GDP ANALYSIS REPORT

- COMPARATIVE STUDY OF THE PERFORMANCE OF THE STATES, SECTORS AND SUB-SECTORS

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STATE_WISE STUDY

COMPARISON OF AVERAGE GROWTH, PER CAPITA GDP AND GSDP EARNINGS

AVERAGE GROWTH OF THE STATES DURING 2014-15

- Mizoram, Tripura and Nagaland clocked superlative growth(of above 15%) during the years 2013-'16.

- Major bunch of other states had a decent growth rate ranging between 14% and 10% during this tenure. While a good majority of these surpassed the national average of 11%, others(Jammu Kashmir and Sikkim) were in close sync with growth around 10%.

- Goa and Meghalaya however posted dismal growth of less than 10% and were clearly struggling to tango with the national average.

- Data for West Bengal wasn't available for analysis.

Average Growth of Indian states during the period 2013-2016
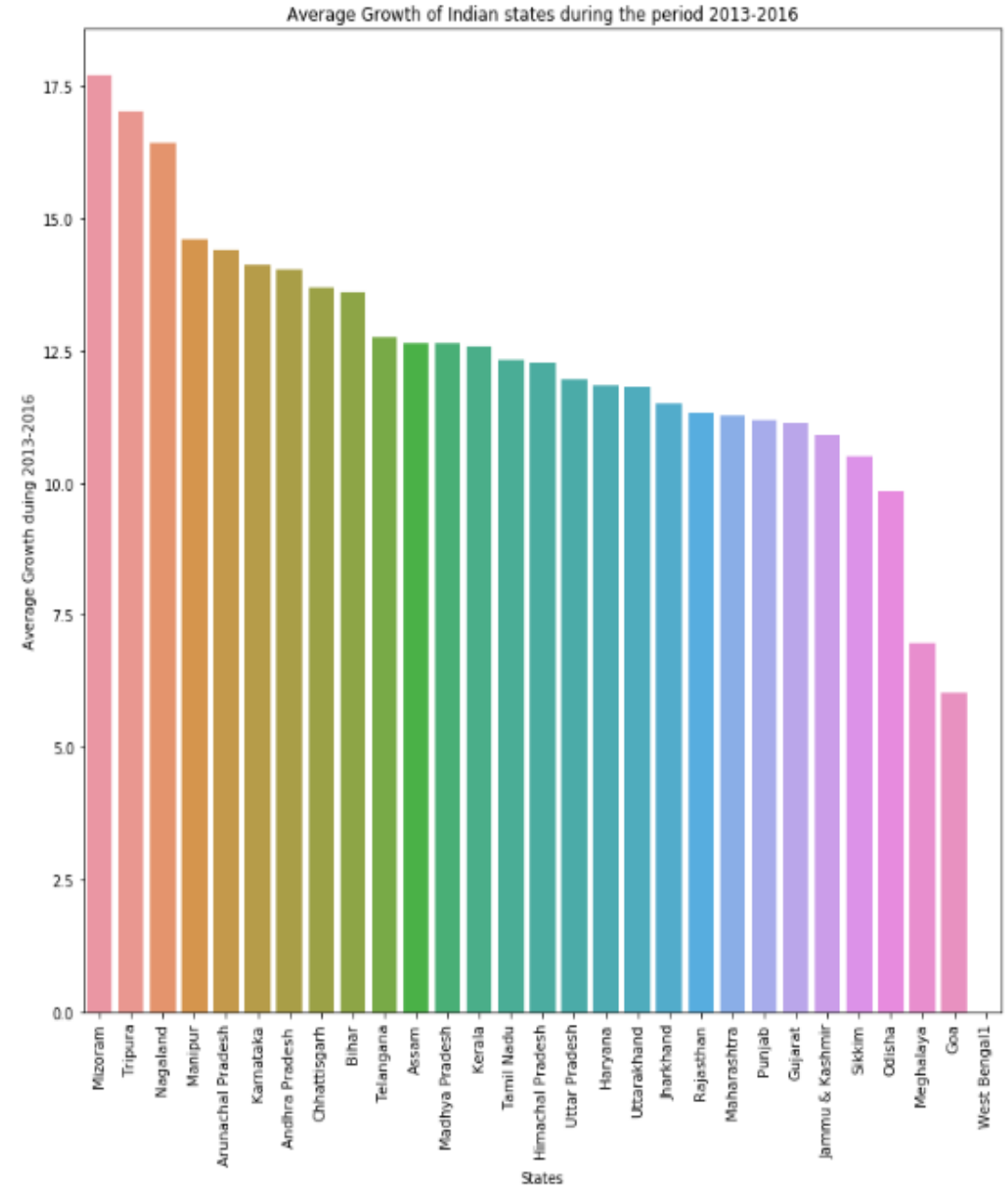
GDP CONTRIBUTION ACROSS THE STATES DURING 2014-'15

- Maharashtra, housing the commercial capital of the country, headed the Total GDP Contribution list of the year with a huge margin over the next best state of Tamil Nadu.

- The top 5 contributors were Maharashtra, Tamil Nadu, Uttar Pradesh, Karnataka and Gujarat. The bottom 5 were Nagaland, Manipur, Arunachal Pradesh, Sikkim and Mizoram.

- Interestingly, the fore-runners were amongst the largest states in the country reflecting the positive impact of population(rather manpower) on GSDP.

- Data for West Bengal was unavailable once again.

GDP Contribution of Indian states during the year 2014-15
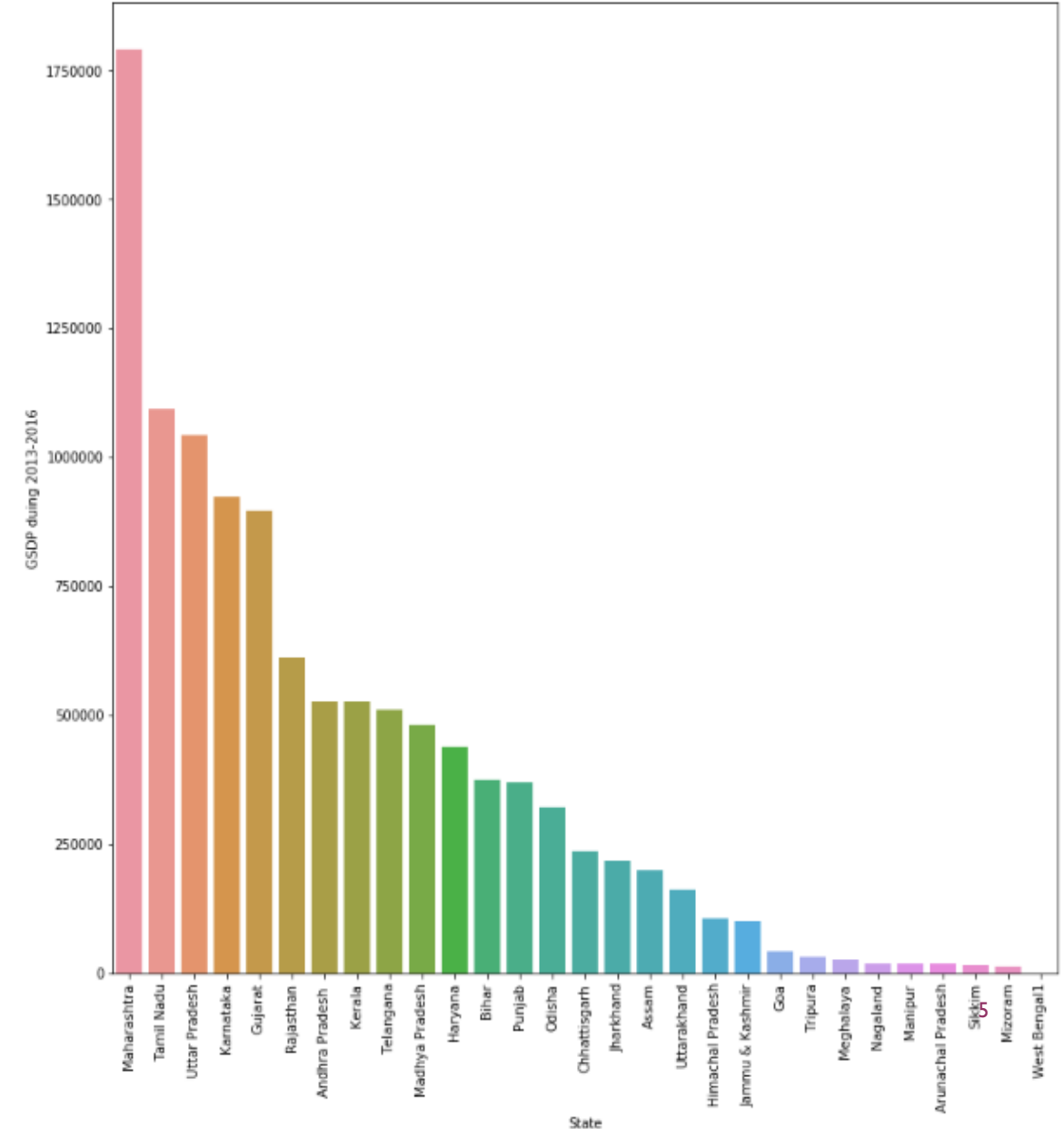
PER_CAPITA_GDP ACROSS THE STATES

- The top five states based on Per capita GDP (for 2014-'15) were Goa, Sikkim, Haryana, Kerala and Uttarakhand while the bottom five were Jharkhand, Assam, Manipur, Uttar Pradesh and Bihar.

- Goa topped the list with a per capita GSDP, which along with following state Sikkim, was significantly higher than the then subsequent state, Haryana.

- Four among top five states were relatively smaller states with better literacy rates and less dependence on agriculture while the bottom performers were relatively larger states.

- The top 10 or 11 states(barring the top two) had almost similar per capita GSDP. The rest of the states had a gradual but steady decline.

- The highest Per capita GDP(i.e. of Goa) was eight times as big as that of the lowest(that of Bihar).

Per Capita GDP of the states for the year 2014-'15
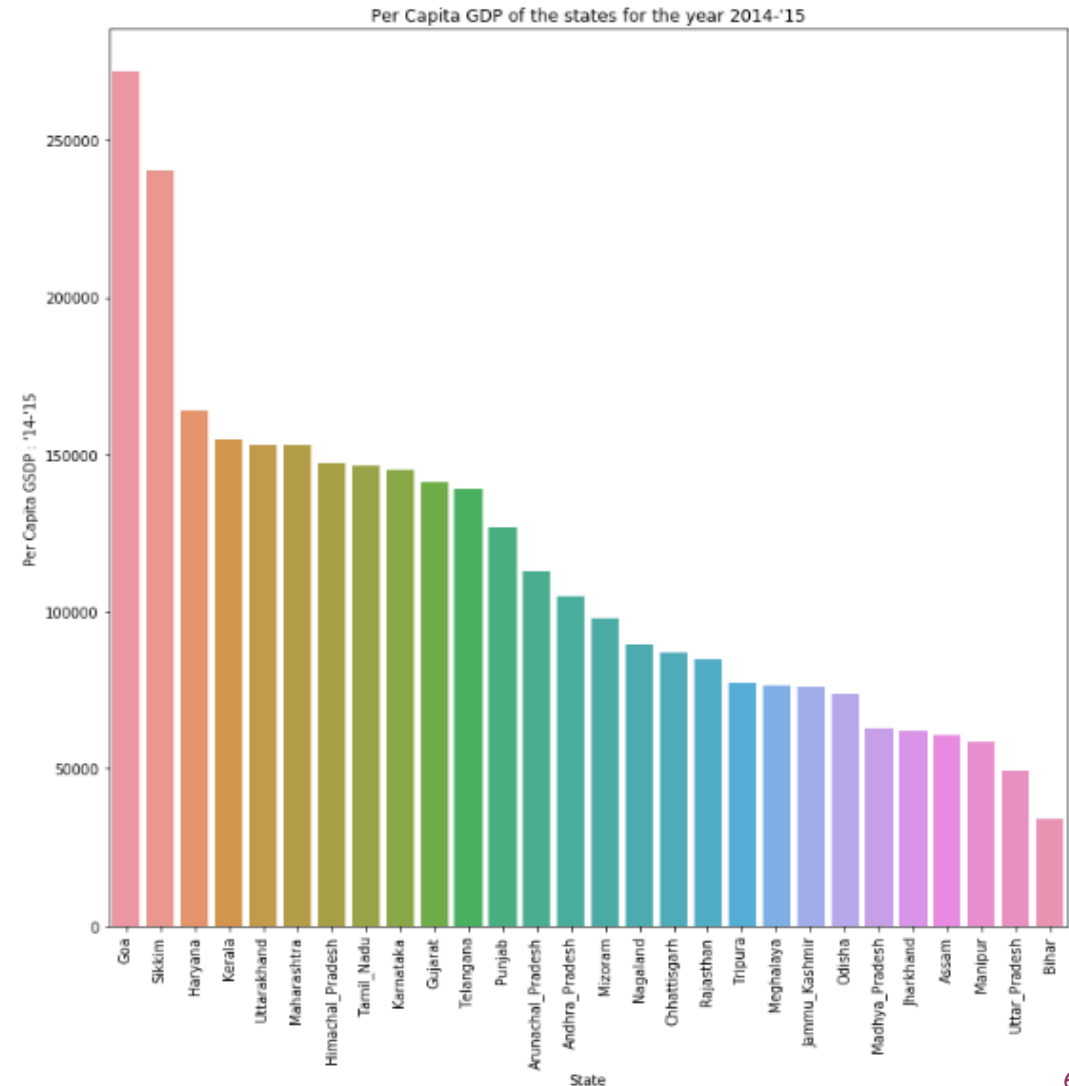
INFERENCES FROM GSDP EARNINGS PLOT AND PER CAPITA GDP PLOT

- Paradoxically, Goa and Sikkim, the two states with highest per capita GDP's, raked at the bottom of total GSDP earnings plot. This hints at the possibility of low population strength varying the per capita gdp dynamics.

- The states with least Per capita GDP were relatively large states indicating booming unemployment and income inequalities in these states especially when read against the fact that some of these were top GSDP earners for the same year.

- There was a distinct drop between the contributions- a blazing testimony to the jumble of growth the nation is in. States can be segregated into clusters of varying degrees of growth, with the best state outperforming the last over a-hundred-fold times!

- Though the GSDP data plotted is for a single year, the trend is similar every year, with the only difference being some states being juggled around.

CATEGORIZATION OF STATES

- The states are categorized into four groups based on their per capita GDPs.

- The states with per capita between the 85th and the 100th percentile values of state-wise per-capita GDP distribution are placed in C1.

- Those lying in the 50th to the 85th percentile bucket placed in category C2,

- 20th-50th percentile ranged states placed in category C3

- the rest grouped in the last bucket C4.

- This is done to simplify the subsequent analysis.

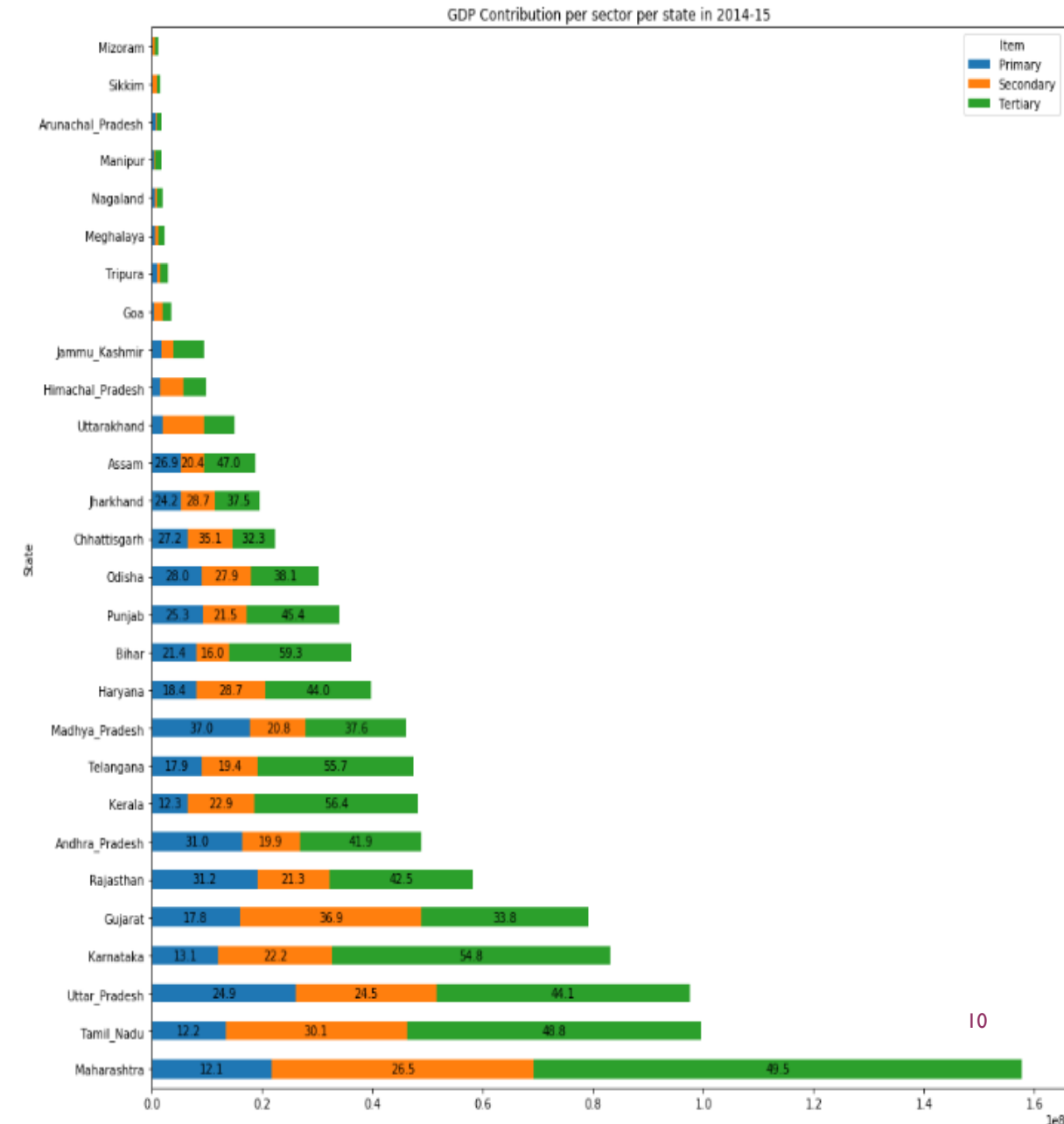| Category 1	Category 2	Category 3	Category 4
Goa	Arunachal Pradesh	Mizoram	Uttar Pradesh
Sikkim	Maharashtra	Nagaland	Madhya Pradesh
Haryana	Himachal Pradesh	Chhattisgarh	Jharkhand
Kerala	Tamil Nadu	Rajasthan	Assam
Uttarakhand	Karnataka	Tripura	Manipur
	Gujarat	Meghalaya	Bihar
	Telangana	Jammu Kashmir	
	Punjab	Odisha	
	Andhra Pradesh		

SECTOR-WISE STUDY

COMPARISON OF SECTOR-WISE CONTRIBUTION TO GSDP EARNINGS OF EACH STATE

SECTOR_WISE CONTRIBUTION TO GSDP ACROSS THE STATES

- Despite the country's economy being largely labelled as an agrarian economy, services sector or the tertiary sector contributes the most to GSDP in many of the top GSDP earning states. Roughly 40-50% of the GSDPs of these pour in from the tertiary sector.

- Some of the larger states like MP, UP, Andhra, Rajasthan, Bihar, Punjab etc. are those that have higher stakes(around 25-40%) invested in agriculture.

- The industrial sector or the secondary sector puts up a considerable contribution of over 20% in most of the top 14 states, literally ending up the secondary contributor in most states and a formidable third in some. Uttarakhand, Gujarat, Chhattisgarh, Sikkim and Goa are the only states in the nation where industrial sector leads the way.

GDP Contribution per sector per state in 2014-15

SUB_SECTOR PERFORMANCES

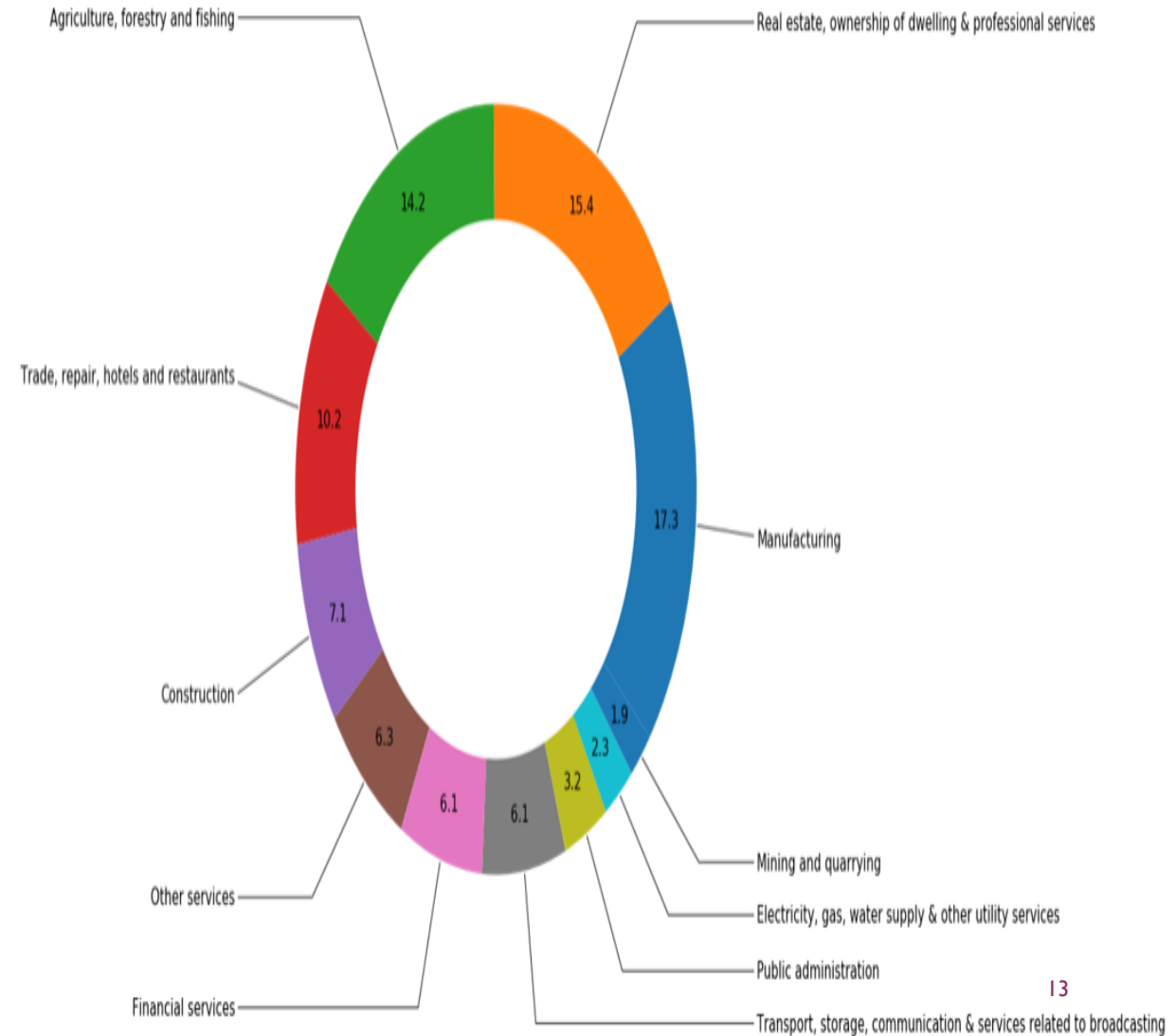## COMPARISON OF SUB_SECTOR CONTRIBUTIONS TO GSDP

CATEGORY-1

- Manufacturing was the top contributing sub-sector of the category.

- 'Agriculture, forestry and fishing', 'Trade, repair, hotels and restaurants', 'Real estate, ownership of dwelling & professional services' were amongst the next-best with more or less same percent of contribution.

- * 'Mining and Quarrying', 'Electricity, gas, water supply & other utility services', 'Public Administration' and 'Financial services' were the worst performing sub-sectors of the category.

- * 'Construction', 'Other services' and 'Transport, storage, communication & services related to broadcasting' relatively under-performed in the period considered.

Sub-Sector Contributions to GSDP - Category 1
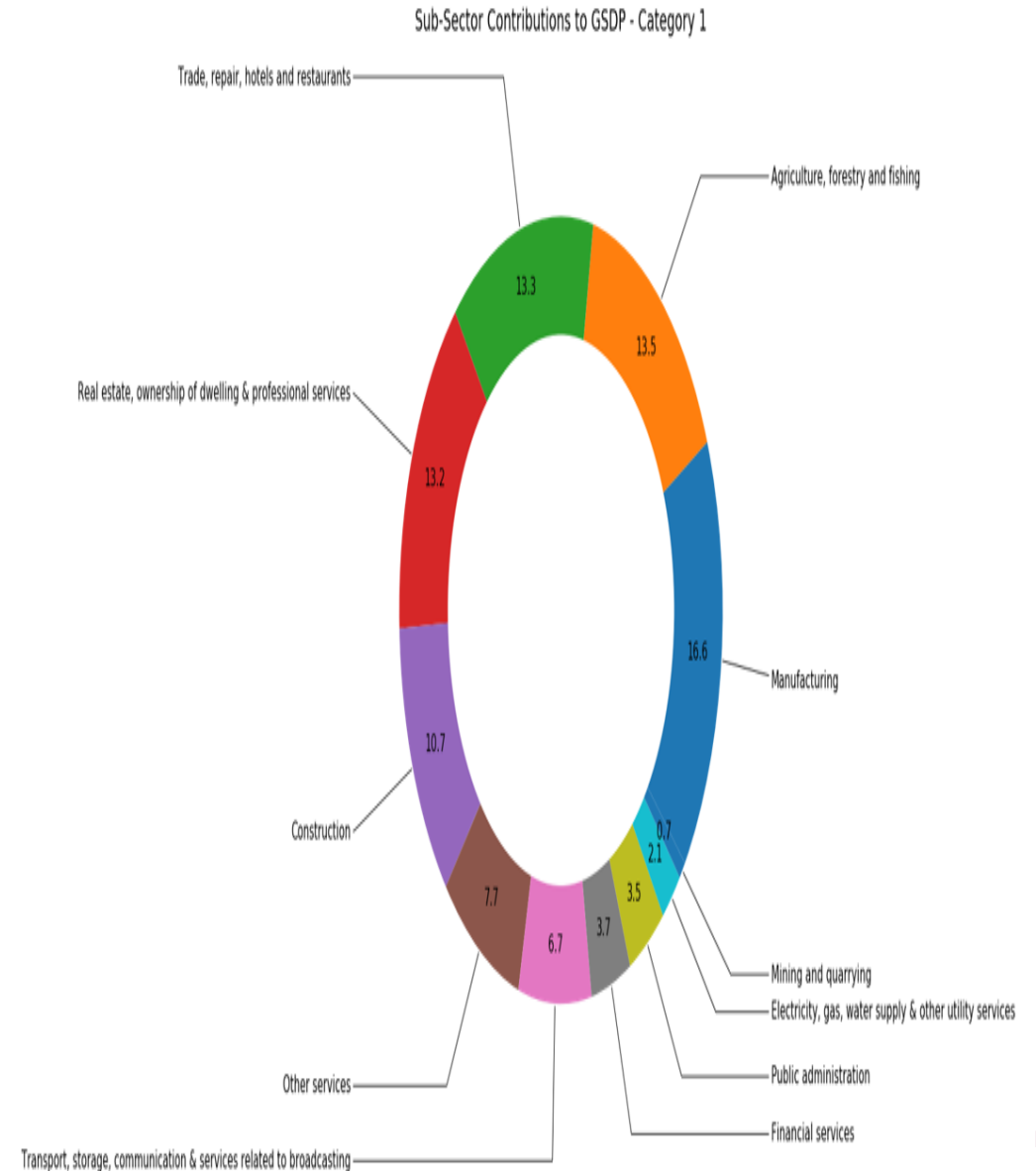
CATEGORY-II

- 'Manufacturing' was the top-earning sub-sector of this category as well. 'Real estate, ownership of dwelling & professional services' and 'Agriculture, forestry and fishing' sub-sectors closely followed it.

- 'Trade, repair, hotels and restaurants' sub-sector show-cased decent performance as well.

- All the other sub-sectors under-performed with 'Mining and Quarrying', 'Electricity, gas, water supply & other utility services' and 'Public administration' being the worst.
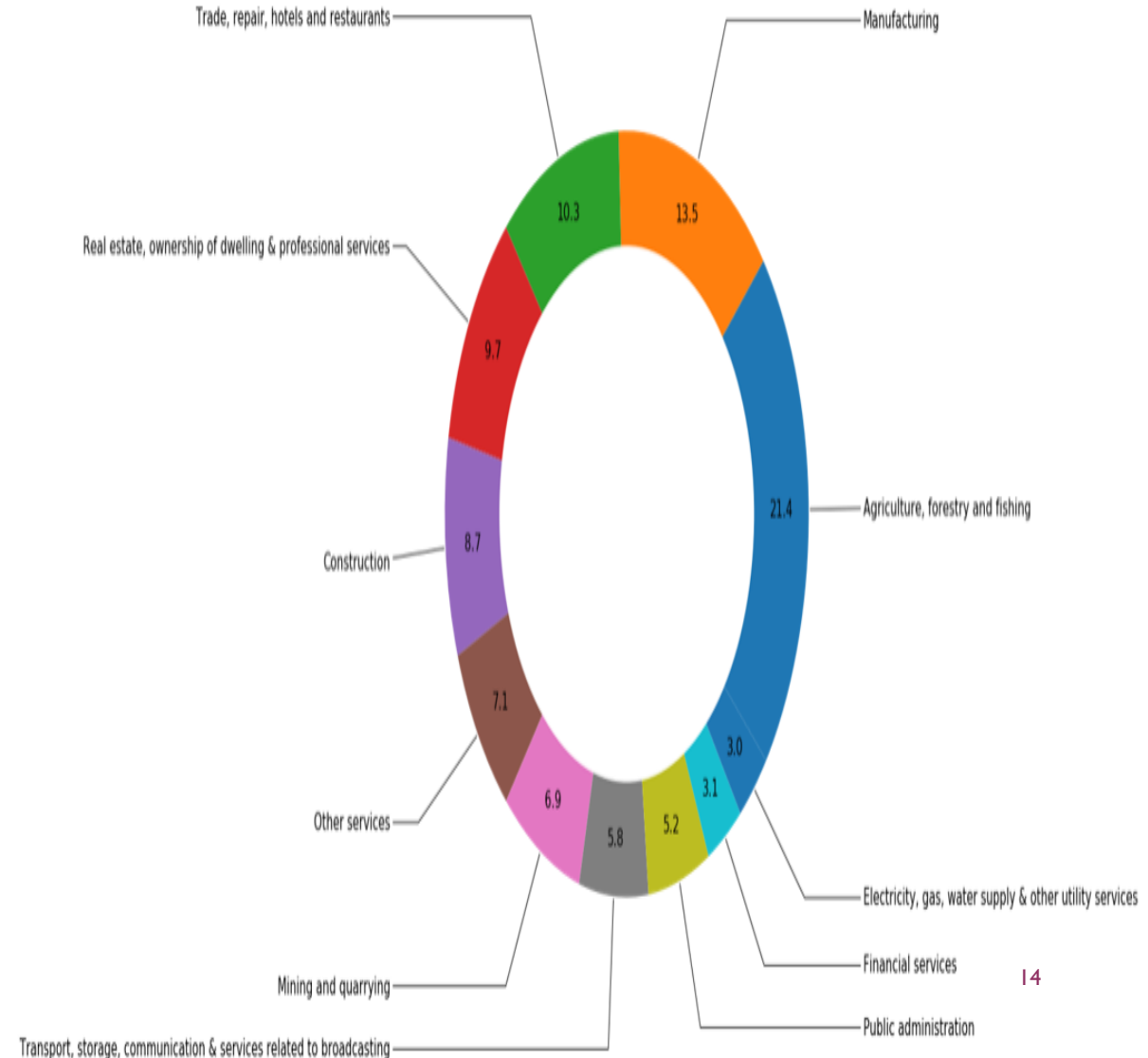
Sub-Sector Contributions to GSDP - Category 2

- Agriculture, forestry and fishing — 14.2
- Real estate, ownership of dwelling & professional services — 15.4
- Trade, repair, hotels and restaurants — 10.2
- Manufacturing — 17.3
- Construction — 7.1
- Mining and quarrying — 1.9
- Electricity, gas, water supply & other utility services — 2.3
- Public administration — 3.2
- Other services — 6.3
- Financial services — 6.1
- Transport, storage, communication & services related to broadcasting — 6.1
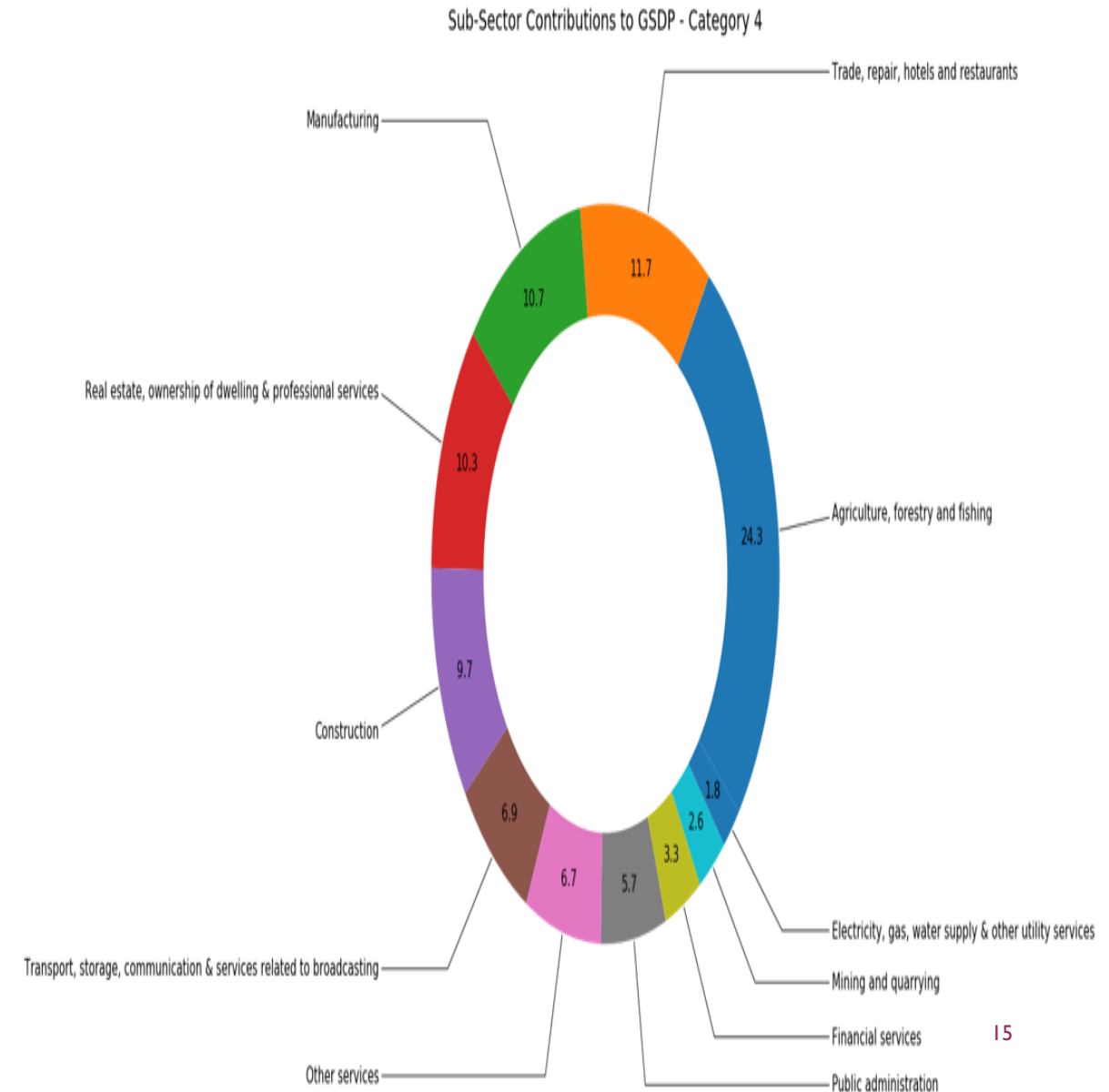
CATEGORY-III

- 'Agriculture, forestry and fishing' contributed the most to GSDP, outperforming the next best by a good margin.

- 'Manufacturing', 'Trade, repair, hotels and restaurants' and 'Real estate, ownership of dwelling & professional services' had a splendid run, contributing around 13-10% towards GSDP.

- 'Construction', 'Other services' and 'Mining and Quarrying' reported average performance.

- 'Electricity, gas, water supply & other utility services' and 'Financial services' had a sombre year with dismal GSDP contribution of around 3%.

Sub-Sector Contributions to GSDP - Category 3

CATEGORY-IV

- *'Agriculture, forestry and fishing' beat the other sub-sectors in this category like in category_C3 with an even better margin.

- 'Trade, repair, hotels and restaurants', 'Manufacturing', 'Real estate, ownership of dwelling & professional services' and 'Construction' sub-sectors contributed above 10% towards GSDP during the tenure considered.

- 'Transport, storage, communication & services related to broadcasting' and 'Other services' were average performers while 'Electricity, gas, water supply & other utility services', 'Mining and Quarrying' and 'Financial services' figured in the worst.

Sub-Sector Contributions to GSDP - Category 4

CATEGORY-WISE INFERENCES

CATEGORIES I, II

- 'Manufacturing' industry was the top GSDP contributor.

- No much difference in the contributions amongst the top 3 or 4 sub-sectors.

- 'Electricity, gas, water supply & other utility services', 'Public Administration', 'Mining and Quarrying' and 'Financial services' were worst performing sub-sectors.

CATEGORIES III, IV

- 'Agriculture, Forestry and Fishing' finished as the top GSDP contributor.

- The top earner 'Agriculture, Forestry and Fishing' was a clear leader with a decisive margin above other sub-sectors.

- 'Electricity, gas, water supply & other utility services', 'Public Administration', 'Mining and Quarrying' and 'Financial services' were worst performing sub-sectors here as well.

INFERENCES

- 'Manufacturing' sub-sector enjoyed highest positive correlation with 'GDP' as it was the top GSDP contributor in top two categories of states.

- 'Real estate, ownership of dwelling & professional services', 'Trade, repair, hotels and restaurants', 'Agriculture, Forestry and Fishing' were the other sub-sectors common across all categories. Hence, they were positively correlated with GDP as well.

- All the categories of states need to focus on the sub-sectors, 'Electricity, gas, water supply & other utility services', 'Mining and Quarrying', 'Public Administration' and 'Financial services'. While this is important for the categories C1 and C2 to maintain/improve their growth trajectory in the long-run, this is more or less the stimulus that the economy demands in categories C3 and C4.

RECOMMENDATIONS

CATEGORY 1

- Need to work on infrastructure to enable more industries and sub-sectors pick up momentum
  - Build more roads-better and safer ones
  - Achieve complete electrification
  - Embrace internet technologies
- Focus on their strengths
  - Improve productivity of workforce
  - Reduce under-employment
  - Make fiscal/monetary interventions to boost their top sub-sectors

CATEGORY 2

- Tackle unemployment and under-employment issues to bridge the gap between their high GSDP and not-so-high per capita GDP
  - Generate employment opportunities
  - Enhance productivity of sub-sectors and workforce
- Improve infrastructure to improve the net-turnout of present industries/firms and attract more investments

RECOMMENDATIONS

CATEGORY 3

- Support Agricultural sector
  - Ensure base prices and increased yields
  - Devise monetary/fiscal policies to help the farmers
- Reduce over-dependence on agriculture
  - Open up new avenues of investment to attract entrepreneurs to new sub-sectors
  - Channel some investment and labour towards tertiary sector

CATEGORY 4

- Undertake large-scale reforms
  - Improve skill-set of the workforce
  - Drag and drop good amount of workers towards more productive sectors
  - Generate more jobs
- Boost agricultural sector
  - Initiate farmer-friendly reforms
  - Educate the farmers
  - Ensure availability of irrigation water, manure etc.
 - Provide monetary support if needed

GDP – SCHOOL DROPOUT CORRELATION

ANALYSIS OF CORRELATION BETWEEN PER CAPITA GDP AND SCHOOL DROPOUT RATES

PER CAPITA GDP OF STATES VS SCHOOL DROP_OUT RATES

- School drop-out rates during primary, upper primary and secondary classes are negatively correlated with per capita GDP of states

- The negative impact is more in case of upper-primary dropouts followed by secondary dropouts followed by a close primary dropout ratio.

- Though it is an average correlation, the flippant impact of dropout rate on per capita GDP is obvious.

Correlation between School Dropout rate and Per Capita GDP during the year 2014-'15
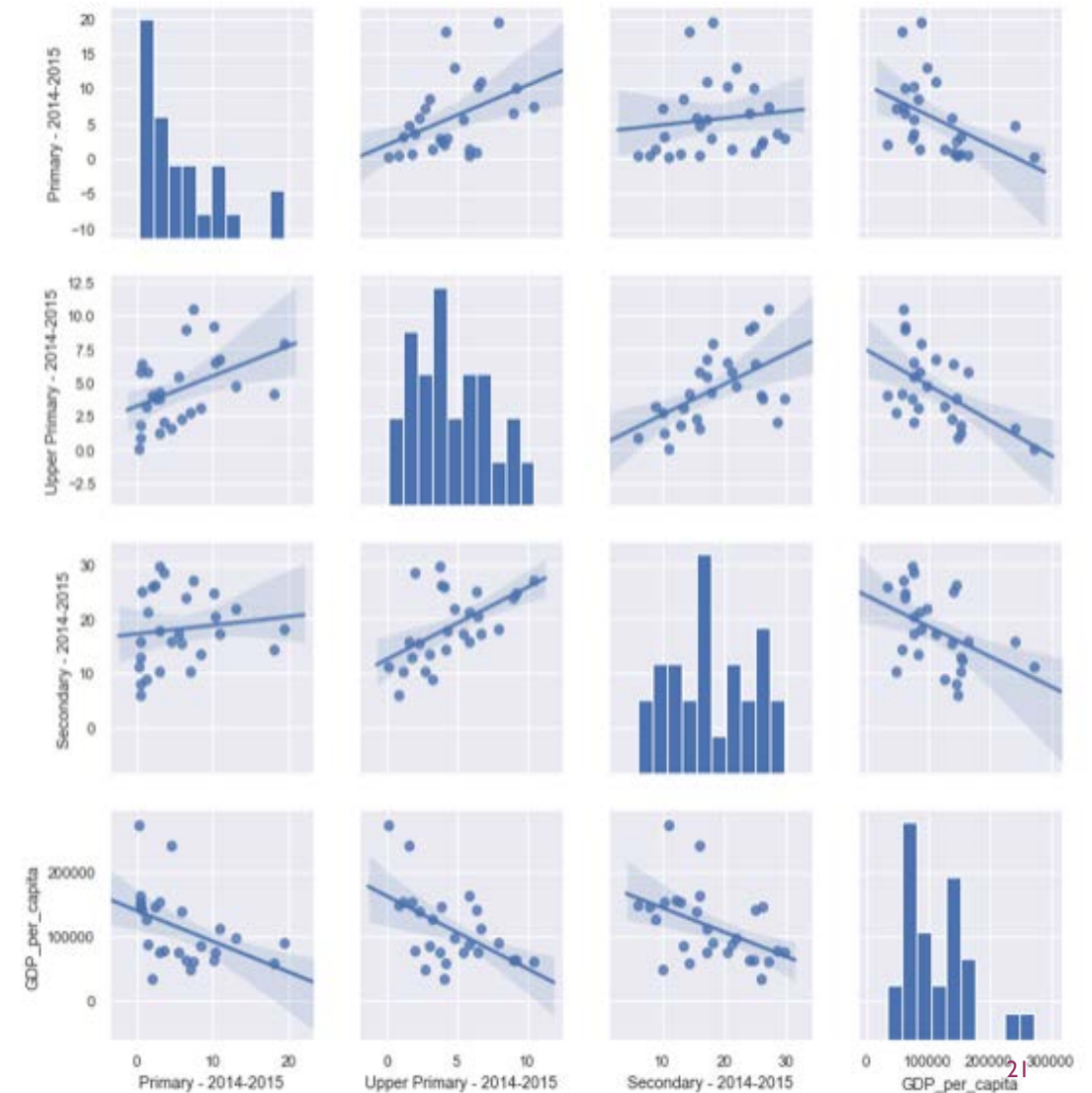
POSSIBLE HYPOTHESIS

- As the students drop out at lower classes, they are deprived of even basic formal education rendering them unequipped for any skilled labour or even an upgrade in an unskilled job.

- As the population of the state gets pooled with more dropouts, the availability of skilled labour drops which would gradually dry up that sub-sector/industry in the state.

- Not only does the non-productive jobs/sectors boom, this reduces sector diversification eating up job opportunities of skilled labourers who are then forced to be under-employed.

- This vicious cycle goes on retarding social as well as economic growth.

CONCLUSION

- In order to leverage the full potential of the nation, all the state governments need to take part pro-actively to boost the sectors at grass-root levels.

- Ensuring

  - good health of the citizens

  - Provision of basic amenities to each one of them (which must include internet services)

  - a just and able administration

  - education to all

  - amenable workplace conditions

  are measures that all of the states must spend their energy on.

- This would help in raising living standards within the state which in turn would set the backdrop for the other measures to take effect.