual states:



The top and the bottom states based on total GDP from the above plot

+ The top 5 states are:

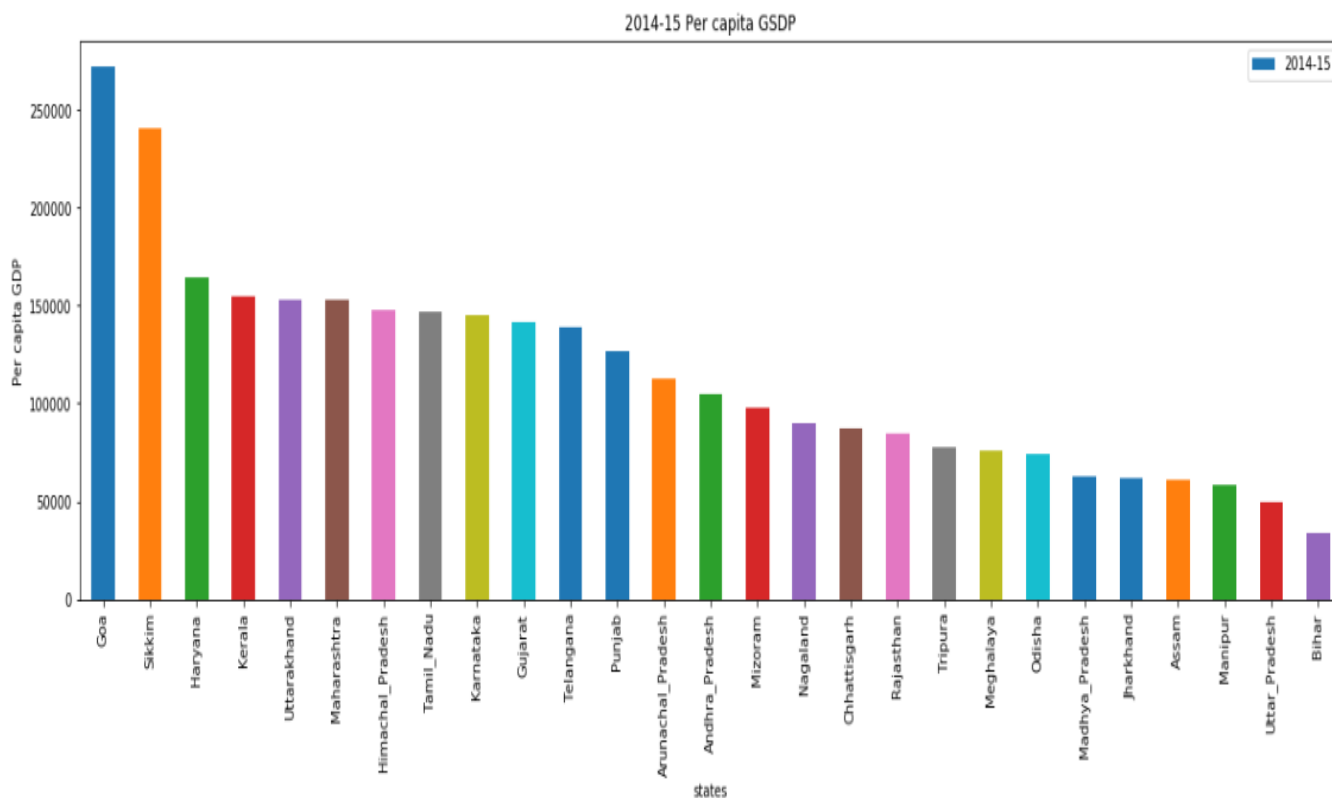
- Tamil Nadu- 1212668
- Uttar Pradesh- 1153795
- Karnataka- 1027068
- Gujarat- 994316
- Andhra Pradesh- 609934

+ The bottom 5 states are:

- Sikkim- 16637
- Arunachal Pradesh- 18784
- Puducherry- 26533
- Meghalaya- 26745
- Chandigarh- 30304

PART I-B:

- Analysis for the duration: 2014-15
- We will not consider the Union Territories for further analysis since they are governed directly by the centre, not state governments.
- Analysis of Per Capita GSDP for all the states:



Top-5 and the Bottom-5 states based on GDP per capita are below:

Top- 5 states:

Goa, Sikkim, Haryana, Kerala, Uttarakhand

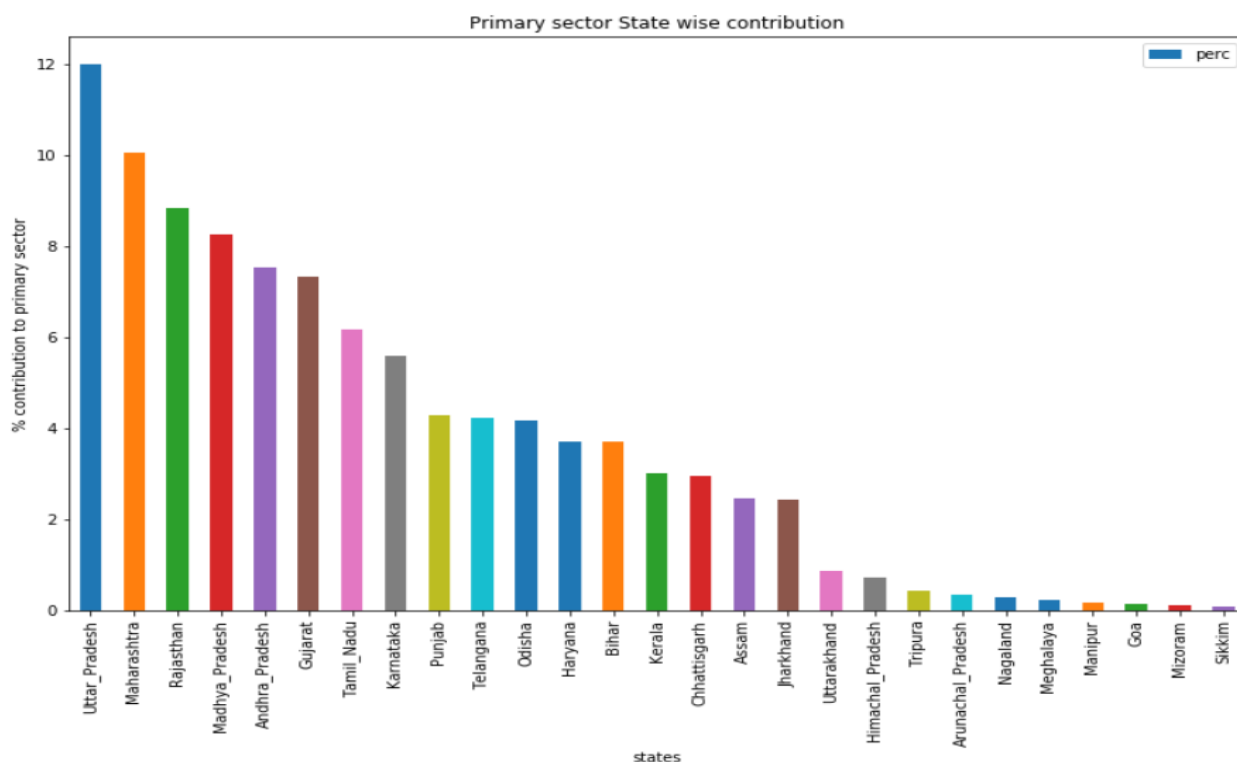
Bottom 5 states:

Bihar, Uttar Pradesh, Manipur, Assam, Jharkhand

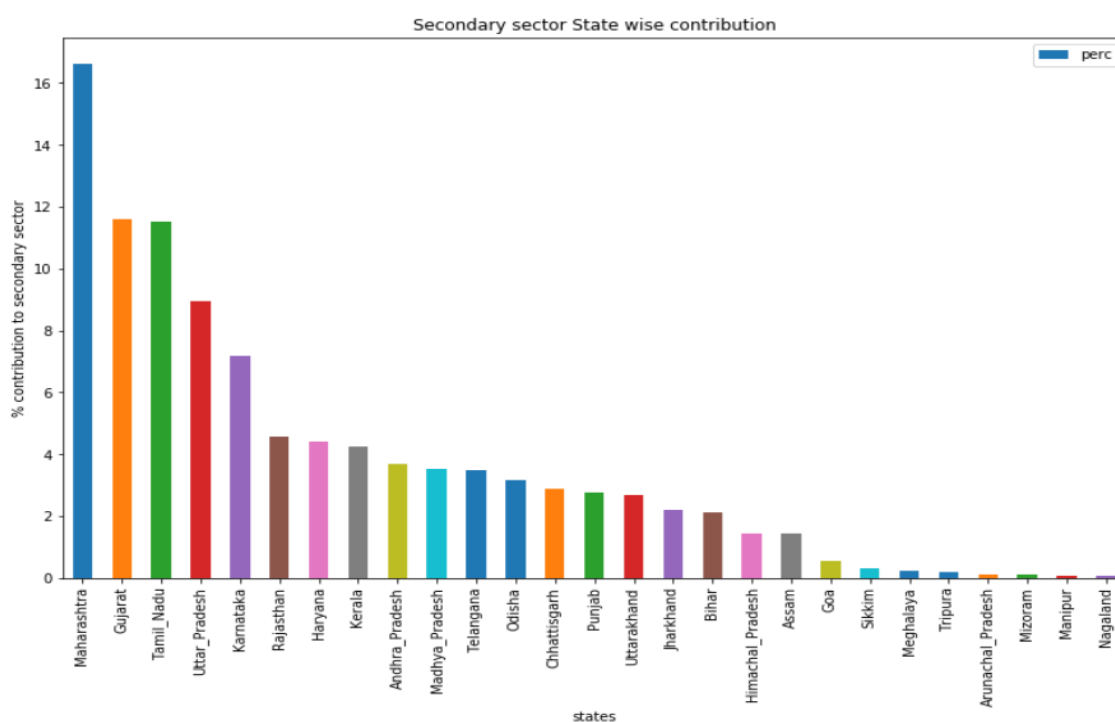
Ratio of highest per capita GDP to the lowest per capita GDP: 8.004741709371503

Percentage contribution of primary, secondary and tertiary sectors as a percentage of total GDP for all the states.

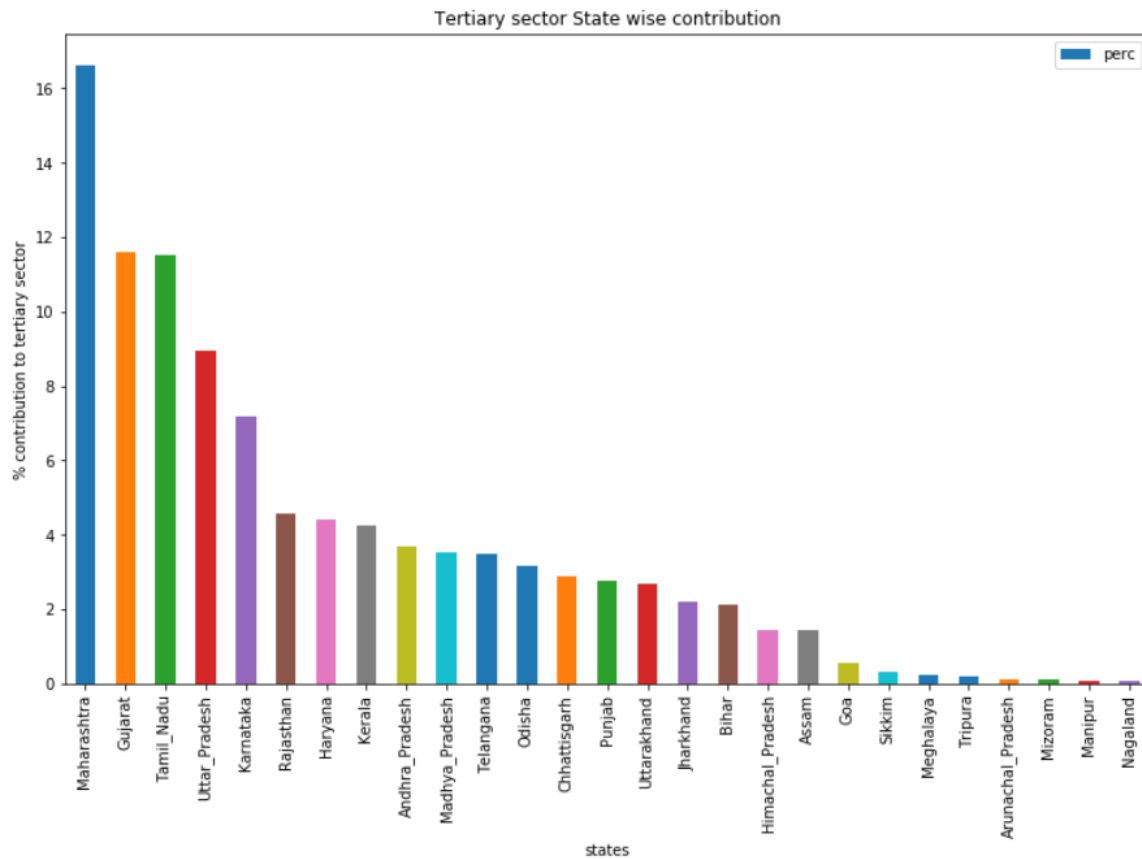
Primary sector state wise contribution:



Secondary sector state wise contribution:



Tertiary sector state wise contribution:



Further depending on the quantile values we will categorize the states into C1, C2, C3, and C4:

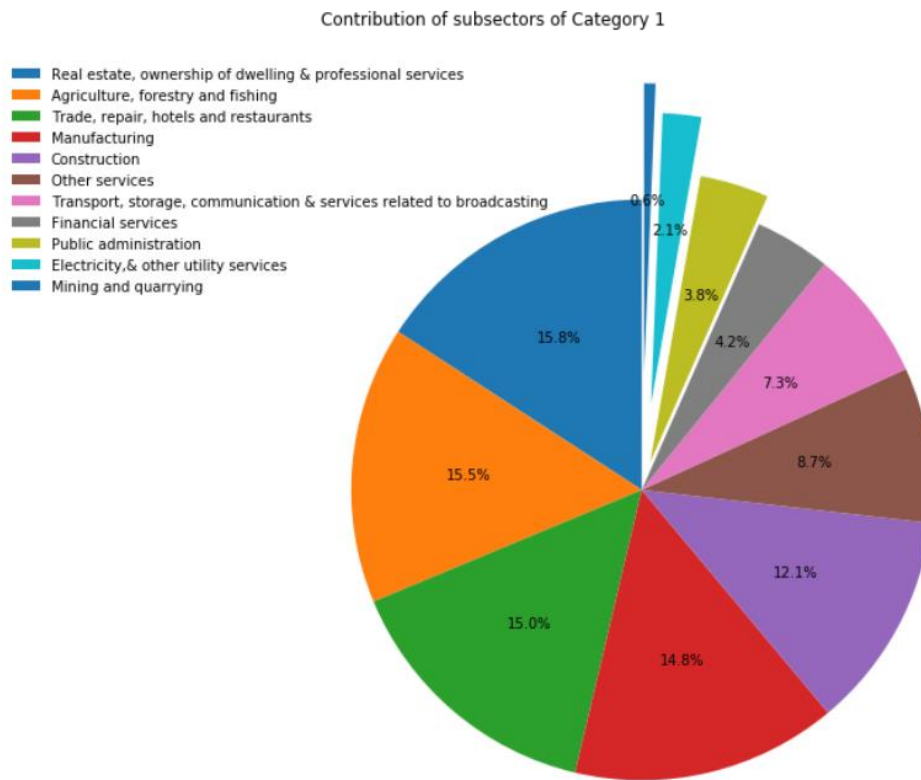
Categorizing based on quantile values:

C1-> 0.00 - 0.20

C2-> 0.21 – 0.5

C3-> 0.51 – 0.85

C4-> 0.86 – 1.0



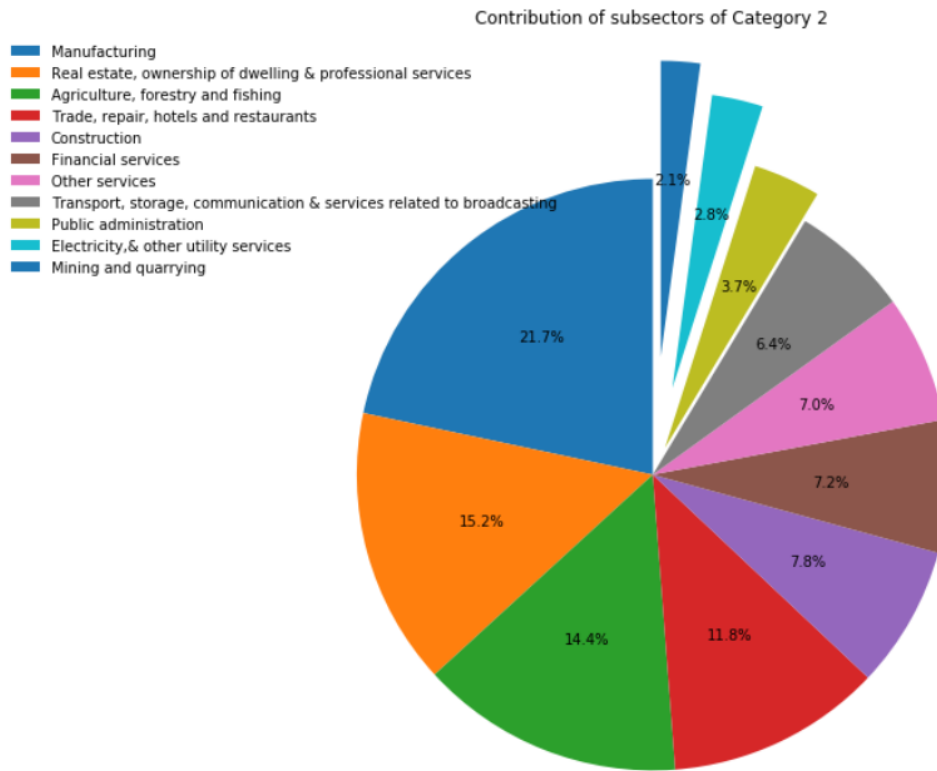
From the above plot below are the observations:

The top subsectors which contribute to approximately 80% of category's GDP are:

1. Real estate, ownership of dwelling & professional services – **15.8%**
2. Agriculture, forestry and fishing – **15.5%**
3. Trade, repair, hotels and restaurants– **15.0%**
4. Manufacturing – **14.8%**
5. Construction – **12.1%**
6. Other services – **8.7%**

The lowest contributing subsectors for the category are:

1. Mining and quarrying – **0.6%**
2. Electricity, gas, water supply & other utility services – **2.1%**
3. Public administration – **3.8%**



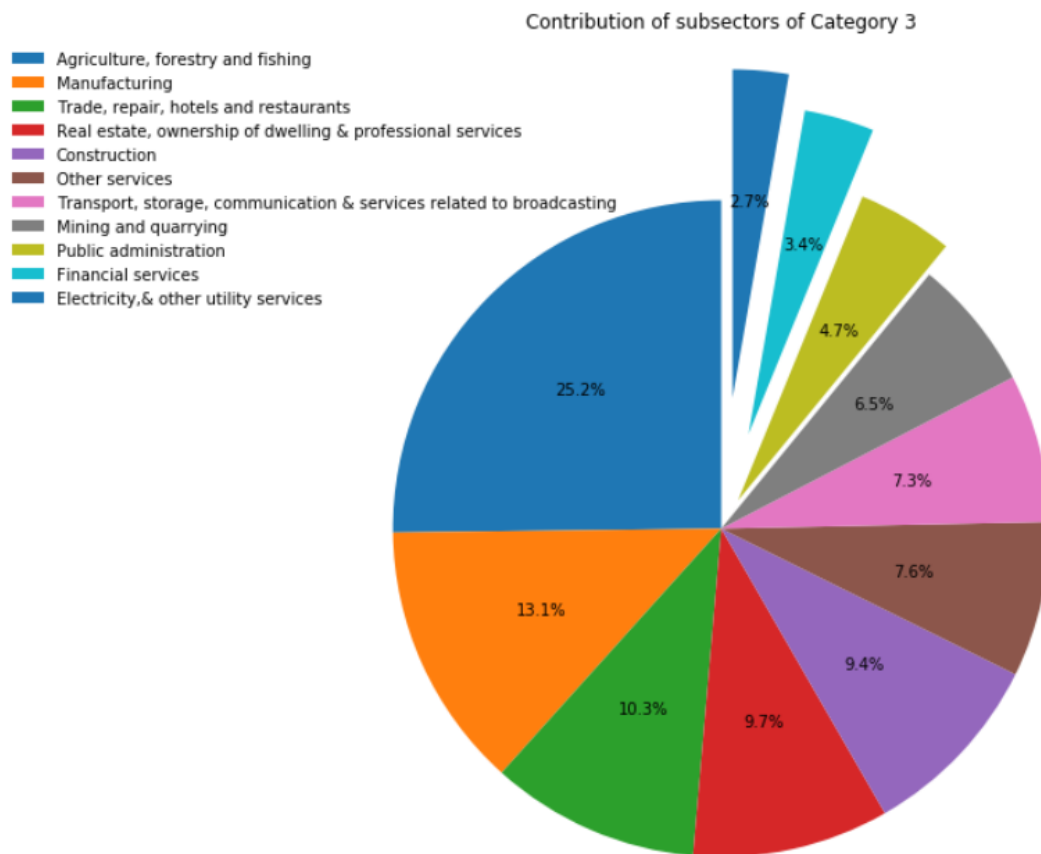
Analysis of category C2 w.r.t contribution of subsectors:

The top subsectors which contribute to approximately 80% of category's GDP are:

1. Manufacturing – **21.7%**
2. Real estate, ownership of dwelling & professional services – **15.2%**
3. Agriculture, forestry and fishing – **14.4%**
4. Trade, repair, hotels and restaurants – **11.8%**
5. Construction – **7.8%**
6. Financial services – **7.2%**

The lowest contributing subsectors for the category are:

1. Mining and quarrying – **2.1%**
2. Electricity, gas, water supply & other utility services – **2.8%**
3. Public administration – **3.7%**



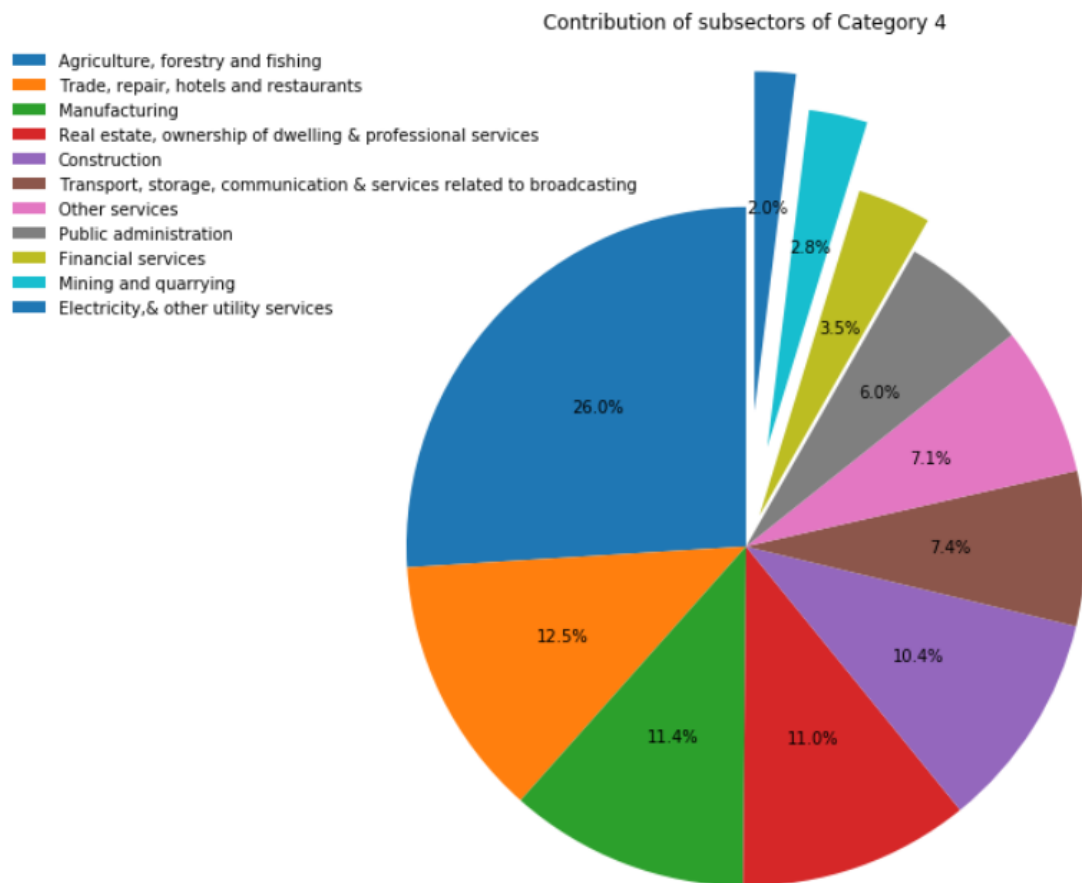
Analysis of category C3 w.r.t contribution of subsectors:

The top subsectors which contribute to approximately 80% of category's GDP are:

1. Agriculture, forestry and fishing – **25.2%**
2. Manufacturing – **13.1%**
3. Trade, repair, hotels and restaurants – **10.3%**
4. Real estate, ownership of dwelling & professional services – **9.7%**
5. Construction – **9.4%**
6. Financial services– **7.6%**
7. Other services – **7.3%**

The lowest contributing subsectors for the category are:

1. Electricity, & other utility services – **2.7%**
2. Financial services– **3.4%**
3. Public administration – **4.7%**



Analysis of category C3 w.r.t contribution of subsectors:

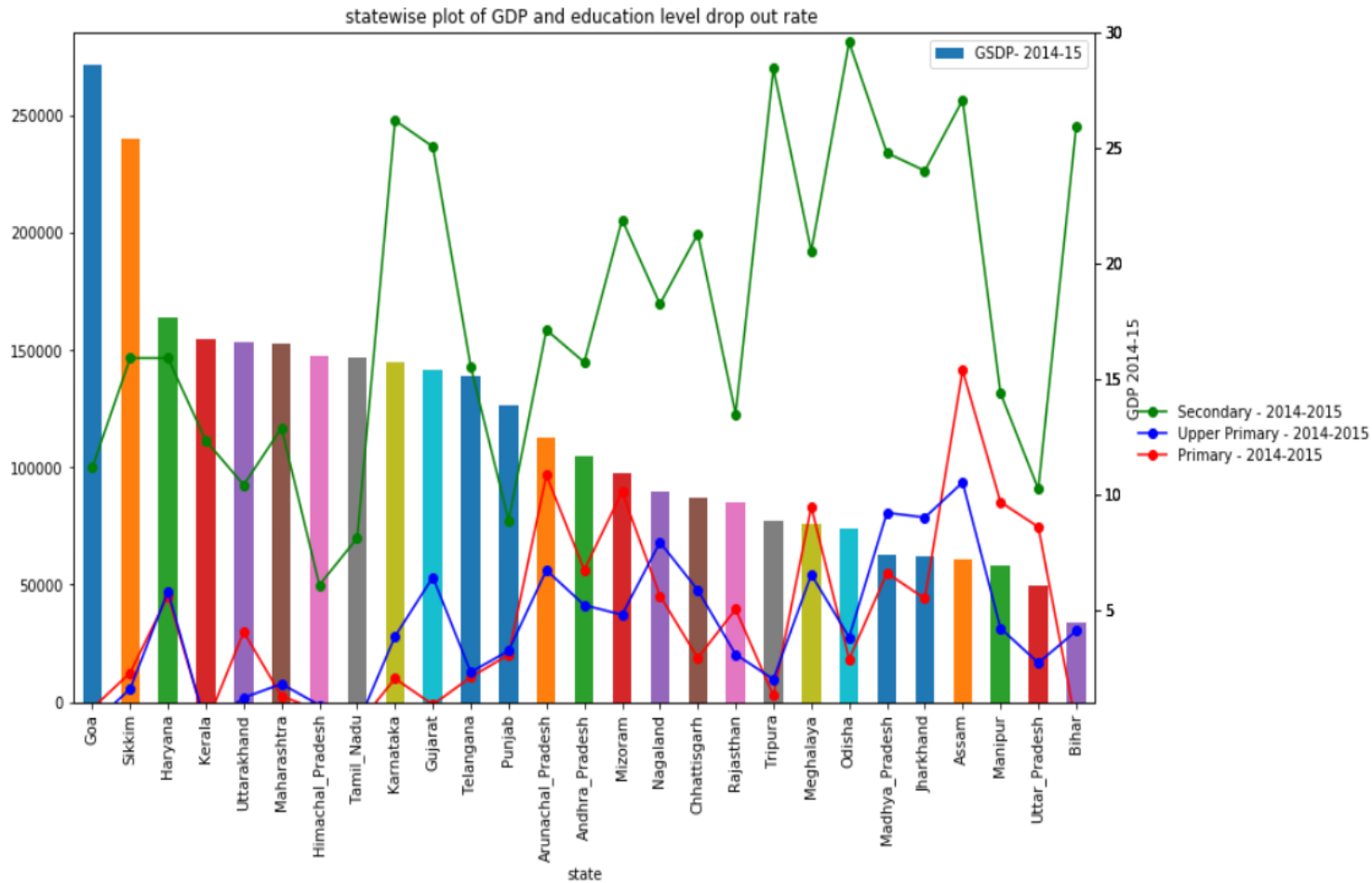
The top subsectors which contribute to approximately 80% of category's GDP are:

1. Agriculture, forestry and fishing – **26.0%**
2. Trade, repair, hotels and restaurants – **12.5%**
3. Manufacturing – **11.4%**
4. Real estate, ownership of dwelling & professional services – **11.0%**
5. Construction – **10.4%**
6. Transport, storage, communication & services related to broadcasting– **7.4%**

The lowest contributing subsectors for the category are:

1. Electricity, & other utility services – **2.0%**
2. Financial services– **2.8%**
3. Financial services– **3.5%**

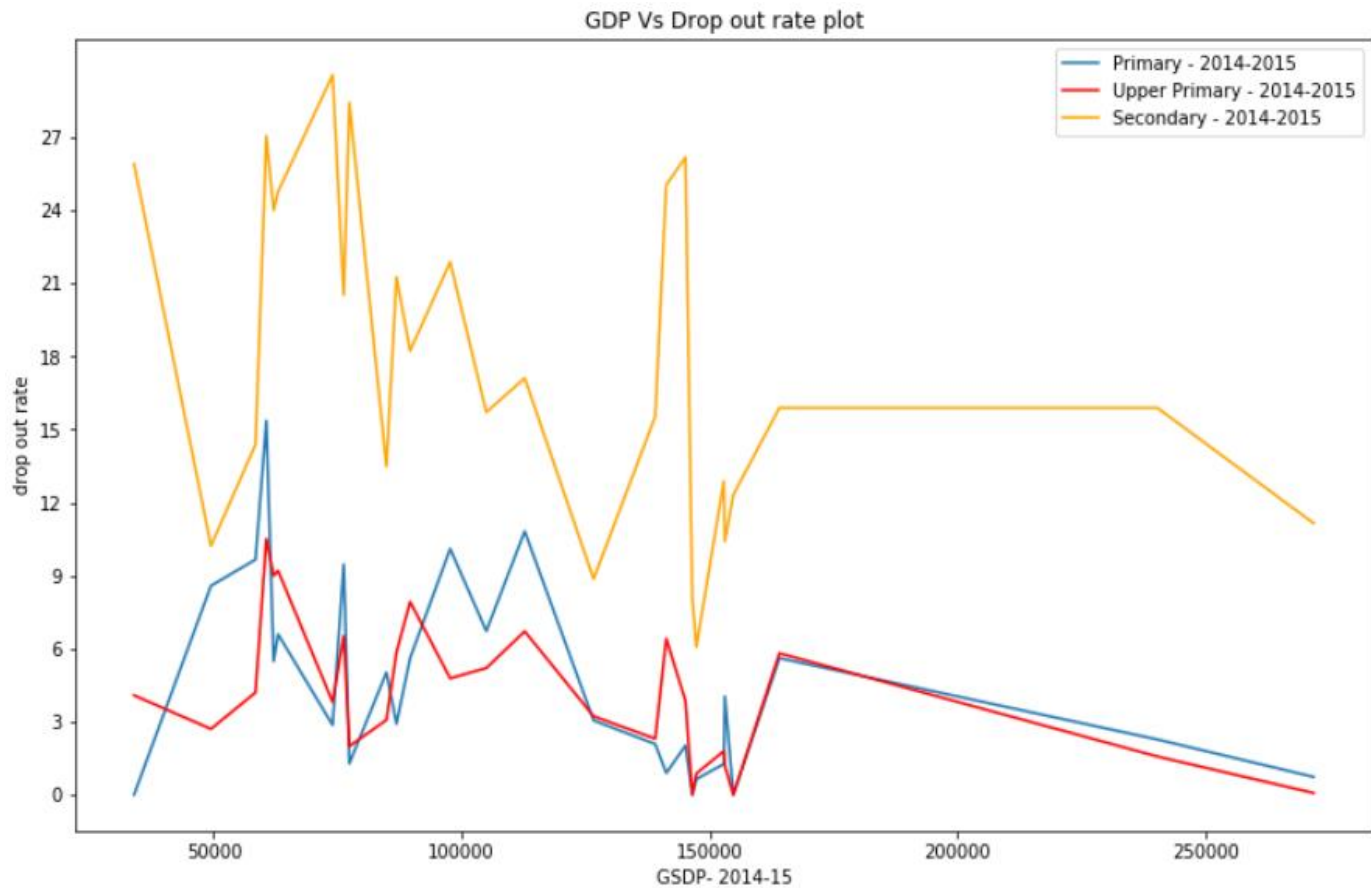
Part-II: GDP and Education Drop-out Rates



From the above plot we can find the below observations:

- Higher the secondary education level drop rate lower the total GDP of the state
- States with lowest secondary dropout rate are the major contributors of the total GDP
- And increase in it directly impacts the GDP of a state
- States with highest primary and upper primary are in the middle from the major contributors wise
- The states should focus on improving the dropout rates of secondary education
- So that the overall GDP increases

Analysis of GDP value w.r.t Drop out rates for all the 3 education levels:



The above plot gives an insight of relation between GDP and the education dropout rate:

- We can observe that lower the dropout rate higher the GDP
- From the plot we see that the GDP is highly to increase where the secondary education dropout rate is the least
- However even the Primary and secondary are also the impactors
- Few places we can see that even if the secondary education dropout rate is high due to the lowest primary and upper primary dropout rate the GDP level is not very less
- But the major contributors for GDP are secondary education sectors
- Hence the improvisation and controlling of secondary education dropout rate is a must for every state to improve the total GDP of an individual

THANK YOU