## **Methodology**

#### 1. State wise Population Data:

a. Census 2011

#### 2. State wise GDP/GSDP:

- a. RBI Handbook on Indian Economy 2014-15
- b. India Public Finance Statistics yearbook 2014-15

### 3. State wise personal income tax:

- a. Annexure table 1 in the answer to Rajya Sabha unstarred question no 1454 by Shri.Lal Sinh Vadodia on 22<sup>nd</sup> July 2014 provides the ratio of state wise personal income taxes for the year 2013-14
- b. Using this as a benchmark, state wise personal income tax contributions is calculated for the year 2015-16 in the same ratio as for the year 2013-14

#### 4. State wise corporate tax:

- a. Total corporate taxes for the year 2015-16 is divided in the ratio of each state's share of GSDP to the total. This is a proxy to economic activity in each state.
- b. This analysis does not use the Income Tax department state wise data of collection of corporate taxes since that skews the ratio in favour of states where large companies are headquartered. Eg. Tata Group companies may be situated across various states of India and contribute to economic activity of each state but their corporate taxes are accounted for in their headquarter state of Maharashtra.
- c. Hence, allocation based on state GDP, while not perfect, is a better proxy to remove the headquarter bias

#### 5. Indirect taxes:

- a. Central excise, customs, sales and service tax allocation to each state is based on zone wise data for each of these taxes provided by Income Tax department.
- b. This is not perfect since one zone can cover multiple states for smaller states
- c. This analysis uses only the 16 largest states that are not defined as "special category" states for preferential treatment. These 16 states account for nearly 90% of GDP of India, hence it is representative.

#### 6. Devolution of tax revenues to states

a. RBI's "State of State Finances" report 2015-16

	Population	GDP Share	Taxes paid to Centre	Share of Taxes	Tax Per Capita	from Centre	_
State	Share		(Rs cr)		(Rs)	(Rs cr)	paid
Andhra Pradesh	4.1%	4.3%	58,758	4.1%	11,991	40,880	69.6%
Bihar	8.6%	3.0%	17,956	1.2%	1,727	75,320	419.5%
Gujarat	5.0%	7.6%	1,22,309	8.4%	20,385	29,800	24.4%
Haryana	2.1%	3.6%	25,969	1.8%	10,388	14,440	55.6%
Jharkhand	2.7%	1.8%	30,131	2.1%	9,134	28,000	92.9%
Karnataka	5.0%	7.4%	1,15,981	8.0%	18,984	38,480	33.2%
Kerala	2.8%	4.3%	41,964	2.9%	12,562	23,100	55.0%
Madhya Pradesh	6.0%	3.7%	44,517	3.1%	6,130	62,330	140.0%
Maharashtra	9.3%	14.5%	3,66,283	25.2%	32,595	54,250	14.8%
Orissa	3.5%	2.5%	26,056	1.8%	6,208	42,500	163.1%
Punjab	2.3%	3.1%	21,396	1.5%	7,712	13,480	63.0%
Rajasthan	5.7%	5.0%	45,534	3.1%	6,643	53,630	117.8%
Tamil Nadu	6.0%	8.6%	1,33,409	9.2%	18,491	45,070	33.8%
Telangana	2.9%	4.2%	35,516	2.4%	10,091	26,090	73.5%
Uttar Pradesh	16.5%	8.2%	86,328	6.0%	4,316	1,39,130	161.2%
West Bengal	7.5%	5.7%	57,069	3.9%	6,271	66,570	116.6%

# Dataset using Income Tax data for corporate taxes that has a strong headquarter bias

Notice that Maharashtra's share of total taxes goes from 25% to 33% because of the Mumbai headquarter skew.

	Population	GDP Share	Taxes paid to Centre	Share of Taxes	Tax Per Capita	Devolution from Centre	Devolution as % of
State	Share	Silare	(Rs cr)	Taxes	(Rs)	(Rs cr)	taxes paid
Andhra Pradesh*	4.1%	4.3%	61,699	4.3%	12,592	40,880	66.3%
Bihar	8.6%	3.0%	6,226	0.4%	599	75,320	1209.7%
Gujarat	5.0%	7.6%	1,05,325	7.3%	17,554	29,800	28.3%
Haryana	2.1%	3.6%	20,867	1.4%	8,347	14,440	69.2%
Jharkhand	2.7%	1.8%	22,866	1.6%	6,931	28,000	122.5%
Karnataka	5.0%	7.4%	1,22,062	8.4%	19,979	38,480	31.5%
Kerala	2.8%	4.3%	28,019	1.9%	8,387	23,100	82.4%
Madhya Pradesh	6.0%	3.7%	37,573	2.6%	5,173	62,330	165.9%
Maharashtra	9.3%	14.5%	4,74,762	32.7%	42,248	54,250	11.4%
Orissa	3.5%	2.5%	22,257	1.5%	5,303	42,500	190.9%
Punjab	2.3%	3.1%	21,396	1.5%	7,712	13,480	63.0%
Rajasthan	5.7%	5.0%	45,534	3.1%	6,643	53,630	117.8%
Tamil Nadu	6.0%	8.6%	1,23,469	8.5%	17,114	45,070	36.5%
Telangana	2.9%	4.2%	15,866	1.1%	4,508	26,090	164.4%
Uttar Pradesh	16.5%	8.2%	65,263	4.5%	3,263	1,39,130	213.2%
West Bengal	7.5%	5.7%	63,853	4.4%	7,017	66,570	104.3%