



LOKSABHA ELECTION ANALYSIS

The Codebasics Resume Project Challenge 11 focuses on analyzing the 2014 and 2019 elections. Dived into electoral data from these years to uncover trends, shifts in voter behavior, and political landscapes.

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Agenda



- o3 About the Project
- o4 About Dataset
- o5 Overview
- o6 Primary Insights
- o7 Secondary Insights
- o8 Recommendation

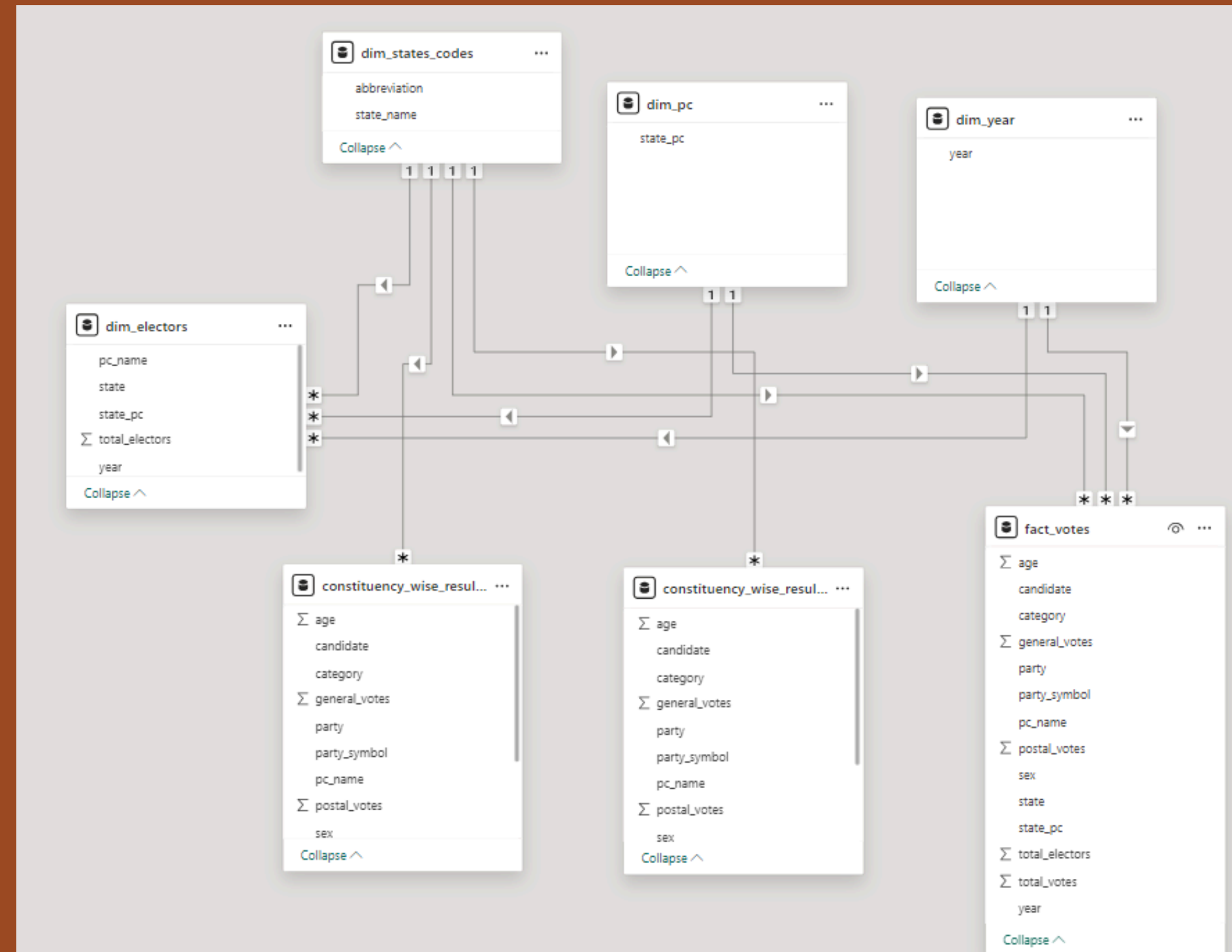


About the project

- AtliQ Media, a private media company, is planning to broadcast a show on the 2024 Lok Sabha elections in India.
- Distinguishing itself from other channels, AtliQ Media aims to avoid debates on election outcomes and instead provide unbiased insights drawn from the 2014 and 2019 elections.
- The focus will be on discussing less explored themes such as voter turnout percentage in India, offering viewers a deeper understanding of electoral dynamics beyond mere predictions.

About Dataset

- The dataset consists of details of 2014 and 2019 elections which is appended into one fact table. There is a state codes table with state abbreviations.
- Fact votes table consists of columns:
 - year
 - state
 - pc_name
 - candidate
 - category
 - age
 - gender
 - party
 - party symbol
 - general votes
 - postal votes
 - total votes
 - total electors



Overview

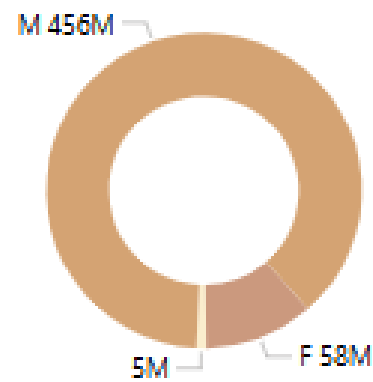
Total Constituencies	Total Electors	Total Postal Votes	Total Votes	Voter Turnout Ratio
543	2bn	3M	1bn	66.75%
2014 : 511 2019 : 543	2014 : 787.2M 2019 : 912M 15.84% ▲	2014 : 897.4K 2019 : 2.3M 156.24% ▲	2014 : 520M 2019 : 614.2M 18.11% ▲	2014 : 66.06% 2019 : 67.35% 1.95% ▲

- **Constituencies:** There was an increase in the number of constituencies from 2014 to 2019, indicating possible redistricting or reorganization.
- **Electors:** The number of eligible voters increased significantly from 782.1 million in 2014 to 911.8 million in 2019, reflecting demographic growth and possibly better voter registration processes.
- **Postal Votes:** The use of postal votes saw a slight increase from 2.715 million in 2014 to 2.824 million in 2019.
- **Total Votes Cast:** The total number of votes cast increased from 612 million in 2014 to 668 million in 2019, indicating higher voter participation.
- **Voter Turnout:** The voter turnout ratio improved from 66.06% in 2014 to 67.35% in 2019, showing a positive trend in voter engagement and participation.

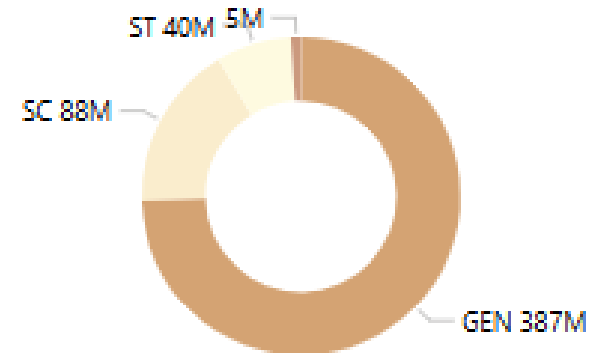
Overview

2014

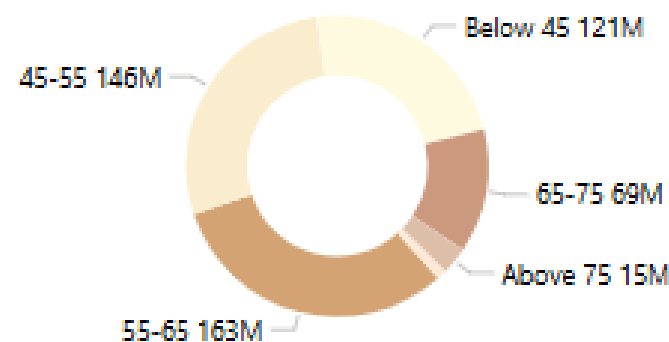
Candidates by Gender



Candidates by Category

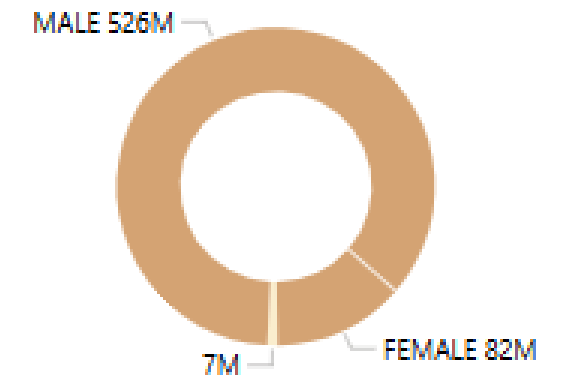


Candidates by Age Group

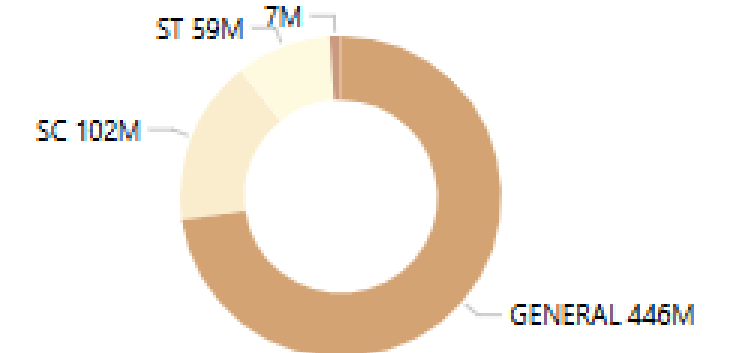


2019

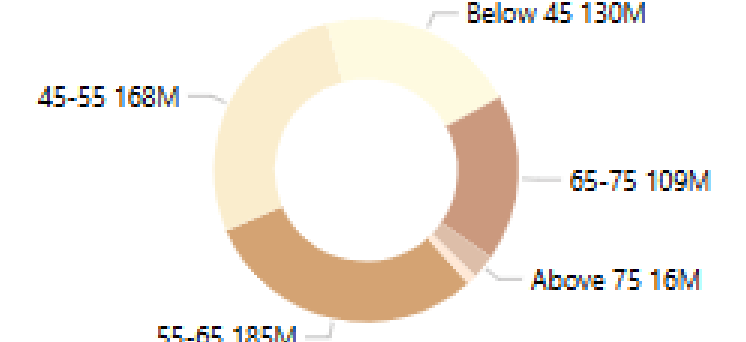
Candidates by Gender



Candidates by Category



Candidates by Age Group



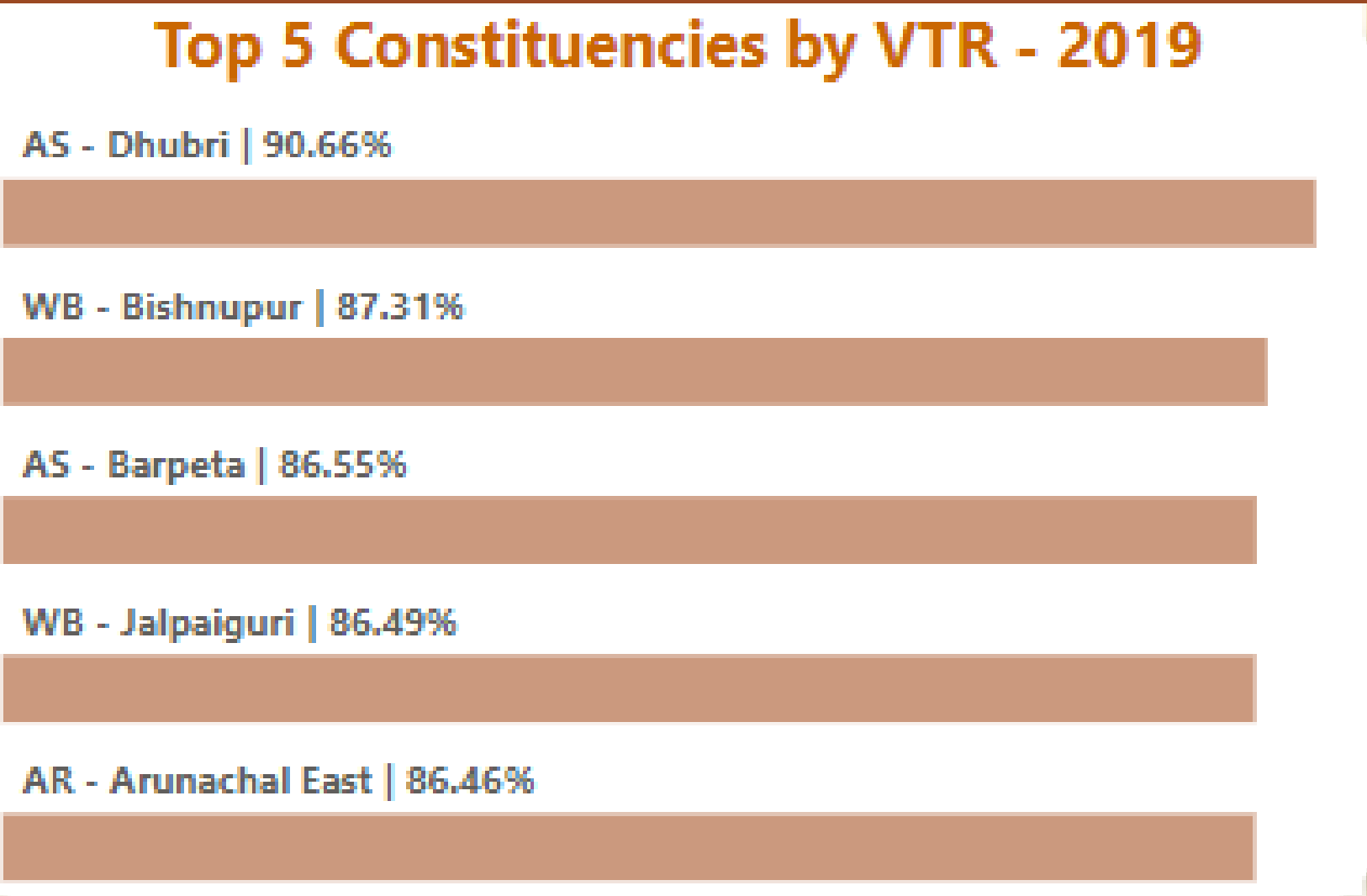
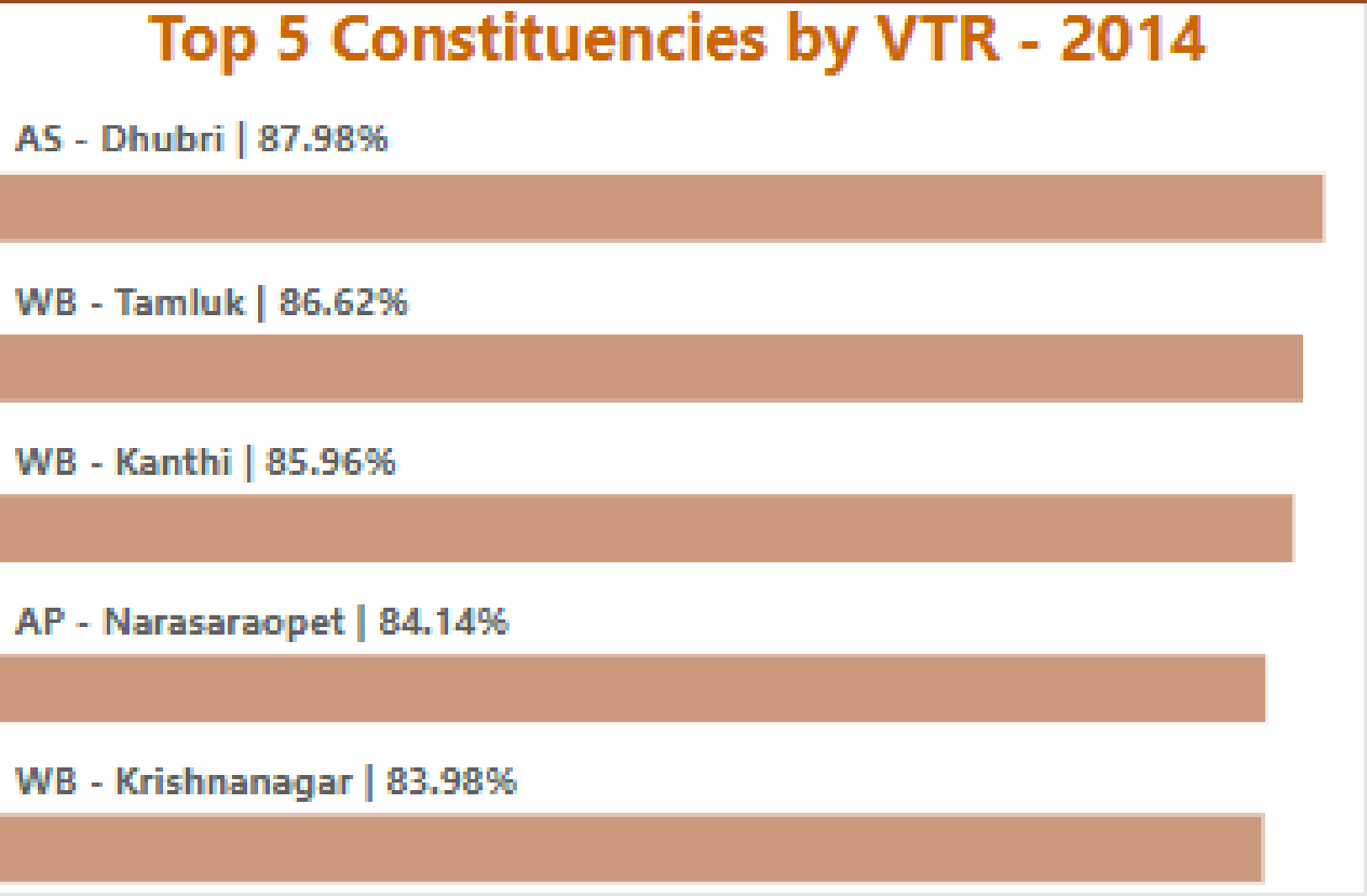
- **Gender:** In 2014, 88% of candidates were male, compared to 86% in 2019.
- **Category:** In 2014, 75% of candidates belonged to the general category, which decreased to 73% in 2019.
- **Age Groups:** In both years, 31% of candidates were in the 55-65 age group, and 28% were between 45-55.

Key Points:

- Male voters comprised the majority of the electorate.
- The General category had the highest number of voters among all categories.
- The largest age group of voters was between 55 and 65 years old.

Primary Insights

1. The top 5 constituencies of 2014 and 2019 in terms of voter turnout ratio.



1. The bottom 5 constituencies of 2014 and 2019 in terms of voter turnout ratio.

Bottom 5 Constituencies by VTR - 2014

JK - Ladakh | 18.63%

JK - Srinagar | 25.45%

JK - Anantnag | 28.39%

GJ - Bharuch | 29.73%

AS - Lakhimpur | 33.63%

Bottom 5 Constituencies by VTR - 2019

JK - Anantnag | 08.94%

JK - Srinagar | 14.43%

JK - Baramulla | 34.57%

TG - Hyderabad | 44.84%

MH - Kalyan | 45.29%

2. The top 5 States of 2014 and 2019 in terms of voter turnout ratio.

Top 5 States by VTR - 2014

Nagaland | 87.82%

Lakshadweep | 86.61%

Tripura | 84.72%

Dadra & Nagar Haveli | 84.07%

Sikkim | 83.33%

Top 5 States by VTR - 2019

Lakshadweep | 85.18%

Nagaland | 82.91%

Manipur | 82.54%

Tripura | 82.35%

West Bengal | 81.72%

2. The Bottom 5 States of 2014 and 2019 in terms of voter turnout ratio.

Bottom 5 States by VTR - 2014

Jammu & Kashmir | 49.66%

Bihar | 56.25%

Uttar Pradesh | 58.42%

Maharashtra | 60.29%

Madhya Pradesh | 61.59%

Bottom 5 States by VTR - 2019

Jammu & Kashmir | 44.84%

Bihar | 57.30%

Uttar Pradesh | 59.18%

NCT OF Delhi | 60.58%

Maharashtra | 60.96%

3. Which constituencies have elected the same party for two consecutive elections, rank them by % of votes to that winning party in 2019

state_pc	Party	Vote % ▼
GJ - Surat	BJP	74.47%
GJ - Navsari	BJP	74.37%
GJ - Vadodara	BJP	72.30%
HP - Kangra	BJP	72.02%
RJ - Bhilwara	BJP	71.59%
MH - Mumbai North	BJP	71.40%
HR - Karnal	BJP	70.08%
GJ - Gandhinagar	BJP	69.67%
RJ - Rajsamand	BJP	69.61%
MP - Hoshangabad	BJP	69.35%
HP - Hamirpur	BJP	69.04%
HR - Faridabad	BJP	68.80%
HP - Mandi	BJP	68.75%
UT - Garhwal	BJP	68.25%
MP - Vidisha	BJP	68.23%

4. Which constituencies have voted for different parties in two elections (list top 10 based on difference (2019-2014) in winner vote percentage in two elections)

Constituency	2014 Winning Party	2019 Winning Party	Votes Difference % ▼
WB - Alipurduars	AITC	BJP	24.77%
AS - Autonomous District	INC	BJP	22.49%
TN - Kanniyakumari	BJP	INC	22.19%
PY - Puducherry	AINRC	INC	21.70%
BR - Bhagalpur	RJD	JD(U)	21.56%
UP - Sambhal	BJP	SP	21.52%
JK - Anantnag	JKPDP	JKN	21.24%
BR - Jhanjharpur	BJP	JD(U)	21.16%
MH - Aurangabad	SHS	AIMIM	20.53%
KA - Chikballapur	INC	BJP	20.15%

5. Top 5 candidates based on margin difference with runners in 2014 and 2019.

Top 5 Candidates based on Margin Difference between Winner and Runner - 2014

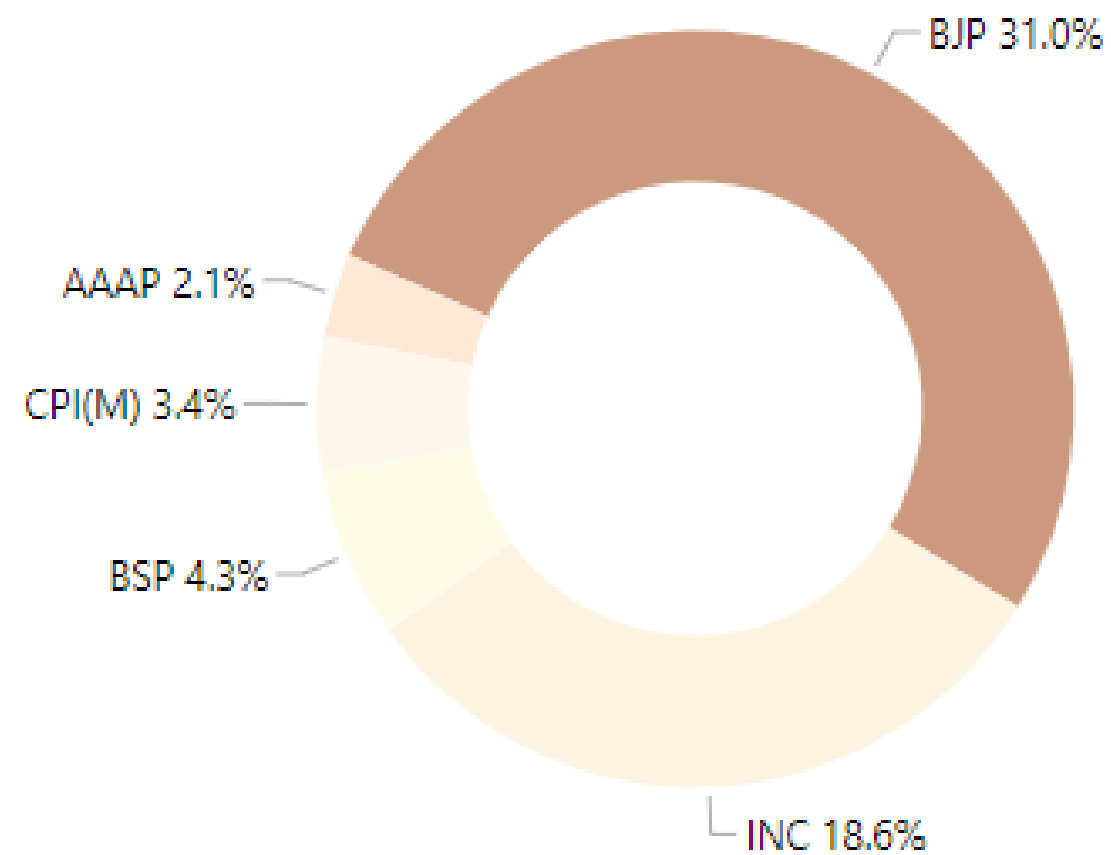
Constituency	Winner Candidate	Party	Votes	Difference ▼
GJ - Vadodara	NARENDRA MODI	BJP	845464	570128
UP - Ghaziabad	VIJAY KUMAR SINGH	BJP	758482	567260
GJ - Navsari	C. R. PATIL	BJP	820831	558116
RJ - Jaipur	RAMCHARAN BOHARA	BJP	863358	539345
GJ - Surat	DARSHANA VIKRAM JARDOSH	BJP	718412	533190

Top 5 Candidates based on Margin Difference between Winner and Runner - 2019

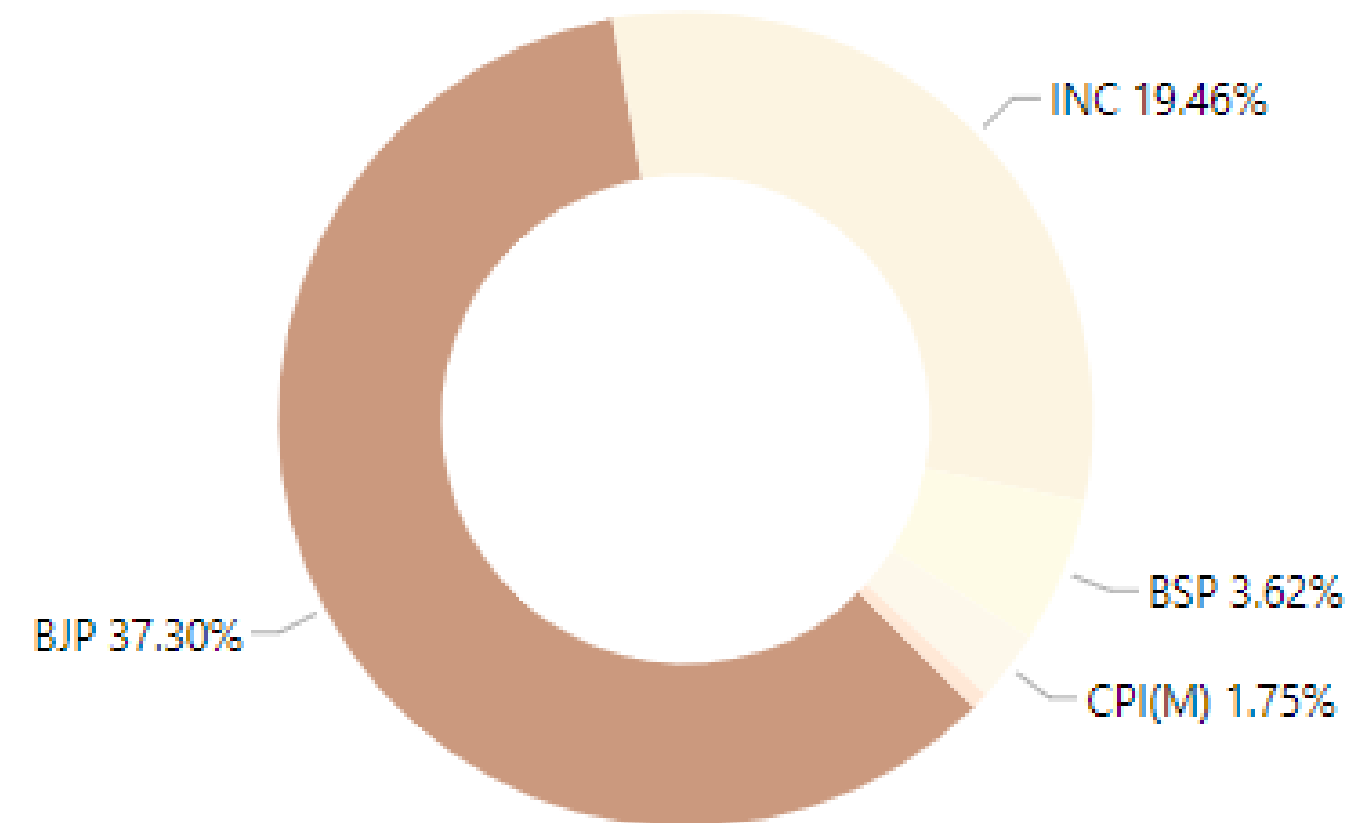
Constituency	Winner Candidate	Party	Votes	Difference ▼
GJ - Navsari	C. R. PATIL	BJP	972739	689668
HR - Karnal	Sanjay Bhatia	BJP	911594	656142
HR - Faridabad	KRISHAN PAL	BJP	913222	638239
RJ - Bhilwara	SUBHASH CHANDRA BAHERIA	BJP	938160	612000
GJ - Vadodara	RANJANBEN BHATT	BJP	883719	589177

6. % Split of votes of parties between 2014 vs 2019 at national level

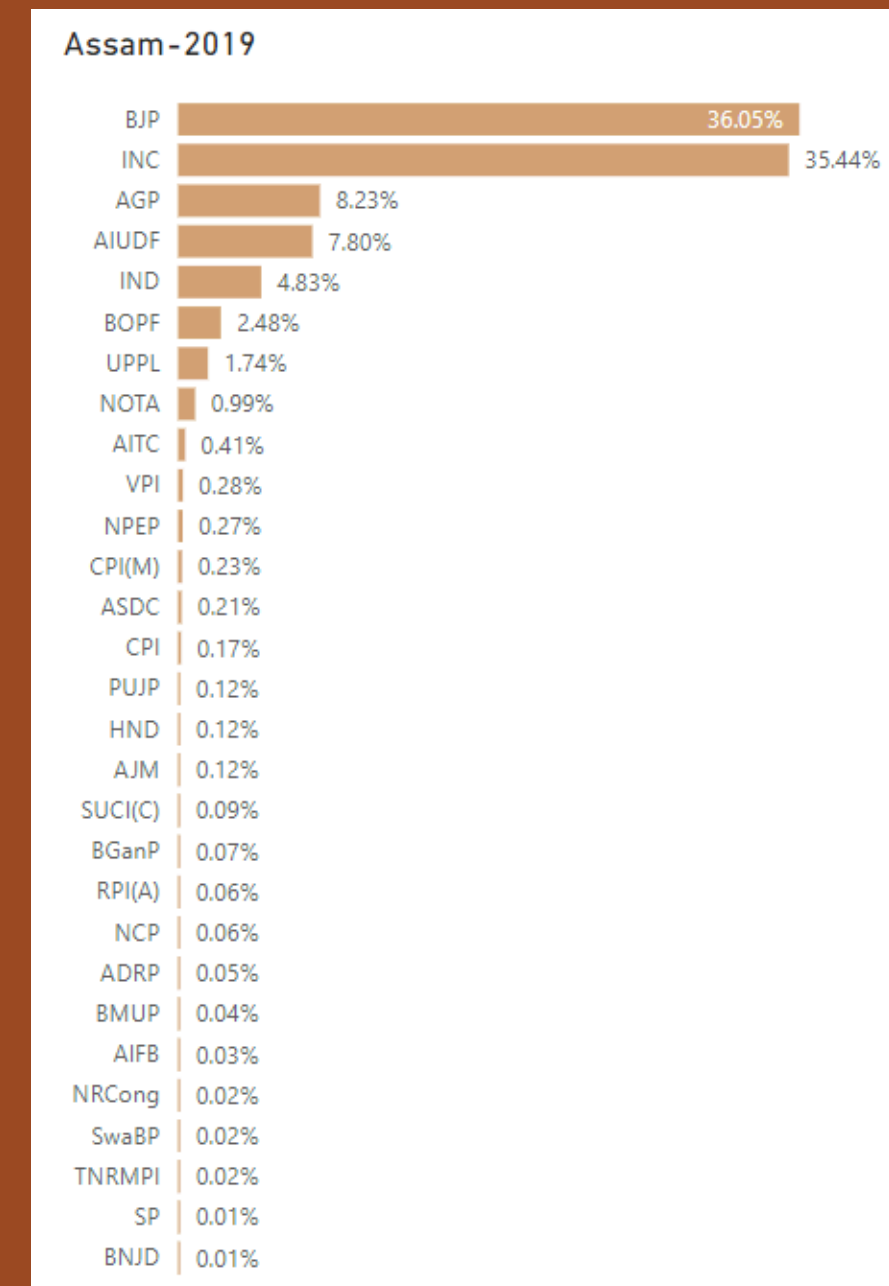
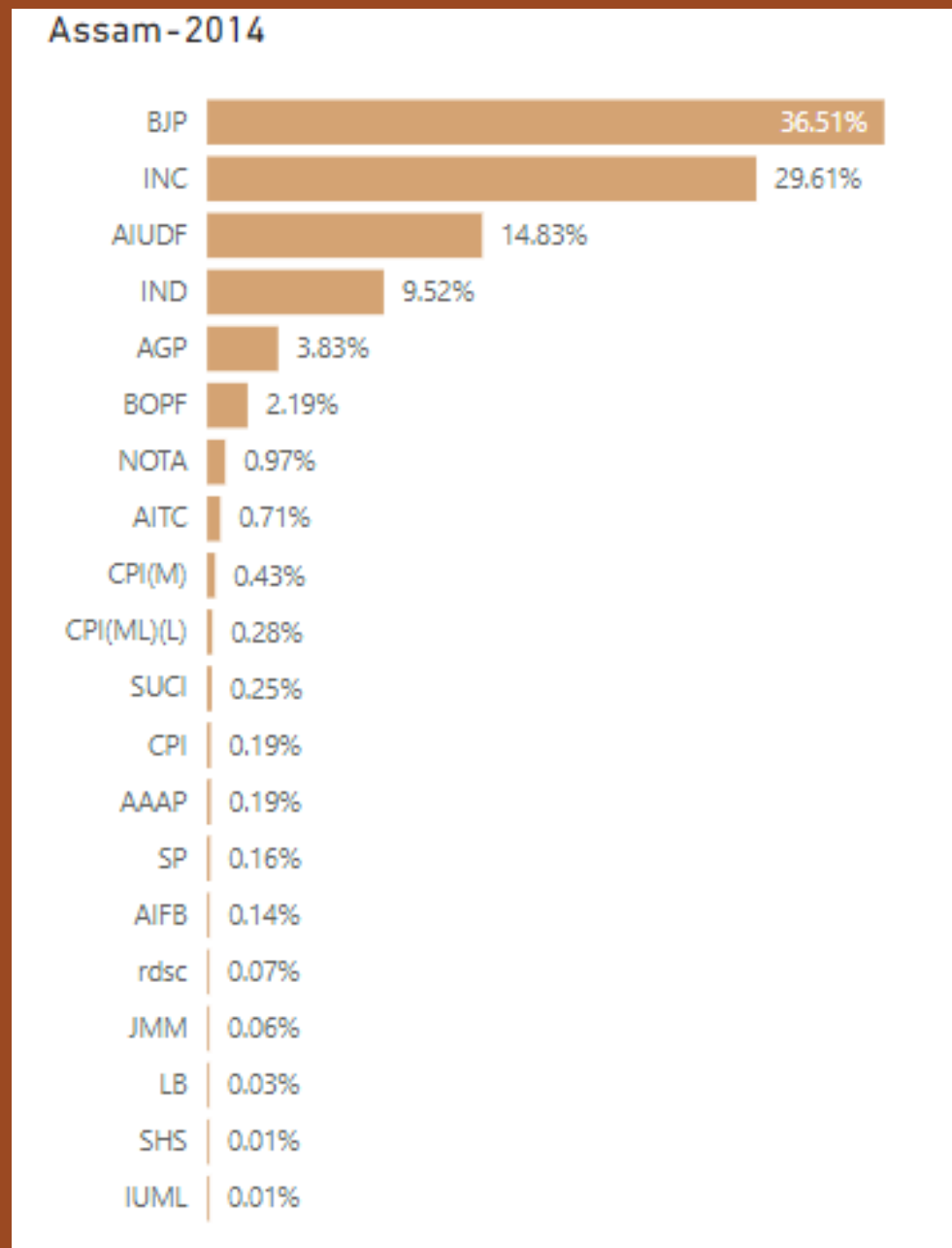
% Split of Votes at National Level-2014



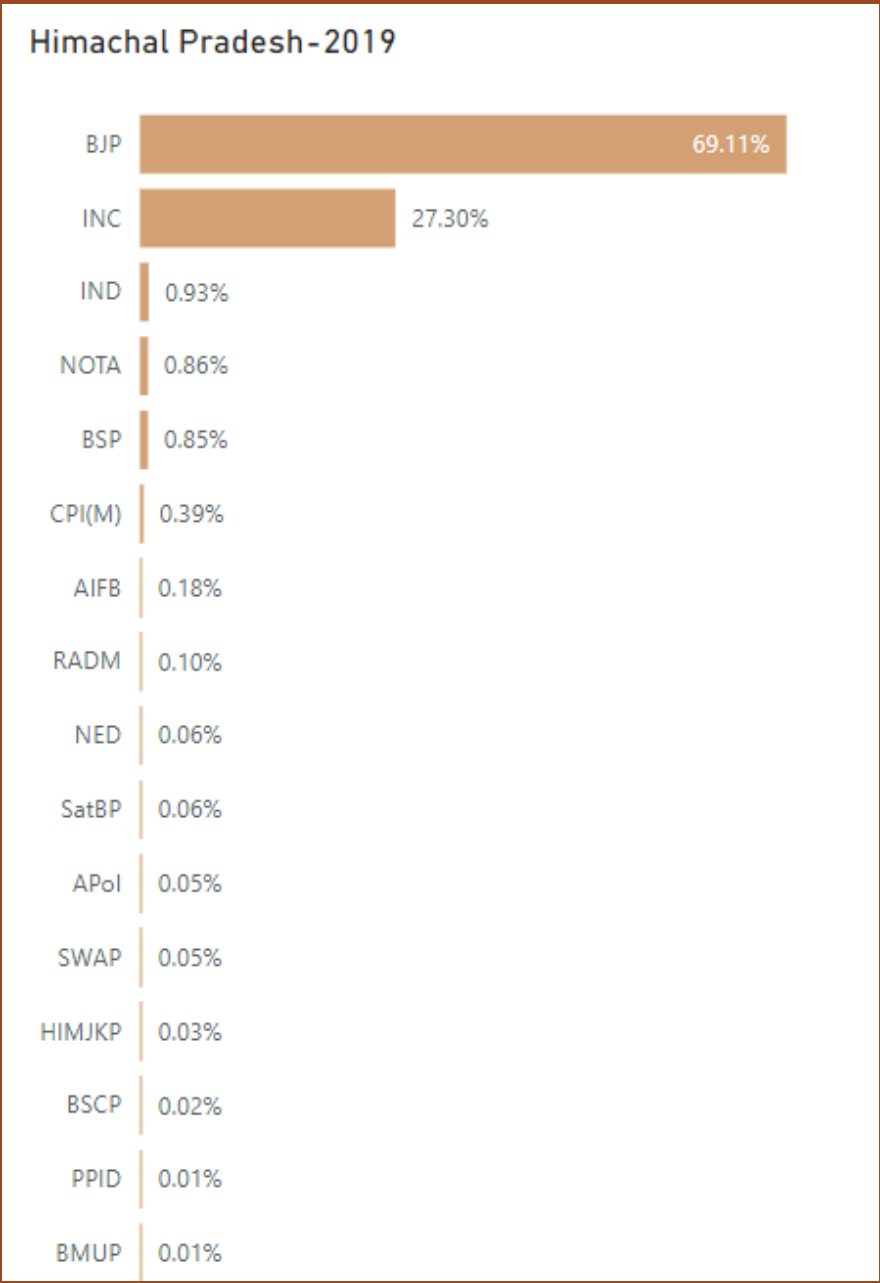
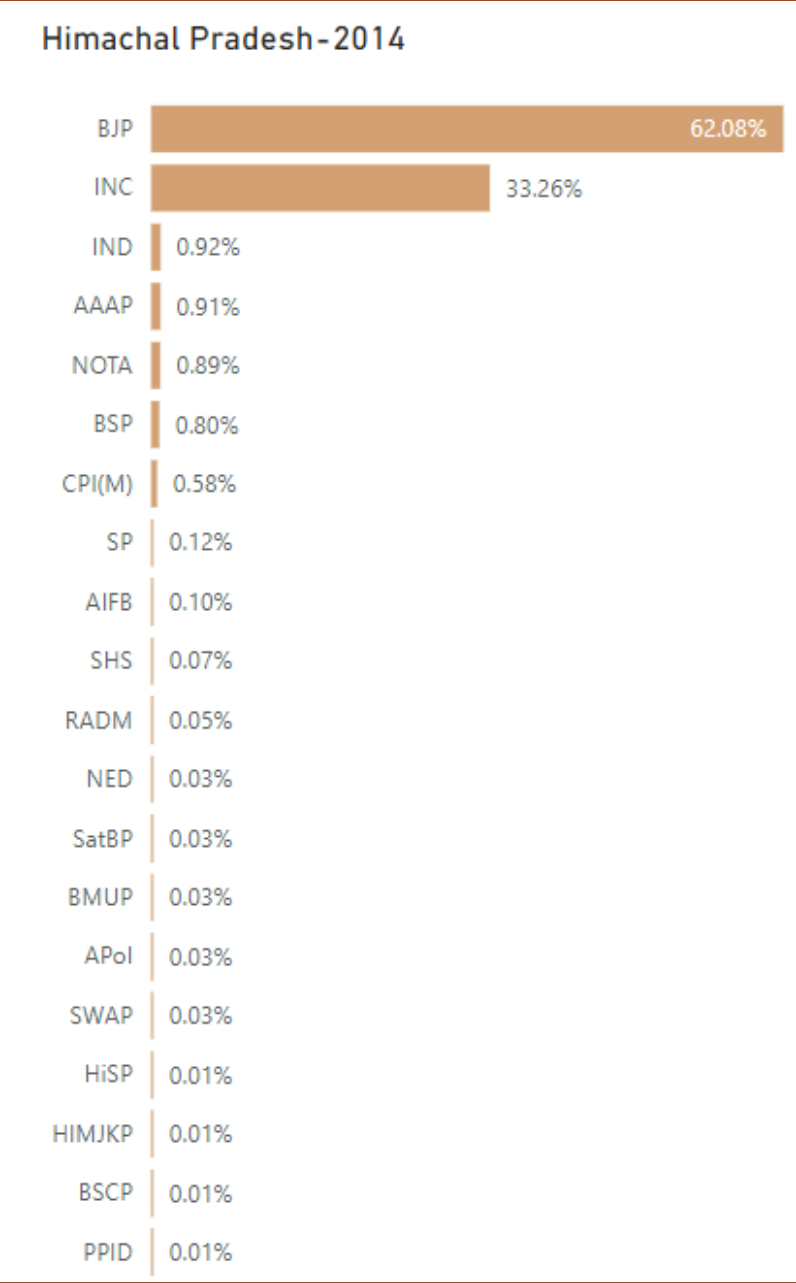
% Split of Votes at National Level-2019



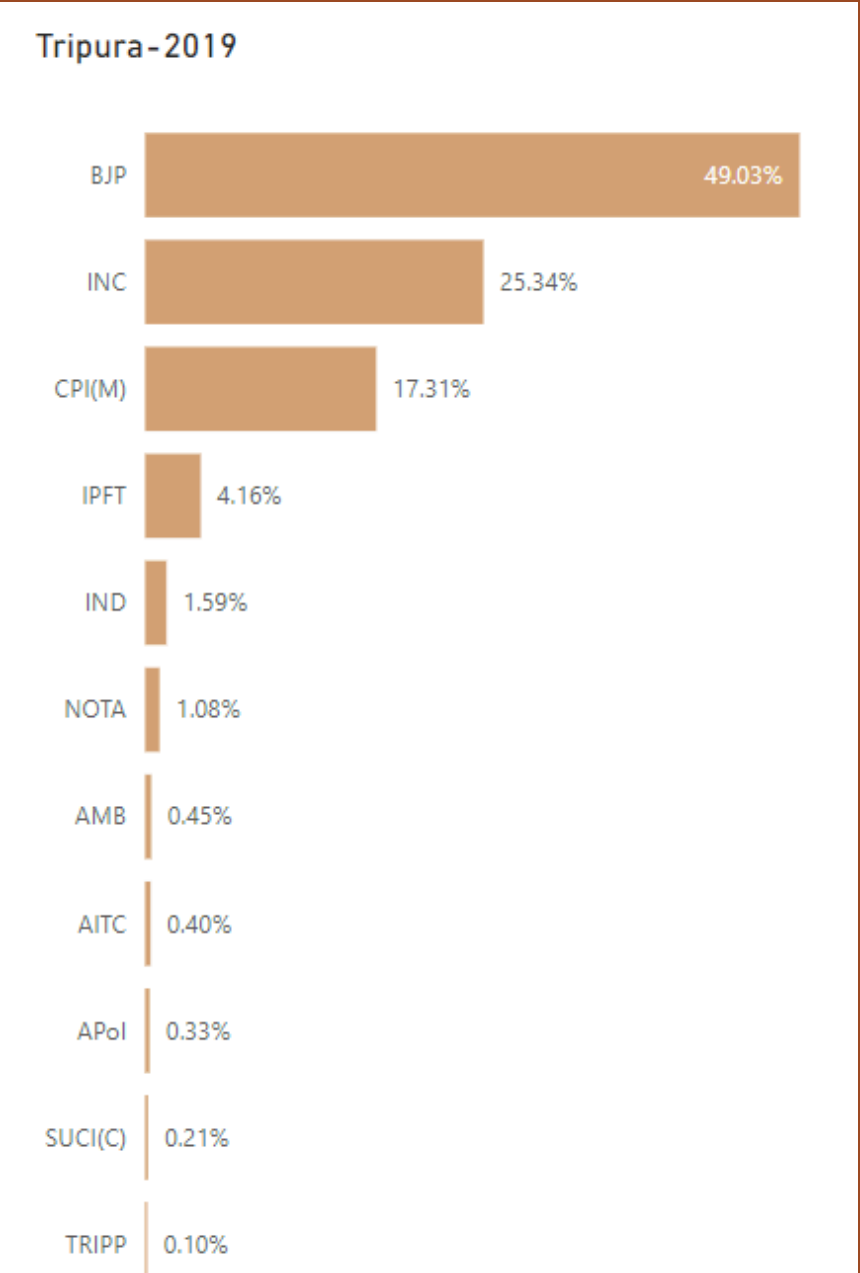
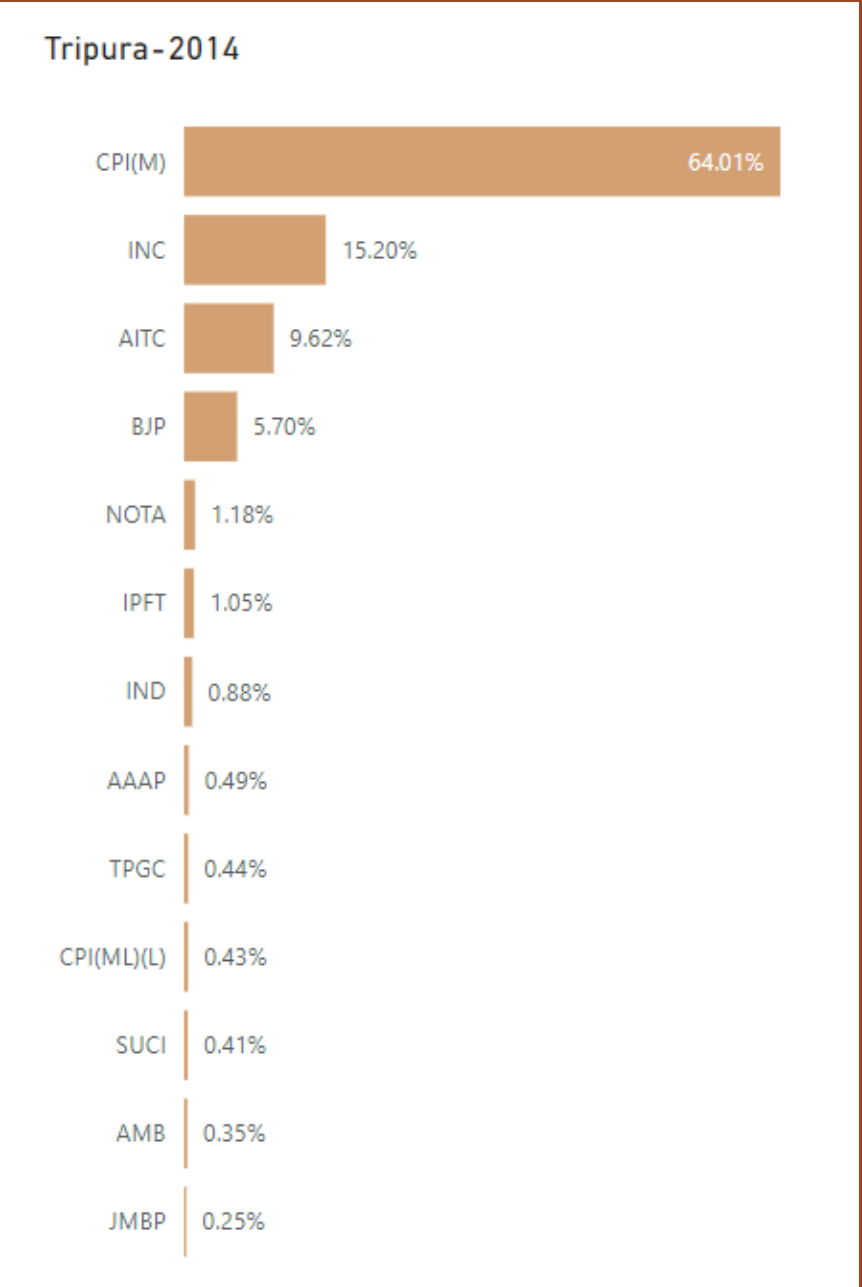
7. % Split of votes of parties between 2014 vs 2019 at state level.



7. % Split of votes of parties between 2014 vs 2019 at state level.



7. % Split of votes of parties between 2014 vs 2019 at state level.



8. List top 5 constituencies for two major national parties where they have gained vote share in 2019 as compared to 2014.

state_pc ▲	BJP 19	BJP 14	Difference
TR - Tripura East	46.12%	6.37%	39.74%
TR - Tripura West	51.77%	5.10%	46.67%
WB - Jhargram	44.56%	9.74%	34.82%
WB - Purulia	49.30%	7.16%	42.14%
WB - Ranaghat	52.78%	17.27%	35.51%
Total	48.97%	9.55%	39.42%

state_pc	INC 19	INC 14	Difference ▼
TN - Karur	63.06%	2.91%	60.15%
TN - Tiruchirappalli	59.28%	5.21%	54.06%
TN - Arani	54.00%	2.53%	51.48%
TN - Thiruvallur	54.49%	3.50%	50.98%
TN - Krishnagiri	52.64%	3.64%	49.00%
Total	56.50%	3.53%	52.97%

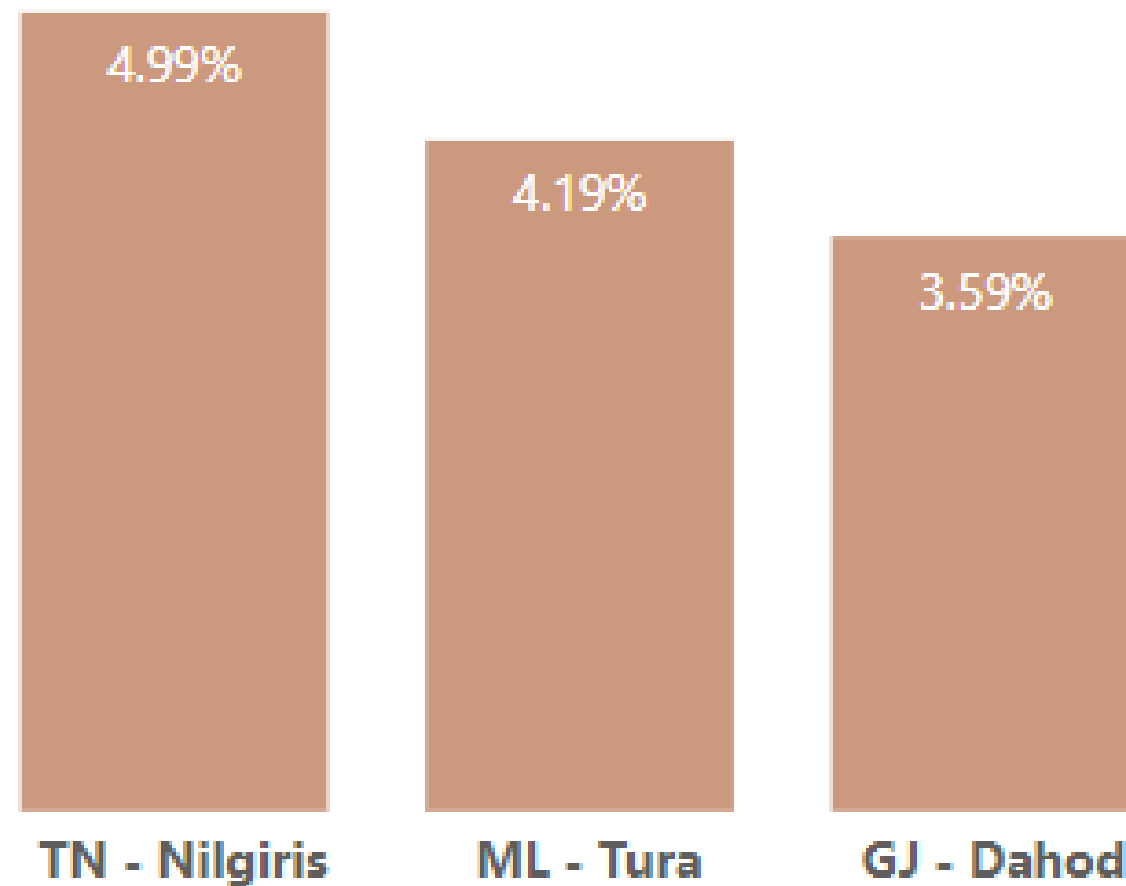
9. List top 5 constituencies for two major national parties where they have lost vote share in 2019 as compared to 2014.

state_pc	INC 19	INC 14	Difference ▼
WB - Raiganj	6.55%	28.50%	-21.95%
AR - Arunachal West	14.22%	38.02%	-23.80%
MH - Aurangabad	7.66%	36.51%	-28.85%
MH - Ratnagiri - Sindhudurg	7.02%	38.27%	-31.25%
DN - Dadra & Nagar Haveli	4.33%	45.12%	-40.79%
Total	7.58%	34.97%	-27.39%

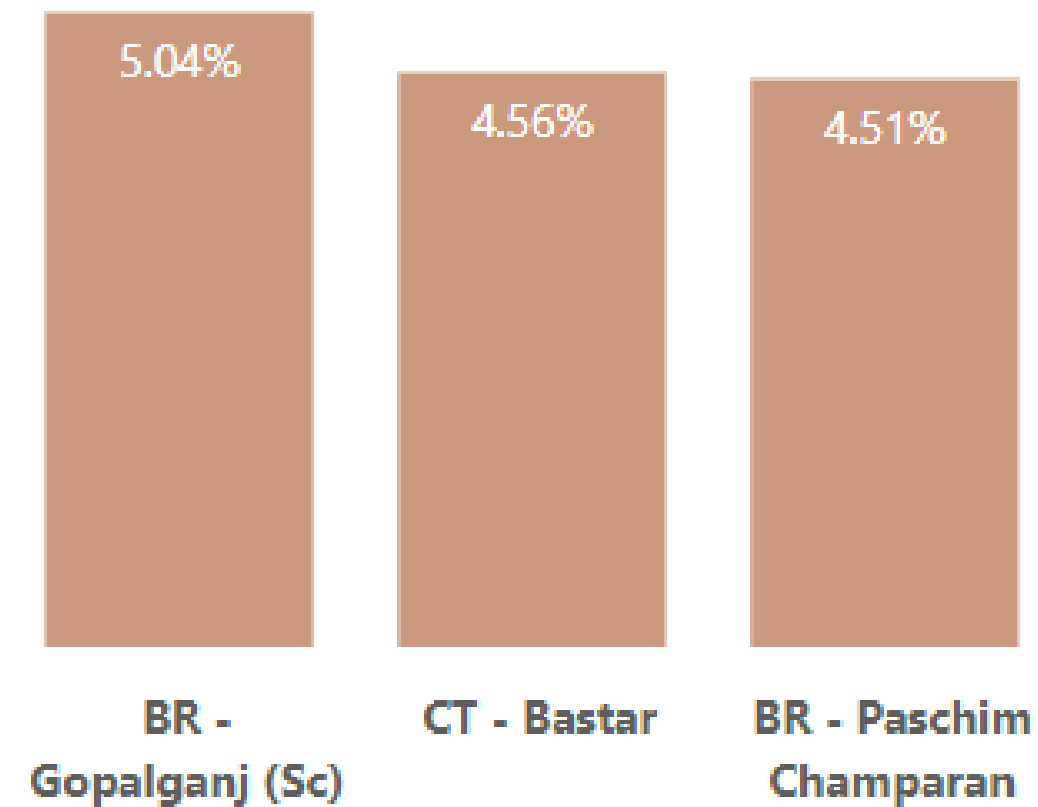
state_pc	BJP 19	BJP 14	Difference ▲
AP - Narsapuram	1.05%	49.62%	-48.56%
AP - Visakhapatnam	2.73%	48.72%	-45.98%
AP - Tirupati	1.23%	44.76%	-43.53%
MH - Sangli	42.77%	58.43%	-15.66%
DD - Daman & Diu	42.98%	53.83%	-10.85%
Total	12.16%	50.19%	-38.03%

10. Which constituency has voted the most for **NOTA**?

Top 3 constituencies by NOTA - 2014



Top 3 constituencies by NOTA - 2019

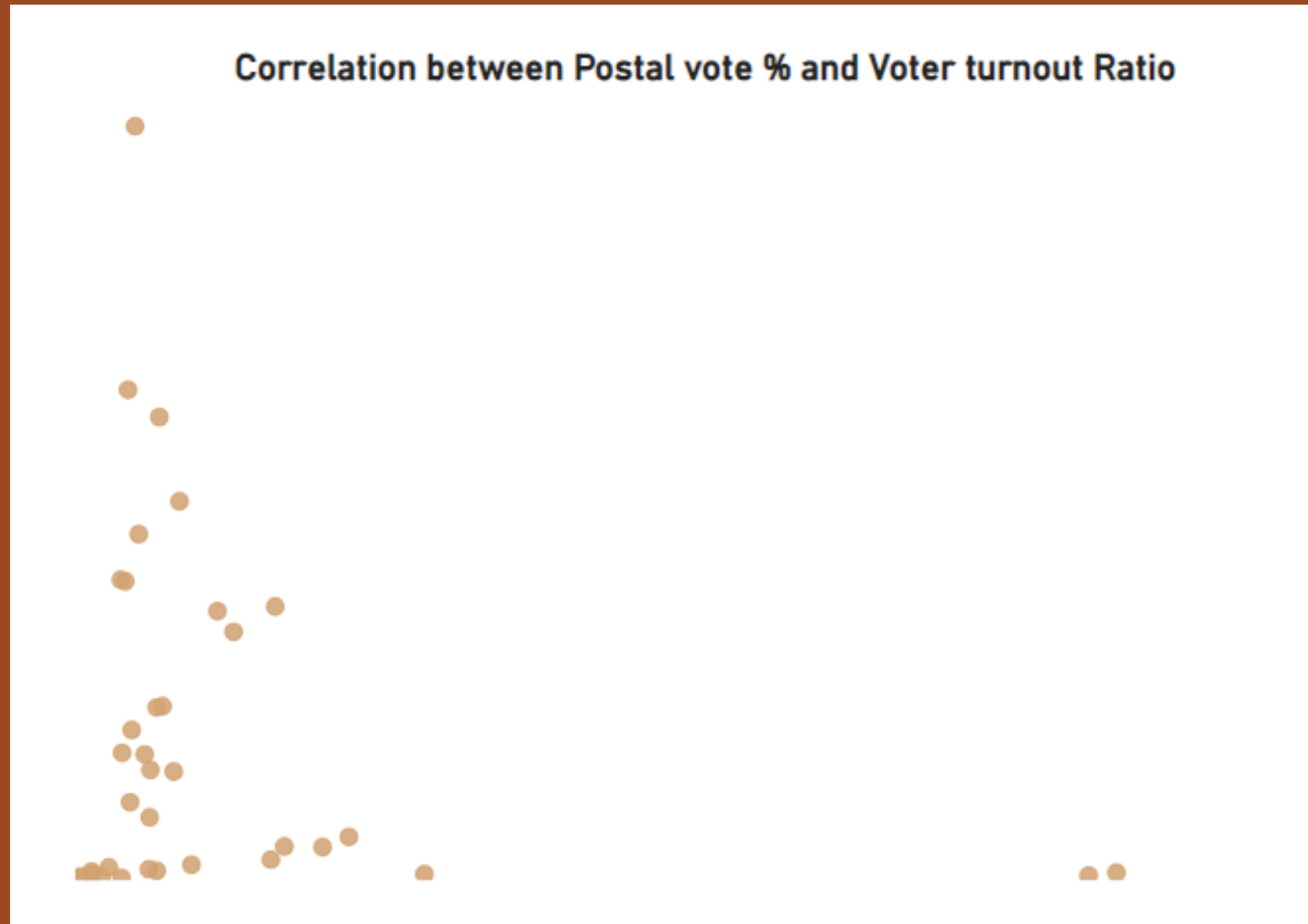


11. Which constituencies have elected candidates whose party has less than 10% vote share at state level in 2019?

state	Constituency	party	candidate	Vote Share
Karnataka	Hassan	JD(S)	PRAJWAL REVANNA	9.67%
Punjab	Gurdaspur	BJP	SUNNY DEOL	9.63%
Punjab	Hoshiarpur	BJP	SOM PARKASH	9.63%
Jammu & Kashmir	Anantnag	JKN	HASNAIN MASOODI	7.89%
Jammu & Kashmir	Baramulla	JKN	MOHAMMAD AKBAR LONE	7.89%
Jammu & Kashmir	Srinagar	JKN	Farooq Abdullah	7.89%
Bihar	Hajipur (Sc)	LJP	PASHU PATI KUMAR PARAS	7.86%
Bihar	Jamui (Sc)	LJP	CHIRAG KUMAR PASWAN	7.86%
Bihar	Khagaria	LJP	Choudhary Mehboob Ali Kaiser	7.86%
Bihar	Nawada	LJP	Chandan Singh	7.86%
Bihar	Samastipur (Sc)	LJP	Ramchandra Paswan	7.86%
Bihar	Vaishali	LJP	Veena Devi (W/o Dinesh Prasad Singh)	7.86%
Assam	Dhubri	AIUDF	BADRUDDIN AJMAL	7.80%
Bihar	Kishanganj	INC	Dr. Mohammad Jawed	7.70%
Punjab	Sangrur	AAAP	BHAGWANT MANN	7.38%
Uttar Pradesh	Rae Bareli	INC	SONIA GANDHI	6.31%
West Bengal	Baharampur	INC	ADHIR RANJAN CHOWDHURY	5.61%
West Bengal	Maldaha Dakshin	INC	ABU HASEM KHAN CHOWDHURY (DALU)	5.61%
Kerala	Malappuram	IUML	P.K. Kunhalikutty	5.45%
Kerala	Ponnani	IUML	E. T. Mohammed Basheer	5.45%
Assam	Kokrajhar	IND	Naba Kumar Sarania	4.83%
Jharkhand	Giridih	AJSUP	Chandra Prakash Choudhary	4.33%
Karnataka	Mandya	IND	SUMALATHA AMBAREESH	3.89%
Maharashtra	Amravati	IND	Navnit Ravi Rana	3.68%
Telangana	Hyderabad	AIMIM	ASADUDDIN OWASI	2.78%
Kerala	Kollam	RSP	N.K.Premachandran	2.45%
Tamil Nadu	Nagapattinam	CPI	SELVARAJ M	2.38%
Tamil Nadu	Tiruppur	CPI	SUBBARAYAN, K.	2.38%
Tamil Nadu	Coimbatore	CPIM	NATARAJAN. P.R	2.35%
Tamil Nadu	Madurai	CPIM	VENKATESAN S	2.35%
Kerala	Kottayam	KEC(M)	Thomas Chazhikadan	2.07%
Rajasthan	Nagaur	RLTP	HANUMAN BENIWAL	2.03%
Uttar Pradesh	Mirzapur	ADAL	Anupriya Singh Patel	1.20%
Uttar Pradesh	Robertsganj	ADAL	PAKAURI LAL KOL	1.20%
Tamil Nadu	Chidambaram	VCK	THIRUMAVALAVAN THOL	1.15%
Tamil Nadu	Ramanathapuram	IUML	K. NAVASKANI	1.08%

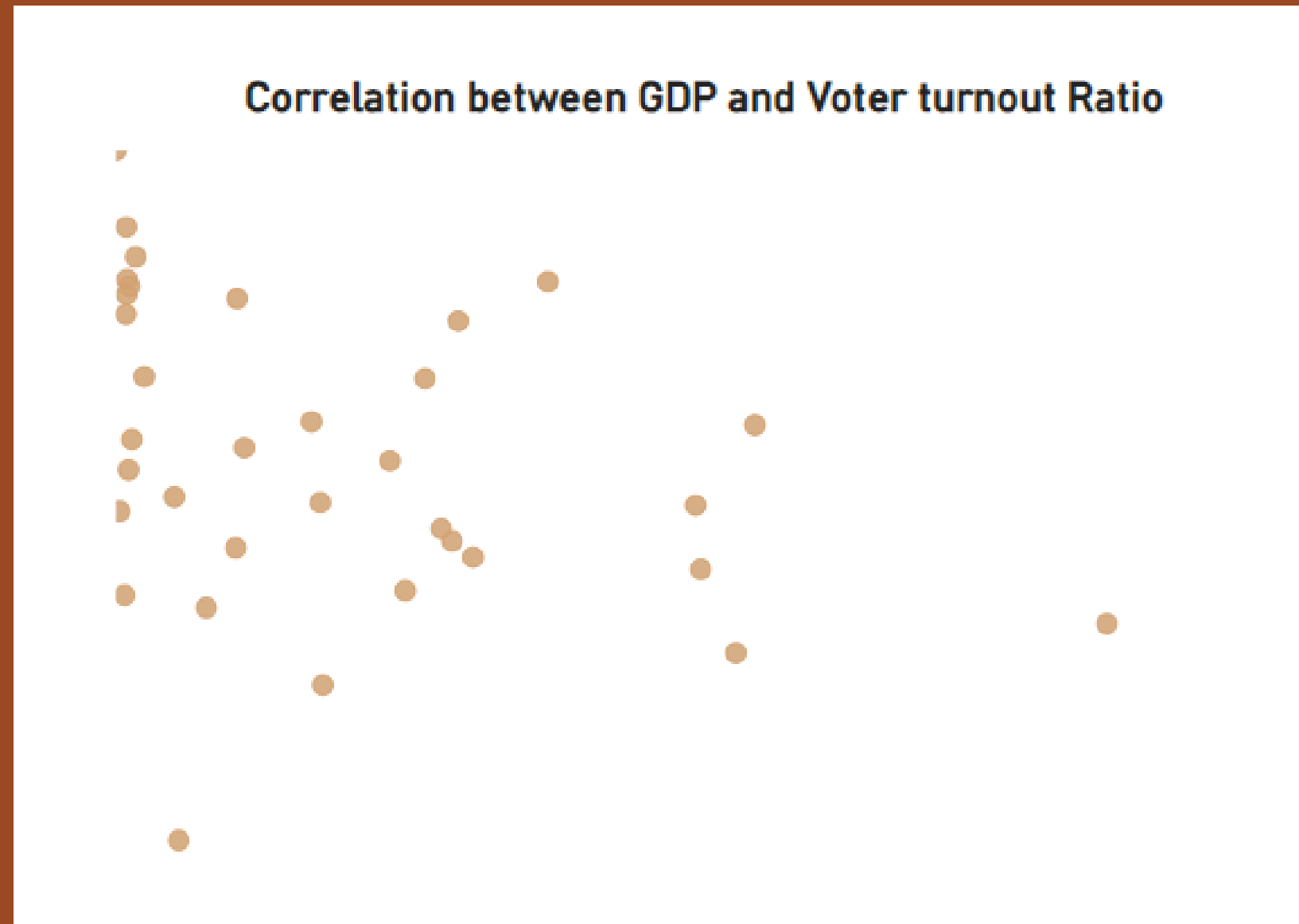
Secondary Insights

1. Is there a correlation between postal votes % and voter turnout %



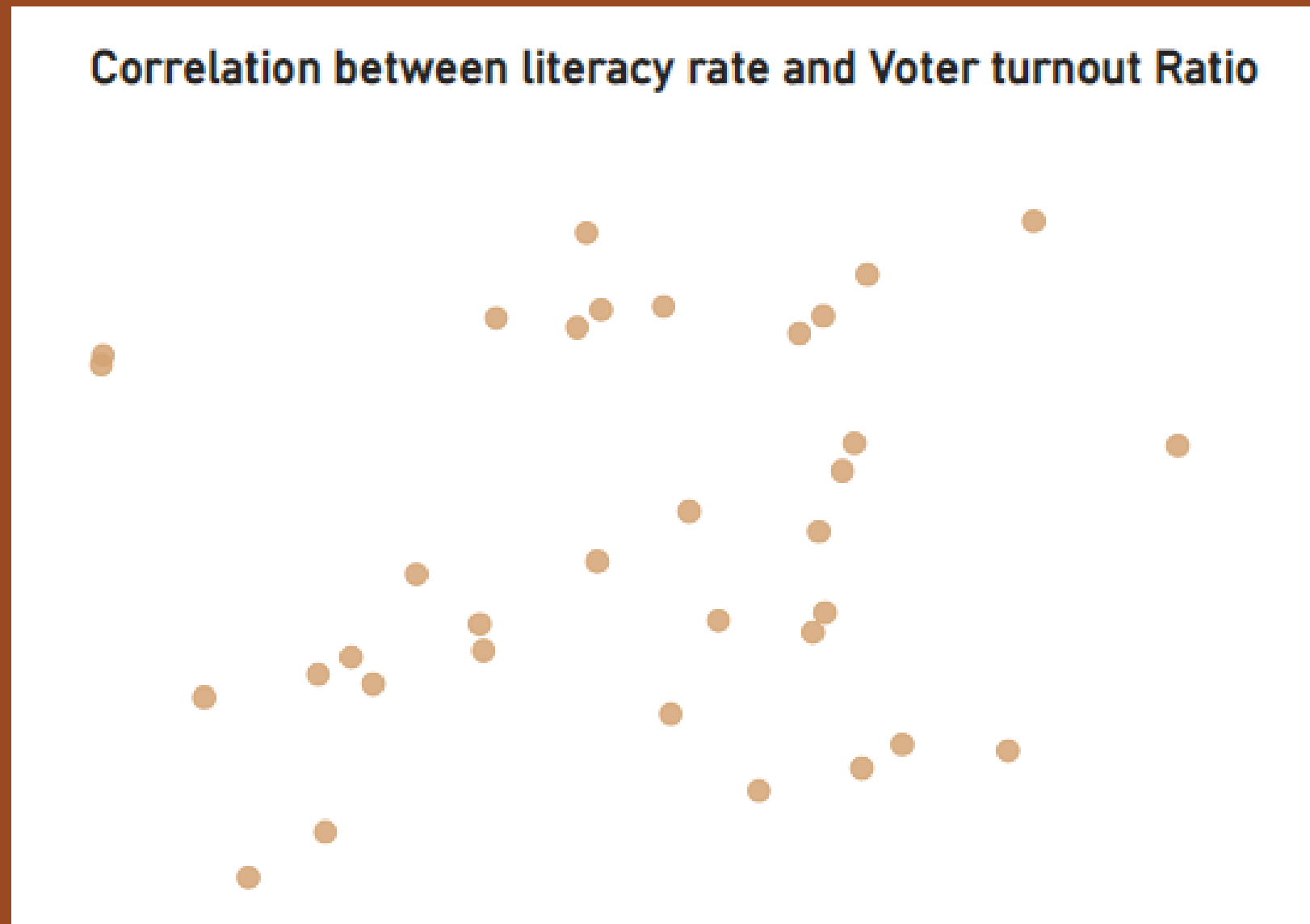
- The data points are heavily clustered towards the lower end of the postal vote percentage axis, with a broad range of voter turnout ratios.
- There is no clear linear trend or strong correlation visible between postal vote percentage and voter turnout ratio.
- The scatter plot suggests that there is no strong correlation between the percentage of postal votes and voter turnout ratios.
- A comprehensive approach that addresses multiple aspects of the voting process is likely necessary to boost voter engagement and turnout.

2. Is there any correlation between GDP of a state and voter turnout %?



- The data points are widely scattered, showing no clear linear relationship between GDP and voter turnout ratio.
- A significant concentration of points appears on the lower end of the GDP spectrum, with a wide range of voter turnout ratios.
- This scatter plot suggests that GDP is not a significant predictor of voter turnout ratios.
- A multi-faceted approach, considering various socio-economic and political factors, is essential for improving voter engagement.

3. Is there any correlation between literacy % of a state and voter turnout %



- The distribution of points appears to be relatively scattered without a clear linear trend.
- There is no obvious strong correlation between the literacy rate and voter turnout ratio based on visual inspection.
- While literacy is an important aspect of an informed electorate, this scatter plot suggests that it may not be the sole determinant of voter turnout.
- Comprehensive strategies that address various aspects of voter engagement are necessary to enhance democratic participation.

Recommendations:

- **Enhance Voter Education:** Implement comprehensive voter education programs to inform citizens about the importance of voting, how to register, and the voting process. Use various media platforms, including social media, to reach a broader audience.
- **Simplify Voter Registration:** Introduce automatic voter registration or same-day registration to make the process more convenient. Ensure that the registration process is straightforward and accessible online.
- **Increase Accessibility:** Provide more polling stations to reduce travel distance and wait times for voters. Ensure polling stations are accessible to people with disabilities.
- **Expand Early and Postal Voting:** Allow early voting and extend the period for it to provide flexibility for voters. Promote postal voting and make it easier to request and submit postal ballots.

Thank you!

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[https://app.powerbi.com/view?
r=eyJrIjoieZDc4NTM5YTYtNjg1ZS00YjU3LThmNWUtYzg5ZWZzZThiMWMxIiwidCI6ImM2ZTU0OWIzLTVmNDUtNDZmMi1hYWU5LWQ0MjQ0ZGM1YjJjNCJ9](https://app.powerbi.com/view?r=eyJrIjoieZDc4NTM5YTYtNjg1ZS00YjU3LThmNWUtYzg5ZWZzZThiMWMxIiwidCI6ImM2ZTU0OWIzLTVmNDUtNDZmMi1hYWU5LWQ0MjQ0ZGM1YjJjNCJ9)