

# [The significance of state legislative assembly elections politics essay](https://assignbuster.com/the-significance-of-state-legislative-assembly-elections-politics-essay/)

Electoral cycles in India are bifurcated between the national level where Parliamentary polls are held to elect the 545 member lower house, or Lok Sabha, for five year terms in single-seat constituencies using a first-past-the-post system, and within the twenty-eight states and two of the seven union territories to state legislative assemblies, or Vidhan Sabhas. State legislative assembly elections may be held during a Parliamentary term or concurrently with Parliamentary elections in the event that the expiration of a legislative assembly’s term is proximate to the date of the Parliamentary poll. In the 2009 Parliamentary elections, for example, the states of Andhra Pradesh, Sikkim and Orissa also held concurrent legislative assembly polls. A wide range of parties contest these polls including national parties such as the Indian National Congress (INC) and Bharatiya Janata Party (BJP) that have a country-wide reach and participate in both Parliamentary and state legislative assembly elections, and regional and state-based parties that may contest only legislative assembly elections. In addition, alliances between parties may dramatically alter an election’s outcome and constitute an unpredictable and changeable feature of the political landscape. For example, parties may agree to not contest elections in return for a similar undertaking from their alliance partner with respect to a subsequent poll, or the relationship may be more complex with parties in an alliance allocating constituencies to one another in some parts of a state, while competing vigorously against one another in other constituencies in the same state.

The discernment of trends between legislative and Parliamentary elections in such a complex and unstable landscape is highly problematic. Nonetheless, the popular media is often full of speculation concerning linkages between legislative assembly and Parliamentary elections and the significance of the former as a barometer for predicting a party’s performance in the latter. For example, the BJP’s defeat in the landmark 2002 legislative assembly elections in Jammu and Kashmir and subsequent 2003 polls in Himachal Pradesh, Meghalaya, Nagaland and Tripura caused considerable speculation in the media of an anti-BJP trend that boded ill for the party’s fortunes in the looming Parliamentary election.[1]This feeling of foreboding was, however, replaced by conjecture of a BJP victory following the defeat of the INC in 2003 legislative assembly elections in Rajasthan, Madhya Pradesh, Mizoram and Chhattisgarh.[2]More recently, the INC’s shock defeat in legislative assembly elections in the states of Goa, Punjab and Uttar Pradesh in early 2012 was held by some to bode ill for its chances in 2014 Lok Sabha elections.[3]In reality, any interconnectedness between the legislative assembly and Parliamentary elections may be mediated by a range of variables. For example, Yadav[4](one of the few writers to investigate the linkages between voter choice at the state and national level in India) observes that where two elections are held in quick succession, the party that won the first election tends to be victorious in the second. However, he continues, whereas in the 1970-80s the party that won a Parliamentary election then repeated their victory in subsequent legislative assembly elections,[5]the trend was reversed in the 1990s with legislative assembly election results routinely repeated in the subsequent Parliamentary poll. In contrast, other writers note the decline of the INC as the principal political actor in many states, the rise of strong regional parties in states such as Tamil Nadu and the increasing popularity of smaller parties in both Parliamentary and legislative assembly elections[6]in support of a regionalization thesis where legislative assembly elections are decided at the state and even constituency level independent of national politics.[7]Explanatory factors cited in support of this thesis include the decline of the previously dominant one party model which has been replaced by an alternative where alternation in power is either the norm or a real possibility, and the increase in the number of single-state and multi-state parties as a result of the federalization of the party system.[8]

The purpose of this study is to examine the statistical evidence for the claim of an enduring and significant linkage between legislative assembly and subsequent Parliamentary election results for major political parties in India. This is achieved through an examination of Parliamentary elections held over the period of 1980-2009, and analysis of the degree to which each party’s performance is correlated to its share of the vote in preceding legislative assembly elections held eighteen months (548 days) or less previously in the same state. To the extent that there exists a linkage between the two sets of elections we expect to observe a statistically significant correlation between a party’s performance in both polls. In contrast, the absence of any significant correlation counsels against the existence of such a linkage. The study incorporates and builds upon insights from previous analyses that have addressed the influence of local elections on subsequent national polls in the United Kingdom (UK), United States (US) and Europe, as well as the inverse hypothesis that national elections impact party performance in subsequent local elections. In the case of India, however, while there has been some investigation of the links between legislative assembly and Parliamentary elections,[9]these studies have concentrated on shorter-term trends and not included advanced statistical tests. A shorter-term approach may result in a more nuanced understanding given the rapidly changing and sometimes cyclical nature of Indian politics. However, it also raises questions regarding the reliability of any findings given the lower number of observations and the possibility of bias in the selection of the time period covered. The longer-term study conducted here that includes data from a thirty year time period covering nine Parliamentary and forty-five legislative assembly polls with a total of 502 observations avoids these concerns and presents a statistically more rigorous and convincing basis for asserting an enduring connection between legislative assembly and Parliamentary polls.

## 2. Literature Review

A wide range of studies examining the relationship in party performance between local and national polls have produced varying results across a range of geographical contexts. Early studies in the US, for example, found a limited effect from local campaigning on subsequent national elections with a positive influence on voter turnout[10]and in the nomination and pre-election registration stages.[11]A 1999 study of elections in Canada concluded that a preceding local campaign is an important determinant of a party’s vote share in a subsequent Parliamentary election, particularly for opposition parties in seats where the campaign was not successful.[12]This finding was consistent with some earlier studies[13]but conflicted with others.[14]In the UK, a range of studies discovered correlations that varied by party. For example, one study uncovered a modest, but statistically significant, impact in national elections associated with a preceding local campaign for the Labour and Conservative parties,[15]whereas another found a positive relationship for the Labour and Liberal Democrat parties, but not the Conservatives.[16]In contrast, a number of important studies in Europe by Dinkel[17](in an inverse of the relationship studied here) conjectured the subordination of regional elections to the electoral rhythms of polity-wide politics and concluded that incumbency at the federal level hurts a party in regional level elections. These findings led to a range of studies[18]that were used to explain the underperformance of incumbent parties in the first direct elections to the European Parliament in 1979.[19]Studies on election results in India have been more limited in both number and scope. Using a panel data analysis Webb and Wijeweera[20]find a correlation in party performance between legislative assembly and Parliamentary elections that varies according to party type (national, state and registered), but which fails to account for regional variations. Similarly, Yadav and Palshikar discern a number of different phases in which the correlation between state and federal politics changes and conclude that politics at the state level shapes and filters, rather than pre-determines, the outcome of national elections.[21]This finding is partially endorsed by Chhibber who conjectures some linkage between a party’s performance at the Parliamentary and state level.[22]

While these studies point to a tentative consensus regarding the links between a party’s performance at the regional and (supra-)national levels, the correlation varies between electorates and may be influenced by a range of intervening variables. For example, North American studies have posited the influence of religious/ethnic homogeneity, campaign spending and the effect of incumbency as possible explanations for why correlations in a party’s performance between local and federal elections may vary.[23]Studies of results from Spain,[24]Greece and Portugal[25]similarly found that the Dinkel effect did not hold in areas where there was a lack of congruence in party systems at the national and regional levels due to the presence of ‘ historic nationalities’ with a strong sense of identity or other intervening variables such as the electoral cycle, socio-economic and cultural factors. In the case of India, Yadav and Palshikar echo previous claims[26]regarding the importance of state politics as a determinant of Parliamentary elections by arguing that politically relevant social cleavages are defined in the arena of state politics where the greater number of actors makes higher voter mobilization more possible, and the building blocks of national collations are formed.[27]Thus, they allege, because voters use Parliamentary elections to pass a verdict on the state government, state elections are an arena of primary choice by voters with the choices made during Parliamentary elections assuming more of a derivative character.[28]Here too, however, we find a range of intervening variables that influence the strength and character of linkages between politics at the state and federal level. For example, Yadav and Palshikar acknowledge the importance of a temporal lag between elections observing that where a Parliamentary election follows a state election in quick succession the state verdict tends to be repeated at the national level. In contrast, they claim, if the Parliamentary election is held in the middle of the term of an elected state government voters are more likely to be critical and an inverse result may obtain.[29]

In summary, there is a widespread body of evidence of a correlation in political parties’ electoral performance between regional and higher-order, (supra-)national elections across a range of electoral systems and geographical areas. However, the correlation is unstable and subject to variation. Moreover, the multiplicity of studies of different variables, time periods, electoral systems and party-types makes any comparison between studies problematic. In addition, a range of intervening variables mediate any relationship in a party’s performance between elections with different studies highlighting different variables across different types of electoral systems. In the case of India, several studies have highlighted a possible connection in a party’s performance between legislative assembly and subsequent Parliamentary elections, but the exact nature and strength of this connection is unclear. Nonetheless, there is widespread speculation in the mass media and elsewhere of such a connection which, if it did exist, might aid in the prediction of Parliamentary poll outcomes and assist parties to allocate resources where they are most effective in maximizing votes.

## 3. Method

Our aim is to test the claim that there exists a linkage between the outcomes of legislative assembly and subsequent Parliamentary polls in India by examining a party’s share of the vote in both elections held eighteen months (548 days) or less previously in the same state. Our study uses a multivariate model and employs data from the 1980-2009 period obtained from statistical reports produced by the Election Commission of India (ECI) pertaining to the performance of all parties that competed in both elections. The selection of the eighteen month time period between elections is important. A shorter time period would have produced significantly fewer observations and made it more difficult to establish the influence of a time lag on voter support between elections. Conversely, a longer time period would have allowed for more observations, but raised questions regarding the relevance of the preceding legislative assembly result given the presence of other, intervening events during this time that might influence an election’s outcome. Accordingly, the time period of eighteen months was chosen because it is sufficiently long to allow enough observations from which to draw reliable conclusions without also raising questions concerning the relevance of the data included. Concerning the related difficulty of including additional variables that may also influence the outcome of an election: Previous studies have generally included only one explanatory variable to account for any statistically significant correlation (i. e. the result from the preceding election) by regressing the percentage of the vote received by a party at the latter election with that from the former. This, however, counter-intuitively suggests that a party’s performance in an election result may be accurately modeled by the results of a preceding election. The reality is unlikely to be so simple and experience suggests that a range of variables between elections may influence a party’s performance including the length of time between the two elections, incumbency, the death of a candidate, campaign spending, a recent scandal, economic changes and so forth. This, however, creates a dilemma given that the more variables that are included within a statistical model, the greater the difficulty in identifying the effect of each and drawing any reliable conclusions due to possible multi-collinearity problems (i. e. if predictor variables are highly correlated then coefficient estimates may change erratically in response to small changes in the model or the data, producing unreliable results concerning individual variables or the redundancy of certain variables with respect to others).

Consequently, we have chosen to use a multivariate model in which the dependent variable (Y) is the percentage of votes received by a party in a state in a Parliamentary election with the initial four explanatory variables.

X1 Vote percentage received by the concerned party in a prior legislative assembly election at time, t-i

X2 Voter turnout at the Parliamentary election at time t

X3 Percentage share of seats won by the party at the preceding local election

X4 Time lag in days between the legislative assembly election and the subsequent Parliamentary election

This gives us the following model:

To the extent that a party’s performance in a Parliamentary election can be explained by the results of a preceding legislative assembly election, then the estimated coefficients of X1 () must be positive and statistically significant. A higher voter turnout at the parliamentary election may affect some party’s share of the vote depending upon the number and identity of the parties contesting the election. For example, a lower turnout can magnify the impact of the protest vote in the favor of smaller parties.[30]Therefore, we speculate that the coefficient of X2 will be positive and greater for parties other than the two mainstream parties – the INC and BJP. The number of seats won in the preceding legislative assembly poll may exercise a ‘ demonstration effect’ for some parties, raising their public profile and attractiveness to voters. Accordingly, we hypothesize a positive coefficient for X3. Conversely, for time lag (X4) we anticipate a negative coefficient; as the temporal distance between a legislative assembly and a subsequent Parliamentary election increases the impact of the former on the latter lessens. Voters’ memories fade and the events of the preceding election recede in favour of more contemporary events as determinants of for which party electors cast their ballot.

INSERT FIGURE 1 HERE

Our full data set contains 502 observations and covers the period 1980-2009 which includes nine Parliamentary and forty-five legislative assembly elections that were held not less than eighteen months prior to the parliamentary poll. However, because of the high number of parties that contest elections in India, and despite the lengthy thirty year time period covered by the study, only a small number of parties had enough observations to carry out a rigorous analysis resulting in two difficulties:[31]First, in order to carry out hypothesis testing it is necessary to assume that the data are normally distributed which in turn requires a reasonably large sample. Second, a smaller data sample presents problems with respect to degrees of freedom. Every time we estimate a coefficient such as one observation is used up in the process. This means one less observation remains for estimating other coefficients. In large samples this is not a problem. However, in small samples this is a serious issue with the result that where the sample size is smaller than the number of observations it is not possible to estimate the model. These considerations eliminate smaller, state parties from our study as none of them have a sufficient number of observations to permit estimation or valid hypothesis testing. Consequently, similar parties such as the Communist Party of India and its Marxist and Marxist-Leninist offshoots, as well as the Janata Dal and its Secular and United subsidiary parties are grouped together, and only those parties that contain twenty-five or more observations are included in our study. These parties and their sample sizes are:

Indian National Congress (INC): 43 observations

Bharatiya Janata Party (BJP): 37 observations

Communist Party of India (CPI/CPI(M)/CPI(ML)): 53 observations

Bahujan Samaj Party (BSP): 26 observations

Janata Dal (JD/JD(S)/JD(U): 28 observations Independent Candidates: 42 observations

## 4. Results

4. 1 Overall Results

An important feature of our study is the use of statistical tools such as regression analysis to ensure the reliability of our findings. Most empirical analyses of election data employ relatively simple statistical techniques such as the correlation coefficient or covariance test to examine relationships. This has the advantage of providing a straight-forward analysis that does not require a significant degree of specialist knowledge to interpret. However, it fails to provide for a more nuanced analysis and may overlook important weaknesses in the data that negatively affect the reliability of the study’s conclusions. There are a number of advanced estimation methods that could be employed to test possible relationships among variables, but they are mostly used in more quantitatively-oriented disciplines such as statistics, economics and econometrics. For these reasons, we opt to use the ordinary least squares (OLS) method to estimate the model which is simple, but very powerful in analyzing relationships[32]and is also popular in the social sciences. Using the OLS method we use sample data to estimate a best-fit regression line achieved by minimizing the sum of squared errors. This assists us to make statistical inferences about the relationship between voting patterns in general elections and preceding local elections and then statistically test the validity of these inferences.

For example, once the estimation is complete, we test whether the coefficient estimates are statistically reliable by examining the relevance of each explanatory variable included in the model to the behavior which the model attempts to explain. To emphasize, the behavior that our model attempts to explain is the variation in the percentage of votes won by major parties in a Parliamentary election and the explanatory variables are the percentage of votes and seats received by a party at a preceding legislative assembly election, voter turnout at the Parliamentary election and the time lag between the legislative assembly and Parliamentary elections. In general, there are two hypotheses; the null hypothesis states that the coefficient is zero, which means the relevant variable should not be in the model while the alternative hypothesis states that the concerned variables should be a part of the model. In this paper, we use the p (probability)-value where, if the p-value is smaller than the level of significance (i. e. 5% or 0. 05), we reject the null hypothesis and conclude that that particular variable should be included in the model (the numbers in parenthesis in Figures Two and Three are the respective p-values). We also use the F-test which examines the overall significance of the model. The null hypothesis in this case is that none of the variables are significant in explaining the target behavior (i. e. the percentage of votes obtained by a party in a given state in a Parliamentary election), whereas the alternative hypothesis is that the model is statistically significant because the selected variables explain the behavior. Again, we use p-values in this test with the result that, if the p-value is smaller than the level of significance, we reject the null hypothesis and conclude that that respective model is statistically significant in explaining the Parliamentary voting pattern (F-values and relevant p-values are shown in the last column of Figure Two). Finally, we also report R2. This shows the percentage variation that is explained from the selected model by aggregating the descriptive power of the four explanatory variables. For example, the R2 value for the BJP is 91. 2 meaning that the model explains approximately 91% of the total variation of the percentage of votes received by the BJP in the Parliamentary elections included within the study.

In order to examine party specific differences, five party groups above are estimated using the Ordinary Least Squares method introduced earlier using the specification given in equation (1) for all five party groups. The results are given in Figure Two below which consists of eight columns. Whereas the first column lists the different parties, the second is the intercept of the linear regression equation which controls for the possibility of other important explanatory variables in the model. Columns three through six are the estimated coefficients of the four explanatory variables. Under each coefficient the probability value corresponding to the estimated coefficient is given in parentheses. Small probability values suggest that the relevant variable is important in explaining the variation of the dependent variable. While there is no universally accepted cut-off point for probability values, a value below 0. 05 is generally considered as strong evidence against the null hypothesis of non-relevance. The seventh and eighth columns of the table measure the goodness of the fit of the chosen model in explaining the variation of Parliamentary election results. The seventh column shows R2, which is the percent of the variance of Parliamentary election share explained by the variables in the regression. The eighth and final column shows the F-statistic values which measures the overall significance of the model and suitability for the data set to which it is applied. If the explanatory variables are jointly significant, then the F-statistic should produce a large value and its probability should be less than 0. 05. The results overwhelmingly support the appropriateness of the model, except in the case of independent parties which are consequently disregarded in the analysis below.

INSERT FIGURE 2 HERE

4. 2 Party Specific Results

Referring to Figure Two we see that the estimated coefficient of the percentage share of voter percentage at the preceding legislative assembly election for the BJP is 1. 053 and its probability value is virtually zero. This suggests that the BJP’s percentage of the vote in a legislative assembly poll is a statistically significant variable in forecasting the party’s percentage of votes cast in a subsequent Parliamentary election in the same state. More specifically, holding all the other variables constant, a one percentage point increase in the BJP’s share of the total votes cast in a legislative assembly election increases its share of the vote in a subsequent Parliamentary election by 1. 053 percent. A similar positive, but smaller in magnitude, link exists between the vote share percentage received at the parliamentary election and the preceding local government election for the other major party groups. To illustrate; for the BSP (0. 626%), CPI (0. 955%), JD (0. 692%) and INC (0. 754%). Interestingly, there is no statistical evidence in support of such a relationship for the independent parties. These findings and possible reasons for them are discussed in greater detail below.

Other interesting findings include that for the CPI there is a statistically significant relationship between the number of seats won in the preceding legislative poll and the party’s share of the vote in a Parliamentary election. This same result is not observed with other parties. Voter turnout is not significantly correlated with a party’s share of the vote in a Parliamentary election except in the case of the JD and independents. In both cases a one percent increase in voter turnout in a Parliamentary election increases the percentage of votes received by approximately a quarter of a percentage point. Finally, although our tests confirm the suitability of our model for the data set, the model does not work equally well for all parties. To illustrate, in the case of the BJP, CPI, and JD more than 75 percent of the variation in the percentage votes received at the Parliamentary election is explained by the selected variables. The model is moderately good for the BSP and INC where approximately half of the variation is explained by the model. In contrast, the model is less effective in explaining the fortunes of independents that contest Parliamentary polls where only 23 percent of the total variation of their share of votes in Parliamentary elections can be explained by the model. Finally, as far as the time lag is concerned, it is neither statistically significant nor numerically consequential (the coefficient is almost zero in every case). Accordingly, we refrain from drawing any firm conclusions regarding independents and the time lag in our analysis below.

4. 3 Inclusion of Regional, Party and Incumbency Variables

A commonly employed tool in studying election results to shed more light on the correlations uncovered is to group the data. For example, similar studies on regional and (supra-)national elections in Europe find a clear variation between different geographical areas leading the authors of these studies to speculate that the distinctive characteristics of some regions affect voting behavior.[33]Accordingly, we similarly group our data into region to examine what effect this exerts on the explanatory power of the model and what conclusions might, therefore, be reasonably drawn from it. Because individual states do not have a sufficient number of observations to permit reliable statistical estimates, we separate the data into the following six commonly-used geographical regions in order to examine whether party performance in Parliamentary elections varies between these. We use the same model as in equation (1), but include dummy variables to capture regional effects. A dummy variable takes a value of 0 or 1 and is represented in Figure Three. In accordance with standard statistical practice, no du