CSR Data Synchronization Exercise

Data Synchronization & Analysis

Challenge hosted by CSIP, Ashoka University #hackteam16

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Problem/Challenge Description

- The Centre for Social Impact and Philanthropy (CSIP) had collated CSR (Corporate Social Responsibility) data for the years 2014 till 2019
- CSR requires businesses to spend at least 2 percent of their average net profits of three years on CSR activities such as COVID, education, gender equality, poverty and hunger
- The amendment requires companies However there is no centralized CSR database to refer for information. To remedy this, CSIP has collated information on various categories related to CSR across India such net profit, CSR Prescribed Expenditure, and CSR spent. However, some of the collated information is lacking in details or maybe duplicated/erroneous in some fields. The dataset needs to be standardised and compacted, for further access and use

Dataset Introduction

For each year, the details of the companies were spread across multiple sheets linked by the primary key (companies CIN - Corporate Identification Number).

- 1. For each year, the four sheets were combined into one by the companies CIN Number
- 2. Then, the five sheets for each year were combined together to form the master sheet
- 3. We used tools such as Tableau and Python to analyse and produce visualizations

Gaps in the Dataset

- 1. Missing values for some columns (details) for some companies
- 2. CSR disparity between different years. Some years had CSR in whole figures and some in decimals (in crores)
- 3. The same mode of implementation was written differently depending on the CSR

CSR Trend PAN India

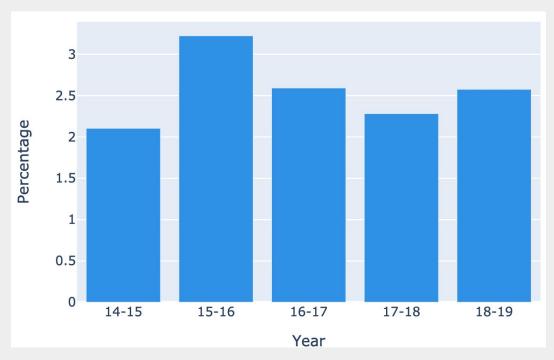
- The dataset had 18710 unique companies
- 31.92% had data for all the years.
 39.12 % had the data for 3 or more years but had at least one missing values
- For such missing cases, they were replaced by the average of the available data
- The master data was resynchronized for 'Net Profit' and 'CSR Spent' year wise for each company



Net Profit and CSR Spent in Picture

CSR Trend PAN India

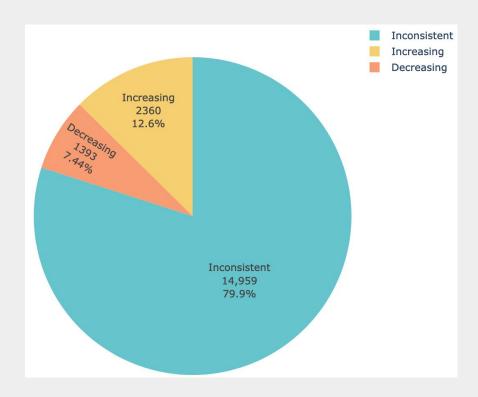
- Each year about 2% of net profit is spent on CSR
- In India, companies with net profit of INR 5 crore and more are are required to spend 2% on CSR



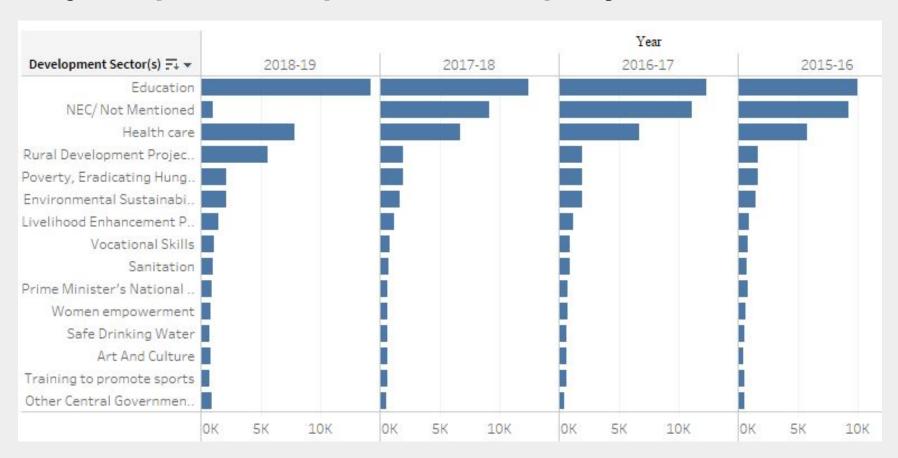
CSR as percentage of Net Profit

Companies CSR Trend

- 18710 companies
- 12.6 % of them increased their CSR contributions each subsequent year
- 7.44% of them decreased their CSR contributions each subsequent year



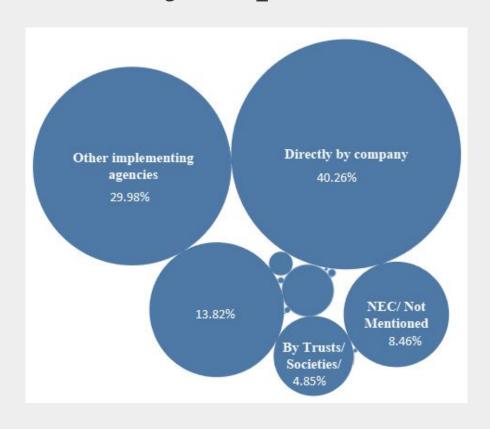
Projects per development sector per year



CSR Spent per Development Sector

Education	Rural development projects	NEC/ Not mentioned	
Health care	Sanitation	Livelihood enhancement projects	
	Vocational skills	Training to promote sports	

Proportion of Projects per Mode of development



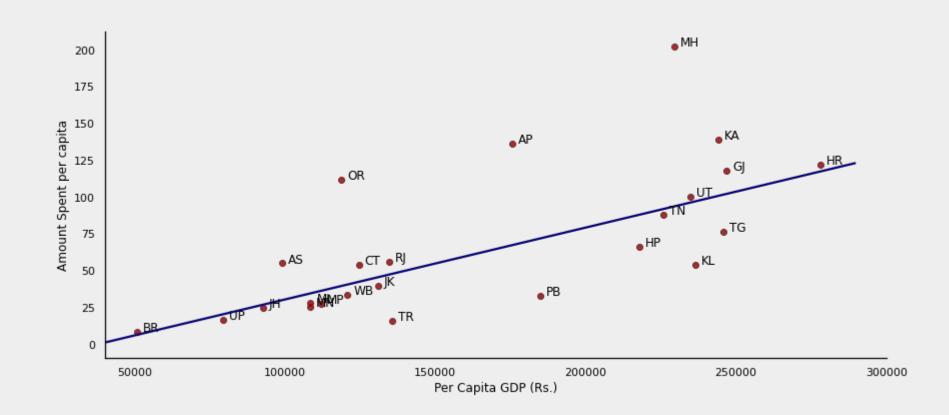
Proportion of projects by development sector and mode of implementation

Education Directly by company NEC/ Not Mentioned	Education Other implementing agencies	Health Care Directly by company	Health Care Other implementing agencies
NEC/ Not Mentioned		Rural Development Projects Directly by company	Poverty, Eradicating Hunger, Malnutrition Directly by company

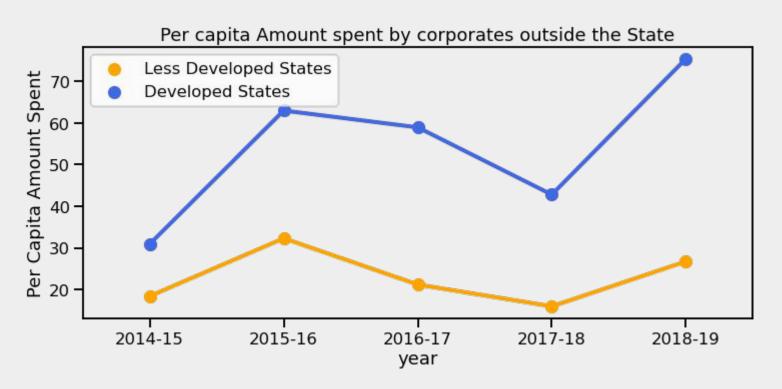
A North - South Divide



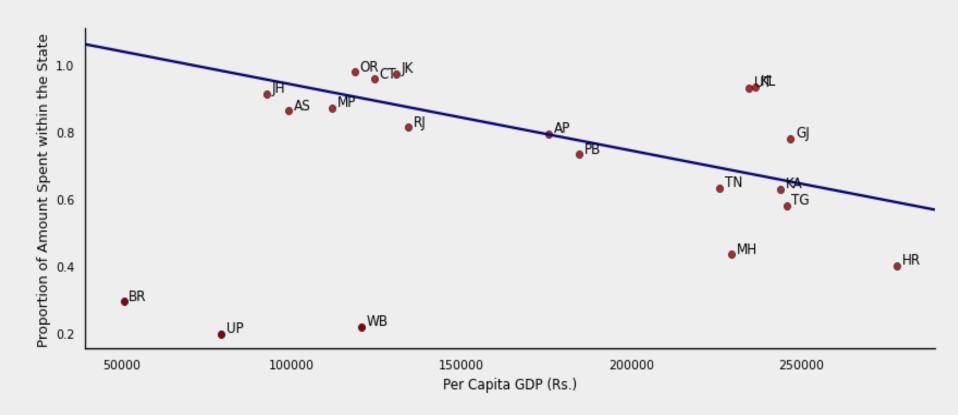
500 1000 Per Capita Amount in INR



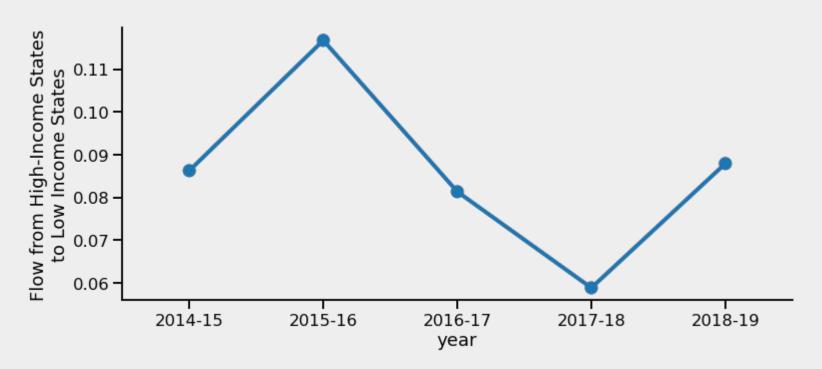
High-Income States are getting more CSR from the other High-Income States than the low-income states



Low-Income states can't get more out of their Corporates



Corporates in High-Income states are not spending on Low-Income States



Challenges and Suggested Next Steps

- Data should be validated, before added to the master data to avoid gap and empty data
- Build an app to facilitate and verify the quality of data and produce in real time these visualisation

Limitations of the Analysis

 We are only measuring the inputs (i.e. the money spent) not the outcomes of the CSR projects

Thank you for your time and effort! Any questions?