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ECON 438: Applied Econometrics

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Indian General Elections: A Cursory Analysis of Voting Behavior

Introduction

Every five years, India holds elections to its lower house of Parliament, the Lok Sabha (literally "the people's house"). The elected Members of Parliament (MPs) are responsible for legislating on social and political issues, and forming governments using their party platforms, which further select a Prime Minister, the executive head of the country. Elections are held across 543 seats, spanning constituencies which encompass all 1.35 billion Indians. The elected MPs, most of whom are affiliated to political parties, then proceed to form the central government (either as a single party if it receives an absolute majority in the house, or as a coalition of several parties). The most recent 2014 elections were the biggest ever with a 66.38% voter turnout, over 540 million votes cast and 8,215 candidates contesting seats.

In this analysis I seek to study what factors influence voter behaviour to predict the probability of winning for a given candidate. Indian elections form an interesting subject because of the complicated dynamics of a multiparty system, temper by a multitude of identity issues, such as caste, language and ethnicity. While the Bharatiya Janata Party (BJP) and Indian National Congress (INC) have been two dominant national parties over the last two decades, regional parties still remain strong and command large followings in some parts of India. They are integral in forming coalitions to establish governments at the Center.

Context

The elections I cover in this paper span a decade and a half of political activity in the country, from 1999 to 2014. While the 2004 and 2009 elections were won by the United Progressive Alliance (UPA), led by the INC, the 2014 elections saw a landslide victory for the National Democratic Alliance (NDA), led by the more nationalist BJP. The 1999 elections too saw an NDA victory but the house was divided across several factions due to a strong showing by the regional parties. The 1999 elections led to several successive short-lived governments, built on unstable coalitions.

The UPA and NDA are alliances composed of several parties, that come together to fight polls as a united front. Given India's multiparty system, no party had garnered an absolute majority in Lok Sabha by itself since 1984, a trend that was beaten by BJP's performance in 2014, when it won 282 seats -- 10 more than the 272 needed for a majority in the Lok Sabha.

These four elections thus form an interesting sample to understand trends in voting behavior, and note if certain circumstances benefit the probability of winning for a given candidate. While India is a multiparty system, the INC and BJP do dominate and are often supported by regional parties in general elections through alliances mentioned above. While a "Third Front" coalition composed of parties that ally with neither the UPA nor the NDA may also arise (as in the case of the 2009 elections), they have historically been small and I do not consider them in this paper. While some parties may join the alliances *after* elections to provide the required strength in the Parliament, I only consider pre-poll alliances to analyse the effect of the announcement on the probability of winning.

India's first past the post (FPTP) voting system further means that a party's share of seats in Parliament can change drastically without significant movements in the popular vote share (Vaishnav, 2015). Between the 2009 and 2014 elections, the INC's popular vote share dropped from 28.5% to 19.5% while that of the BJP rose from 18.8% to 31.3%. This corresponded to a 2014 seat share of only 8.1% for the INC and 51.2% for BJP.

Table 1: Discrepancies in vote share and seat share under the FPTP system

Party	2009 vote share % (seat share %)	2014 vote share % (seat share %)
ВЈР	18.8 (22.16)	31.3 (51.2)
INC	28.5 (26.7)	19.5 (8.1)
Regional Parties	52.6 (51.14)	48.6 (40)

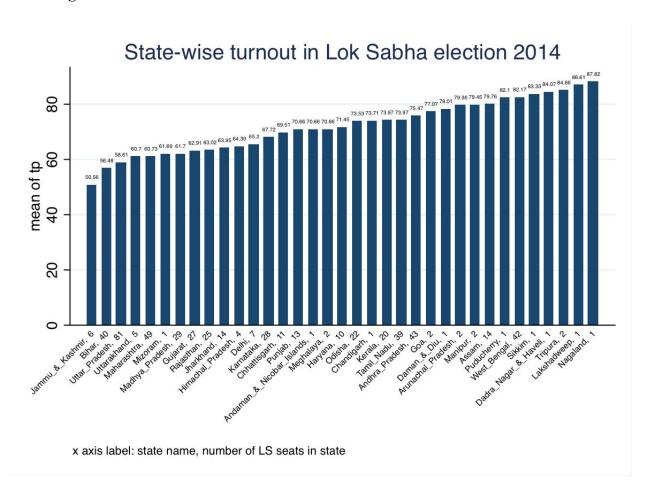
Caste (alongside religion) is one of the most important factors at play in identity politics, with parties often organizing across shared caste lines and caste groups voting in blocs. Evidence from Uttar Pradesh state elections points to influence of a candidate's caste on the likelihood of a voter to vote for them. The researcher notes. "voters are more likely to vote for a party if it fields a candidate from their caste; and less likely to vote for that party if other parties field co-caste candidates from that constituency (Singh, 2015)."

While India has instituted reservation for women in local government elections, making 1/3rd of all seats reserved for women, the Lok Sabha does not have any such policies of affirmative action for women. Women are thus strongly underrepresented in the Lok Sabha,

comprising only 11% of 543 MPs. In this analysis I seek to explore whether a candidate's gender seemed to impact their probability of winning, or whether this underrepresentation was largely due to the lesser female political participation, with fewer women running for seats.

India also exhibits significant regional variation in terms of political mobilization and voting habits. Voter turnout varies from a high of 87.82% in Nagaland in the 2014 elections to 50.55% in Jammu and Kashmir.

Figure 1



Furthermore, there is large spatial difference in political preference too. While the INC and BJP are the two largest political parties, they took only about 60% of all seats on offer in 2014. Furthermore, the performance of regional parties was concentrated within their own states.

With the exception of CPM, all other top performing parties won all their seats in a single state. Even as regional parties command significant vote share (48.6% in the 2014 elections), the hold only 40% of the seats due to intense fragmentation. Milan Vaishnav suggests that the "proliferation of regional parties may lead them to cannibalize the non-national party vote share, rather than chip away at the power of national parties (2015)."

Table 2: Performance of top 10 parties (by seats won) in the 2014 Lok Sabha elections

Party	Number of seats won	Percentage of total seats in LS	Percentage of popular vote	Top states (seats won)
ВЈР	284	51.82	31.34	UP (71), MP (27), Gujarat (27)
INC	44	8.03	19.52	Karnataka (9), Kerala (8), West Bengal (4)
ADMK	37	6.75	3.27	Tamil Nadu (37)
AITC	34	6.2	3.84	West Bengal (34)
BJD	21	3.83	1.71	Odisha (21)
SHS	18	3.28	1.85	Maharashtra (18)
TDP	16	2.92	2.55	Andhra Pradesh (16)
СРМ	9	1.64	3.25	Kerala (5), West Bengal (2), Tripura (2)
YSRCP	9	1.64	1.72	Andhra Pradesh (9)

Data

The primary data used for this analysis is sourced from the Trivedi Centre for Political Data at Ashoka University, encompassing 14 general elections from 1962 with 82,206 observations. Each observation gives details about candidates who contested the election in a constituency, their gender, caste, vote share and margin of victory (Ashoka, 2018). I further added data regarding which parties formed the government at the Center and whether a given candidate was affiliated to the majority party, part of the coalition or in the opposition.

For the purposes of this paper I had to limit my analysis to the last four general elections (2014, 2009, 2004 and 1999) due to time and processing power constraints. Given the change in the political landscape in India over the last 18 years as note above, the sample, while not all encompassing, still yields interesting insights about the nature of and change in voting behavior in the country.

While most of the data was clean and organized, I had to undertake significant cleaning of the candidate name variable in order to verify which constituencies had incumbents running again. I used a fuzzy matching technique across observations to make the names uniform (though there are probably a small number of false positives and some missed observations).

I then created a *candidate_incumbency* variable based on whether the contesting candidate had held the seat in the previous election. Variables *UPA* and *NDA* reflect pre-election affiliation the United Progressive Alliance or the National Democratic Alliance.¹

Analysis

¹ I do not consider parties that join these alliances post-election in order to form governments since I am concerned with the impact of announcement of affiliation on voting behavior, hence ex-ante with regards to the voting itself.

For my analysis I conducted yearly regressions to understand the best fit equation, and note how coefficients changed over time. Since I was trying to understand the probability of a candidate winning an given race, I use variables or interactions that are specific to candidates (and not to the overall race). Thus, while the number of candidates in a given race increases competition and decreases the probability of any candidate winning, I did not include the variable in the regression since the same competition is faced by all candidates in the race.² After doing some exploratory analysis, the following equation seemed to provide the best fit:

$$win = \alpha_1 incumbency_{candidate} + \alpha_2 UPA + \alpha_3 NDA + \alpha_4 NDA * turnout + \alpha_5 UPA * margin + \alpha_6 NDA * margin + \alpha_7 incumbency_{party} + \alpha_8 female --- (1)$$

Table 3: Results from yearly OLS regressions³

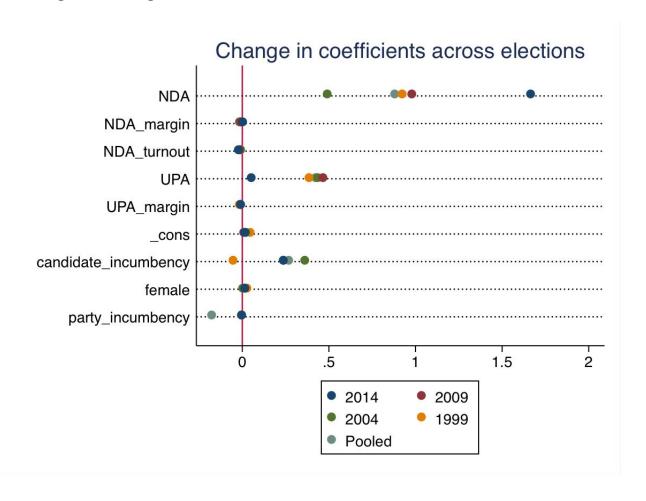
Variables	2014	2009	2004	1999	Pooled
candidate_incumbency	0.244	0.239	0.365	-0.05	0.271
	(10.19)	(7.67)	(12.72)	(-13.29)	(32.56)
UPA	0.056	0.471	0.441	0.387	0.428
	(3.58)	(16.5)	(13.75)	(11.33)	(48.56)
NDA	1.671	0.981	0.496	0.926	0.884
	(10.31)	(9.99)	(5.78)	(6.52)	(33.16)
NDA_margin	0.006	-0.007	-0.009	-0.007	-0.003
	(3.28)	(-4.4)	(-9.5)	(-4.64)	(-8.04)
UPA_margin	-0.003	-0.008	-0.008	-0.01	-0.008
	(-5.28)	(-6.33)	(-6.59)	(-10.55)	(-22.26)
NDA_turnout	-0.019	-0.011	-0.003	-0.007	-0.008
	(-8.59)	(-8.29)	(-2.52)	(-3.01)	(-18.27)

² Interactions between candidate-specific variables, such as party, and the number of candidates in the race, did not yield significant results. Thus no one party is more strongly impacted by a change in competition

³ Corresponding t-statistics are provided in brackets

Female	0.019	0.019	0.008	0.034	0.018
	(2.07)	(1.77)	(0.51)	(1.66)	(3.19)
Party_incumbency					-0.174 (-22.96)
_cons	0.017	0.015	0.026	0.05	0.024
	(10.1)	(8.48)	(10.09)	(13.29)	(14.18)

Figure 2: Change in coefficients for variables across elections



The most interesting results from my exploratory analysis were that a candidate's **caste** and gender do not seem to significantly impact their probability of winning. This is quite curious since caste seems to be a large mobilizing factor in Indian elections. One possible explanation for this discrepancy maybe that the categorization in the dataset was too general.

While the dataset encompasses only the three broad categories of General, SC and ST, actual mobilization occurs across far more precise caste boundaries. Further, much of caste mobilization is already factored into voter preference for parties, which may also be organized along caste lines (for example, the Yadavs in Uttar Pradesh form a strong voting bloc for the Samajwadi Party). Lastly, this regression does not account for region-wise effects, which may also be significantly different when it comes to caste matters as the traditional hierarchies and family structures vary across the country. However, the weakness in the relation between caste and voting maybe indicative of cultural trends. Milan Vaishnav of the Carnegie Endowment for International Peace notes "voters cast their vote, they do not necessarily vote their caste. Social biases remain entrenched in India, but the transmission of those biases into the political domain is imperfect and may be weakening" (Vaishnav, 2015). Further, it maybe possible that while caste is an important mobilizing force, when it comes to voting for candidates, voters prefer those who campaign on more actionable grounds as opposed to simple identity politics. Lastly, given the multiplicity of castes and sub-castes in India, "voters often do not have the opportunity to vote for a co-ethnic because one is not on the ballot (Vaishnav, 2015)." Thus, over hundreds of races, the bias towards co-ethnic voting becomes minute and significant caste effects are not observed.

Given general Indian society's patriarchal systems, one would expect the *female* coefficient to be significant and negative, with female candidates facing lower probabilities of winning. However, in the yearly regressions, the coefficient on female is only significant at a 5% level in the 2014 election (with a p-value of 0.038) and actually bears a positive coefficient of 0.019. For the pooled regression, the coefficient becomes more significant with a 0.001 p-value

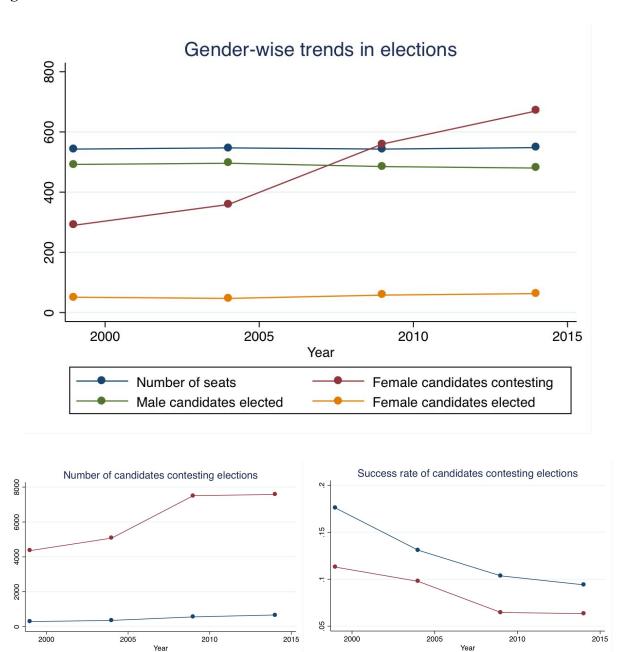
and a similar positive coefficient of 0.018. This result implies that female candidates actually have a *better* chance of winning electoral races. This is an interesting result, but may be biased because of the small number of female candidates contesting at all. Out of the 26,398 candidates analyzed in this paper, only 1,879 were female (7.12%). In 2014, only 368 out of 548 races saw a female candidate contesting, and 63 female candidates actually won a seat. However, given the far fewer number of female candidates, this implies a success rate in 2014 of about 9.4% for female candidates, as opposed to 6.3% for male candidates. It may simply be the case that female candidates are stronger on average than their male counterparts (and hence chose to run). They may also have greater funds and backing from the parties whose platforms they contest on.

Considering trends from past elections, one can note that while the number of female candidates has risen significantly, more than doubling between 1999 and 2014, the number of elected female MPs has stayed relatively stable. The overall gender composition of the House has thus not changed much (**Figure 3**).

Male candidates

Female candidates

Figure 3



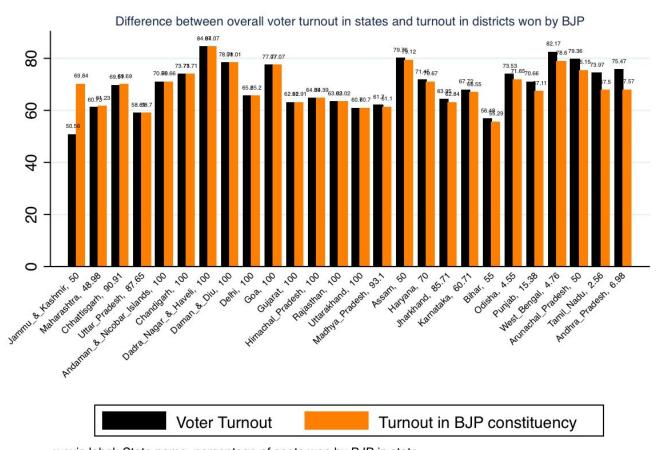
With regards to the **turnout and margins** variables, I seek to interact them with the candidates alliance affiliation in order to analyse how voting patterns in different constituencies

Male candidates

Female candidates

affects the probability of a candidate from a given alliance winning. Here, the relationship between NDA and turnout is striking. While the NDA won by a landslide in the 2014 election, they average voter turnout in a NDA constituency was 63.3% compared to a 66.38% overall turnout and 69.95% turnout for constituencies won by UPA. This trend is true for the 2004 and 2009 elections as well – the NDA seems to fair better in constituencies with lower turnout while there is no similar significant relationship for UPA won seats. Digging deeper into the 2014 elections, the BJP (the biggest constituent of the NDA) performs better in low voter turnout districts in states where it is not the dominant party. Thus, the biggest differential in the average state-wide voter turnout and turnout in BJP won districts, is in states like Andhra Pradesh, Tamil Nadu and West Bengal, where the BJP wins few seats.

Figure 4⁴



x axis label: State name, percentage of seats won by BJP in state

⁴ Note: The axis labels give the state name and percentage of seats in that state won by BJP. The bar heights given the percentage of turnout across the state and in BJP-won constituencies.

Table 4: Difference in turnout in BJP won constituencies and average turnout across states⁵

State	State BJP		Number	Seats	Percentage	Difference
	wide	constituency	of seats	won by	of seats	in average
	turnout	turnout		BJP	won by	turnout
					BJP	
Andhra Pradesh	75.47	67.57	43	3	6.98	7.90
Tamil Nadu	73.97	67.50	39	1	2.56	6.47
Arunachal Pradesh	79.36	75.15	2	1	50	4.20
West Bengal	82.17	78.60	42	2	4.76	3.58
Punjab	70.66	67.11	13	2	15.38	3.55
Odisha	73.53	71.65	22	1	4.55	1.88
Bihar	56.48	55.29	40	22	55	1.19
Karnataka	67.72	66.55	28	17	60.71	1.18
Jharkhand	63.95	62.84	14	12	85.71	1.11
Haryana	71.45	70.67	10	7	70	0.78
Assam	79.76	79.12	14	7	50	0.64
Madhya Pradesh	61.70	61.10	29	27	93.1	0.61
Uttar Pradesh	58.61	58.70	81	71	87.65	-0.09
Chhattisgarh	69.51	69.69	11	10	90.91	-0.18
Maharashtra	60.73	61.23	49	24	48.98	-0.51
Jammu & Kashmir	50.56	69.84	6	3	50	-19.28

Interestingly, the only state in which BJP constituencies strongly outperform in terms of turnout is Jammu and Kashmir. The six seats in the state are divided across the three regions of Kashmir, Jammu and Ladakh. The elections were boycotted in several parts of Kashmir, which has a Muslim majority population and has long had a fraught history of separatism with the Indian state. The situation has been further aggravated over the last three decades as a result of

⁵ Note: This table only covers states where the BJP won under 100% of seats (such as Gujarat, Rajasthan) or where it won no seats (such as Kerala) since there is no differential between state and BJP turnout to report in these states. A multi-year analysis might be helpful to gain an idea of broader national trends but could not be carried out due to paucity of time.

the Indian Army's oppressive tactics in the region, and interference by the Pakistani intelligence agencies. The Indian state is thus often viewed as an oppressive force in the region, and compounded by separatists calls to boycott elections, the voter turnout is extremely low (about 31%). Jammu and Udhampur on the other hand lie in Hindu majority areas and are closer to the Indian mainland. The BJP, a Hindu nationalist party, is thus able to mobilize support in these regions and benefits from a higher voter turnout. Ladakh is a Buddhist majority region and its political dynamics are similar to those in Jammu.

This is an interesting phenomenon that can in part be explained by examining these constituencies in past elections. Comparing the 2009 turnout in constituencies taken by the BJP in 2014, it turns out that turnout actually increased across the board (Figure 5). Thus the BJP was able to mobilize voters in low turnout constituencies, "successfully channeling popular disaffection with the incumbent INC (Vaishnav, 2015)."

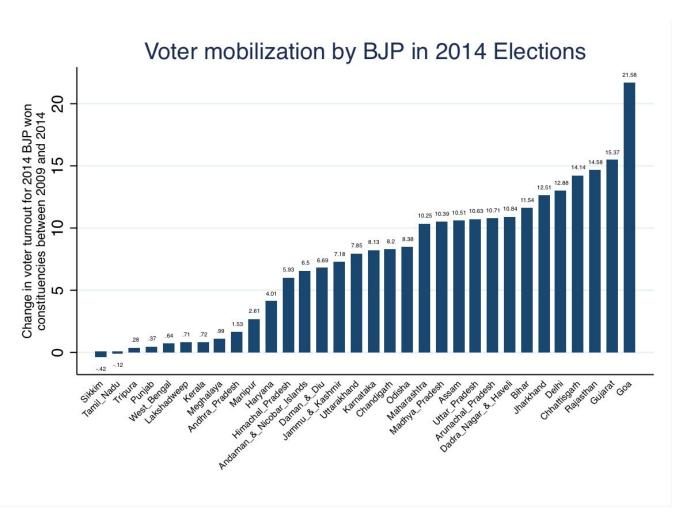


Figure 5: Change in turnout in BJP won districts between 2009 and 2014

Incumbency effects were more in line with what I had expected, candidate incumbency in a given race seems to have a strong positive impact on their probability of winning, across party lines. The only year that seemed to yield an anti-incumbency effect at the candidate level was 1999, which was also an year several regional parties gained prominence, possibly as a result of feelings of disaffection from the ruling national party INC. Party incumbency is defined as whether or not a given candidates is running on a ticket from a party that is currently part of the government forming alliance at the Center. While this effect could not be captured at the election level (since UPA, NDA are collinear with party incumbency), in the pooled regression

party incumbency actually seems to have a negative effect, This suggests that while voters favor incumbent candidates within their constituency, at the national level, the anti-incumbency effect is stronger. While this result is significant for the sample of these three elections, I would be curious to see how it changes if we were to run this analysis on a more expanded dataset.

Lastly, in a more correlational than causal vein, the average margin for a NDA win is higher than that for a UPA win. Margin here is defined as the difference between votes for the winning candidate, and the candidate who came second, as a percentage of total votes cast. This is exemplified most strongly in the coefficients for the 2014 elections, NDA_margin is 0.006 implying larger margin wins for NDA while that for UPA_margin is -0.003. The average NDA winning margin was 17.31% in 2014, more than double that of a UPA won constituency. However, this trend is not as strong in the 2009 and 2004 elections where the margins for seats won are comparable (though slightly higher for UPA in 2004, when it was the winning coalition).

Table 5: Mean margin of victory for candidates

Alliance	2014	2009	2004	Pooled
NDA	17.31	9.77	10.01	12.70
UPA	8.09	9.94	13.09	10.69

Shortcomings and further questions

This analysis led me to more questions than answers over the writing of this paper. While my model considering the NDA and UPA follows a more typical two-party system model, I would like to consider how adding multi-party and regional dynamics to the model affect the

outcome. I would further be interested in researching more macro historical trends, with regards to two-party polarization in the country and the dynamics behind coalition politics. While the INC commanded a majority in the Lok Sabha for the first 30 years of independent India, till 1977, the 1990s were a particularly period of several short lived governments formed through coalitions between regional parties. The 2014 BJP government is the first since 1984 to command an absolute majority in the house. I would be interested in observing what quantifiable factors changed across these elections.

This model is not useful for ex-ante prediction of win probabilities since coefficients on the NDA and UPA variables vary significantly year on year, influenced by political happenings and voter sentiment in the country at the time. Estimating this coefficient ex-ante may prove to be tough though one approach can include aggregating data from state elections (which occur between the five year general elections) to gauge voter sentiment.

This analysis can further be extended over the last 60 years (data is available since 1962 - the 3rd general election) to further note changes in coefficients on caste and gender. This may serve as a proxy indicator for social development, noting how attitudes towards caste and female empowerment have changed over the last 14 election cycles.

Conclusion⁶

In this paper I sought to analyse voter behavior in India, with regards to caste, gender, incumbency and party affiliation, while also considering how turnouts and margins affect parties differently. While caste and identity politics form the bulk of mainstream political discourse in

⁶ **Postscript**: Over the course of my analysis, though a little too late into it, I found another fascinating dataset compiled by the Lokniti: Programme for Comparative Democracy at the Centre for the Study of Developing Societies. They have conducted post-poll surveys since 1996 covering large samples and asking more precise questions regarding voting behavior, such as "Who would you want to be the next Prime Minister?" and "What was the single most important issue for you while voting in this election?" This data may complement my existing analysis, lending insights into actual voter psychology and may form a starting point for a more substantive analysis in the final paper

India, they seem less significant in actually informing voting behaviour and win probabilities for candidates. Given the weaker than expected relationship between voting and identity politics, the model could be improved by including economic variables and actual delivery on election manifestos by incumbents. Further, adopting astute political strategies can maximize yield for political parties under the FPTP system, as shown by the BJP's performance in 2014, where it was able to use political mobilization in low turnout constituencies to win an absolute majority in the house in spite of winning only 31% of the vote share. However, voters' attitudes towards female candidates remain ambiguous. Perhaps noting longer historical trends may lead us to better conclusions on this front.

Appendix

Table (1) using data from 2014 elections

2014

note: party_incumbency omitted because of collinearity

Linear regression

Number of obs = 8245 F(7, 8237) = 190.12 Prob > F = 0.0000 R-squared = 0.4167 Root MSE = .18952

		Robust				
win	Coef.	Std. Err.	t	P> t	[95% Conf	. Interval]
candidate_incumb~y	.2439709	.0239432	10.19	0.000	.1970362	.2909055
UPA	.055883	.0156068	3.58	0.000	.0252897	.0864762
NDA	1.671468	.1620511	10.31	0.000	1.353807	1.989129
NDA_margin	.0062519	.0019068	3.28	0.001	.0025141	.0099897
UPA_margin	0034386	.0006514	-5.28	0.000	0047155	0021617
NDA_turnout	0185261	.0021576	-8.59	0.000	0227556	0142967
female	.0190599	.0092079	2.07	0.038	.0010101	.0371097
<pre>party_incumbency</pre>	0	(omitted)				
_cons	.0167659	.0016593	10.10	0.000	.0135132	.0200186

Table (2) using data from 2009 elections

2009

note: party_incumbency omitted because of collinearity

Linear regression

Number of obs = 8070 F(7, 8062) = 104.21 Prob > F = 0.0000 R-squared = 0.2939 Root MSE = .21061

		Robust				
win	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
candidate_incumb~y	. 2385835	.0311002	7.67	0.000	. 177619	. 2995479
UPA	.4705667	.0285152	16.50	0.000	.4146694	.5264639
NDA	.9814263	.0982405	9.99	0.000	.7888496	1.174003
NDA_margin	0068839	.0015643	-4.40	0.000	0099503	0038174
UPA_margin	007816	.0012345	-6.33	0.000	010236	0053961
NDA_turnout	0113577	.0013693	-8.29	0.000	0140419	0086734
female	.0190602	.0107686	1.77	0.077	0020491	.0401695
party_incumbency	0	(omitted)				
_cons	.0145205	.0017127	8.48	0.000	.0111631	.0178778

Table (3) using data from 2004 elections

2004

note: party_incumbency omitted because of collinearity

Linear regression

Number of obs = 5435 F(7, 5427) = 104.44 Prob > F = 0.0000 R-squared = 0.2797 Root MSE = .2547

win	Coef.	Robust Std. Err.	t	P> t	[95% Conf.	Interval]
candidate_incumb~y	.3650544	.0287013	12.72	0.000	.3087883	.4213204
UPA	.4407934	.032054	13.75	0.000	.3779547	.5036321
NDA	.4955147	.0857715	5.78	0.000	.327368	.6636613
NDA_margin	0093643	.0009862	-9.50	0.000	0112976	0074309
UPA_margin	0080844	.0012276	-6.59	0.000	010491	0056779
NDA_turnout	0034277	.0013596	-2.52	0.012	006093	0007623
female	.0084058	.0164996	0.51	0.610	02394	.0407517
<pre>party_incumbency</pre>	0	(omitted)				
_cons	.0261461	.0025922	10.09	0.000	.0210644	.0312278

Table (4) using data from 1999 elections

1999

note: party_incumbency omitted because of collinearity

Linear regression

Number of obs = 4648 F(6, 4640) = . Prob > F = . R-squared = 0.2232 Root MSE = .28334

win	Coef.	Robust Std. Err.	t	P> t	[95% Conf.	Interval]
candidate_incumbency	0498133	.003749	-13.29	0.000	0571631	0424635
UPA	.3872359	.0341664	11.33	0.000	.3202535	.4542183
NDA	.9264132	.1421052	6.52	0.000	.6478195	1.205007
NDA_margin	0070446	.001517	-4.64	0.000	0100187	0040706
UPA_margin	0101602	.000963	-10.55	0.000	0120482	0082722
NDA_turnout	0071848	.0023894	-3.01	0.003	0118692	0025004
female	.0341602	.0205465	1.66	0.096	0061207	.0744411
<pre>party_incumbency</pre>	0	(omitted)				
_cons	.0498133	.003749	13.29	0.000	.0424635	.0571631

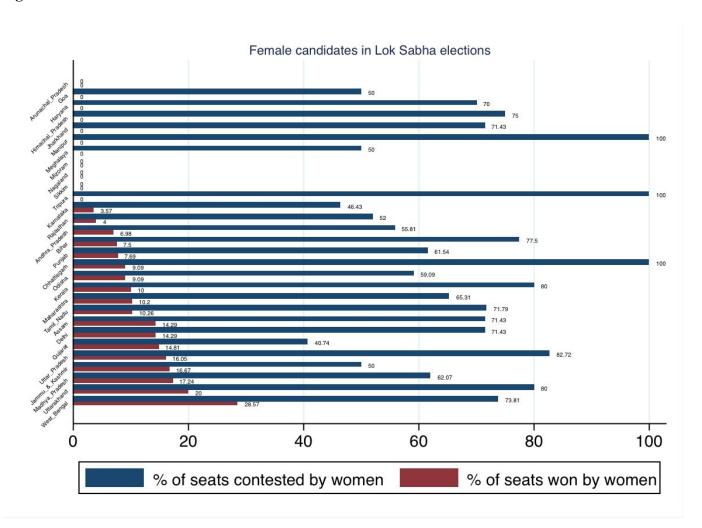
Table (5) pooled regression across 2014, 2009, 2004 and 1999 using model (1)

. reg win candidate_incumbency UPA NDA NDA_margin UPA_margin NDA_turnout female par
> ty_incumbency

	Source	SS	d f	MS	Number of obs	=	26398
					F(8, 26389)	=	1106.19
	Model	500.58002	8	62.5725025	Prob > F	=	0.0000
	Residual	1492.71008	26389	.056565617	R-squared	=	0.2511
9					Adj R-squared	=	0.2509
	Total	1993.2901	26397	.075511994	Root MSE	=	.23784

win	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
candidate_incumb~y	.2714815	.0083366	32.56	0.000	. 2551412	.2878217
UPA	.428299	.0088201	48.56	0.000	.4110111	.4455869
NDA	.8841839	.0266656	33.16	0.000	.831918	.9364498
NDA_margin	0032093	.0003994	-8.04	0.000	0039921	0024265
UPA_margin	007725	.000347	-22.26	0.000	0084051	0070449
NDA_turnout	0075637	.0004139	-18.27	0.000	008375	0067525
female	.0181784	.0057011	3.19	0.001	.0070039	.029353
party_incumbency	1737365	.0075676	-22.96	0.000	1885694	1589036
_cons	.0235041	.0016577	14.18	0.000	.0202551	.0267532

Figure A: State-wise statistics for female candidates and elected MPs



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