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Incumbency and Parliamentary Elections in India: An Analysis of the Congress Party's Electoral Performance, 1962-1999

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Abstract

A recurring theme in commentary on parliamentary (Lok Sabha) elections in India since the 1990s is that of "anti-incumbency": at every election since 1991, voters have cut a swathe through incumbent members of parliament by choosing to replace a large number of them with a fresh set of faces. In this paper we make more precise the concept of "anti-incumbency" and then, based on this concept, we measure the extent of anti-incumbency, in the 10 Indian parliamentary general elections between 1967 and 1999, towards the historically most significant of political parties in India - the Indian National Congress (INC). In addition, we examine the electoral performance of the INC in its marginal constituencies both as an incumbent and as non-incumbent. Lastly, we examine the effectiveness of vote mobilisation by the INC in constituencies in which it was the incumbent and in constituencies in which it was not the incumbent. Based on all these approaches, we find little evidence of incumbency bias against the INC.

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1. Introduction

A major issue in the study of elections is whether, and to what extent, the chances of a candidate or a party being elected from a constituency are improved or damaged by virtue of the fact that the candidate or the party is the incumbent in that constituency (i.e. won the previous election from that constituency). The literature on US elections suggests that incumbents enjoy considerable advantage over their non-incumbent rivals: they are not only much more likely to be re-elected (Lee, 2001) but their margin of victory has increased significantly over time (Alford and Hibbing, 1981; Collie, 1981; Garland and Gross, 1984). By contrast, a recurring theme in the literature on parliamentary (Lok Sabha) elections in India since the 1990s is that of "anti-incumbency": at every election since 1991, voters have cut a swathe through incumbent members of parliament by choosing to replace a large number of them with a fresh set of faces.

The "anti-incumbency" sentiment of Indian voters in a particular constituency may be underpinned by any one of four "grievances": (i) at its broadest, it may represent a vote against the ruling party at the centre ("national government incumbency"); (ii) more narrowly, but still within the purview of a *ruling* party, it may represent a vote against the party of government in the state in which the constituency is based ("state government incumbency"); (iii) it may represent a vote against the party which won the seat in the previous election, regardless of whether that party forms the government at the centre or in the state ("party incumbency"); (iv) at its narrowest, it may represent a vote against the sitting member of parliament ("candidate incumbency").

We define incumbency in this paper in terms of the party which won a constituency in the previous election ("party incumbency") and an anti-incumbent

vote is, therefore, a vote against the incumbent party. The issue of "government incumbency" (Yadav, 2004) or "candidate incumbency" (see Linden, 2003) are not addressed in this paper. Within this context, we make more precise the concept of "anti-incumbency" and then, based on this concept, we measure the extent of anti-incumbency towards the Indian National Congress¹ (INC).

To students of Indian politics this party needs no introduction. For others, the INC (which was the party of Mahatma Gandhi and Jawaharlal Nehru) was India's party of government in five successive parliamentary elections: 1951, 1957, 1962, 1967, and 1971. After a brief period out of power, following the 1977 elections, it stormed back winning the next two elections (1980 and 1984) handsomely. Since the 1996 elections, however, it has had to sit on the Opposition benches and it was only after the most recent (2004) elections that it was again able to form a government but in coalition with other parties and supported, from outside government, by the Communists.

We also examine the electoral performance of the INC in its marginal constituencies both as an incumbent and as non-incumbent. Lastly, we examine the effectiveness of vote mobilisation by the INC in constituencies in which it was the incumbent and in constituencies in which it was not the incumbent. We place these results in a comparative context by presenting equivalent results for India's other major party: the Bharatiya Janata party (BJP).

The results presented in this paper are based on parliamentary election outcomes in every constituency in the 16 major states of India (and Delhi) for each of the 11 Lok Sabha General Elections between 1962 and 1999². A major problem in using the

² Because of disturbances in these states, parliamentary (Lok Sabha) elections for Punjab and Assam could not be conducted as part of the 1984 parliamentary General Election; instead they were held in 1985. They are included here as part of the 1984 election results. Similarly, results for the

¹ Commonly referred to as the Congress Party or, simply, as the Congress.

data was tracking the results for each constituency over the different elections. This task was made difficult by inconsistencies in the spelling of constituency names over the period: for example, sometimes it was "Behram*pore*" and at other times "Behram*pur*". In order to correct these anomalies, we examined each constituency, across every election, to arrive at a consistent set of electoral data for 1962-1999.

2. Analysing the "Incumbency Effect"

Let A and \overline{A} denote, respectively, the events that a political party won or lost the *previous* election from a constituency (i.e. is/is not the incumbent party in that constituency) and let T and \overline{T} denote, respectively, the events that the party wins or loses the *current* election from that constituency. Then, the probability that the party wins/loses the current election in the constituency, *given that it is the incumbent party in that constituency* is: $P(T \mid A)$ and $P(\overline{T} \mid A)$ and one definition of the *risk ratio* associated with being the incumbent is: $\rho = \frac{P(T \mid A)}{P(\overline{T} \mid A)}$.

The risk ratio measures the odds of the null hypothesis being "true" (the party wins the current election from a constituency) to it being "false" (the party loses the current election from the constituency) under a particular set of data (the party is the incumbent party in the constituency).

An alternative view of the risk of a party winning/losing from a constituency, in which it is the incumbent, is provided by posing the following question: given two rival scenarios – in the first, a party is the incumbent; in the second, it is a challenger - what is the ratio of its probabilities of winning that seat in these different situations? In order to answer this question, the relevant "risk ratio" is $\sigma = \frac{P(T \mid A)}{P(T \mid \overline{A})}$: given two

parliamentary (Lok Sabha) elections in Punjab held in 1992 – which, but for disturbances in this state, would have been part of the 1991 General Election – are included in the 1991 election results.

different "pieces" of information – a party is the incumbent or a challenger – what is the ratio of its probabilities of winning the election?

3. Risk Ratio and Odds Ratio Calculations for Indian Parliamentary (Lok Sabha) Elections

Table 1 shows the "incumbency outcomes" for the seats contested by the INC in the 16 major Indian states plus Delhi for the 10 successive parliamentary (Lok Sabha) General Elections in India from 1967 to 1999. This Table shows, for example, that in 1999 the INC won in 50, and lost in 80, constituencies in which it was the incumbent party (i.e. had won these seats in the previous – in this case, 1998 – elections). On the other hand, it won in 56 seats, and lost in 237 seats, in which it was a non-incumbent. As a consequence, 136 seats changed hands between the INC and other parties⁴. This constituted an "electoral turnover" for the INC of 32 percent of the 423 seats it contested in 1999. The INC, therefore, made a net loss of 24 seats⁵ and these losses represented 18 percent of its total turnover of 136 seats.

Table 1 shows that electoral turnover for the INC has always been high averaging 41 percent over the ten elections between 1967-99. However, electoral turnover for the INC fell in the 1990s: it averaged 32 percent for the four elections in the period 1991-99 compared to 47 percent for the six elections in the 1967-89 period. This was due to the fact in the 1990s there was, relative to the number of seats contested by the INC, both a fall in the number of seats in which INC incumbents lost and in which INC non-incumbents won.

In particular, with the sharp decline in the INC's fortunes from the 1996 election onwards – when its vote share in its contested seats fell to 25 percent - the proportion of INC incumbent seats in the total number of seats contested by the INC

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³ In total, we made about 150 changes.

⁴ Wining non-incumbent (56) + losing incumbent seats (80).

fell sharply: in 1999, when the INC contested 423 seats, it was the incumbent party in 132 seats and, of these, it contested 130; in 1998, when the INC contested 445 seats, it was the incumbent party in 126 seats and, of these, it contested 122. By contrast, in the 1967 election, 260 out of the 474 seats contested by the INC were incumbent seats and, in 1996, when it had a large stock of incumbent seats (227) from 1991, 224 of the 503 contested seats were incumbent seats.

Along with a fall in the number of INC incumbent seats, both in absolute terms and as a proportion of seats contested, the chances of the INC losing a seat in which it was the incumbent increased dramatically since 1996: as Table 2 shows, in three successive elections, 1996, 1998 and 1999, the INC lost, respectively, 63, 48 and 62 percent of its incumbent seats. For attrition rates of comparable magnitude one has to go back to 1989 and, before that, to 1977, when, on a wave of anti-Congress sentiment, the INC lost 65 (1989) and 75 (1977) percent of its incumbent seats. Since the mid-1990s, however, attrition rates for incumbent INC seats have been high even in the absence of any overt anti-Congress feeling.

Table 2 also shows that for four of the 10 elections in the 1967-99 period⁶, the risk ratio (the ratio of the number of seats won by incumbents to seats lost by incumbents) for the INC was less than unity (i.e. the chance of the INC wining a seat in which it was an incumbent was less than the chance of losing it): in the 1996, 1998, and 1999 elections, the chance of the INC retaining a seat it held in the previous election was, at its best in the 1998 election, just over 50 percent.

The *odds ratio*, λ , is the ratio of the *total* number of seats won, to the *total* number of seats lost, by the INC. The risk ratio (ρ) is compared to the *odds ratio*

 $^{^5}$ Wining non-incumbent (56) - losing incumbent seats (80). 6 1977, 1989, 1996, and 1999.

 (λ) . If the risk ratio is greater than the odds ratio (i.e. $\frac{\rho}{\lambda} > 1$), this meant that a party is more likely to have been the incumbent in a constituency if it won from that constituency than if it lost: $P(A|T) > P(A|\overline{T})$. Conversely, if the risk ratio is less than the odds ratio (i.e. $\frac{\rho}{\lambda} < 1$), then this meant that a party is more likely to have been the incumbent in a constituency if it lost, than if it won, from there: $P(A|T) < P(A|\overline{T})^{-7}$.

Table 2 shows that, except for 1977 and 1989, the risk ratio was always greater than the odds ratio for the INC. Even in the 1996 and 1999 elections, when it was very "risky" standing as an INC incumbent⁸, *it was not as risky as standing as an INC non-incumbent*. Consequently, in 1999, the likelihood of an INC win being an incumbent victory was almost twice as likely (risk ratio/odds ratio=1.91) as an INC loss being an incumbent defeat. Only in the 1977 and 1989 elections, both of which were characterised by a strong anti-INC sentiment, was it more risky being an INC incumbent compared to being an INC non-incumbent: in these elections: risk ratio/odds ratio<1 implied that the likelihood of an INC loss being an incumbent defeat was greater (by 25 percent in 1977 and 8 percent in 1989) than the likelihood of an INC win being an incumbent victory.

4. Inverse Risk Ratio and Inverse Odds Ratio Calculations for Indian Parliamentary (Lok Sabha) Elections

Unlike Table 2, which compared the proportion of incumbent seat wins (of the seats contested by the INC as an incumbent party) to the proportion of incumbent seat losses, Table 3 compares the proportion of incumbent seat wins (of the number of

⁷ Proof: $\rho = \frac{P(T \mid A)}{P(\overline{T} \mid A)} = \frac{P(A \mid T)}{P(A \mid \overline{T})} \frac{P(T)}{P(\overline{T})} \Rightarrow \frac{P(A \mid T)}{P(A \mid \overline{T})} = \frac{\rho}{\lambda}$

seats contested by the INC as an incumbent party) to the proportion of non-incumbent seats wins (of the number of seats contested by the INC as a non-incumbent party). Table 3 shows that, except for the elections of 1977 and 1989, the *inverse risk ratio* was always greater than 1 implying that the probability of the INC winning seats in which it was the incumbent was greater than the probability of the INC winning seats in which it was the non-incumbent: indeed, since 1991, the former probability has been more than twice as large as the latter probability.

The *inverse odds ratio*, μ , shown in Table 3 is the ratio of the total number of seats which the INC contested as a non-incumbent party to the total number of seats it contested as an incumbent party. When the sharp fall in the number of seats won by the INC since 1991 is combined with the considerably smaller fall in the number of seats contested by the INC, the INC emerges as a non-incumbent party in the majority of the seats contested by it: in consequence, the inverse odds ratio was greater than 1 for the post-1989 elections.

The greater probability of the INC winning its incumbent, compared to its non-incumbent, seats (inverse risk ratio, $\sigma > 1$) was set alongside the fact that, since 1991, incumbent seats for the INC constituted a minority of the seats contested by it (inverse odds ratio, $\mu > 1$). When the inverse risk ratio was greater than the inverse odds ratio ($\frac{\sigma}{\mu} > 1$), the chance of an INC win being an incumbent victory was greater than the chance of it being a non-incumbent victory (1991 and 1996 elections): $P(A|T) > P(\overline{A}|T)$. When the inverse risk ratio was less than the inverse odds ratio ($\frac{\sigma}{\mu} < 1$), the chance of an INC win being a non-incumbent victory was greater than

⁸ In 1999, for example, the probability of the INC losing a seat in which it was an incumbent was 62 percent.

the chance of it being an incumbent victory (1998 and 1999 elections) $P(A \mid T) < P(\overline{A} \mid T).^{9}$

5. Comparison with the BJP

Table 4 shows the electoral performance of the BJP which fought its first parliamentary elections in 1984 in which it won just 2 seats out of 223 seats contested in the 16 major states of India plus Delhi. Since then its path has been steadily upward and in every subsequent election it has added to it tally of Lok Sabha Members: indeed, it contested the 1991 Lok Sabha elections with 80 incumbent Lok Sabha Members having won 81 seats (out of 214 contested) in the previous (1989) General Election. In contrast to the INC, when the BJP contested 361 seats in 1998 it was the incumbent party in 159 seats and, of these, it contested 152; in 1999, when the BJP contested 313 seats, it was the incumbent party in 171 seats and, of these, it contested 168. Thus over half the seats contested by the BJP, compared to less than a third of the seats contested by the INC, in the 1998 and 1999 election were seats in which they were the incumbent parties.

Compared to the INC, the attrition rate in seats in which the BJP was the incumbent was much lower: as Table 5 shows, in three successive elections, 1996, 1998 and 1999, the BJP lost, respectively, 28, 35 and 36 percent of its incumbent seats. Table 5 also shows that the BJP was also much more likely to win an incumbent seat than to lose it: nearly three times as likely in 1996 (risk ratio=2.58) and almost twice as likely in the 1998 and 1999 elections (risk ratio=1.87 and 1.75, respectively). The risk ratio was always greater than the odds ratio for the BJP: in the 1991 and 1996 elections, the likelihood of an BJP win being an incumbent victory

⁹ Proof: $\sigma = \frac{P(T \mid A)}{P(T \mid \overline{A})} = \frac{P(A \mid T)}{P(\overline{A} \mid T)} \frac{P(\overline{A})}{P(A)} \Rightarrow \frac{P(A \mid T)}{P(\overline{A} \mid T)} = \frac{\rho}{\mu}$

was over three times as likely ($\frac{\rho}{\lambda}$ =3.26 and 4.69) as a BJP loss being an incumbent defeat. The fall in $\frac{\rho}{\lambda}$ for the BJP in 1999 was due to the fact that, for the first time in its brief electoral career of six General Elections, its number of wins was greater than its number of losses so that it odds ratio was greater than unity (odds raio=1.18). Consequently, the gap between the BJP's performance in its contested incumbent seats and in all its contested seats narrowed, leading to a fall in $\frac{\rho}{\lambda}$.

Table 6 shows that the probability of the BJP winning seats in which it was the incumbent was substantially greater than the probability of the BJP winning seats in which it was the non-incumbent. Because the BJP started from a very small base in 1984, it was a non-incumbent party in the majority of the seats it contested: in consequence, the inverse odds ratio, like that for the INC, was greater than 1 for the post-1989 elections. Table 6 shows that in the 1989 and 1991 elections, the chance of a BJP win being a non-incumbent victory was greater than the chance of it being an incumbent victory ($\frac{\sigma}{\mu}$ <1); for the 1996 election, the chance of a BJP win being a non-incumbent victory was about the same as the chance of it being an incumbent victory ($\frac{\sigma}{\mu}$ =1.02); and, for the 1998 and 1999 elections, the chance of a BJP win being an incumbent victory was greater than the chance of it being a non-incumbent victory was greater than the chance of it being a non-incumbent victory ($\frac{\sigma}{\mu}$ >1).

6. Close Finishes and Marginal Constituencies

It could be argued that, when all the seats contested by the INC are analysed, INC incumbents are at an advantage over non-incumbents because they have "safer" constituencies: i.e. it would take a larger voter swing against the INC to defeat it in seats in which it was the incumbent than in seats in which it was not. To examine the force of this argument we examined incumbent and non-incumbent performance in INC marginal constituencies.

Table 7 shows the electoral performance of the INC in constituencies (in the 16 major Indian states plus Delhi) in which there was a "close finish", defined here as seats in which INC either came first or second with a margin of victory or defeat which was 10 percent or less of total valid votes¹¹. An important point which emerges from Table 7 is that, since 1989, the INC won a greater proportion of seats in which there was a close finish than it did of the total number of seats it contested: for example, in 1999 it won 106 percent of the 423 seats it contested (25 percent) and 68 of the 177 seats it contested in which there was a close finish (38 percent). However, in elections in which a pro-Congress wave swept away the opposition parties (1971, 1980, and 1984), the INC won a much larger proportion of the total number of seats it contested than it did of constituencies in which there was a close finish.

An important criterion of effective electoral performance is to win marginal seats and, indeed, to convert marginal constituencies into party strongholds. Conversely, ineffective electoral performance would be to lose marginal seats and, indeed, to allow opposition parties to convert marginal constituencies into party strongholds. The relevant question is whether the effective electoral performance of

¹⁰ However, in the 1999 elections, the BJP was the incumbent party in the majority of seats in which it contested and its odds ratio was less than 1.

¹¹ That is, a 5 percent swing from the winner to the loser would have altered the result.

the INC was helped or hindered by it being the incumbent party in marginal constituencies.

We define a constituency as being an INC "marginal constituency" for a particular election if, *in the previous election*, the INC either came first or second in that constituency *with a margin of victory or defeat which was 10 percent or less of total valid votes*. Then, *for the current election*, this opens up four possibilities:

- (i) the INC wins the seat and converts it from a marginal to a non-marginal constituency with a winning margin which exceeds 10 percent of the total of valid votes. We awarded 3 points for each constituency in which the INC achieved this.
- (ii) the INC wins the seat but it remains a marginal constituency i.e. the winning margin did not exceed 10 percent of the total of valid votes. We awarded 2 points for each constituency in which the INC achieved this.
- (iii) the INC loses the seat but it remains a marginal constituency i.e. the losing margin did not exceed 10 percent of the total of valid votes. We awarded 1 point for each constituency in which the INC achieved this.
- (iv) the INC loses the seat and converts it from a marginal to a non-marginal constituency with a losing margin which exceeds 10 percent of the total of valid votes. We awarded 0 points for each constituency in which the INC achieved this.

These values (3, 2, 1, 0) may be termed the *marginal constituencies* performance (MCP) scores of a party. Table 8 shows the MCP profile of the INC, separately for constituencies in which it was the incumbent and those in which it was the challenger, in the various Lok Sabha elections held during 1967-99. In 1999, for example, the INC contested 311 marginal seats. These were seats which, in the

previous (1998) election, the INC won (84 seats) or came second (227), with a margin of 10 percent or less of the total valid votes.

In the 1999 elections, of the 84 marginal seats in which the INC was the incumbent: it won 2 percent with a margin of more than 10 percent (3 points); it won 26 percent with a margin of 10 percent or less (2 points); it lost 50 percent with a margin of 10 percent or less (1 points); and it lost 21 percent with a margin of more than 10 percent (0 points). Its average score over these 84 seats was 1.1. In contrast, of the 227 marginal seats in which the INC was the main challenger: it won 6 percent with a margin of more than 10 percent (3 points); it won 8 percent with a margin of 10 percent or less (2 points); it lost 62 percent with a margin of 10 percent or less (1 points); and it lost 23 percent with a margin of more than 10 percent (0 points). Its average score over these 227 seats was 0.97.

Table 8 also shows the mean value of the MCP scores for the INC computed across all the marginal constituencies in which it was the incumbent (i.e. constituencies it *won* with a margin of 10 percent or less in the previous election) and (parenthetically) across all the marginal constituencies in which it was the main challenger (i.e. constituencies in which, in the previous election, it came second, *losing* by a margin of 10 percent or less). The maximum possible mean score, for the INC, as incumbent or as challenger, is 3 and the minimum is 0.

Table 8 shows that the INC's performance in marginal seats was particularly good in the "Congress wave" elections of 1971, 1980, and 1984 and particularly bad in the post-Emergency elections of 1977. For the three elections of 1996, 1998, and 1999, the INC's performance in marginal seats has been much worse than in earlier elections: in 1999, for example, it lost over 70 percent of the marginal constituencies in which it was the incumbent and it lost over 80 percent of the marginal

constituencies in which it was the challenger. Through all these fluctuations in the level of the INC's performance in its marginal seats one fact stands out: its performance (as measured by the mean MCP score) in seats in which it was the incumbent was, except for 1989, always better than its performance in seats in which it was the challenger.

An interesting feature that emerges from Table 8 is the dramatic increase in the number of marginal seats contested by the INC. In the 1967 elections, 157 of the 474 seats contested by the INC (33 percent) were marginal seats (i.e. it was defending or attacking a winning margin of 10 percent or less); in the 1999 elections, 311 of the 423 seats contested by the INC (74 percent) were marginal seats and, of these, the INC was contesting 84 constituencies as the incumbent party and 227 as a non-incumbent challenger.

7. Vote Shares and Incumbency

Table 9 shows the mean votes share obtained (percentage of valid votes) by the INC in constituencies which it contested as the incumbent, and as a non-incumbent, party. Except for the two elections of 1977 and 1989, the INC's vote share in seats in which it was the incumbent was greater than its vote share in seats in which it was a non-incumbent. Similarly, as Table 10 shows, the BJP's vote share in its incumbent seats was always greater than its vote share in seats in which it was a non-incumbent.

If we compare incumbent and non-incumbent vote shares in constituencies in which the parties won then, as Tables 9 and 10 show, the INC and BJP mean vote shares in their incumbent seat wins was larger than their vote shares in their non-incumbent seat wins (except, significantly, for the 1989 and 1996 elections for the INC). If, however, we compare incumbent and non-incumbent vote shares in

constituencies in which the parties lost then, as Table 9 shows, the difference between the vote shares received by the INC in its losing incumbent and non-incumbent seats was generally positive. However, as Table 10 shows, there was a much larger positive gap between the vote shares received by the BJP in its losing incumbent and non-incumbent seats.

The issue of vote shares, and of the effectiveness of mobilising votes so as to increase these shares, can be analysed using econometric methods. Let Y be a variable such that $Y_i=1$ if a party wins from constituency i and $Y_i=0$ if the party loses from the constituency. Let I be a variable such that $I_i=1$ if a party is the incumbent party in constituency i and $I_i=0$ if it is a non-incumbent party. If V_i is the vote share (percentage received of valid votes) of the party in constituency i, then the probability of a party winning the seat can be represented (in logit form) - separately for incumbent and non-incumbent constituencies - as an increasing function of its vote share:

$$\log\left(\frac{\Pr(Y_i=1)}{\Pr(Y_i=0)}\right) = \beta_1(I_i \times V_i) + \beta_2([1-I_i] \times V_i) + u_i$$
(1)

for a logistic error tern, u_i . The coefficients β_1 and β_2 relate to constituencies in which the party is, respectively, the incumbent and a non-incumbent. From equation (1), the *probability* of winning constituency i is:

$$p_{i} = \Pr(Y_{i} = 1) = \frac{\exp\{\beta_{1}(I_{i} \times V_{i}) + \beta_{2}([1 - I_{i}] \times V_{i})\}}{1 + \exp\{\beta_{1}(I_{i} \times V_{i}) + \beta_{2}([1 - I_{i}] \times V_{i})\}}$$
(2)

and the marginal probability with respect to the vote share, V_i , is the change in p_i resulting from a percentage point change in the vote share: ie. the marginal

probability =
$$\frac{\partial p_i}{\partial V_i}$$
.

Table 10 shows the estimated marginal probabilities for the INC for seats which it contested as incumbent and non-incumbent parties. The marginal probabilities may be interpreted as the effectiveness of vote mobilisation for the party because they measure how the probability of a party winning increased with an extra point increase in its vote share. If β_1 = β_2 , there is no difference in the effectiveness of vote mobilisation between constituencies in which a party is the incumbent and those in which it is a non-incumbent; on the other hand, if β_1 > β_2 (β_1 < β_2), vote mobilisation is relatively more (less) effective in incumbent, compared to non-incumbent, constituencies.

If the probability of winning is taken to range from 0 to 100, then Table 10 shows that, in 1967, an increase of 1 point in the INC's vote share would, on average, have increased the probability of its winning a constituency in which it was the incumbent by 2.9 points and of its winning a constituency in which it was a non-incumbent by 2.7 points. Given the standard errors associated with the marginal probabilities, this difference was not significantly different from zero at the 5% level. So, for the INC in the 1967 elections (and, indeed, in all the elections between 1967-99 except for the 1984, 1989, 1991 and 1996 elections) the effectiveness of vote mobilisation did not differ between its incumbent and non-incumbent seats. For the 1984, 1989, 1991 and 1996 elections, however, resources spent by the INC in mobilising votes in incumbent seats would have been more effective (in terms of increasing the probability of winning) than a corresponding outlay of resources in seats where it was a non-incumbent.

In the elections of 1991 and 1996, when, as Table 12 shows, the BJP received a considerably smaller vote share in constituencies in which it was a non-incumbent compared to seats where it was the incumbent, resources spent by the BJP in

mobilising votes in incumbent seats would have been more effective (in terms of increasing the probability of winning) than a corresponding outlay of resources in seats where it was a non-incumbent. However, in the 1998 and 1999 elections, with a narrowing of the gap between the BJP's vote share in incumbent and non-incumbent seats, the effectiveness of vote mobilisation by the BJP did not differ significantly between the two types of constituencies.

8. Conclusions

On the face of it, there did appear to be an anti-incumbency factor working against the INC from the 1996 elections onwards: in the 1998 elections, the INC lost in nearly half, and in the 1996 and 1999 elections the INC lost in nearly two-thirds, of the constituencies in which it was the incumbent party. However, the fact that from the 1996 election onwards the INC had, at best, a 50-50 chance of being elected from seats which it held in the previous election reflected not so much anti-incumbency towards the INC but, rather, a general worsening of the party's fortunes. For example, in the 1996 elections, the INC had a 15 percent chance of winning in seats in which it was a non-incumbent compared to a 38 percent chance of winning in seats in which it was the incumbent.

One way of assessing the extent of anti-incumbency sentiment towards the INC was to set the electoral performance of the INC as an incumbent party alongside its general electoral performance (i.e. the ratio of incumbent wins to losses to total wins to total losses). The risk and odds ratio calculations shown in Table 2 revealed that, even in the 1996 and in the 1999 elections, the chances of an INC win being an incumbent victory were almost twice as great the chances of an INC loss being an incumbent defeat. So, on this measure, there was no anti-incumbency sentiment towards the INC.

Another way of assessing the extent of anti-incumbency sentiment towards the INC was to set the electoral success of the INC as an incumbent party and non-incumbent party alongside the representation of incumbents and non-incumbents in the total number of seats contested by the INC. The inverse risk ratio and inverse odds ratio calculations shown in Table 3 revealed that in the 1998 and 1999 elections, the chances of an INC win being a non-incumbent victory were greater than the chances of an INC win being an incumbent victory. So, on this measure, and for these elections, there was anti-incumbency sentiment towards the INC.

A third way of assessing the extent of incumbency bias against the INC was to examine its electoral performance in its marginal seats both as an incumbent party and as the main challenger. The marginal constituencies performance score proposed in this paper showed that the INC performed better in its marginal seats when it was the incumbent party than when it was the main challenger.

Lastly, we examined the vote shares for the INC in seats in which it was the incumbent party and in seats in which it was the challenger. This showed that winning INC incumbents had larger vote shares than winning INC non-incumbents and that losing INC incumbents had larger vote shares than losing INC non-incumbents. Furthermore, there was some evidence that an increase in INC vote share in a constituency would be more effective (in terms of increasing its probability of winning an election) when it was the incumbent in that constituency than when it was not the incumbent.

References

Alford, J. and Hibbing, J.R. (1981), "Increasing Incumbency Advantage in the House", <u>The Journal of Politics</u>, **43:** 1042-1061.

Collie, M. (1981), ""Incumbency, Electoral Safety, and Turnover in the House of Representatives, 1952-1976", The American Political Science Review, 75: 119-131.

Garand, J.C. and Gross, D.A., "Changes in the Vote Margins for Congressional Candidates: A Specification of Historical Trends", <u>The American Political Science Review</u>, **78**: 17-30.

Linden, L.L. (2003, <u>Are Candidates Really Advantaged? The Preference for Non-Incumbents in Indian Elections</u>, Massachusetts Institute of Technology (mimeo).

Yadav, Y. (2004), "The Elusive Mandate of 2004", <u>Economic and Political</u>

Weekly, **39**: 5383-5398.

Table 1 Lok Sabha Election Performance of the Indian National Congress (INC)

	Winning	Losing	Winning	Losing	Seats Won:	Electoral	Seats	Seats Gain/
	Non-	Incumbent	Incumbent	Non-	Contested	Turnover	Gain/Loss	Loss as % of
	Incumbent	Seats	Seats	Incumbent		(%)		Seats
	Seats			Seats				Change
1967	91	96	164	123	255:474	39	-5	0.2
(54)								
1971	116	45	196	41	312:398	40	71	44
(78)								
1977	72	209	69	115	141:465	60	-137	49
(30)								
1980	223	10	115	123	338:471	49	213	91
(82)								
1984	120	52	278	46	398:496	35	68	40
(80)								
1989	46	247	133	55	179:481	61	-201	-69
(37)								
1991	94	44	133	208	227:479	29	50	36
(47)		4.40			444 -04			
1996	42	140	84	237	126:503	36	-98	-54
(25)							4.0	
1998	69	59	63	254	132:445	29	10	8
(30)		0.0	=0		106 100		•	40
1999	56	80	50	237	106:423	32	-24	-18
(25)								

Incumbency refers to seats held by the INC.

Figures in parentheses are percentage of seats won by the INC of those it contested.

Electoral Turnover: percentage of seats contested by INC which changed hands between INC and other parties.

Table 2
Risk Ratio and Odds Ratio Calculations for the Indian National Congress
Lok Sabha Elections

	% of seats contested by incumbent, won	% seats contested by incumbent, lost	Risk Ratio [*]	Odds Ratio**	Risk Ratio / Odds Ratio
	by incumbent	by incumbent			
1967	57.1	42.9	1.33	1.16	1.15
(54)					
1971	81.3	18.7	4.35	3.63	1.20
(78)					
1977	24.8	75.2	0.33	0.44	0.75
(30)					
1980	82.0	8.0	11.50	2.54	4.53
(72)					
1984	84.2	15.8	5.35	4.06	1.32
(80)					
1989	35.0	65.0	0.54	0.59	0.92
(37)					
1991	75.1	24.9	3.02	0.90	3.36
(48)					
1996	37.5	62.5	0.60	0.33	1.82
(25)					
1998	51.6	48.4	1.07	0.42	2.55
(30)					
1999	38.5	61.5	0.63	0.33	1.91
(25)					

Incumbency refers to seats held by the INC.

Figures in parentheses are percentage of seats won by the INC of those it contested

^{*}Risk Ratio = Number of seats contested by incumbents which were won by incumbents/ Number of seats contested by incumbents which were lost by incumbents

^{**} Odds Ratio = Number of seats won to number of seats lost, by INC

Table 3
Inverse Risk Ratio and Inverse Odds Ratio Calculations for the Indian National Congress: Lok Sabha Elections

	% of seats	% seats	Inverse	Inverse	Inverse
	contested by	contested by	Risk	Odds	Risk Ratio
	incumbent, won	non-incumbent,	Ratio*	Ratio**	/ Inverse
	by incumbent	won by non-			Odds
		incumbent			Ratio
					Factor
1967	57.1	48.7	1.17	0.64	1.80
(61)					
1971	81.3	73.9	1.10	0.64	1.69
(61)					
1977	24.8	38.5	0.64	0.67	0.95
(58)					
1980	92.0	64.5	1.43	2.78	0.51
(27)					
1984	84.2	72.3	1.16	0.50	2.31
(66)					
1989	35.0	45.5	0.77	0.27	2.90
(79)					
1991	75.1	31.1	2.41	1.69	1.42
(37)					
1996	37.5	15.1	2.48	1.25	3.10
(45)					
1998	51.6	21.4	2.41	2.63	0.92
(27)					
1999	38.5	19.1	2.02	2.27	0.89
(31)					

Incumbency refers to seats held by the INC.

Figures in parentheses are percentage of INC incumbent seats of total INC contested seats

^{*}Inverse Risk Ratio = % of seats contested by incumbents which were won by incumbents / % of seats contested by non-incumbents which were won by non-incumbents **

^{**} Inverse Odds Ratio = Ratio of the number of non-incumbents to incumbents

Table 4
Lok Sabha Election Performance of the Bharatiya Janata Party (BJP)

	Winning	Losing	Winning	Losing	Seats Won:	Electoral	Seats	Seats Gain/
	Non-	Incumbent	Incumbent	Non-	Contested	Turnover	Gain/Loss	Loss as %
	Incumbent	Seats	Seats	Incumbent		(%)		of Seats
	Seats			Seats				Change
1989	80	1	1	132	81:214	38	80	99
(38)								
1991	73	38	42	302	115:455	24	35	32
(25)								
1996	79	31	80	259	159:449	25	48	44
(35)								
1998	72	53	99	137	171:361	35	19	15
(47)								
1999	63	61	107	83	170:314	40	2	2
(54)								

Incumbency refers to seats held by the BJP.

Figures in parentheses are percentage of seats won by the BJP of those it contested.

Electoral Turnover: percentage of seats contested by BJP which changed hands between BJP and other parties.

Table 5
Risk Ratio and Odds Ratio Calculations for Lok Sabha Candidates of the Bharatiya Janata Party (BJP)

		<i>y</i> •			
	% of seats contested by incumbent, won by incumbent	% seats contested by incumbent, lost by incumbent	Risk Ratio*	Odds Ratio**	Risk Ratio / Odds Ratio
1989	50	50	1	0.61	1.64
(38)					
1991	52.5	47.5	1.11	0.34	3.26
(25)					
1996	72.1	27.9	2.58	0.55	4.69
(35)	65.1	24.0	1.07	0.00	2.00
1998	65.1	34.9	1.87	0.90	2.08
(47) 1999	63.7	36.3	1.75	1.18	1.48
(54)	03.7	30.3	1./3	1.10	1.40
(31)					

Incumbency refers to seats held by the BJP.

Figures in parentheses are percentage of seats won by the BJP of those it contested.

Table 6
Inverse Risk Ratio and Inverse Odds Ratio Calculations for Lok Sabha
Candidates of the Bharatiya Janata Party (BJP)

		<i>u</i>		(201)	
	% of seats	% seats contested	Inverse	Inverse	Inverse
	contested by	by non-	Risk Ratio*	Odds	Risk ratio /
	incumbent, won	incumbent, won		Ratio**	Inverse
	by incumbent	by non-incumbent			Odds Ratio
1989	50.0	37.7	1.33	111.1	0.01
(1)					
1991	52.5	19.5	2.69	4.76	0.56
(18)					
1996	72.1	23.4	3.08	3.03	1.02
(25)					
1998	65.1	34.5	1.89	1.37	1.38
(42)					
1999	63.7	43.2	1.47	0.87	1.69
(54)					

Results pertain to the 16 major Indian states plus Delhi.

Incumbency refers to seats held by the BJP.

Figures in parentheses are percentage of BJP incumbent seats of total BJP contested seats

Risk Ratio = Number of seats contested by incumbents which were won by incumbents/ Number of seats contested by incumbents which were lost by incumbents

^{**} Odds Ratio = Number of seats won to number of seats lost, by BJP

^{*}Inverse Risk Ratio = % of seats contested by incumbents which were won by incumbents / % of seats contested by non-incumbents which were won by non-incumbents

Inverse Odds Ratio = Ratio of the number of non-incumbents to incumbents

Table 7 Lok Sabha Election Performance of the Indian National Congress (INC) in Close Finishes *

	Winning	Losing	Winning	Losing	Seats Won:	Electoral	Seats	Seats Gain/
	Non-	Incumbent	Incumbent	Non-	Contested	Turnover	Gain/Loss	Loss as % of
	Incumbent	Seats	Seats	Incumbent		(%)		Seats
40.4	Seats	40	70	Seats	105 104	40	2	Change
1967	45	48	60	41	105:194	48	-3	3
(54)								
1971	25	23	25	18	50:91	53	2	4
(55)								
1977	16	24	19	13	35:72	56	-8	20
(49)								
1980	67	6	11	47	78:131	56	61	84
(60)								
1984	27	25	56	31	83:139	37	2	4
(60)								
1989	25	69	57	21	82:172	55	-44	47
(48)								
1991	46	28	50	64	96:188	39	18	24
(51)								
1996	24	55	54	45	78:178	44	-31	39
(44)								
1998	45	29	39	50	84:163	45	16	22
(52)								
1999	34	50	34	59	68:177	47	-16	19
(38)								

Margin of victory or defeat was 10 percent or less of total valid votes.

Results pertain to the 16 major Indian states plus Delhi.

Incumbency refers to seats held by the INC.
Figures in parentheses are percentage of seats won by the INC of those it contested.

Electoral Turnover: percentage of seats contested by INC which changed hands between INC and other parties.

Table 8
Marginal Constituencies Performance Profiles and Scores:
Lok Sabha Elections, Indian National Congress

	Perce	ntage of Const	tituencies with	Score		
	Score=3	Score=2	Score=1	Score=0	Average Score	Number of Marginal Seats
1967	28.1	27.1	18.8	26.0	1.57	96
	(21.3)	(26.2)	(26.2)	(26.2)	(1.43)	(61)
1971	60.0	16.2	13.3	10.5	2.26	105
	(47.4)	(6.2)	(20.6)	(25.8)	(1.75)	(97)
1977	8.2	12.2	8.2	71.4	0.57	49
	(11.1)	(4.8)	(7.9)	(76.2)	(0.51)	(63)
1980	56.3	15.6	18.8	9.4	2.19	32
	(58.3)	(12.5)	(8.3)	(20.8)	(2.08)	(48)
1984	61.3	21.3	8.8	8.8	2.35	80
	(65.4)	(7.8)	(15.4)	(11.5)	(2.27)	(78)
1989	15.2	22.8	22.8	39.2	1.14	79
	(19.1)	(20.6)	(27.0)	(33.3)	(1.25)	(63)
1991	27.9	32.6	26.7	12.8	1.76	86
	(17.5)	(13.2)	(43.0)	(26.3)	(1.22)	(114)
1996	8.3	24.0	37.5	30.2	1.10	96
	(7.6)	(12.4)	(55.9)	(24.1)	(1.03)	(145)
1998	12.8	38.5	32.1	16.7	1.47	78
	(7.0)	(14.1)	(54.3)	(24.6)	(1.04)	(199)
1999	2.4	26.2	50.0	21.4	1.10	84
	(6.2)	(8.4)	(62.1)	(23.4)	(0.97)	(227)

For a given election, a constituency is a marginal constituency for the INC if, in the previous election,

the INC won or lost the seat with a margin of 10 percent or less of the total valid votes.

Figures in the first line refer to marginal constituencies in which the INC is the incumbent.

Figures in the second line (shown parenthetically) refer to marginal constituencies in which the INC is the challenger.

Score=3: the INC wins the seat with a margin which exceeds 10 percent of the total of valid votes.

Score=2: the INC wins the seat with a margin which does not exceed 10 percent of the total of valid votes.

Score=1: the INC loses the seat with a margin which does not exceed 10 percent of the total of valid votes.

Score=0: the INC loses the seat with a margin which exceeds 10 percent of the total of valid votes.

Table 9
Vote Shares of Indian National Congress (INC) Candidates in Lok Sabha
Elections

			Mean Vote	e Shares in:		
	Incumbent	Non-	Winning	Winning	Losing	Losing
	Seats	Incumbent	Incumbent	Non-	Incumbent	Non-
		Seats	Seats	Incumbent	Seats	Incumbent
				Seats		Seats
1967	40.7	39.2	45.0	43.7	34.9	34.9
(40.1)						
1971	54.6	48.2	58.9	52.9	36.2	35.0
(52.4)						
1977	37.3	40.7	56.7	56.9	30.8	30.5
(36.9)		42.0	57.0	40.7	40.6	22.6
1980	56.4	42.8	57.8	48.5	40.6	32.6
(47.5)	52 0	40.0	55.2	52.4	20.2	20.6
1984	52.8	48.9	55.3	52.4	39.2	39.6
(51.5) 1989	39.2	12.7	40.6	52.2	33.6	36.6
(39.6)	39.2	43.7	49.6	52.2	33.0	30.0
1991	47.0	33.4	51.2	47.0	34.1	27.2
(41.4)						
1996	35.3	23.7	44.5	46.7	29.8	19.8
(31.9)						
1998	41.2	25.1	48.4	47.9	33.5	19.0
(34.6)						
1999	42.2	30.6	47.3	47.0	39.0	26.7
(39.2)						

Results pertain to the 16 major Indian states plus Delhi. Incumbency refers to seats held by the INC.

Table 10 Vote Shares of the Bharatiya Janata Party (BJP) in Lok Sabha Elections

		•	Median Vo	te Shares in:		
	Incumbent Seats	Non- Incumbent Seats	Winning Incumbent Seats	Winning Non- Incumbent Seats	Losing Incumbent Seats	Losing Non- Incumbent Seats
1989	49.7	28.5	59.2	51.1	40.3	14.8
(28.2) 1991	42.5	20.9	48.1	40.9	36.3	16.0
(25.9) 1996	41.4	21.0	44.6	42.3	33.1	14.5
(28.9) 1998	43.9	31.5	46.6	44.0	38.9	25.0
(39.0) 1999 (42.1)	43.0	37.0	48.5	47.5	33.4	29.1

Results pertain to the 16 major Indian states plus Delhi. Incumbency refers to seats held by the BJP.

Table 11 Marginal Probabilities of the Indian National Congress (INC) Winning Seats in Lok Sabha Elections

	Number	Pseudo-R ²	Marginal Probability	Marginal Probability	Test of: $\beta_1 = \beta_2$
	obs		in Incumbent Seats	in Non-Incumbent	$[\chi^{2}(1)]$
				Seats	-,,
1967	474	0.175	0.029	0.027	2.24
			(8.90)	(8.25	
1971	398	0.458	0.013	0.013	.016
			(6.22)	(5.95)	
1977	465	0.868	0.002	0.002	2.02
			(1.21)	(1.20)	
1980	471	0.524	0.026	0.028	2.75
			(8.11)	(7.43)	
1984	495	0.398	0.018	0.017	4.59 [*]
			(7.75)	(7.29)	
1989	481	0.516	0.052	0.049	4.42*
			(11.06)	(11.30)	
1991	479	0.502	0.0519	0.046	13.77*
			(10.90)	(10.14)	
1996	503	0.499	0.010	0.009	12.66*
			(4.41)	(4.46)	
1998	445	0.563	0.007	0.006	1.13
			(3.06)	(3.10)	
1999	423	0.338	0.014	0.013	0.57
			(6.46)	(6.57)	

The marginal probability is the change in the probability of winning a constituency, consequent upon a 1 percentage point increase in the party's vote share in that constituency

Table 12 Marginal Probabilities of the Bharatiya Janata Party (BJP) of Winning Seats in Lok Sabha Elections

or vinning pears in Bon Sasina Electrons									
	Number	Pseudo-R ²	Marginal Probability	Marginal Probability	Test of: $\beta_1 = \beta_2$				
	obs		in Incumbent Seats	in Non-Incumbent	$[\chi^{2}(1)]$				
				Seats					
1991	455	0.528	0.010	0.011	7.13*				
			(5.02)	(4.10)					
1996	449	0.570	0.024	0.022	3.84^{*}				
			(7.31)	(7.74)					
1998	361	0.365	0.043	0.042	0.17				
			(9.72)	(8.97)					
1999	314	0.421	0.047	0.044	3.20				
			(9.13)	(8.62)					

The marginal probability is the change in the probability of winning a constituency, consequent upon a 1 percentage point increase in the party's vote share in that constituency