

Voting for the Underdog or Jumping on the Bandwagon? Evidence from India's Exit Poll Ban

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Bandwagon Effect?



Bandwagon vs Underdog Voting

- Subsequent to some prior prediction or information:

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Bandwagon vs Underdog Voting

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- Subsequent to some prior prediction or information:
 - if voters are likelier to vote for the predicted frontrunner, it is known as *bandwagon voting*.
 - if they vote for the predicted trailing candidate, the phenomenon is known as *underdog voting*.

Bandwagon vs Underdog Voting

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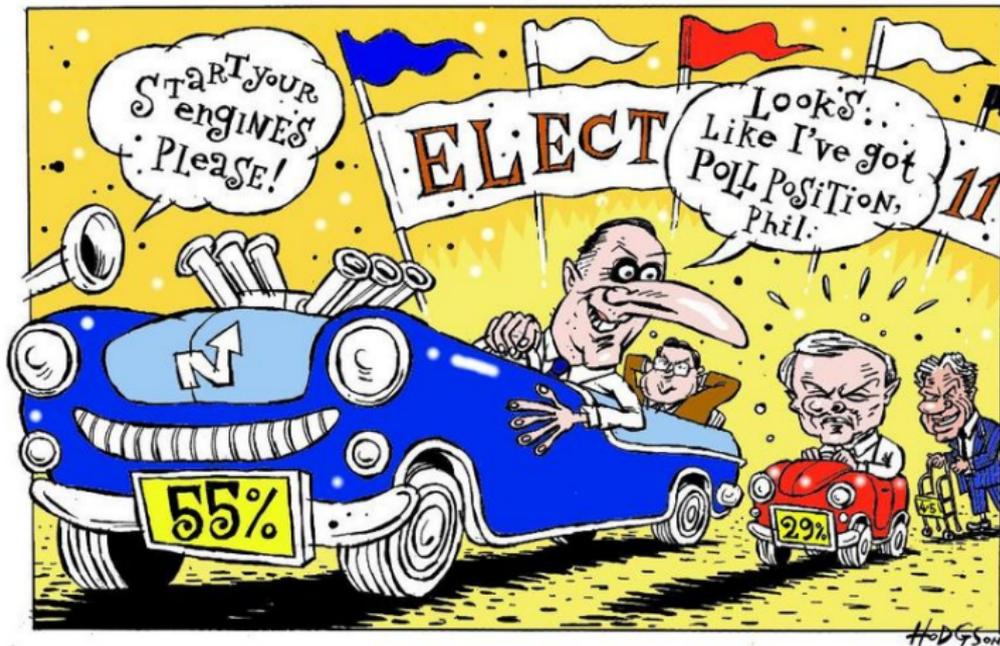
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- Subsequent to some prior prediction or information:
 - if voters are likelier to vote for the predicted frontrunner, it is known as *bandwagon voting*.
 - if they vote for the predicted trailing candidate, the phenomenon is known as *underdog voting*.
- Existing empirical evidence suggests both types of behaviour exist.
- It is not obvious which one of them is dominant in a particular country, eg: India.

Poll Predictions?



How Poll Predictions can affect election outcome?

- It depends on which of the effects is dominating

How Poll Predictions can affect election outcome?

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- It depends on which of the effects is dominating
 - Dominant Bandwagon Effect: the top frontrunner of exit poll results is benefitted
 - Dominant Underdog Effect: the second frontrunner of exit poll results is benefitted

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- It depends on which of the effects is dominating
 - Dominant Bandwagon Effect: the top frontrunner of exit poll results is benefitted
 - Dominant Underdog Effect: the second frontrunner of exit poll results is benefitted
- There is also a possibility of a projection effect, with voters' expectations conforming to their partisanship (McAllister, 1991)

The Premise

- With a population of over 1.3 billion people, India is the world's largest democracy and therefore provides a great case for research in political economy.

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 - A major controversy : potential influence that the prediction results may have on actual voting behavior of the electorate.
 - In multiphase elections, the possibility of such influence is immense.

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- India, due to its sheer size, provides the largest audience for news related to the elections.
- Election news coverage often revolves around predicted results from pre- and post-poll surveys.
 - A major controversy : potential influence that the prediction results may have on actual voting behavior of the electorate.
 - In multiphase elections, the possibility of such influence is immense.
- To address for this issue, in the year 2009, the Election Commission of India (ECI), decided to issue a blanket ban on publishing results of exit polls, until the conclusion of all phases of the ongoing election.

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- Use plausibly exogenous variation generated by the exit poll ban to estimate causal effects on voting outcomes and candidate behavior.

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- Use plausibly exogenous variation generated by the exit poll ban to estimate causal effects on voting outcomes and candidate behavior.
- In doing so, discuss counterfactual scenarios to predict whether Indian voters jump on the bandwagon or vote for the underdog.

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- Use plausibly exogenous variation generated by the exit poll ban to estimate causal effects on voting outcomes and candidate behavior.
- In doing so, discuss counterfactual scenarios to predict whether Indian voters jump on the bandwagon or vote for the underdog.
- Suggestive evidence of **underdog voting** among electorate using both national and state-level election data.

▶ Related Literature

▶ Contribution

What are Exit Polls?

- Exit polls are surveys in which people are interviewed or given a questionnaire with the idea of predicting election results.
- In terms of precision, exit polls have advantage of the timings over other kinds of polls such as pre poll surveys as they are conducted on the same day of election.
- Also, pre-poll surveys might overestimate election-day voter turnout and hence are more susceptible to biases

▶ How exit polls are conducted

▶ Exit Poll and voter turnout

Exit Polls in India

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- Seat predictions were accurate for both 1998 and 1999 Lok Sabha elections.
- Exit polls predicted win for BJP allies and actual results were similar to predictions.
- Whereas, in 2004 most of the Media houses predicted that Bhartiya Janta Party (BJP) will retain it's power but United Progressive Alliance(UPA) came into power.

▶ Why Ban?

▶ History

Exit poll ban in India

- Representation of the People (Amendment) Act 2009: restrictions on conducting the exit polls and publishing the results of exit polls in any manner during a specified period
- Ministry of law and justice appointed 1st February 2010 as the date on which the provisions of the act would come into force.

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- Ministry of law and justice appointed 1st February 2010 as the date on which the provisions of the act would come into force.
- It is not the first attempt by India to ban Exit Polls.
- The Election Commission consulted political parties on exit polls on December 22, 1997 but not eventually implemented with success as supreme court ruled out exit poll ban.

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- Ministry of law and justice appointed 1st February 2010 as the date on which the provisions of the act would come into force.
- It is not the first attempt by India to ban Exit Polls.
- The Election Commission consulted political parties on exit polls on December 22, 1997 but not eventually implemented with success as supreme court ruled out exit poll ban.
- Representatives of most national and state parties usually criticize exit polls;
 - but depending on whether there is bandwagon or underdog voting; there should be selective acceptance of exit polls in principle for the predicted frontrunner or predicted loser.

Identification Strategy

- Task at hand: identify causal effects of exit poll ban on voter and candidate behavior

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- Task at hand: identify causal effects of exit poll ban on voter and candidate behavior
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 - If vote shares of frontrunners increases and that of others go down, evidence of underdog voting
 - Bandwagon, if vice-versa

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- Ideal Experiment: Hold elections in all states, randomly assign some states to have exit polls and ban it in others, compare mean outcomes (RCT concept)

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- Ideal Experiment: Hold elections in all states, randomly assign some states to have exit polls and ban it in others, compare mean outcomes (RCT concept)
- Elections not held in that way
- Exploit a pseudo-experiment in terms of the ban on exit polls
 - Quasi-experimental design

Exit Poll Ban: A Natural Experiment

General Elections to Parliament

- In Indian scenario, exit polls have potential to affect multi-phase elections.

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- Electoral calendar in India is fixed. Once every five year.
- Compare the general elections before the ban with the elections after the ban in multi-phase and single-phase states.

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Assembly Elections

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 - would work if Bihar and the 3 other states are identical along other dimensions (unlikely)

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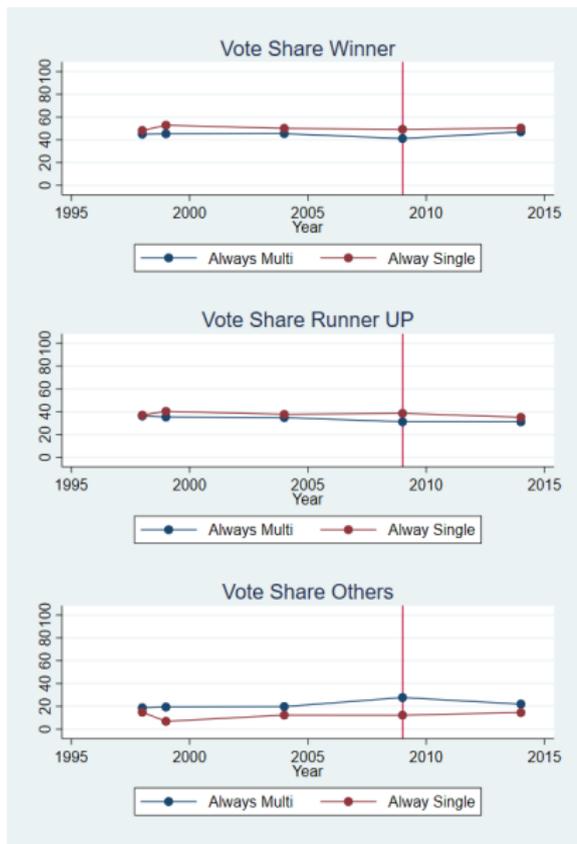
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- Potentially compare outcomes in Bihar to outcomes in other state
 - would work if Bihar and the 3 other states are identical along other dimensions (unlikely)
- Net out the mean differences in these states using an earlier round of elections (prior to the ban): use a *difference-in-differences* estimation framework

Regression Specification

$$Y_{ct} = \alpha + \beta \cdot \text{alwaysmulti}_c + \gamma \cdot \text{after}_t + \delta \cdot (\text{alwaysmulti}_c * \text{after}_t) + \theta_1 \cdot X_{ct} + \theta_2 \cdot X_{st} + \epsilon_{ct}, \quad (1)$$

- alwaysmulti_c and after_t are dummy variables such that :
 - $\text{alwaysmulti}_c = 1$ if constituency c is in a state in which all the election were always multi-phase in our data period
 - $\text{after}_t = 1$ if elections were held after 2009
- The parameter of interest δ captures the effect of EPB.
- Y_{ct} : Vote shares of winner, runner up, others, Number of candidates contesting , withdrawing and forfeiting deposits, Voter turnout, Winning margin
- X_{st} controls for state specific demographics such as population , sex ratio, literacy and employment
- X_{ct} represents constituency level controls such as total number of registered voters.
- ϵ is the unobserved error term.



▶ Assumptions

- Data regarding election related variables is based on the statistical reports published by Election Commission of India (ECI).

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- Data regarding election related variables is based on the statistical reports published by Election Commission of India (ECI).
- Election related variables at the constituency level are: total number of candidates contested for an election , withdrawn nomination from an election, had forfeiture of deposits , total electors and number of polling stations
- ECI also provides statistics of results of these elections. We use these to calculate turnout, winning margins and vote shares.

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- ECI also provides statistics of results of these elections. We use these to calculate turnout, winning margins and vote shares.
- The state level data for control variables is taken from Reserve Bank of India, which is India's central bank - "Handbook of statistics on Indian Economy".

General Elections

- The dataset consists of 543 constituencies of all Indian States.

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General Elections

- The dataset consists of 543 constituencies of all Indian States.
- We have analysed five recent general elections: 1998, 1999, 2004, 2009 and 2014.

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Assembly Elections

- The dataset consists of 681 constituencies of four Indian States namely Arunchal Pradesh, Bihar, Haryana and Maharashtra.

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Assembly Elections

- The dataset consists of 681 constituencies of four Indian States namely Arunchal Pradesh, Bihar, Haryana and Maharashtra.
- Elections in all those four states were conducted twice between 2004 and 2010.

▶ Summary - Assembly Elections

Vote Shares of Candidates -
General Elections

Table: Impact of Exit Poll Bans on Vote Shares of Candidates

	Winner		Runner-Up		Others	
$\hat{\delta}$	2.452* (1.197)	3.504** (1.286)	-0.016 (0.984)	1.264 (0.941)	-2.436 (1.449)	-4.768** (1.600)
Controls	No	Yes	No	Yes	No	Yes
R-squared	0.077	0.213	0.08	0.247	0.094	0.311
Obs	1740	1737	1740	1737	1740	1737

Notes: Voter share data is based on the statistical reports on election to legislative assemblies published by election commission of India. Control variables include population, sex ratio, literacy, total electors and urban employment. The data for control variables is taken from RBI's "Handbook of statistics on Indian Economy". The $\hat{\delta}$ captures the true effect of treatment (exit poll ban) in difference-in-difference setup. Robust Standard Errors in parentheses. *** $p < 0.01$ ** $p < 0.05$ * $p < 0.1$

► Voter Turnout and Winning Margin- General Elections

Vote Shares of Candidates -
Assembly Elections

Table: Impact of Exit Poll Bans on Vote Shares of Candidates

	Winner		Runner-Up		Others	
$\hat{\delta}$	0.652 (1.012)	2.921* (1.196)	-2.278*** (0.778)	0.738 (0.987)	1.781 (1.349)	-2.934* (1.461)
Controls	No	Yes	No	Yes	No	Yes
R-squared	0.07	0.18	0.08	0.15	0.12	0.25
Obs	1352	1352	1352	1352	1352	1352

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Candidate Behavior - General
Elections

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Table: Impact of Exit Poll Bans on Candidates' Decision to Contest

	Contested		Withdrawn		Forfeited	
$\hat{\delta}$	-0.641 (0.917)	-1.983* (0.873)	0.321 (0.401)	-0.123 (0.391)	-0.532 (0.907)	-1.827* (0.858)
Controls	No	Yes	No	Yes	No	Yes
R-squared	0.084	0.292	0.03	0.157	0.084	0.281
Obs	1740	1737	1740	1737	1740	1737

Notes: Data regarding total number of candidates contested for an election, withdrawn nomination from an election and submitted forfeiture deposits is based on the statistical reports on election to legislative assemblies published by election commission of India. Control variables include population, sex ratio, literacy, total electors and urban employment. The data for control variables is taken from RBI's "Handbook of statistics on Indian Economy". The $\hat{\delta}$ captures the true effect of treatment (exit poll ban) in difference-in-difference setup. Robust Standard Errors in parentheses. *** $p < 0.01$ ** $p < 0.05$ * $p < 0.1$

Candidate Behavior - Assembly
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	Contested		Withdrawn		Forfeited	
$\hat{\delta}$	3.180*** (0.465)	1.906*** (0.402)	-1.922*** (0.329)	-1.705*** (0.228)	3.473*** (0.468)	2.238*** (0.407)
Controls	No	Yes	No	Yes	No	Yes
R-squared	0.19	0.44	0.25	0.46	0.20	0.44
Obs	1362	1359	1362	1359	1362	1359

Notes: Data regarding total number of candidates contested for an election, withdrawn nomination from an election and submitted forfeiture deposits is based on the statistical reports on election to legislative assemblies published by election commission of India. Control variables include population, sex ratio, literacy, total electors and urban employment. The data for control variables is taken from RBI's "Handbook of statistics on Indian Economy". The $\hat{\delta}$ captures the true effect of treatment (exit poll ban) in difference-in-difference setup. Robust Standard Errors in parentheses. *** $p < 0.01$ ** $p < 0.05$ * $p < 0.1$

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- Vote share increase for the winner and decreases for others
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 - No split-ticket voting
- Effect on candidate behavior is ambiguous
 - **Assembly Elections:** More candidates contesting elections and fewer withdrawals suggesting that candidates believe that voters engage in *bandwagon* voting.
 - **General Elections:** Less candidates contesting elections and fewer withdrawals suggesting that candidates believe that voters engage in *Underdog* voting.

Underdog
Voting vs
Bandwagon
Voting

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THANK YOU

Related Literature

- Exit polls have potential to influence the voting behavior and voter turnout (Sudman 1986; McAllister 1991; Morwitz 1996; Andersen et al 2014; John E. Jackson 1983; Morton 2015)

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- Presence of Bandwagon effect using Exit Poll ban (Merton 2015)

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- Concern about conducting exit polls (Barreto et al 2006; Rai 2014; Bishop et al 1985)
- Presence of Bandwagon effect using Exit Poll ban (Merton 2015)
- Empirical evidence protest voting in India (Ujhelyi, Chatterjee and Szabo 2019)

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Contribution to the Literature

- To the best of our knowledge, no study has empirically found presence of either Bandwagon or Underdog effect in Indian context.

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- While some papers have studied the effects of exit poll bans, none that we know of have looked at the impact on ex-ante and ex-post candidate behavior and performance.
 - We also happen to find a mismatch in candidate's expectations and voter's behavior in terms of bandwagon and/or underdog voting.

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How Exit Polls are conducted?

- Face to face interviews, Telephonic interviews, Secret Ballots etc
- For example United States and most European countries - Telephonically
India - Interviews in person.

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India - Interviews in person.
- Key issues for conducting exit poll : choice of the survey method and sampling technique
- Potential for Bias due to self-reporting (see Chatterjee 2019 for effects of idiosyncratic biases on self-reported measures)

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- Incentive for early voting
 - Before the exit poll is released, it worthwhile to await its result before they decide on whether to stay home or go to the polls.
 - By influencing the result of the exit poll, early voters can induce fellow supporters to vote after the result of the poll is revealed
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 - By influencing the result of the exit poll, early voters can induce fellow supporters to vote after the result of the poll is revealed
 - The incentive to vote early is ambiguous.
- For example, John E. Jackson (1983) indicates that hearing news of the projected outcome decreased the likelihood of voting among those who had not already voted

Why ban on Exit Poll? : Potential of favouritism

- There have been allegations that the exit polls are tweaked to favor one of the parties by the media houses.

Why ban on Exit Poll? : Potential of favouritism

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- There have been allegations that the exit polls are tweaked to favor one of the parties by the media houses.
- The exit poll of 2000 presidential election in USA predicted that Al Gore has won the Florida state.
- However, Bush won the election by a narrow margin after 45 days of lawsuits and recounting.

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- The exit poll of 2000 presidential election in USA predicted that Al Gore has won the Florida state.
- However, Bush won the election by a narrow margin after 45 days of lawsuits and recounting.
- In Indian context, A recent sting operation on polling agencies have also revealed that seat prediction figures are manipulated in favor of their client.(Rai 2014).

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History of Exit Poll Bans

- According to Freedom to conduct opinion polls 2017 report, out of 111 countries surveyed twelve countries had complete ban on exit poll.
- They are: people's republic of China, Mongolia, Qatar, Saudi Arabia, Singapore, Vietnam, Cameroon, Columbia, Dominican Republic, Malta, Morocco and Trinidad and Tobago.

History of Exit Poll Bans

- According to Freedom to conduct opinion polls 2017 report, out of 111 countries surveyed twelve countries had complete ban on exit poll.
- They are: people's republic of China, Mongolia, Qatar, Saudi Arabia, Singapore, Vietnam, Cameroon, Columbia, Dominican Republic, Malta, Morocco and Trinidad and Tobago.
- In 57 % of the countries in the study, exit polls are conducted, though often with restrictions on their conduct.

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The Survey Findings

- **“In your country, are there legal restrictions on the conduct of the exit polls?”**
 - 11% of the countries cannot conduct opinion poll at all
 - 19% it cannot be conducted inside the polling station
 - 9% it cannot be conducted within a specified distance from polling station
 - 17% no restrictions but exit polls have not been conducted to date
 - 30% no restrictions and some exit polls have been conducted to date and
 - 14% of the respondents don't know the status of their country.

Source: Freedom to conduct opinion polls 2017 report

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- Allows making predictions about the counterfactual, such as: in the absence of the exit poll ban, these differences would have been zero and so on.
- Delimitation exercise in 2008 through “The Delimitation Act , 2002” . Due to this delimitation exercise, we are not having a true panel dataset , instead we are having repeated cross sections of data.

Summary Statistics - Assembly Elections

Table: Summary Statistics Assembly election

	Mean	Standard Deviation
Voter Turnout (Poll Percentage)	60.50	13.28
Margin Percentage	12.23	11.21
Vote Share Winner	44.04	9.97
Vote Share Runnerup	31.80	7.69
Vote Share Irrelevants	24.21	13.74
Contested	10.59	4.91
Forfeited	8.33	4.93
Withdrawn	3.16	4.42
Total Electors	202869	88588

Note: All data is based on the statistical reports on general election to legislative assemblies published by election commission of India.

Summary Statistics - General Elections

Table: Summary Statistics General Elections

	Mean	Standard Deviation
Voter Turnout (Poll Percentage)	62.08	11.84
Margin Percentage	11.47	9.79
Vote Share Winner	46.65	8.42
Vote Share Runnerup	35.09	7.34
Vote Share Irrelevants	18.25	12.33
Contested	11.40	6.15
Forfeited	9.10	6.11
Withdrawn	1.50	2.35
Total Electors	1271991	316185

Note: All data is based on the statistical reports on general election to legislative assemblies published by election commission of India.

Voter Turnout and Winning Margins - General Elections

Table: Impact of Exit Poll Bans on Voter Turnout and Winning Margins

	Voter Turnout		Winning Margin	
$\hat{\delta}$	-3.518*	-0.897	2.44	2.186
	(1.278)	(1.292)	(1.639)	(1.580)
Controls	No	Yes	No	Yes
R-squared	0.08	0.387	0.055	0.089
Obs	1740	1737	1740	1737

Notes: Voter turnout and Winning margin data is based on the statistical reports on election to legislative assemblies published by election commission of India. Control variables include population, sex ratio, literacy, total electors and urban employment. The data for control variables is taken from RBI's "Handbook of statistics on Indian Economy". The $\hat{\delta}$ captures the true effect of treatment (exit poll ban) in difference-in-difference setup. Robust Standard Errors in parentheses. *** $p < 0.01$ ** $p < 0.05$ * $p < 0.1$

List of states - Always Multi

State Name	Constituencies
Andhra Pradesh	42
Bihar	40
Jammu & Kashmir	6
Madhya Pradesh	29
Maharashtra	48
Odisha	21
Uttar Pradesh	80
Total	266

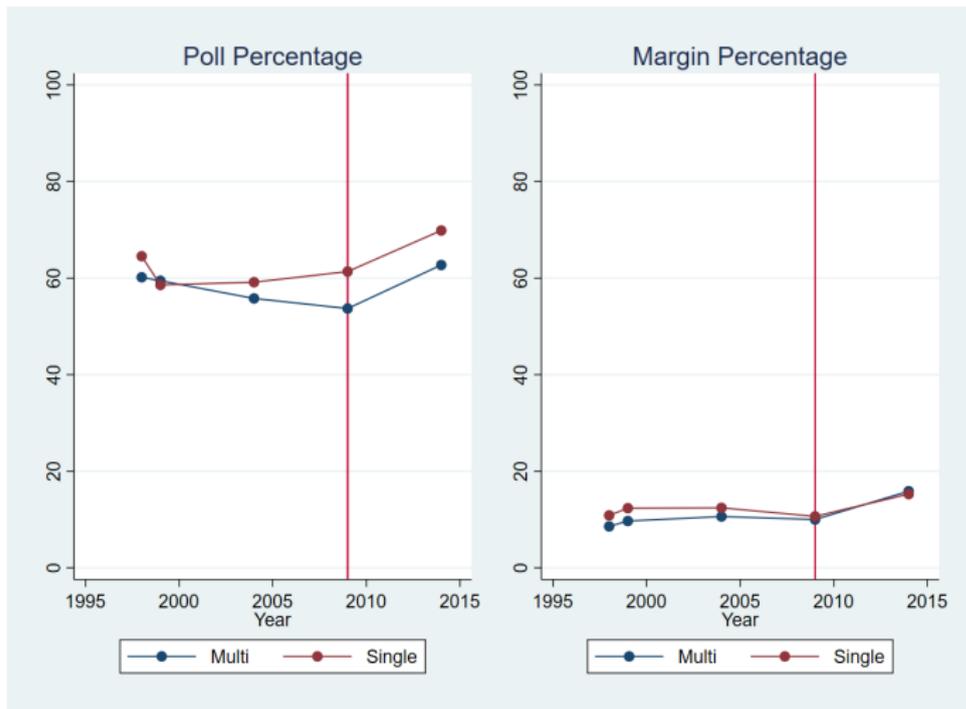
Note: Total Seven States [▶ Back](#)

List of states - Always Single

State Name	Constituencies
Andaman & Nicobar Islands	1
Arunachal Pradesh	2
Chandigarh	1
Dadra & Nagar Haveli	1
Daman & Diu	1
Goa	2
Gujarat	26
Haryana	10
Himachal Pradesh	4
Kerala	20
Lakshadweep	1
Meghalaya	2
Mizoram	1
NCT OF Delhi	7
Nagaland	1
Puducherry	1
Sikkim	1
Total	82

Note: Total 17 States

Parallel Trends



Data source: Election Commission of India (ECI)

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