India GDP Assessment

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Data Sets and Data Sources

1. ***State-wise Gross Domestic Product (GDP) at current price on yearly basis' in one file***
2. ***GSVA by Economic Activity at Current Prices' in 28 files one for each state***
3. ***State-wise average annual dropout rate in one file***
4. ***Data Source gov.data.in***

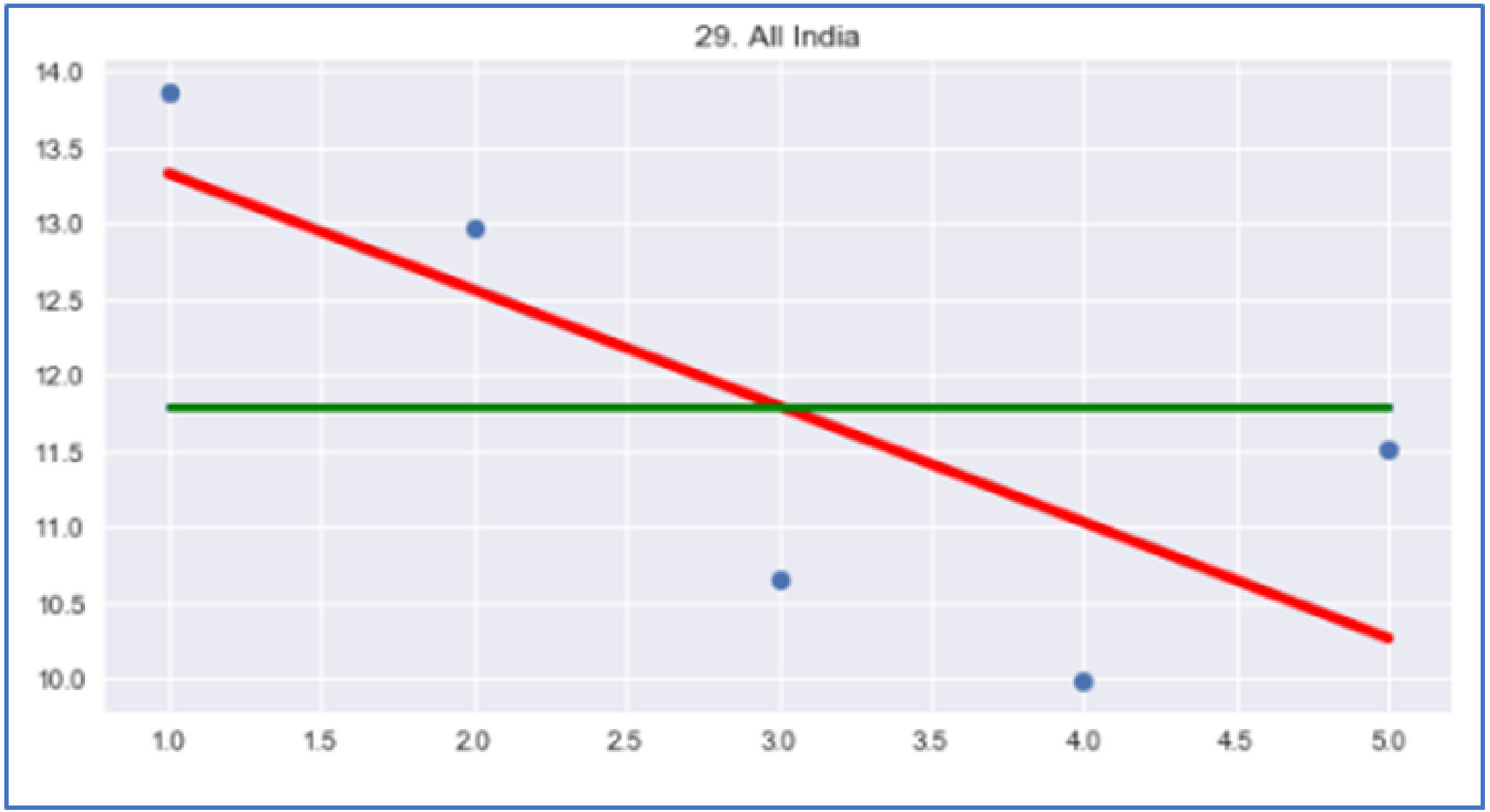
Outline

1. **State-wise GDP status**
2. **Sector wise GSVA contribution**
3. **GDP and Education relationship**

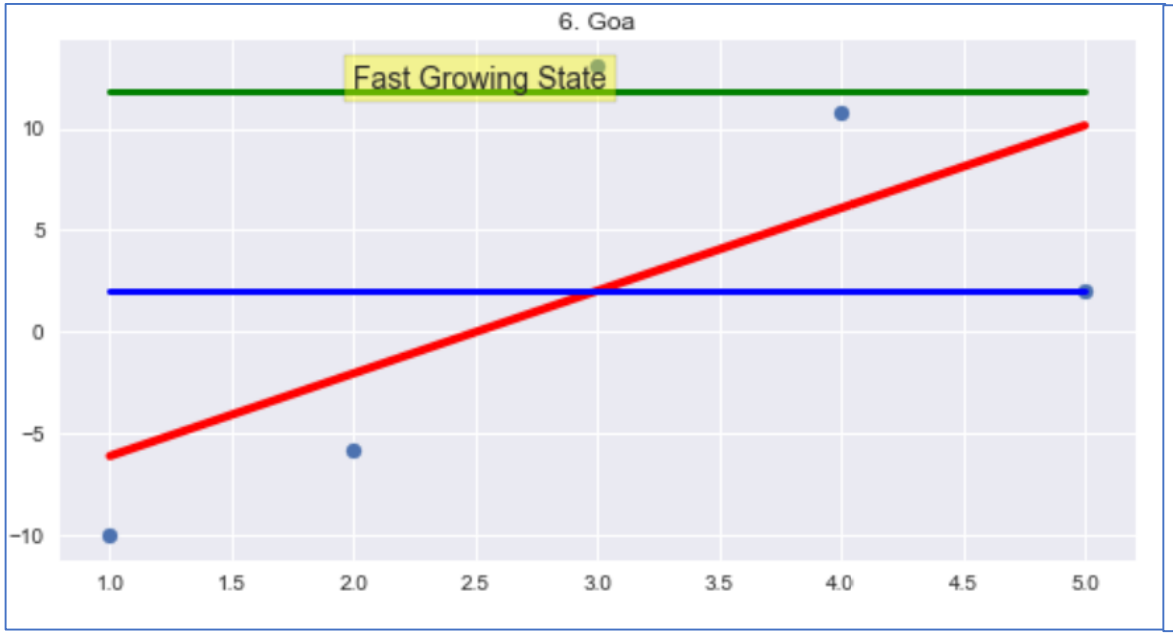
State-wise GDP status

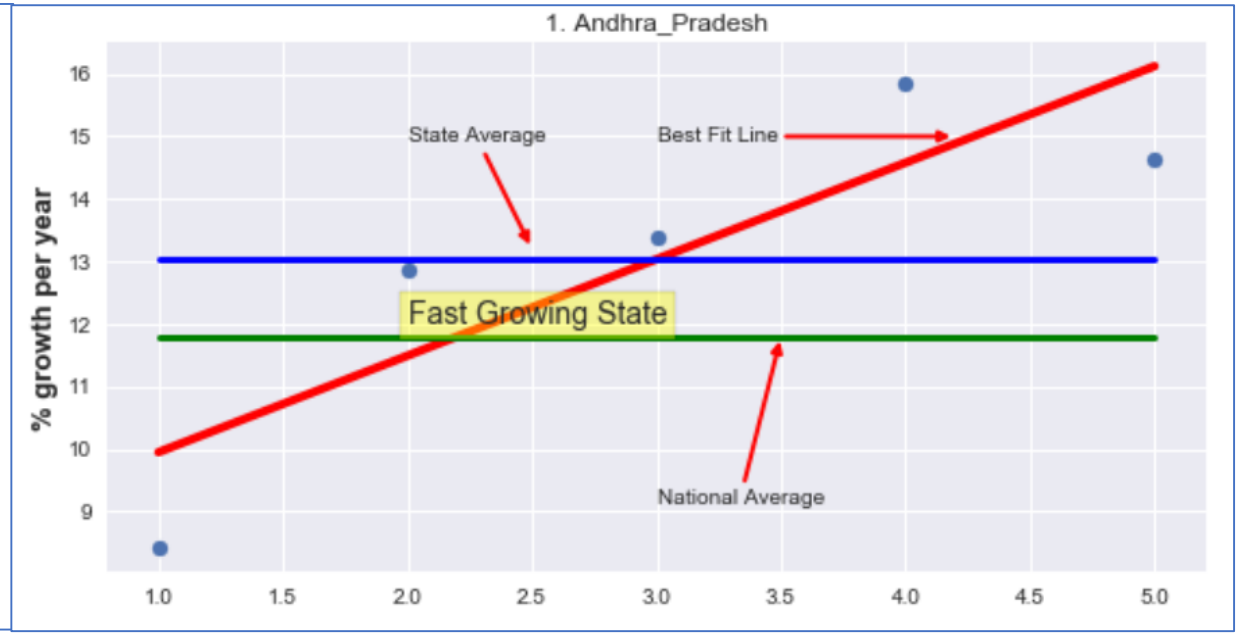
India % of growth rate trend from 2012-2016

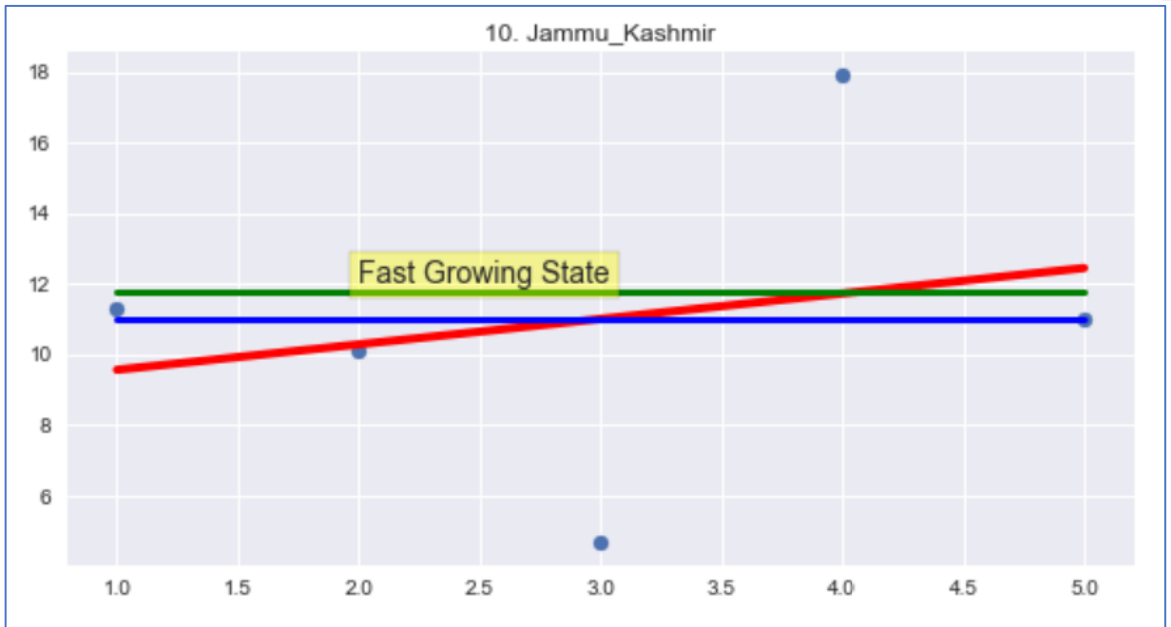
The overall growth rate of India shows decline



Top 3 states with growing steady and fast - continued

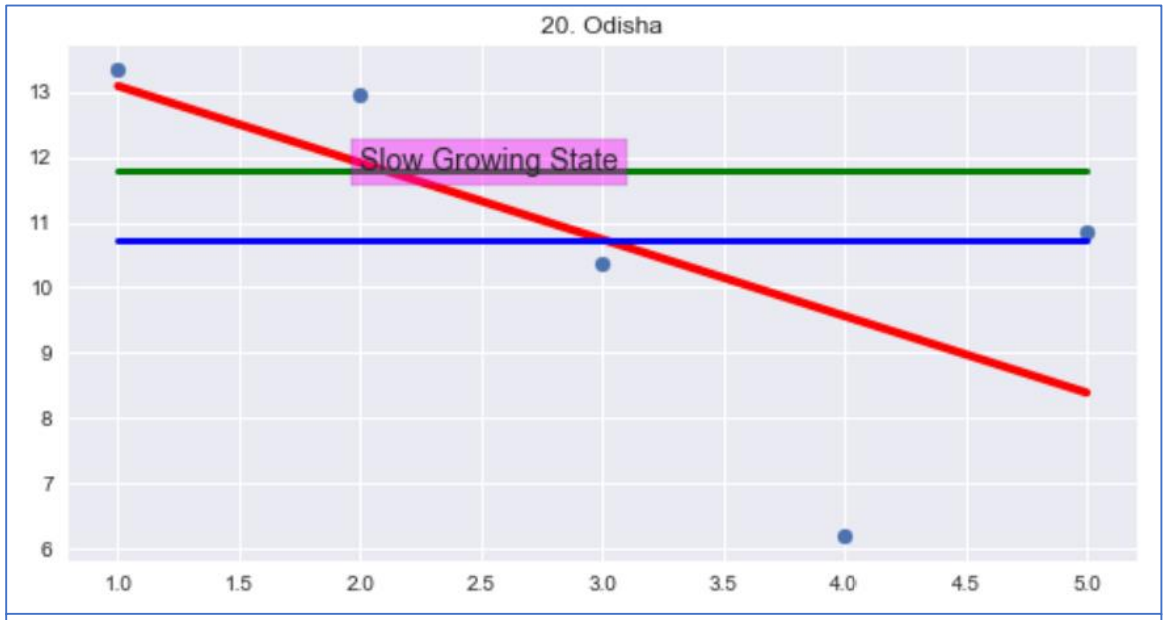


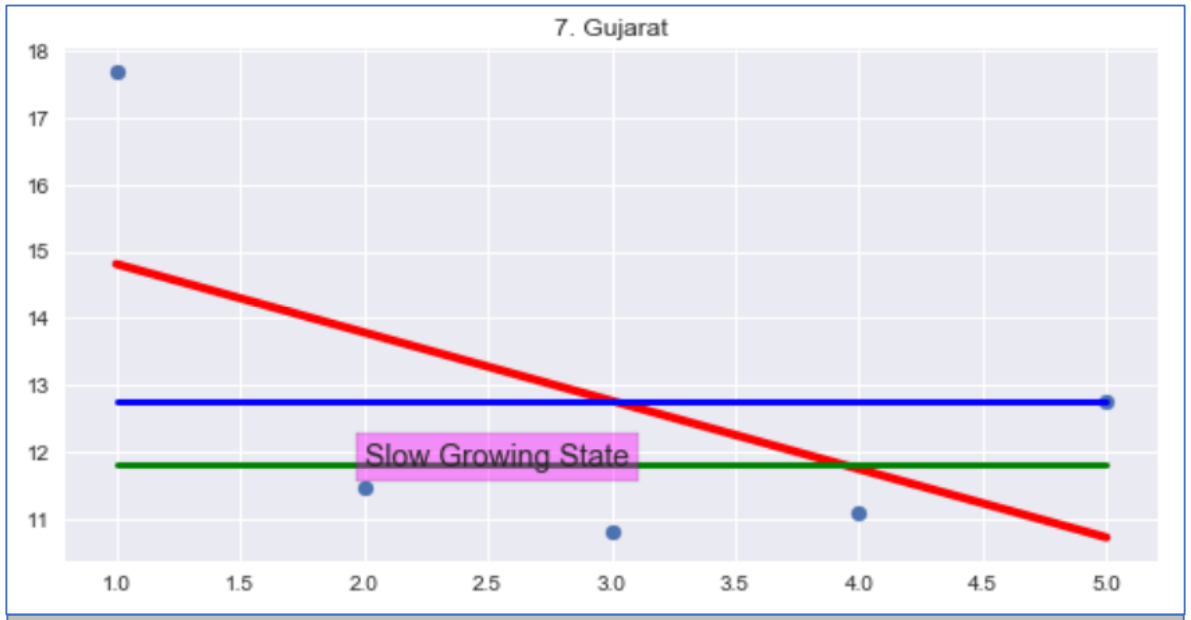


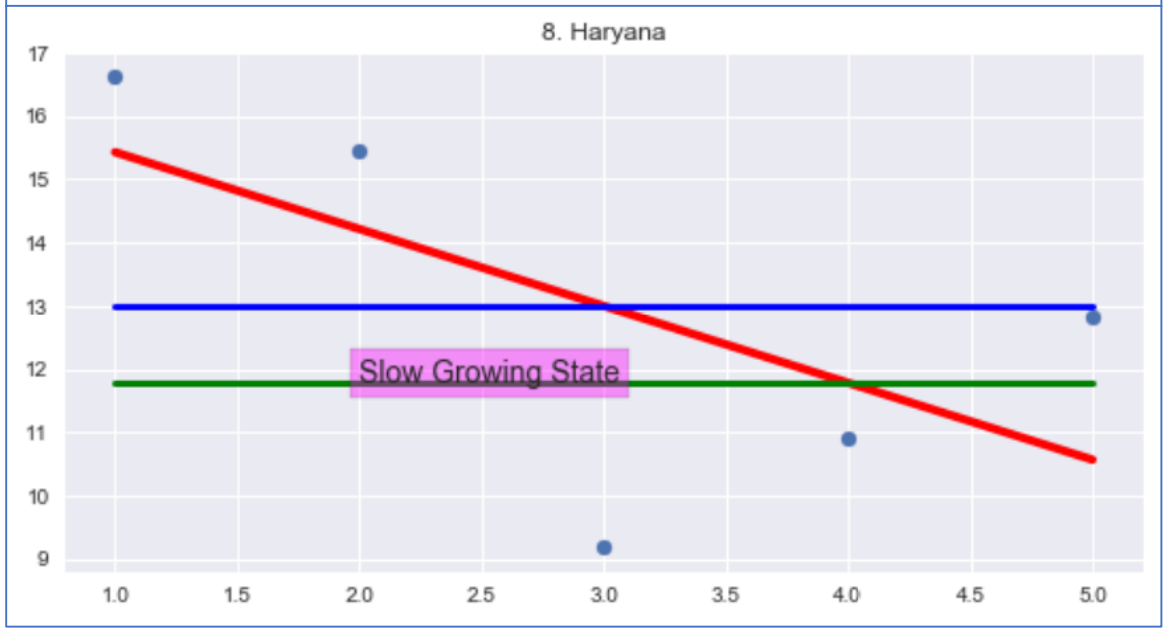


1. 7 out of 28 states had growing rate
2. 3 states had the fastest growing rate. **Andhra Pradesh**, **Goa**, and **Jamu and Kashmir**
3. **Haryana**, **Odisha**, and **Gujrat** are the 3 slowest growing states

Bottom 3 states with slow moving rate or decline

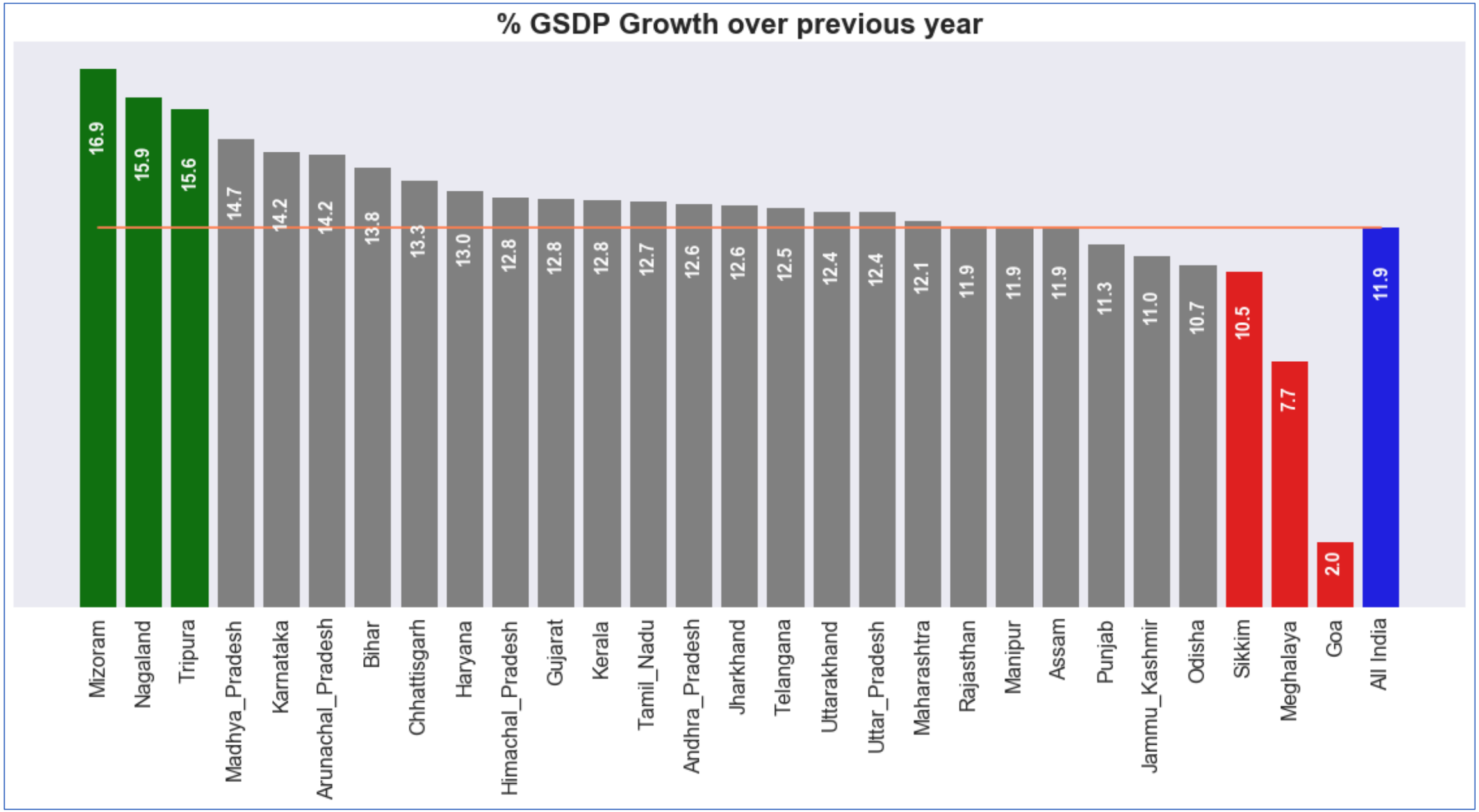




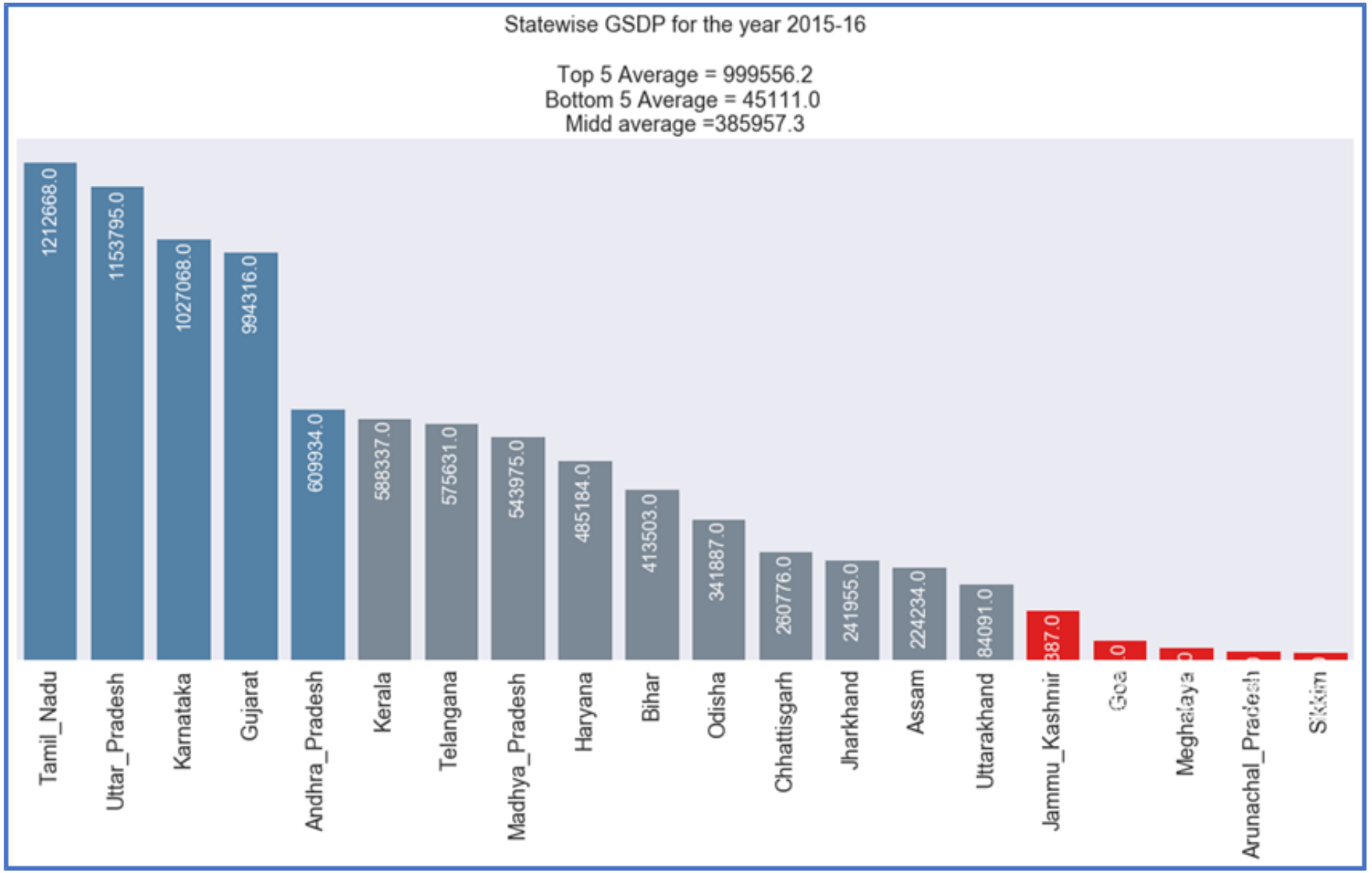


Haryana, **Odisha**, and **Gujrat** are the 3 slowest growing states

Average % GSDP growth rate over previous years



States with highest total GSDP

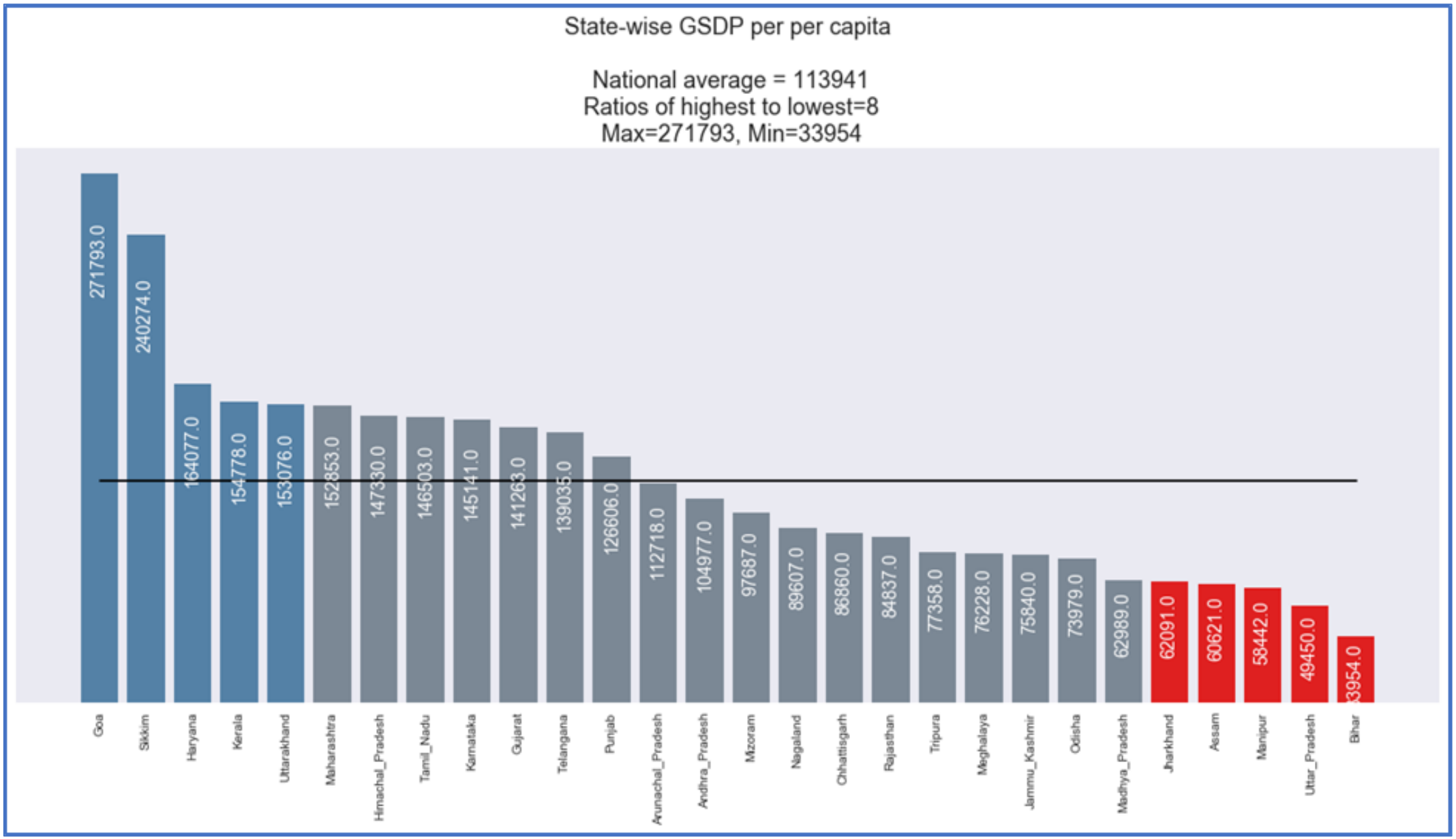


Insights from GDP per Capita Analysis

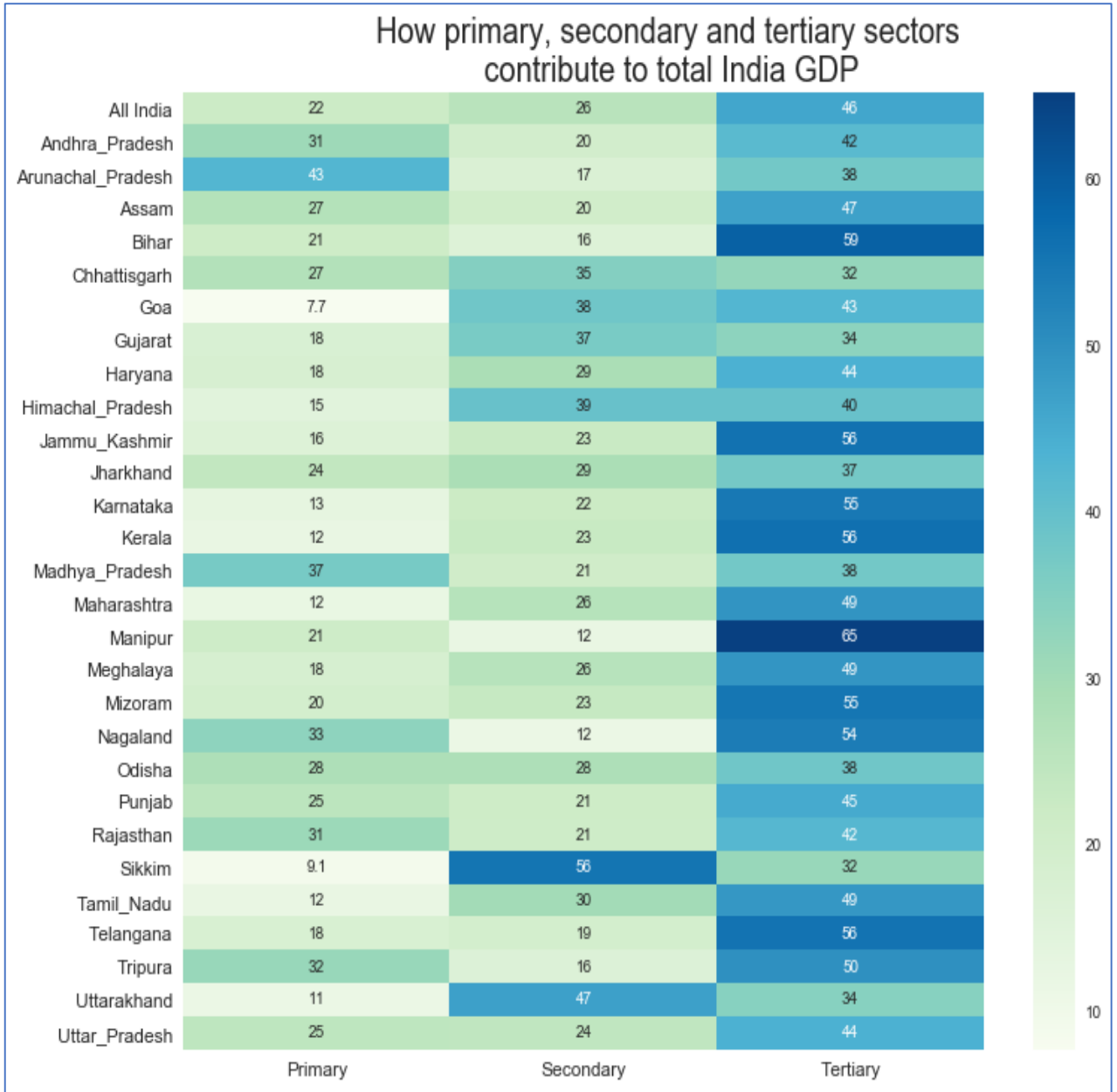
1. **Overall India GDP growing is showing decline from 2012 to 2016**
2. **State-wise growth rate differs but most of the states are declining**
3. **3 fast moving states are Andhra Pradesh**, **Goa**, and **Jamu and Kashmir**
4. **3 slow moving states are Haryana**, **Odisha**, and **Gujrat**
5. **3 states are highest in terms of average growth rate Mizoram**, **Nangaland**, and **Tipura**
6. **3 states** had lowest growth rate since **Sikim, Maghalaya, and Goa**
7. **19 states are above national average while 9 are below national average line**
8. **The average GSDP of 5 top states is 999,556 while average for bottom 5 states is 45,111 which is 22 times higher than bottom 5 states, and 2.6 times higher than national average.**

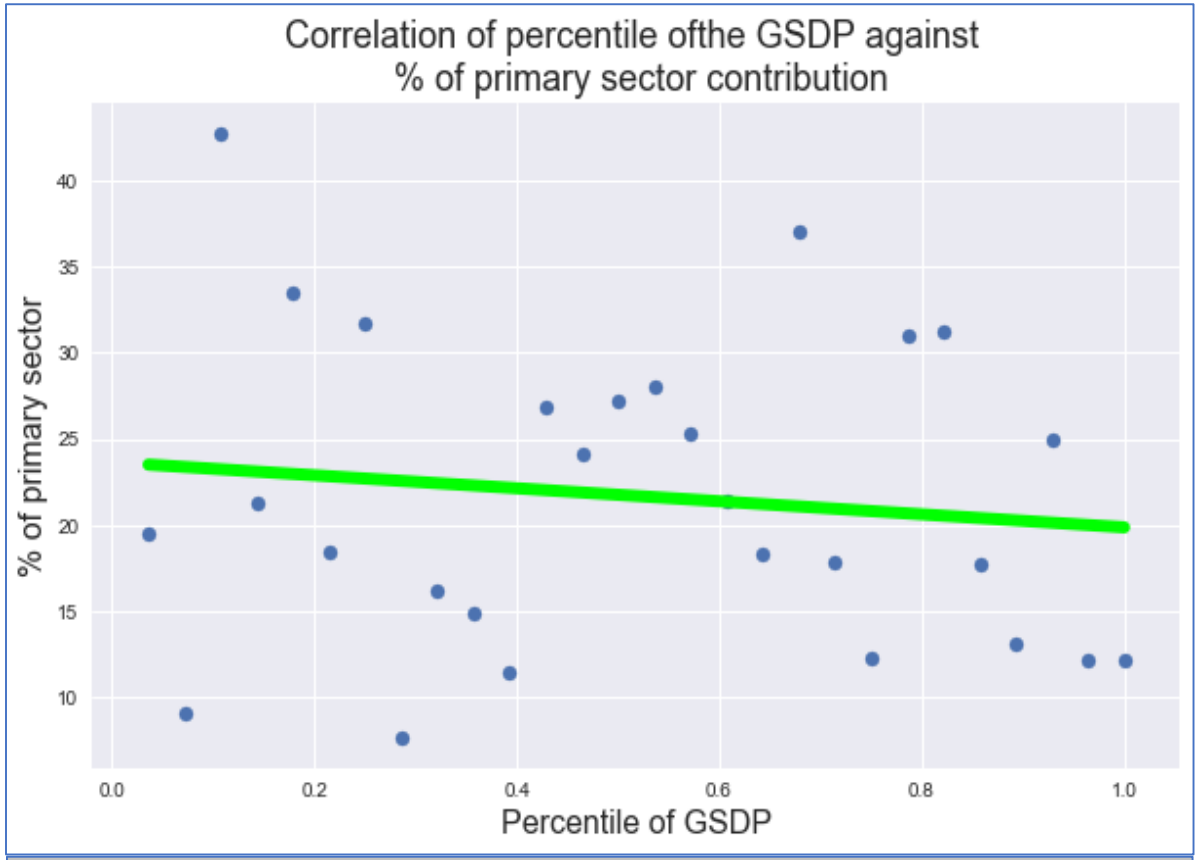
Sector wise GSVA contribution

Per Capita GDP by state



Contribution of sectors to total India GDP

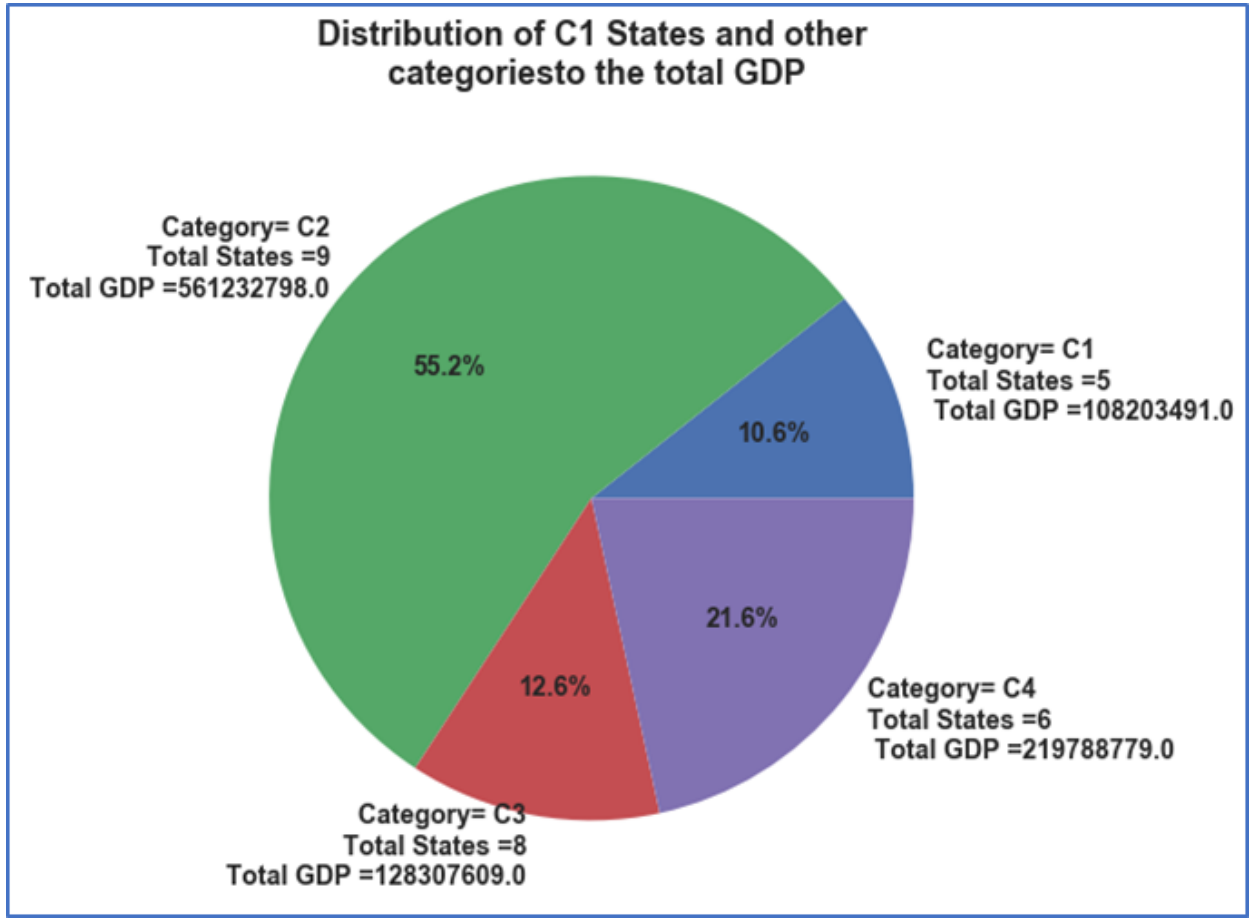




The **tertiary** sector has greater contribution, the second is **secondary** sector but **primary** sector has lowest contribution.

But as seen in both charts, there is negative correlation between GDP and primary sector contribution.

Categorization of states into 4 quarters based on Per Capita rate



The states were categorized into 4 quarterlies of (0.20,0.5, 0.85, 1) named C1, C2, C3, and C4.

C1 category states are 85th to 100th percentile

C2 states fall between 50th percentile to 85th percentile

C3 states fall between 20th and 50th percentile

C4 states fall below 20th percentile

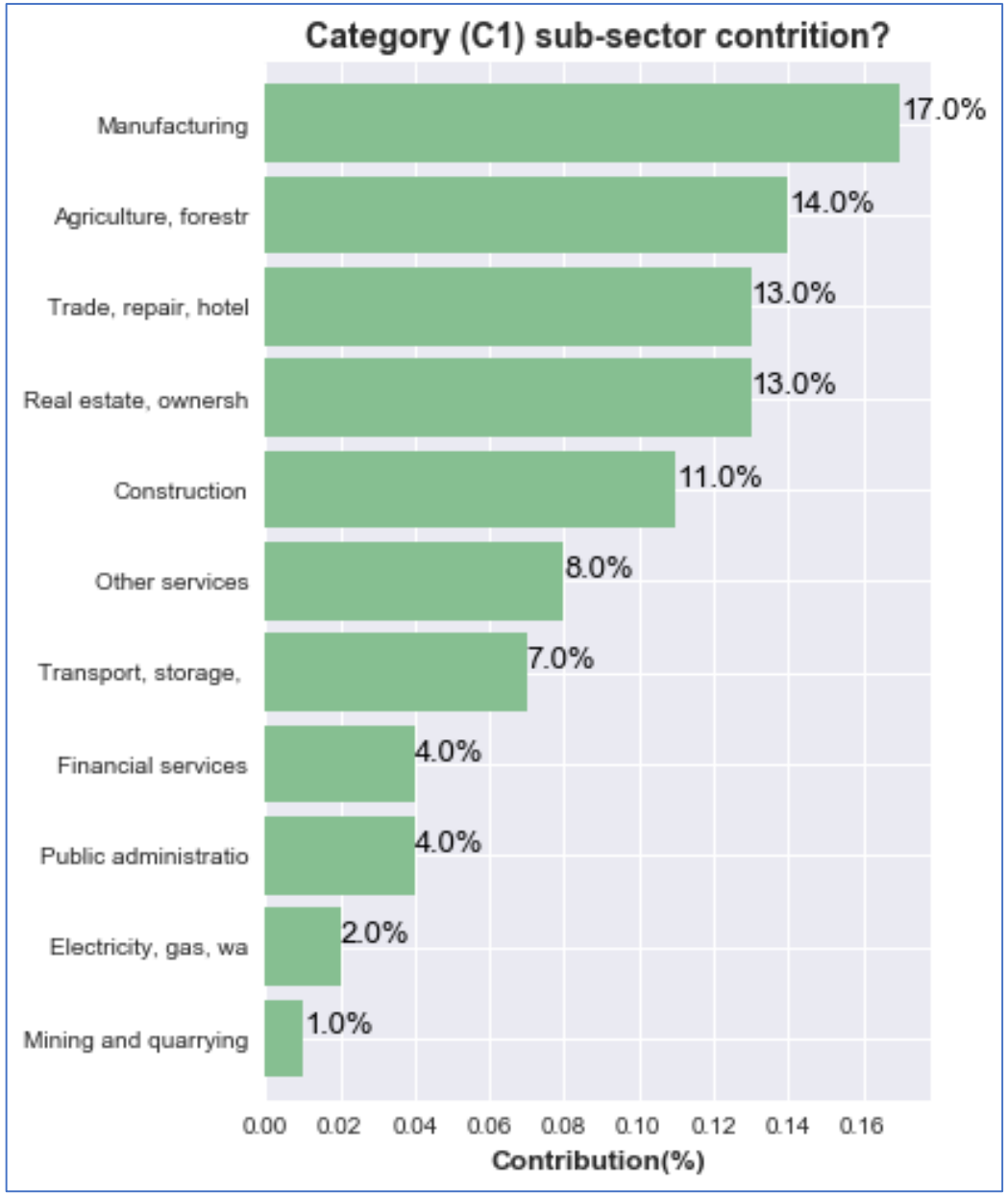
Sub-sector contrib. to aprox. 80% of the GSDP of each category

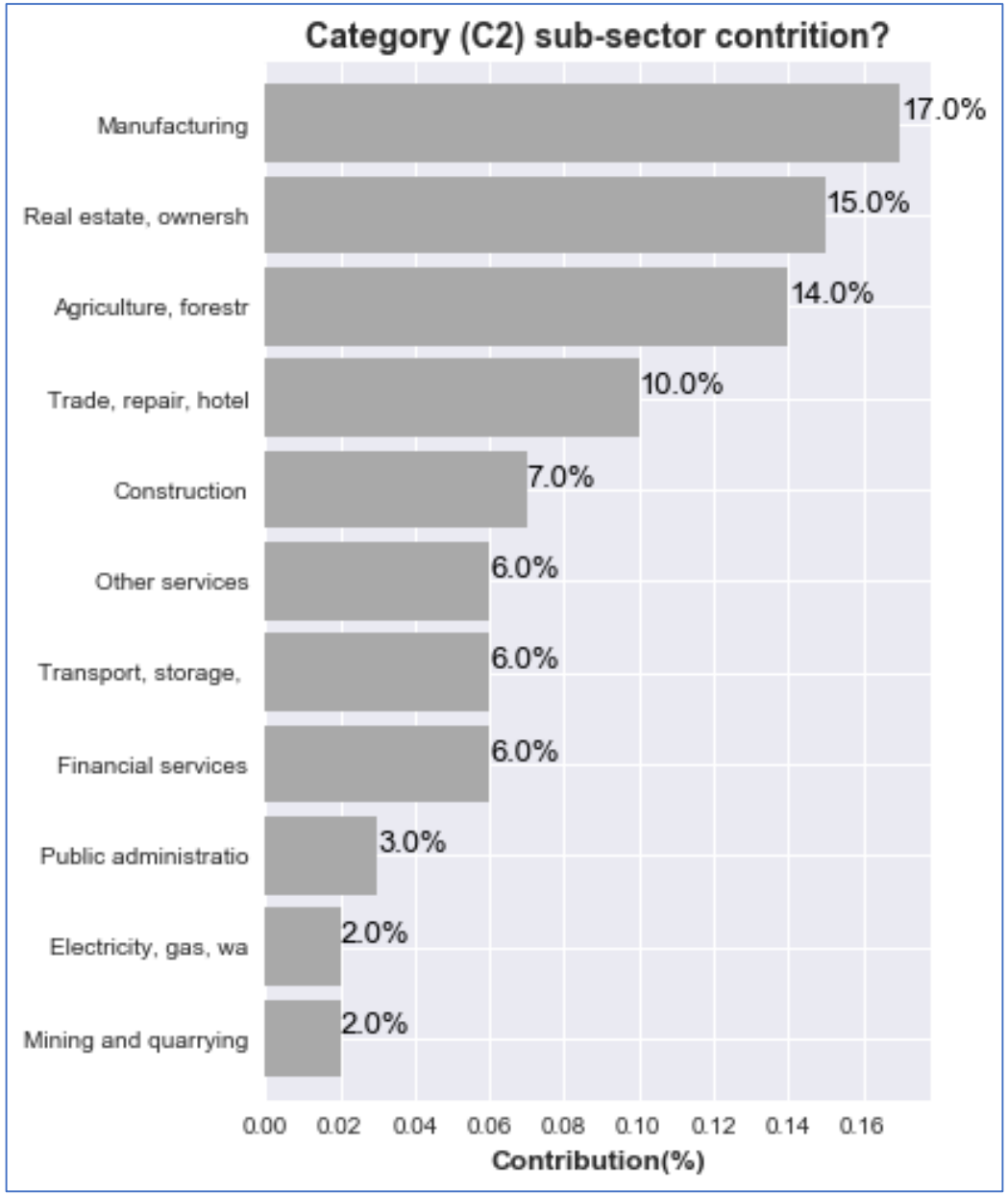
Category	Total States in Category	Sectors	# and % of contribution to total	Total Value (%) of GDP
C1	5	1. Manufacturing, 2. Agriculture, forestry and fishing, 3. Trade, repair, hotels and restaurants, 4.Real estate, ownership of dwelling & professional services, 5. Construction, and 6. Other services	6 (76%) out of 11 sectors	108,203,491.0 (10.6%)
C2	9	1. Manufacturing, 2. 2. Real estate, ownership of dwelling & professional services, 3. Agriculture, forestry and fishing, 4. Trade, repair, hotels and restaurants, 5. Construction, 6. Transport, storage, communication & services related to broadcasting, and 7. Financial services	7 (75%) out of 11 sectors	561,232,798.0 (55.2%)

Sub-sector contrib. to aprox. 80% of the GSDP of each category

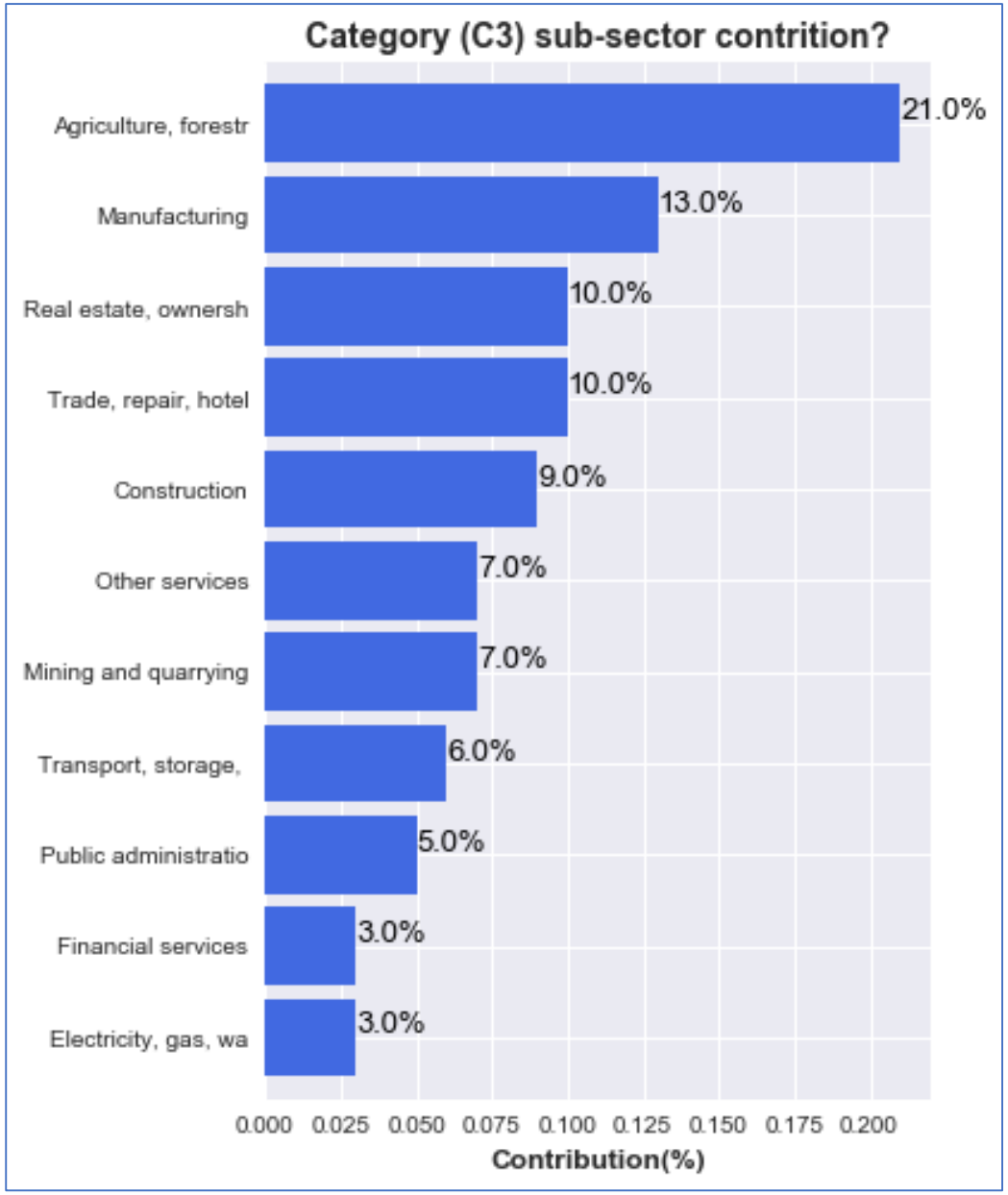
Category	Total States in Category	Sectors	# and % of contribution to total	Total Value (%) of GDP
C3	8	1. Agriculture, forestry and fishing, 2. Manufacturing, 3. Trade, repair, hotels and restaurants, 4. Real estate, ownership of dwelling & professional services, 5. Construction, 6. Mining and quarrying, and 7. Other services	7(77%) out of 11 sectors	128,307,609.0 (12.6%)
C4	6	1. Agriculture, forestry and fishing, 2. Trade, repair, hotels and restaurants, 3. Manufacturing, 4. Construction, 5. Real estate, ownership of dwelling & professional services, 6. Transport, storage, communication & services related to broadcasting, and 7. Other services	7(81%) out of 11 sectors	219,788,779.0 (21.6%)

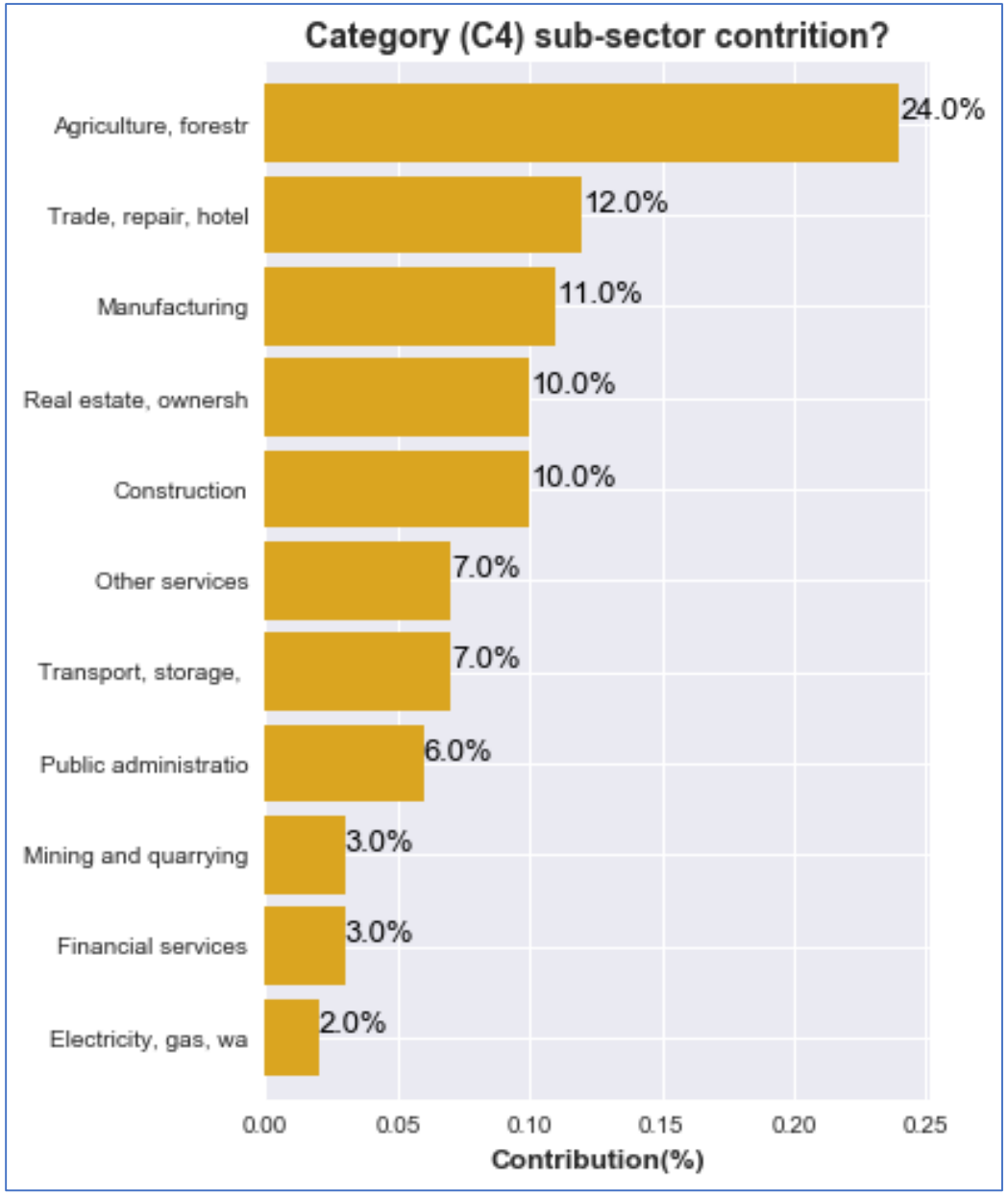
Contribution of sub-sectors to total GDP (C1, C2)





Contribution of sub-sectors to total GDP (C3, C4)



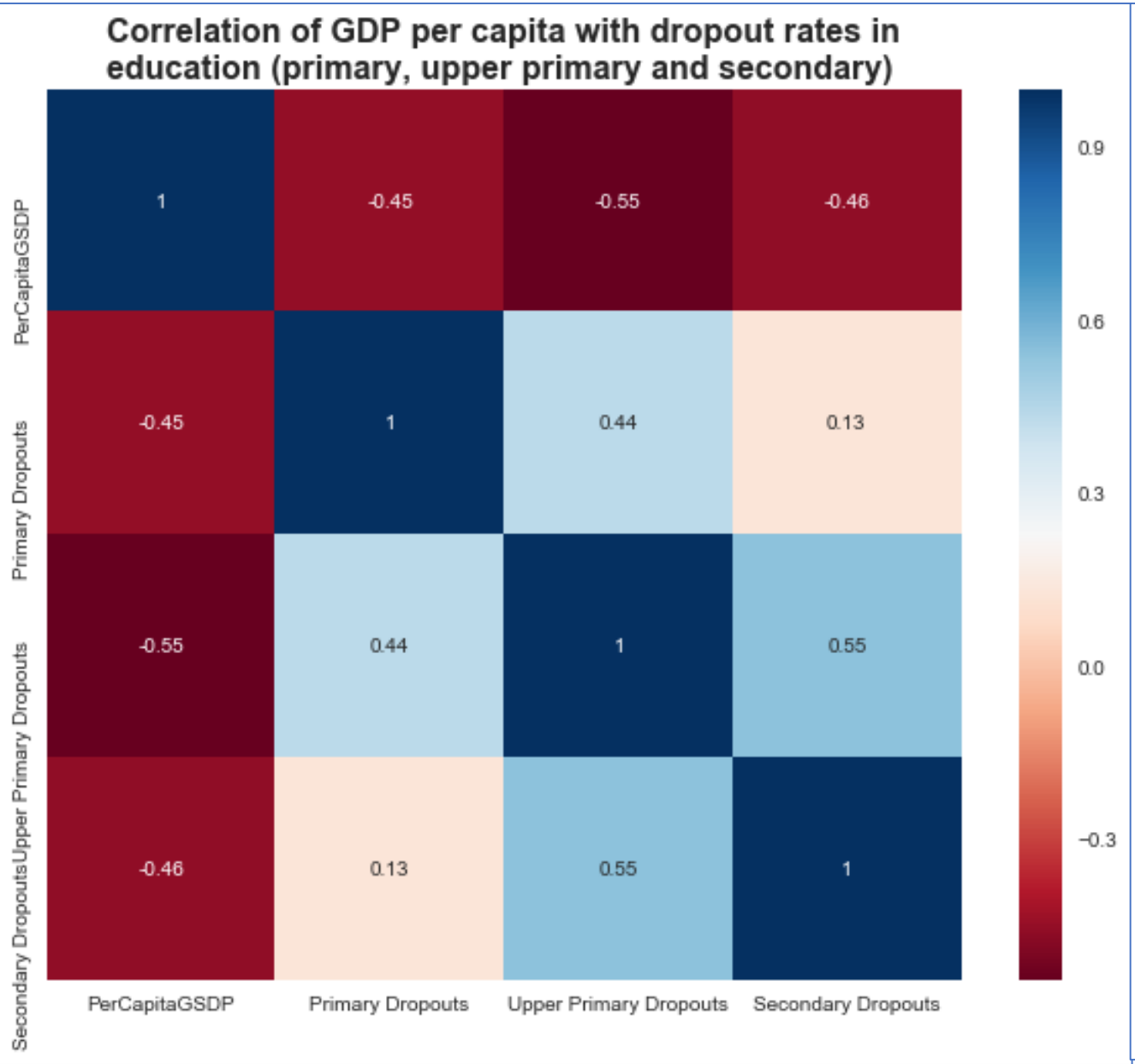


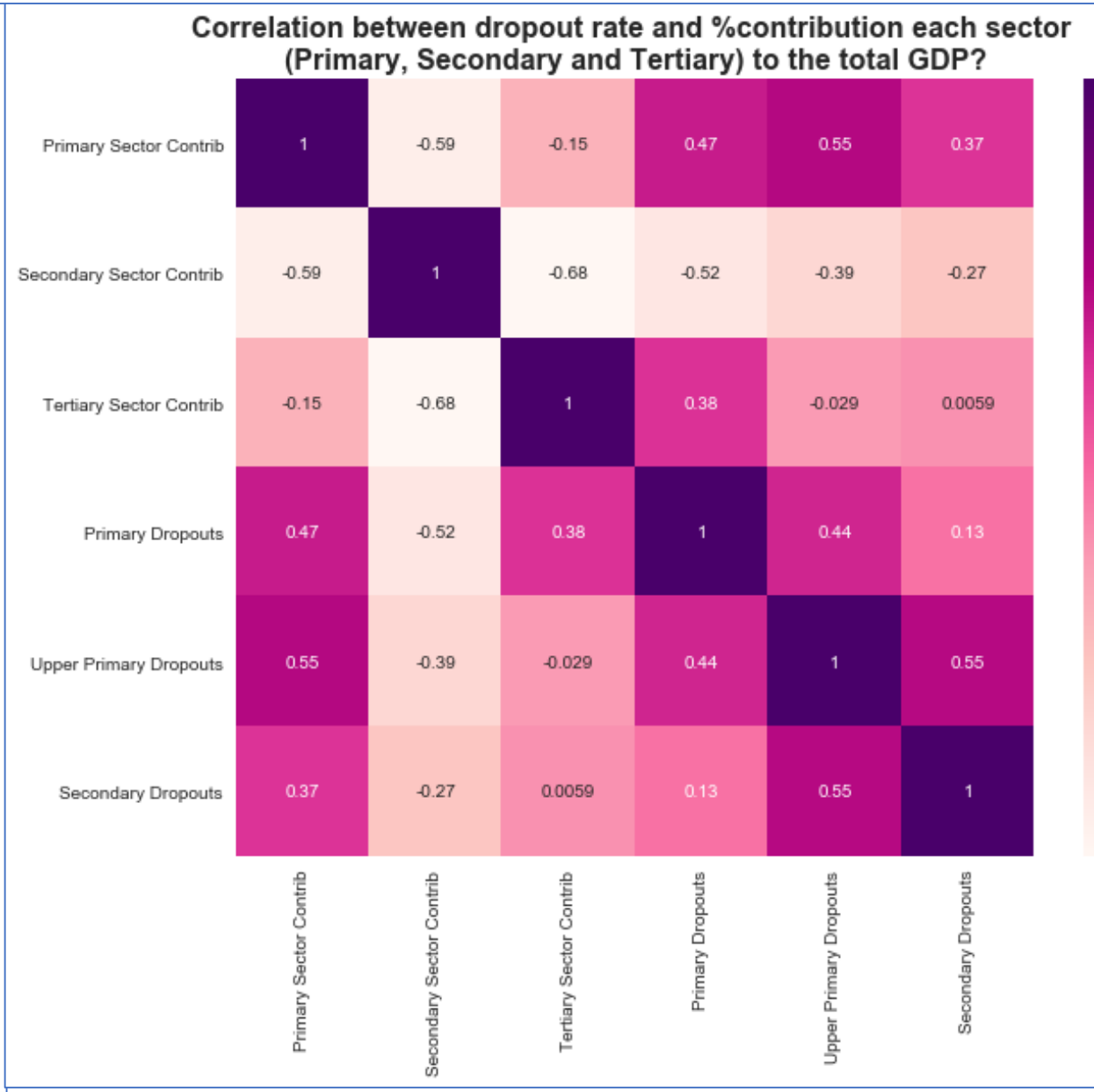
Insights for GDP per capita and Total GDP

1. The ratio of highest to lowest is 8. Means that Goa people earns 8 times more than Bihar people.
2. Highest GDP per capita is 271893 INR in Goa which is 8 times higher than Bihar with lowest GDP per capita of 33954.
3. National per capita is 113941 INR, 28 states are above national average but 16 states are lower than national average
4. The tertiary sector has greater contribution, the second is secondary sector but primary sector has the lowest contribution.
5. Primary sector has 0 or negative affect on state GSDP
6. Manufacturing; Agriculture, forestry and fishing; Real Estate, and Trade; Real estate, ownership of dwelling & professional services; Trade, repair, hotels and restaurants; and construction sub-sectors has greater affect on states GSDP and national GDP.
7. Category C1 sector with highest GDP per capita though has affect on per capita but is contributing less per centage to total GDP

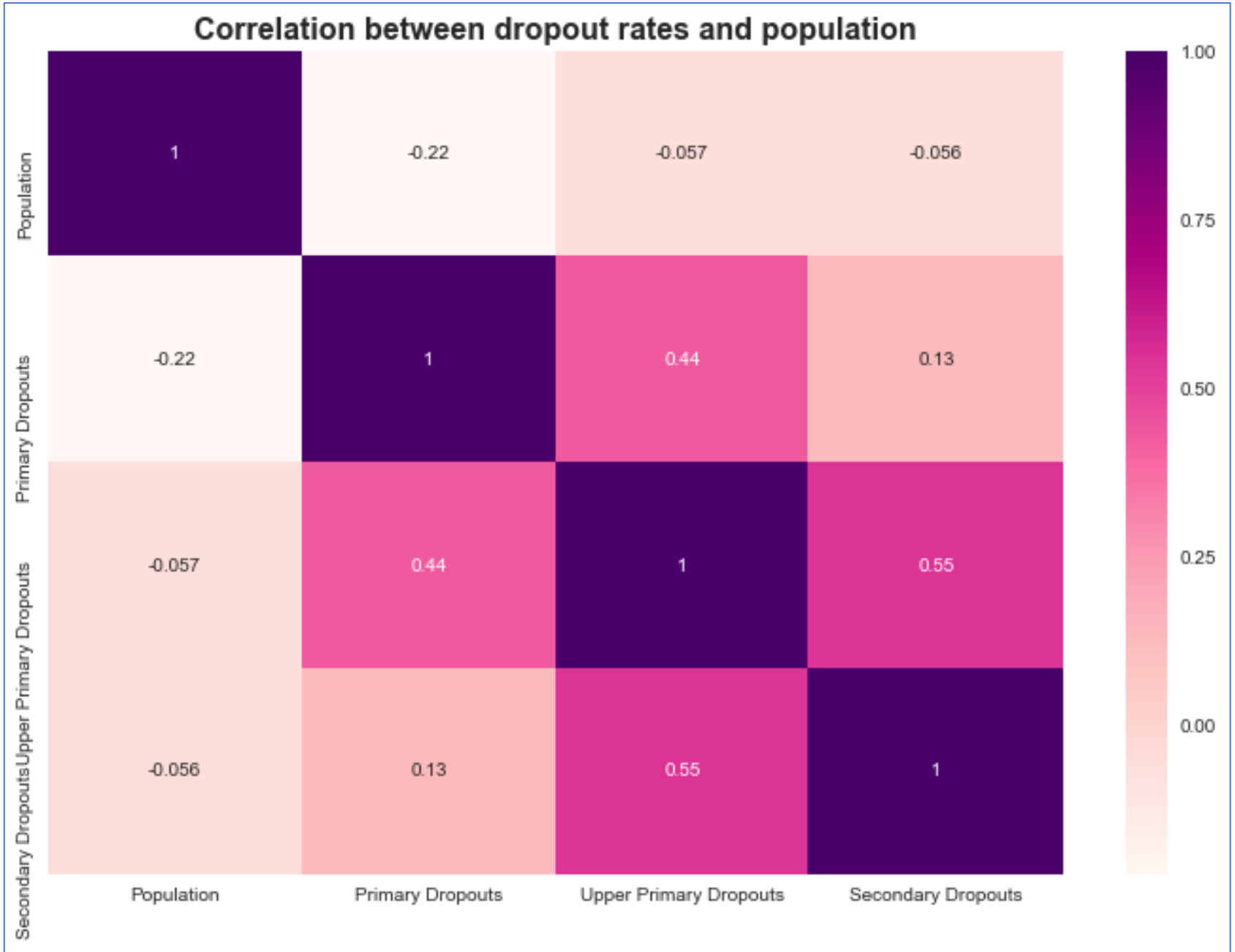
GDP and Education relationship

How do education drop out rate is correlated with GDP per capita and sectors contribution?





Education drop out rate and population relation



Education drop out rate and population relation

1. There is negative correlation of GSDP per capita against drop out rate. A raise in drop means there lower GDP per capita.
2. There Correlation between drop rates of % primary sector contribution, but negative correlation among drop out rates and secondary sector. Positive correlation between primary drop out rate and % Tertiary contrition to GDP, no correlation or a bit correlation between Secondary drop out rate and Tertiary sector but negative correlation between Upper Primary drop out rate and secondary sector.
3. There is negative correlation between drop out rates and population. It means that when population increases the drop out decreases and when drop out increase the population decrease.
4. If government and each state invest on increasing the GDP per capita, the education drop out will get lower. A better educated people will then make a higher return of making higher GDP to the nation.

Take always/recommendations

1. Overall, India GDP growth rate is declining from 2012 to 2016
2. Learn and use success factors from fast growing states like Goa
3. Find why reason behind slow moving states and invest on these states
4. Primary sector has 0 or negative affect on state GSDP
5. Each state should Manufacturing; Agriculture, forestry and fishing; Real Estate, and Trade; Real estate, ownership of dwelling & professional services; Trade, repair, hotels and restaurants; and construction sub-sectors to increase GSVA.
6. There is negative correlation between drop out rates and population. It means that when population increases the drop out decreases and when drop out increase the population decrease.
7. If government and each state invest on increasing the GDP per capita, the education drop out will get lower. An educated people will directly affect individual learnings resulting to higher GDP to the nation.

The End