

INDIAN GDP ANALYSIS

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DATA EXPLORATION

Data set contains data for All States and Union Territories of India divided into three parts:

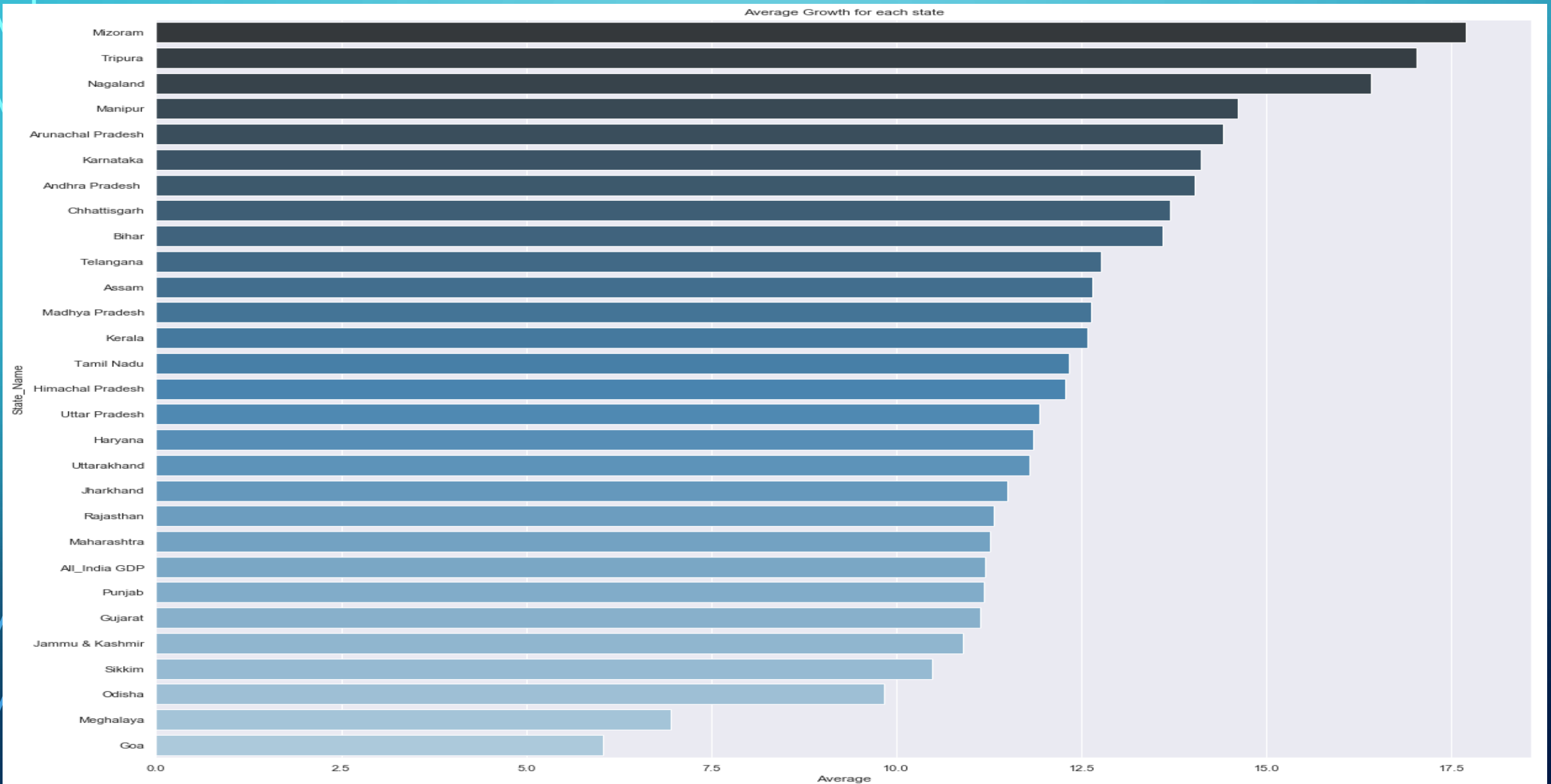
- Data I-A : consists of the GSDP (Gross State Domestic Product) data for the states and union territories.
- **Data I-B:** This dataset contains the distribution of GSDP among three sectors: the primary sector (agriculture), the secondary sector (industry) and the tertiary sector (services) along with taxes and subsidies.
- Separate dataset for each of the states in the folder Data I-B

Problem Statement: analyze the GDP of the various states of India and suggest ways to improve it.

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PART-I: GDP ANALYSIS OF THE INDIAN STATES

DATA 1A: Average growth of states for the duration 2013-14, 2014-15 and 2015-16



DATA 1 A: Average growth of states for the duration 2013-14, 2014-15 and 2015-16

- Growth Rates:

Mizoram, Tripura, Nagaland

Meghalaya, Goa

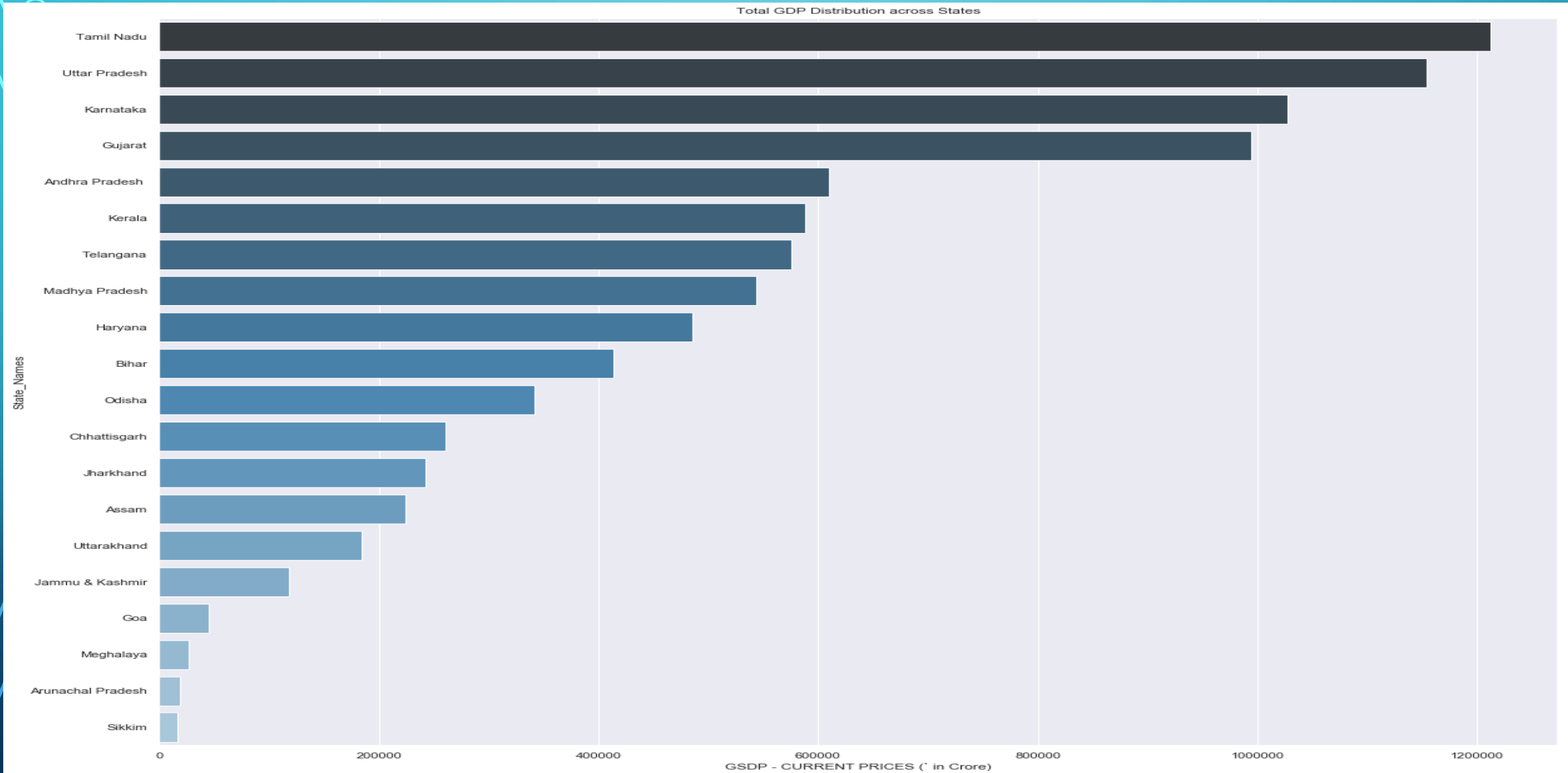


Home State: **Uttar Pradesh**

State Name	2013-14	2014-15	2015-16	Average
Uttar Pradesh	14.73	10.51	10.58	11.94
All_India GDP	12.97	10.65	9.99	11.20

Average Growth Rate of Uttar Pradesh is a slight more than Indian GDP Growth Rate

DATA 1A: Total GDP Distribution Across States (2015-16)



DATA 1 A: Total GDP Distribution Across States (2015-16)

- Highest Total GDP States



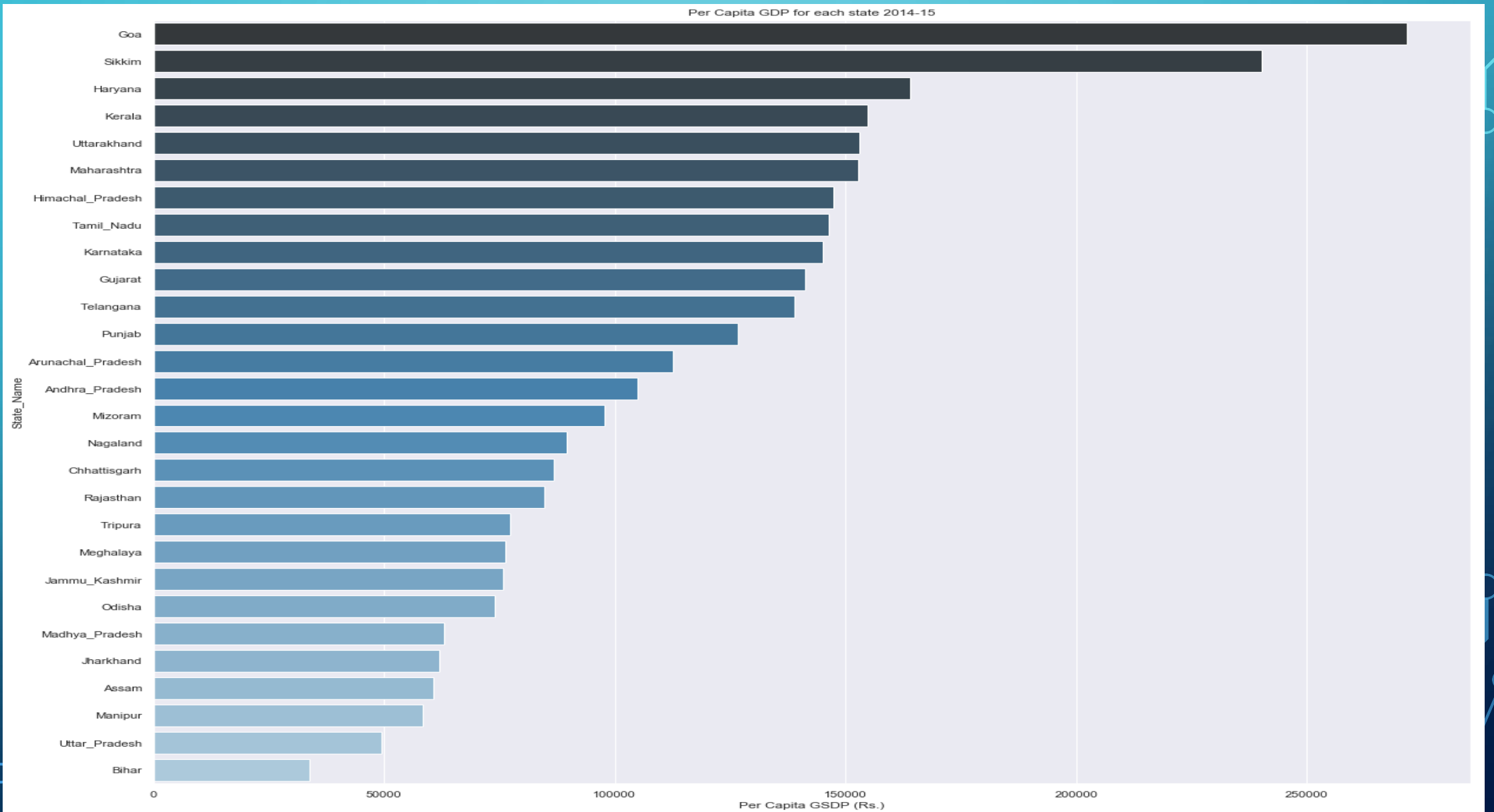
State	Ranking
Tamil Nadu	1
Uttar Pradesh	2
Karnataka	3
Gujarat	4
Andhra Pradesh	5

Lowest Total GDP States



State	Ranking
Sikkim	1
Arunchal Pradesh	2
Meghalaya	3
Goa	4
Jammu & Kashmir	5

DATA 1B: GDP per capita for all states



DATA 1 A: GDP per capita for all states

- Highest GDP Per Capita



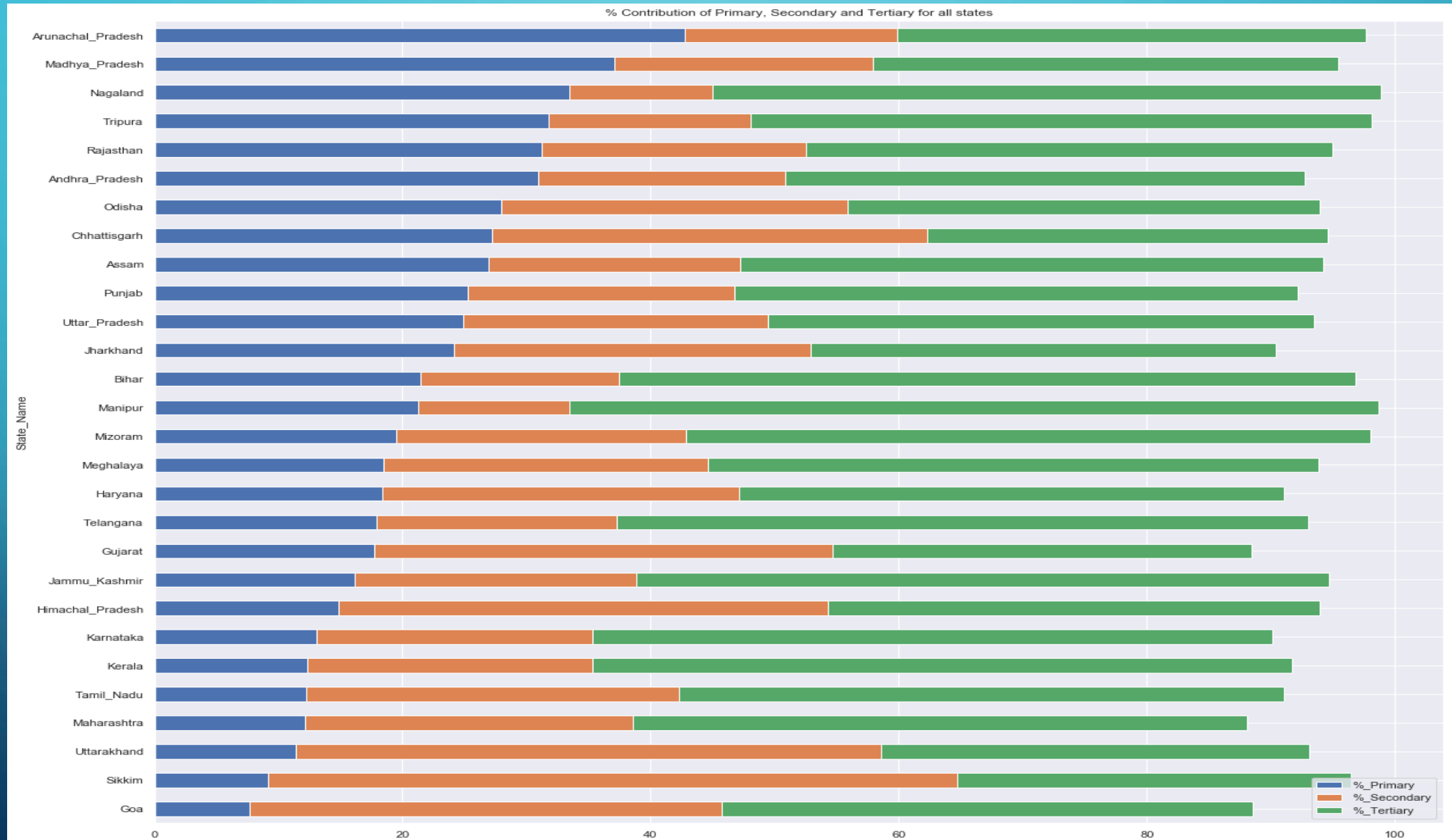
State	Ranking
Goa	1
Sikkim	2
Harayana	3
Kerala	4
Uttarakhand	5

Lowest GDP Per Capita



State	Ranking
Bihar	1
Uttar Pradesh	2
Manipur	3
Assam	4
Jharkhand	5

DATA 1B: % Contribution of the primary, secondary and tertiary sectors



DATA 1B: State Categories

Range	Category
0<Per Capita GDP <67300	C4
67000< Per Capita GDP <101300	C3
67300<Per Capita GDP<153000	C2
153000<Per Capita GDP<271800	C1

DATA 1B: **Reflections**

Top performing states can focus on strengthening the primary sectors and leverage their secondary and tertiary sectors.

States can promote new schemes for farmers to promote primary sectors growth.

Tertiary Sector is growing for all states.

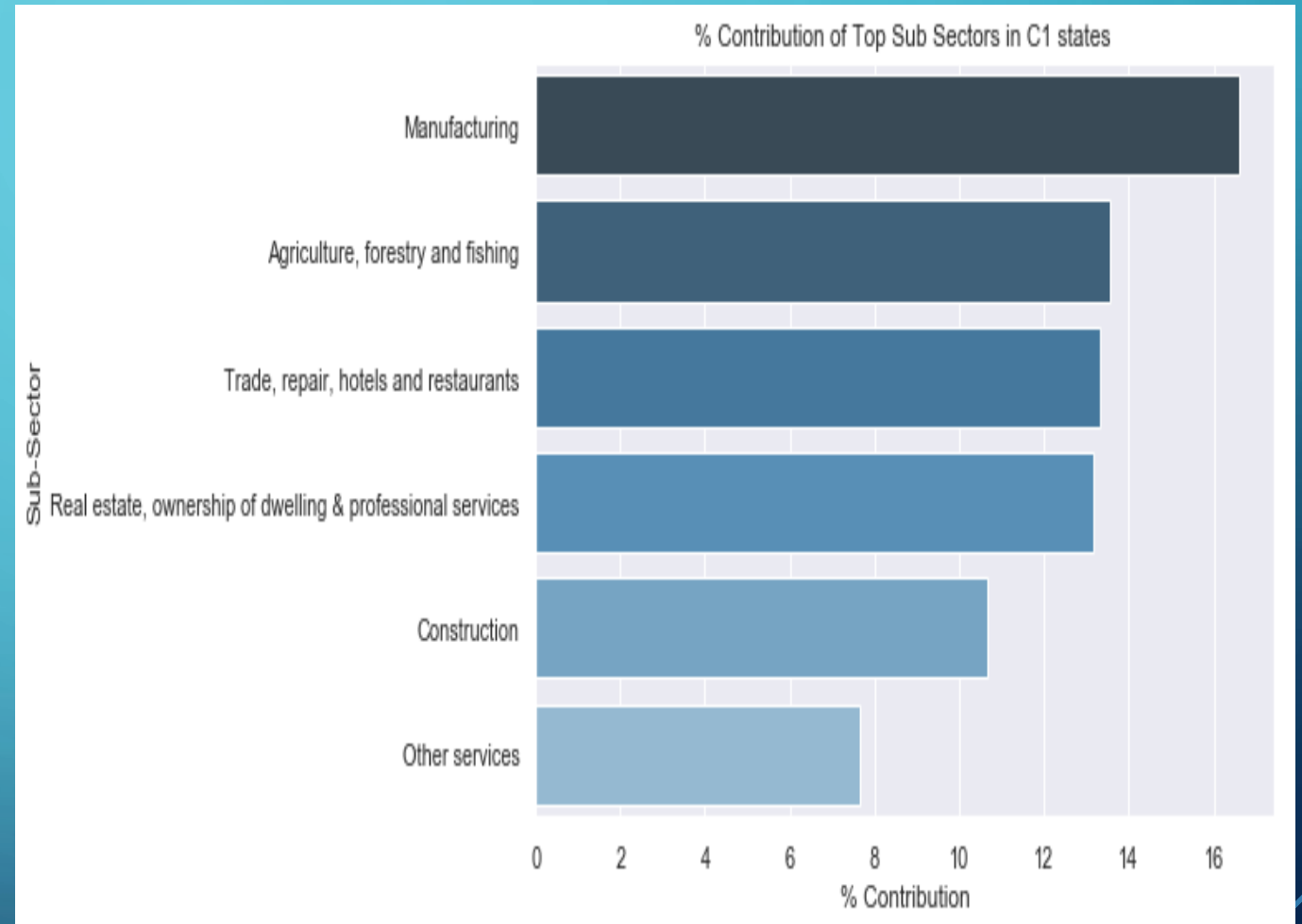
DATA 1B: C1 States with 80% GDP Contribution

Analysis:

- Manufacturing stands out as Top Contributor of GDP
- The distribution seems to be mix and all top sectors contribute together to form 80% of GDP
- Transport and storage of goods have been real prominent problem in states like Sikkim and Uttarakhand.

Recommendations:

- C1 states should focus a bit more on sectors like Mining and quarrying, Electricity, gas, water supply & other utility services & Transport, storage, communication & services related to broadcasting
- States like Uttarakhand can leverage sectors like electricity generation by dams more.



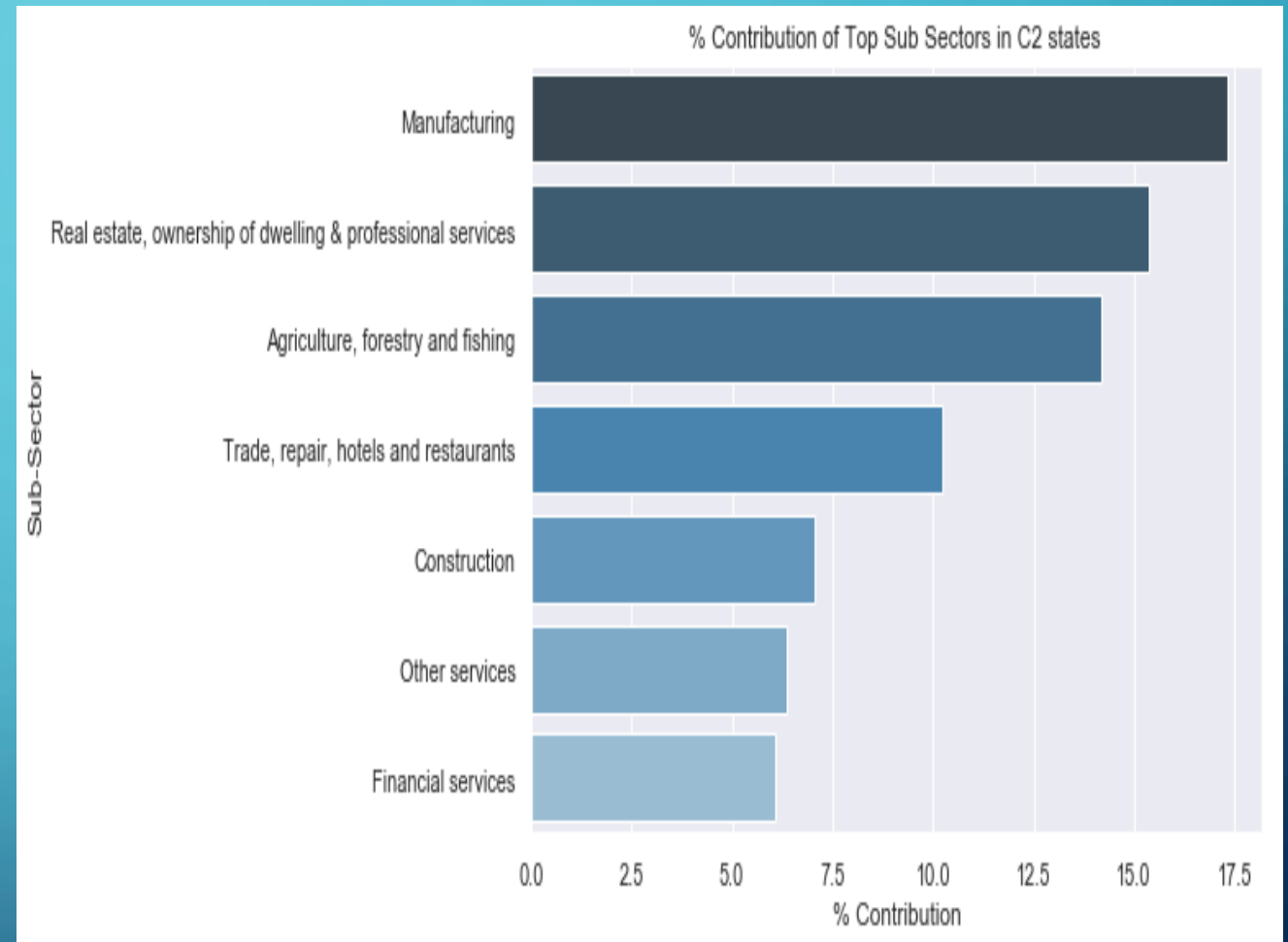
DATA 1B: C2 States with 80% GDP Contribution

Analysis:

- Manufacturing stands out as Top Contributor of GDP
- Manufacturing, Real Estate and Agriculture all three are major contributors to GDP here.

Recommendations:

- Construction business can kick in as Real Estate has already been very prominent.
- Financial Services can kick in Rel Estate and Agriculture are already prominent.



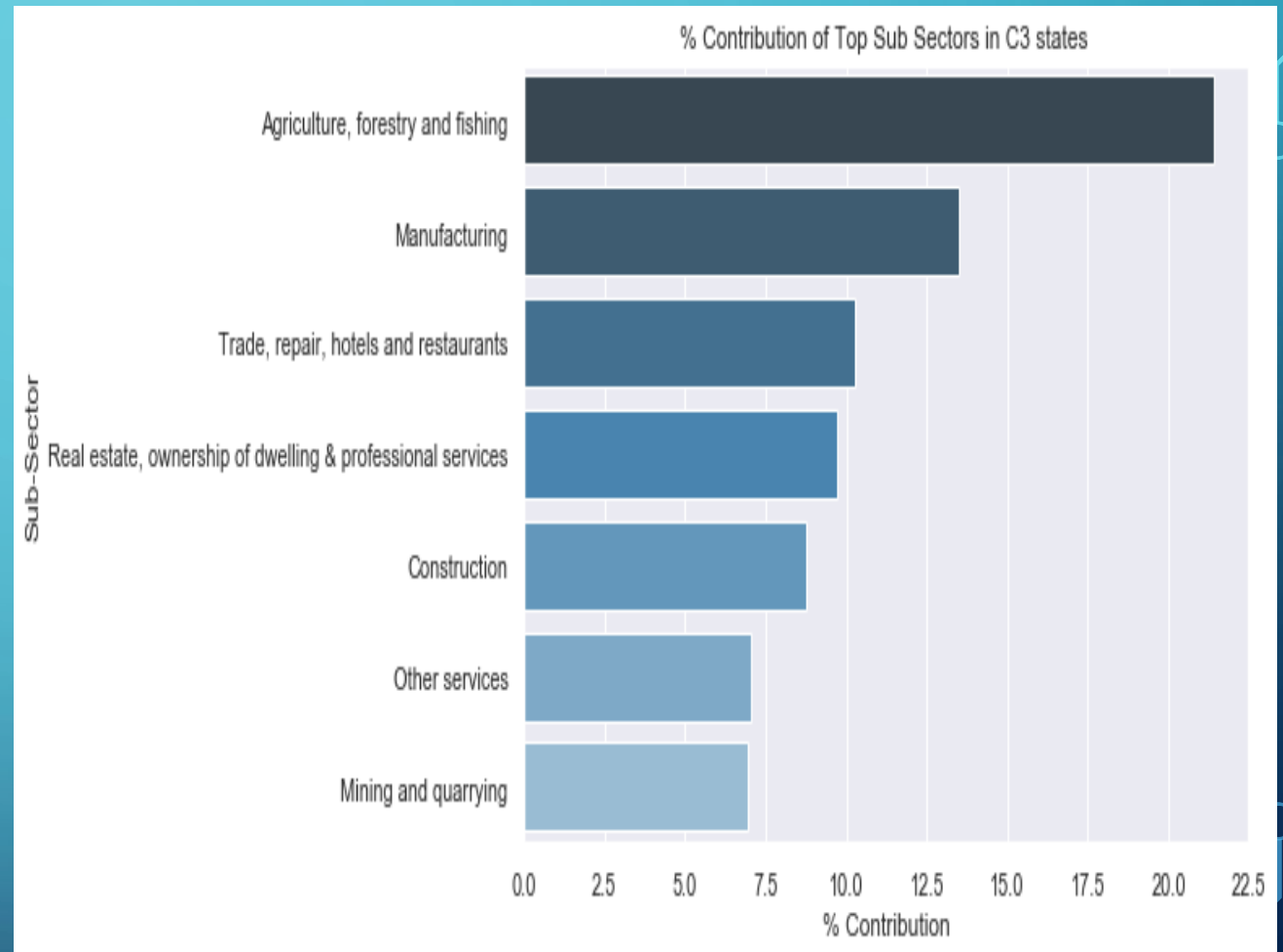
DATA 1B: C3 States with 80% GDP Contribution

Analysis:

- Agriculture stands out as top contributor of GDP
- Manufacturing, Trade, Repair, hotels and restaurants & Real Estate are other major contributors to GDP here.
- These are poor states but their primary business comes from Agriculture.

Recommendations:

- States like Chhattisgarh can invest more on Mining to increase their GDP
- These states can invest more in sectors like Electricity, gas, water supply & other utility services and states like J&K, Meghalaya, Mizoram, Nagaland can invest more on Tourism as they are scenic



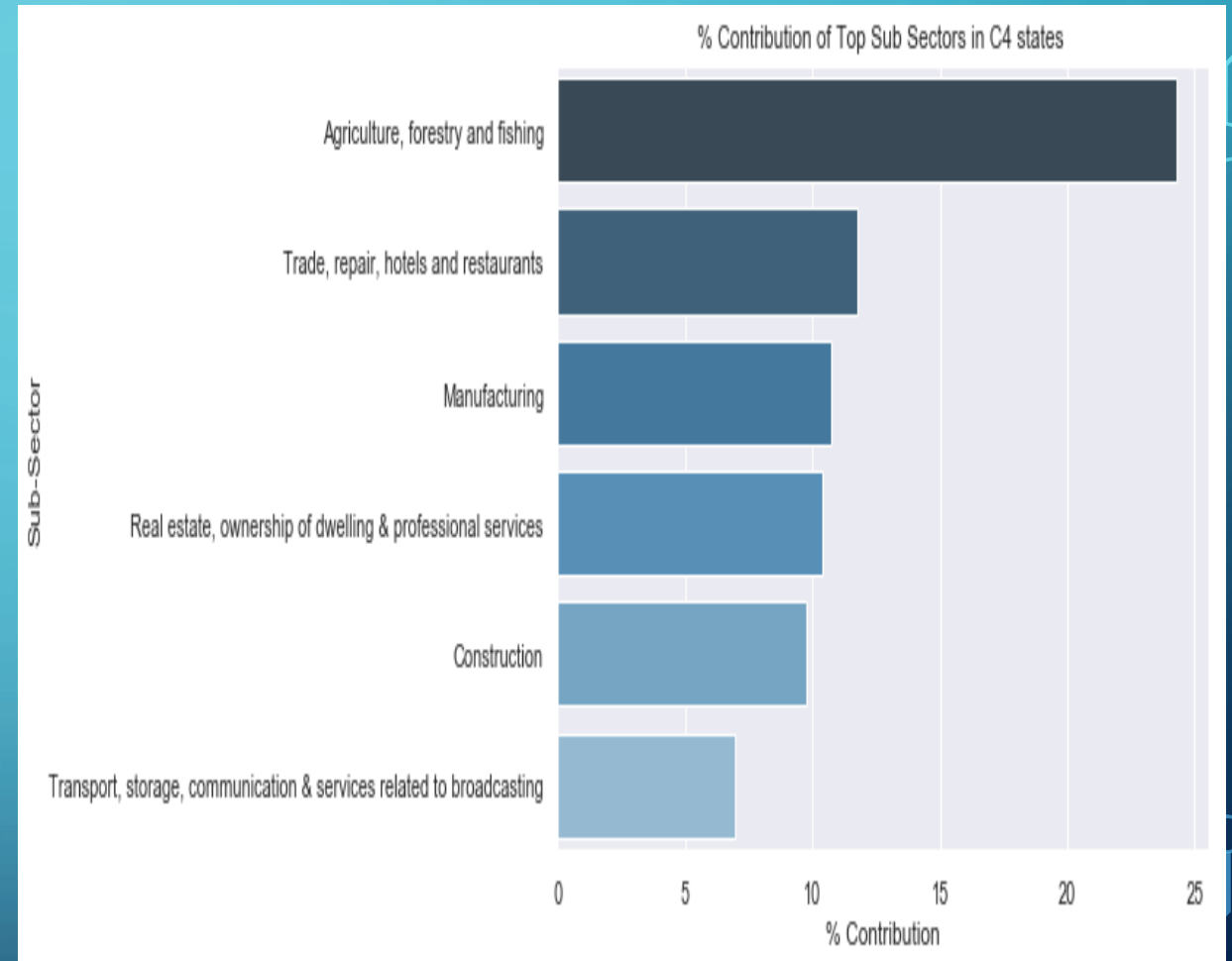
DATA 1B: C4 States with 80% GDP Contribution

Analysis:

- These are poor states with high population mainly agriculture oriented and trading.
- Trade, Repair, hotels and restaurants, Manufacturing, & Real Estate are other major contributors to GDP here.

Recommendations:

- These states have good connectivity and hence can focus more on sectors like Transport, communication & other services like broadcasting.
- States like Jharkhand, MP and Assam can leverage more on Mining and Quarrying as connectivity is good.



DATA 1B: Inferences

Analysis:

Among all the 4 categories, Manufacturing is the biggest sub-sector contributing for states with high Per Capita GDP whereas Agriculture has been the biggest contributor for states with Low Per Capita GDP. Electricity, gas, water and other utility services should be a strong focus to meet the needs of growing population.

How does the GDP distribution of the top states (C1) differ from the others?

- In terms of Trade and Other services, C4 states are performing better
- Manufacturing is the core of C1 states which lags for other categories which shows the people to be more skilled than other categories whereas for other categories the population is high and people are unskilled.
- C2 states can empower C1 states if leverage more of their Real Estate business and can combine it with Manufacturing sub sector.

Which sub-sectors seem to be correlated with high GDP?

Agriculture and Manufacturing

Which sub-sectors do the various categories need to focus on?

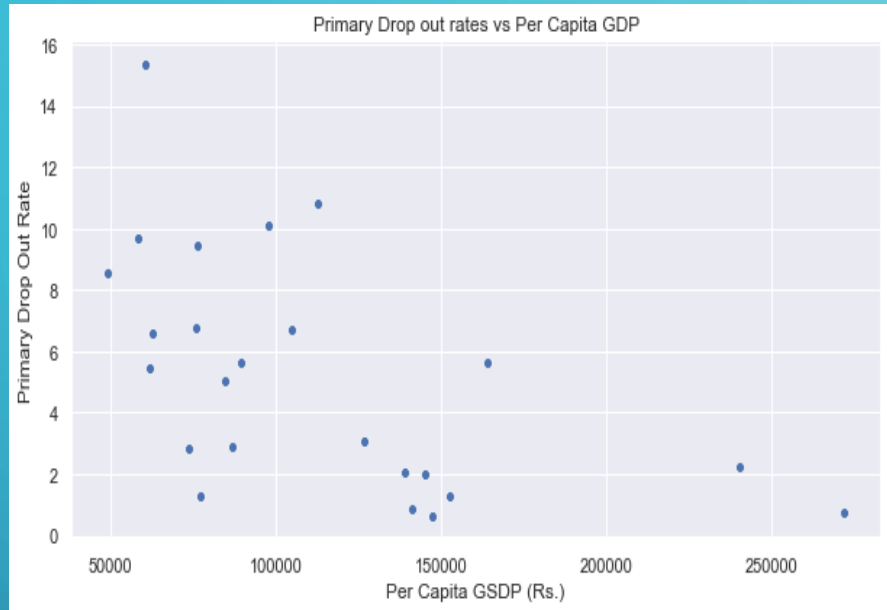
Discussed in previous slides

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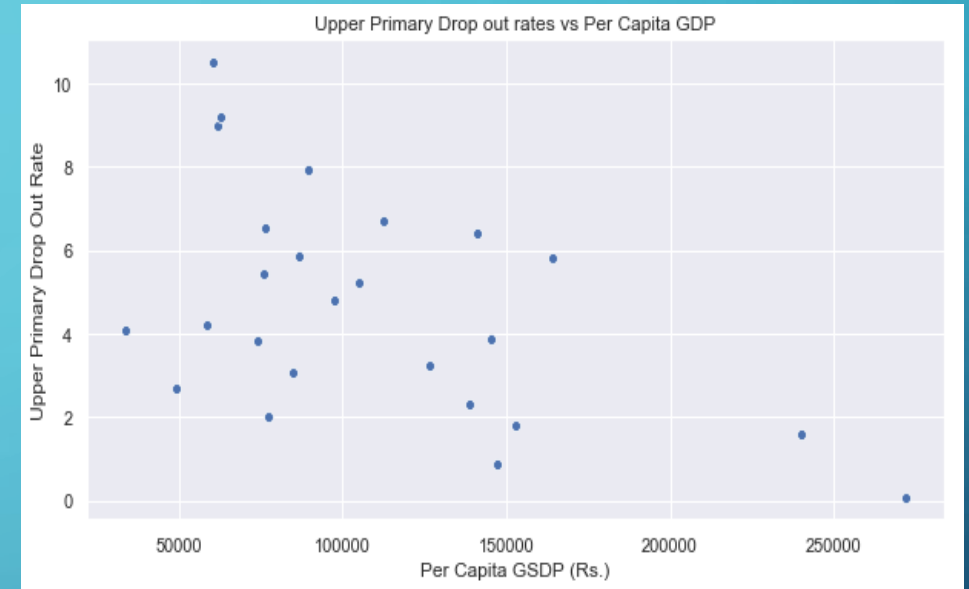
PART II:GDP AND EDUCATION DROPOUT RATES

DATA II:

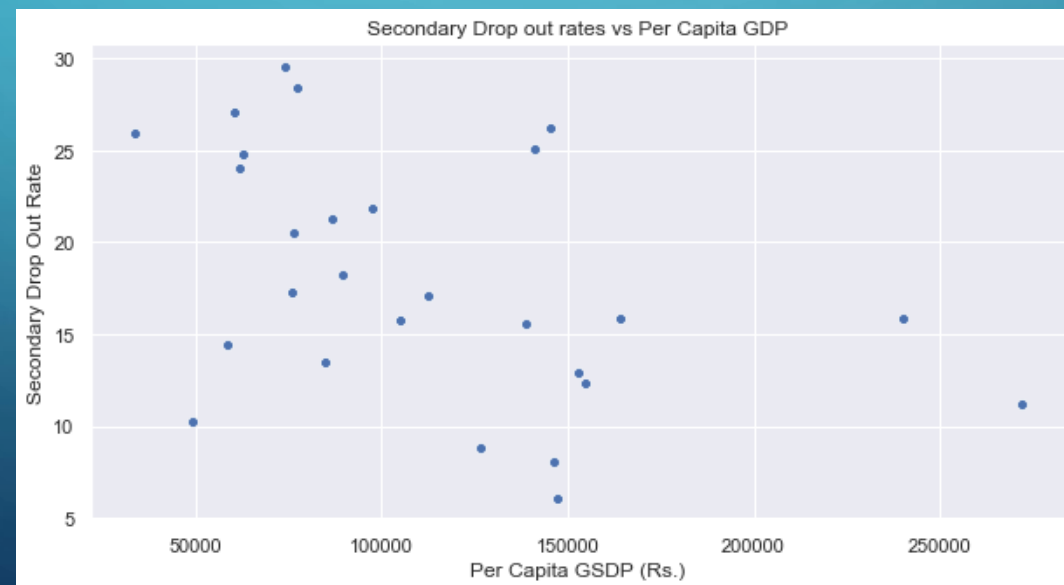
Primary Drop Out Rates



Upper Primary Drop Out Rates



Secondary Drop Out Rates



DATA II: CONCLUSIONS

- **Primary Education:**

As the per capita GDP increases, the drop out rates reduces. For states with high per Capita GDP, the drop out rates are very less. The trend is somewhat linear.

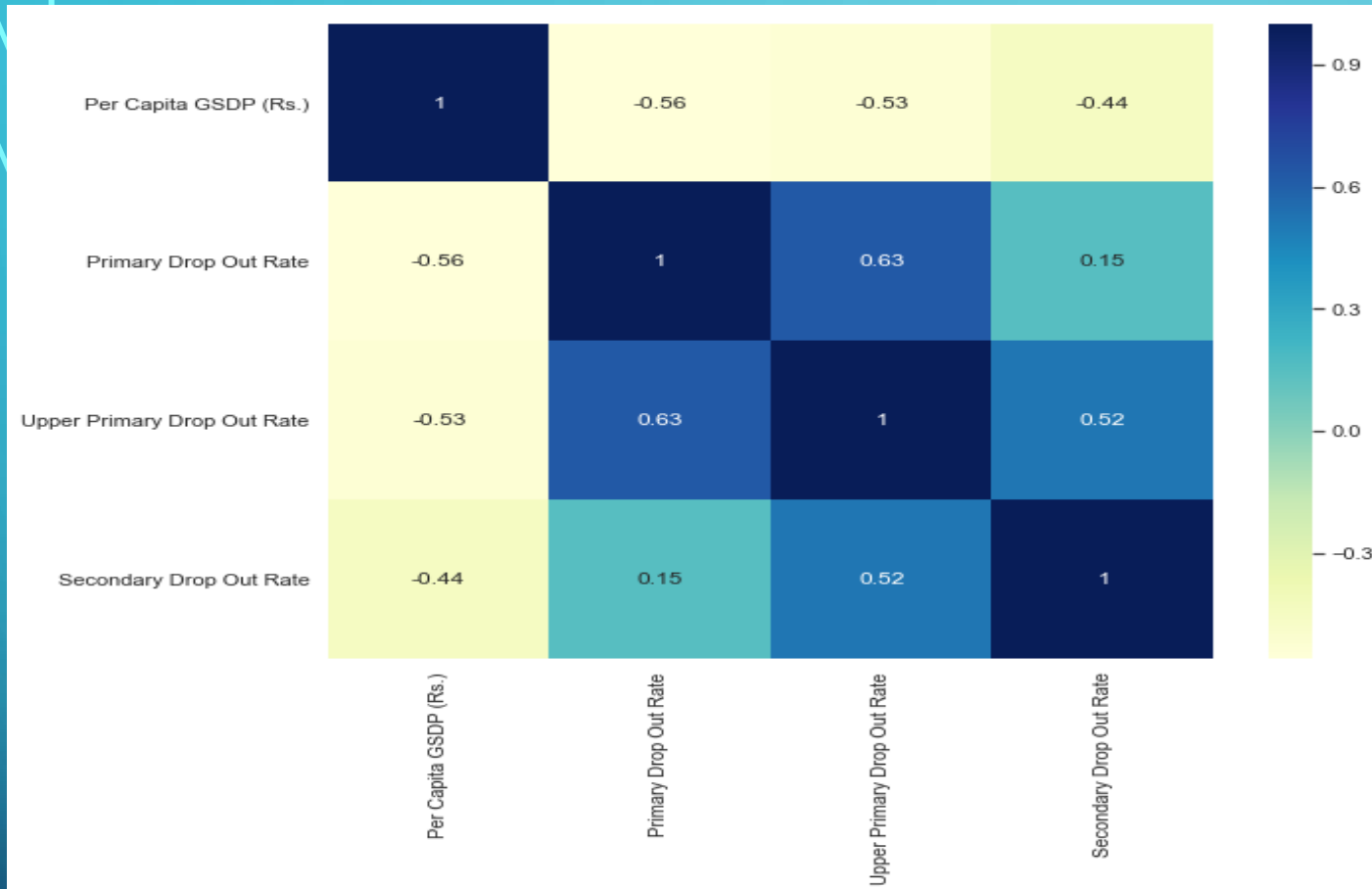
- **Upper Primary Education:**

The trend is mixed and for low-medium ranged per Capita GDP drop outs are very high. Even for some of the high per capita GDP states , the drop out rates are very high. When the per Capita GDP increases for the states from low to medium, the drop out rates also increase.

- **Secondary Education:**

Drop out rates at low per Capita GDP are very high and decrease as the per capita GDP increases as parents have enough money to fund their child's education.

DATA 2:



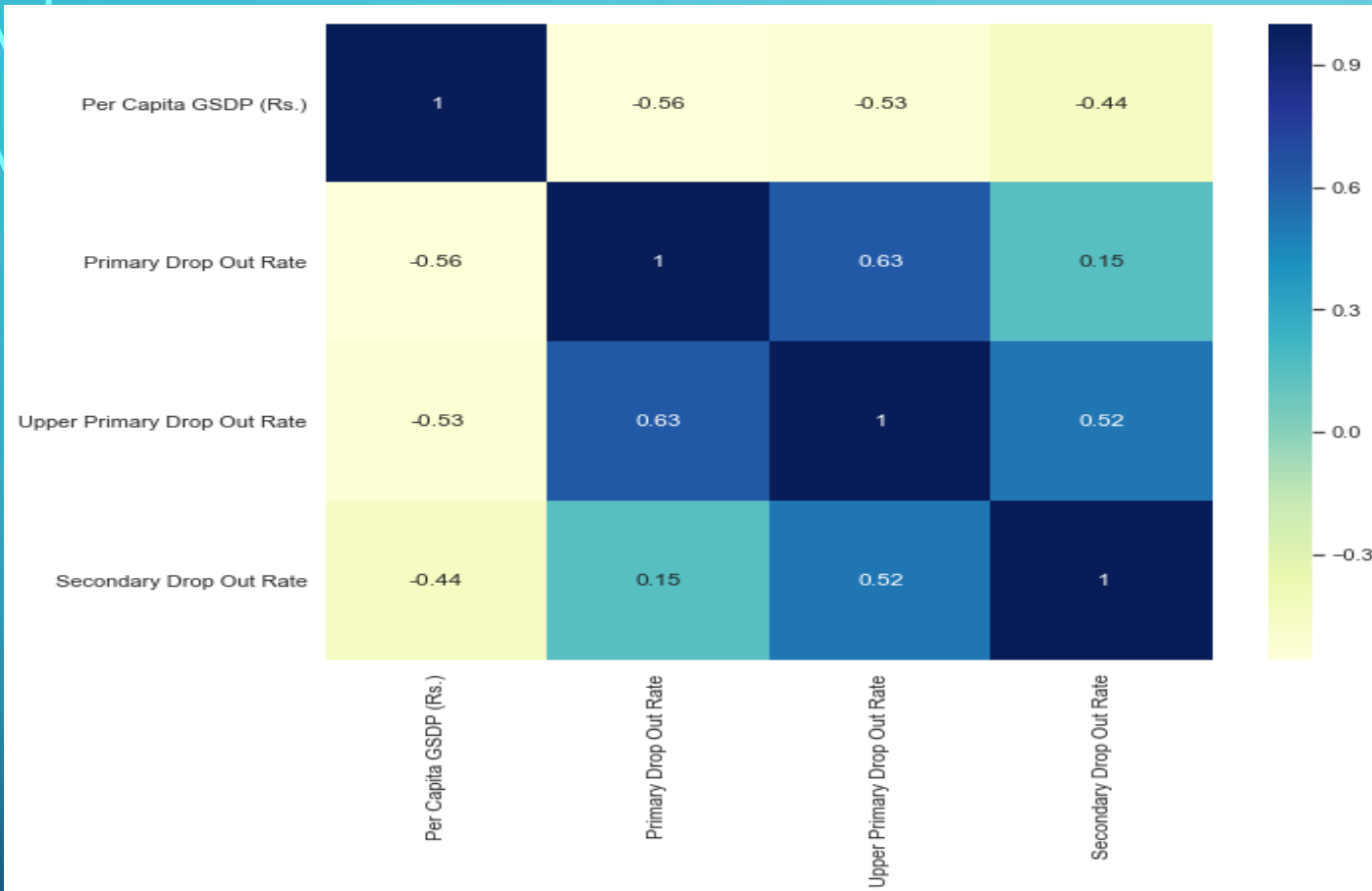
For primary education, parents consider their economic status. For low per Capita GDP, the drop out rates are very high as initial funding itself cannot be done.

As the students reach higher education levels then money becomes important factor as high per Capita GDP can educate the child more and less per Capita GDP can leave the child uneducated beyond one point as their no money with the parents to make their children study.

Solutions:

- 1) Make the educated more educated- invest more on teachers for senior education levels as they can train many children to reach higher education levels.
- 2) Invest more on primary education for low per capita GDP states by providing free education or very less fee to promote education.

DATA 2:



For primary education, parents consider their economic status. For low per Capita GDP, the drop out rates are very high as initial funding itself cannot be done.

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