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ECONOMIC GROWTH, GOVERNANCE AND VOTING BEHAVIOUR: AN APPLICATION TO INDIAN ELECTIONS

Arvind Virmani

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INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL ECONOMIC RELATIONS
Core-6A, 4th Floor, India Habitat Centre, Lodi Road, New Delhi-110 003
website1: www.icrier.org, website2: www.icrier.res.in

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Foreword

After every election there is a spate of articles on whether economic reforms were or were not responsible for the fall of the incumbent government. Many theories are floated to explain the voting behaviour of the public. The recent general election was no exception. Though we are not in the business of forecasting elections we do believe that good theoretical and empirical analysis can and should be brought to bear on all issues that may affect economic reform and policy change, in the interests of the Nation. What this article attempts to do is to relate standard economic analysis of consumer utility to voting behaviour. It then goes on to authenticate (not test) the model against the results of the recent elections. At this stage the model remains a hypothesis. It would have to be subjected to much more thorough testing before we can give it the status of a theory. Nevertheless, given the publicly available data it provides an interesting explanation of recent election results in India and a useful starting point for more refined and perhaps even much better models of voter behaviour.

Arvind Virmani
Director & Chief Executive
ICRIER

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1 INTRODUCTION

Human actions, such as voting in a democratic election, are extremely complex phenomenon and depend on a host of economic and social factors (e.g. caste, feudalism, coercion/fear), as well as political alliances. Though economics plays an important role in many human decisions, it is not the sole determinant. The focus of this paper is on the potential economic factors underlying voter behaviour in a democracy. It develops a simplified model based on economic theory (welfare & conditional probabilities) and governance problems prevalent in developing countries and emerging economies. The formal model does, however, include non-economic factors. The motivation for the paper came from the general election in India in 2004. Many fascinating economic explanations were advanced for the surprising result in which the incumbent party was defeated despite a universal forecast to the contrary. Even the best forecast, one by NDTV-Indian Express, did not predict the surprising upset. Most of the analysis so far bear little relationship to publicly available data. We use available economic data and the results of the general election in 2004 as well as the State elections in the previous two years to check its consistency with publicly available data.[1]

Economic factors play a role in voting behaviour in two ways. An improvement/worsening of economic conditions can increase/decrease the probability of voting for the party perceived to be responsible for the change. Further, the independent or floating voter is more likely to be affected by economic conditions than voters committed to a particular party for social, caste, religious and cultural reasons. As we know small swings in vote share of a party can play a significant role in the number of seats won by different parties (along with alliances) and therefore this set of voter's play an important role in electoral 'swings'.

Section 2 outlines a simplified model relating growth performance and economic governance to voting behaviour. Those who are interested only in practical implications (or are uncomfortable with algebra), can see the model results in sub-section 2.2 and go

[1] That is we validate (not test) the model in the spirit of validation of General equilibrium models.

directly to section 3. Section 3 examines the growth data and links it to voting patterns in the General election of 2004 and the State elections that preceded it by less than 6 months. Though our discussion is in terms of GDP growth rates (table 1), per capita GDP growth rates reveal the same picture (table 2). These per capita GDP growth rates reflect the growth of individual income and capture the rate of growth of the average person's income. The average person is acutely aware of the growth of his/her income even if (s) he does not know the statistics of national or State GDP growth or per capita GDP growth.

Section 4 presents a qualitative analysis of the role of governance and the supply of public goods and services and shows how this is linked to the 'anti-incumbency factor.' Section 5 explores some complexities that arise in general elections when the incumbents are different at the Central and State levels and when the period of incumbency is not coterminous. Section 6 summarises the conclusions.

2 MODEL

2.1 Simplified Economics

The welfare of the average citizen can be represented by a function containing his/her consumption of private goods and services Q and Public goods and services X,[2] or

Equation 1: U = U(Q, X).

X can be viewed as the quality adjusted quantity of public goods and services supplied. Private goods purchased are limited by the real disposable income Y and the quality adjusted price p of goods. That is,

Equation 2: p Q = Y, Y = (1-T)Y', T = Tx – Tr.

Y' is earned income, Tx is the tax rate and Tr is transfers received from the government per unit of Y'. The change in welfare of the average person/ voter over a given period t (dU) can be represented as,

Equation 3: $dU = U_1\, dQ + U_2\, dX$

[2] Strictly all these are vectors.

U_1 and U_2 are the marginal utility of consumption of private and public goods respectively, dQ is the change in the value of private goods and services purchased and dX is the change in the supply of public goods and services by the government. . We can replace private consumption by income to get,

$dU = U_1 (1-m) \{(1-T) [dY – (Y/p) dp] – Ydt\}/p + U_2 dX$, or

Equation 4: $dU = A' dY + B' dX – C' dp – D'dT$,

$A'=(1-T)(1-m)U_1 /p$, $B' = U_2$, $C' = (1-T)(1-m)U_1Y/ p^2$, $D' =U_1 Y(1-m)/p$.

m is the marginal propensity to save. For simplicity, savings are assumed either to be a fixed proportion of income or absent. The first term in (4) represents the effect of income (net of taxes and transfers) received by the average voter. Thus the negative effect of increased taxes and the positive effect of increased transfers on the average voter can in principle be captured in this model. The last term represents the change in the price and quality of private goods available to the public. Thus if policy reform and increased competition reduce prices or increase the variety and quality of consumer durable goods available to the average voter, such reform would have a positive effect.

Equation 5: $dU_t = A' dY_t + B' dX_t – C' dp_t – D' dT$

We hypothesise that the average voter looks at the improvement in his/her welfare during the term of the incumbent party or coalition as represented by the Equation 5 and compares it to some benchmark U^b (H1).[3] We further hypothesise (H2) that the benchmark is the welfare improvement during the previous government's term (dU_{t-1}) adjusted for the expectations aroused by the current government's promises and election slogans.[4]

The median voter model, which assumes a two party system and 100% voting provides a theoretical under-pinning for focussing on the marginal or swing voter. In our context of a multiparty system we modify this as follows. The probability of voting for

[3] In India a full term is of 5 years. If a government falls because of loss of majority or if it calls a mid-term election can be anything between few months and 5 years. In exceptional circumstances it can exceed 5 years by about 6 months.

[4] The term of the incumbent may be different from that of the previous government (more or less).

the incumbent Pr is hypothesised (H3) to be a function F of the difference between a Utility benchmark U^b and the actual Utility, and non-economic factors Z.

Equation 6: $Pr = F(U_t - U^b, Z-Z^b) = F(U_t - U^b, Z)$

Though in general the public service benchmark Z^b may be non-negative, we assume for the empirical analysis of this paper that it is zero. On differentiating Equation 6, substituting U_{t-1} for U^b and using Equation 5, we get,

Equation 7: $dPr = F_1(U_t - U^b, Z)(dU_t - dU^b) + F_2(U_t - U^b, Z)\, dZ$

The change in voting probability is related to the difference between the increase in welfare during the rule of the incumbent compared to the increase in welfare expected i.e. the benchmark ($dU^b=dU_{t-1}$) and the effect of change in non-economic factors (dZ). Substituting U_{t-1} for U^b and using (5) we get,

Equation 8: $dPr = A(dY_t - dY_{t-1}) + B(dX_t - dX_{t-1}) - C'(dp_t - dp_{t-1}) - D(dT_t - dT_{t-1}) + E\, dZ$,

$A = F_1 A'$, $B = F_1 B'$, $C = C' F_1$, $E = F_2$, where A, B, C, E > 0.

Equation 9: $dPr/dT = -(1-m) Y U_1 F_1 < 0$

2.2 Implications

The following propositions follow [from Equation 8 and Equation 9 along with earlier equations]:

P1: T*he Probability of voting for the incumbent increases (decreases) with an acceleration (deceleration) in the rate of growth of income and an improvement (deterioration) in the supply of public goods.*

P2: A*n increase (decrease) in the taxes paid or transfers received by the average voter will reduce (increase) the probability of voting for the incumbent.*

As income taxes and transfers received by the average voter is generally a very small faction of earned income, its effect will usually be swamped by the growth factor. In cases where there is little or no change in income growth, they could however play a

role, but still be dominated by the governance effects. In the empirical analysis we approximate the growth of income of the average voter by the growth of GDP per capita. The change in supply of public services (quantity & quality) is analysed qualitatively and related to the quality of governance.

2.3 Complication: Divided Responsibilities

The model outlined in section 2.1 assumes a single level of government for which voting is taking place. It is therefore appropriate for State (Provincial) elections and for General (Central/federal) elections in which the same party or coalition is ruling at the Centre and the State. With multiple levels of government the ruling party can be different at the two levels. It therefore needs to be refined further for a Central/Federal election in which the ruling party in the State/Province is different from that at the Central/Federal level.

Before doing this we simplify the model along two dimensions. Measurement of the effect of quality changes (hedonic price indices) is beyond the scope of this paper. We therefore simplify Equation 4 by assuming that dp =0 and also ignore tax changes by setting dt=0. As the focus of the paper is on economic factors we can also simplify Equation 8 (further) by dropping the non-economic factors Z from the equation to obtain the simpler one:

Equation 10: $dPr = A\,(dY_t - dY_{t-1}) + B\,(dX_t - dX_{t-1})$

The average voter directly experiences performance at the state level. The question is how much of this (s)he attributes to the State government (S party) and how much to the central government (C party). We therefore get two Probabilities as follows:

Equation 11: $dPr(S) = \alpha A\,(dY_t - dY_{t-1}) + \beta B\,(dX_t - dX_{t-1}),\ \alpha < \beta \leq 1$

where α is the proportion of growth performance attributed to the party in power in the state and β is the proportion of the public goods performance attributed to it.

Equation 12: $dPr(C) = (1-\alpha) A\,(dY_t - dY_{t-1}) + (1-\beta) B\,(dX_t - dX_{t-1}),\ \alpha < \beta \leq 1$

In this situation we would need to go deeper into the voting percentage of each party to see whether the reduction (increase) in each party leaves the relative position unchanged or inverts it.

A simplifying hypothesis is that $\beta = 1$. In this case, Equation 11 and Equation 12 simplify to,

Equation 13: $dPr(S) = \alpha A (dY_t - dY_{t-1}) + B (dX_t - dX_{t-1})$

Equation 14: $dPr(C) = (1-\alpha) A (dY_t - dY_{t-1})$

We expect that α would generally be quite close to 1, in which case Equation 13 would determine the outcome. Only in exceptional circumstances would the incumbent S party be able to pass the blame for poor performance of the State on to the centre or the central party be able to claim the credit for good performance of the State.

Equation 11to Equation 14 assume that the tenure of central and state parties/coalitions is identical. Adjustments have also to be made if the period of incumbency is different, as for instance, if the general election is taking place after the full five-year term but the S party has been in power in the state for only 2- 3 years. First the period represented by the t in Equation 11 (Equation 13) will be different from that in Equation 12 (Equation 14). Second the α will be much lower if the C party was in power in the state earlier (i.e. before the 2-3 years that the S party has been in power). Third the benchmark may be a hybrid.

2.4 State Monopoly of Private Good

In India many sectors were exclusively reserved for investment by the Public sector. Through this process of State monopoly private goods were removed from the market. Some of these (e.g. electricity, railway) are still public monopolies and have below-market prices and supply rationing. Equation 2 and subsequent equations therefore need to be modified to reflect this. The main changes are given below.

Equation 15: $p' Q' = Y - p_1 Q_1$, $Y = (1-T)Y'$, $T = Tx - Tr$.

Where Q_1 represents the rationed (private) goods supplied by the public monopoly, and Q' represents all other private goods. p_1 is the below market price charged by the public monopolist. As a result Equation 5 and Equation 10 are modified to;

Equation 16: $dU_t = A' dY_t + H' dQ_{1t} + B' dX_t - C' dp_t - D' dT$

Equation 17: $dPr = A (dY_t - dY_{t-1}) + B (dX_t - dX_{t-1}) + H (dQ_{1t} - dQ_{1t-1})$

This means that the average person is concerned not only about his/her income and supply of public goods, but also the supply of private goods (such as electricity and railway services) for which the government is a monopoly supplier. As in the case of public goods, the quality of supply of private goods produced by public monopolies has deteriorated over time. This is partly because these organisations are bankrupted by under-pricing and partly because of increasing X-inefficiency. Some of them have also been infected by the general deterioration of governance. Thus in addition to the supply of public goods and services the supply of private goods that the government has chosen to monopolise also affects the voting behaviour of the average voter in India. Lack of electricity or availability of train seats, train robbery and rail accidents will affect voters (who use electricity or rail travel) over and above any affect they may have on income growth as long as they are monopolised by the government.

One implication is that privatisation of electricity distribution and passenger railway services will tend to free governments from direct responsibility and thus make it less likely to directly blame the incumbent governing party for any deterioration (as Equation 10 would become applicable).[5]

3 GDP GROWTH MATTERS

3.1 National Expectations & Reality

In a set of papers done at ICRIER we have analysed the linkages between policy, reforms and economic growth. This analysis has brought out two sets of facts that are relevant to the issue. First the facts about economic growth: India has indeed been 'shining' for the **last 24 years** relative to the previous 30 years. From 1980-1 to 2003-4 the Indian economy grew at an average rate of **5.8%** per year the **eighth highest** in the world. This compares with the 3.5% growth rate of the previous 30 years from 1950-1 to 1979-80, which placed us at the bottom of the global growth rankings during that period.

[5] In a transitional period, till such time as an efficient regulatory system is instituted by the government, they may continue to hold the party responsible for medium-long term trends.

Thus the benchmark that citizens use in gauging the performance of the government with respect to economic development and growth of their personal income has gradually risen over the last two decades. This is especially true of younger citizens who have become adults during the past two decades.

In any election, the voters are more concerned about the recent past than the more distant one. If one had asked any member of our substantial educated middle class about the growth rate of the economy before the election, they would have given a figure in the range of 6 to 8% with a mean around 7% (many are giving this number even now). The buzz in the media was about 8% growth rates, a take-of of the Indian economy and India growing faster than China over the decade. The facts are quite different. The Indian economy grew at a rate of 5.6% per annum during the past five years (term of incumbent), a rate, which is not only below the benchmark rate (the average for 24 years) but much less than the 6.1% per year average during 1992-3 to 2003-4. Thus the reality experienced by the average citizen was a GDP growth rate of **5.6%** during 1999-2000 to 2003-4 compared to an average growth rate of **6.7%** per year in the previous five years, 1994-5 to 1998-9 (table 1)). Per capita GDP growth correspondingly declined from 4.7% per annum to 3.8% per annum over the two periods (table 2).

Campaign slogans tended to raise the benchmark towards the 7-8% range. The educated elite may have convinced themselves of the boom in (/take-off of) the Indian economy, but the reality that the average voter knew from personal experience was a significant slow-down in the growth of the Indian economy since 1996-97. He/she could clearly see the big gap between the "verbal" and the actual growth rate and would be more inclined (i.e. other things equal) to vote against the party in power during these five years (in the Centre or the State). Further, political economy studies in the US suggest that the economic performance that matters is not that of the six months preceding the election. Thus the high growth rate of the last two quarters of 2003-4 (even taken at face value) may not have affected even Indian voters, contrary to what was assumed by neutral observers/analysts.

3.2 Reforms: Verbal & Actual

Incidentally the slower growth rate does not represent the failure of reform. The "verbal reforms" during the five years have been far in excess of the actual reforms. The main areas of actual reform have been in Telecom (price reduction and market growth), Insurance (26% FDI), Highways (institutional reform but not policy reform) and the Electricity Act 2003. The first three have been successful sector reforms, while the last is too recent to judge its effect. Though half a dozen companies were privatised (for the first time), the program came to a halt about two years before the election. In other areas new 'verbal reform' initiatives have not been followed up by 'actual reform.' The question of success or failure of the reforms therefore does not arise in their case.

3.3 State Results: MP, Rajasthan & Bihar

The election results from Rajasthan and Madhya Pradesh, including the State elections that preceded the General election, are consistent with our hypothesis. Economic growth in Madhya Pradesh declined from a simple average of 5.4% per annum during 1994-5 to 1998-99 to an estimated 60% of this level during 1999-2000 to 2003-4 (Table 1).[6] Per capita GDP growth correspondingly decelerated from 3.1% per year to 0.5% per year (table 2). Economic growth in Rajasthan had decelerated even more sharply from 9.5% per year to an estimated 45% of this rate during the tenure of the incumbent party (Congress). Per capita GDP growth therefore collapsed from 6.7% per year to 0.5% per year (table 2). The average voter in each state was therefore more likely to vote against the Congress party in these States both in the State and the General elections (held within 6 months of the former). Neither the global reputation of the MP CM as social sector innovator and leader in decentralisation, nor last year efforts of the Rajasthan CM to project good governance could counter the impact of the sharp slow-down in growth.

The conventional wisdom on Bihar's growth performance under Shri Lalu Yadav is that it has been performing very poorly. Recall the joke about Mr Yadav responding to

[6] State data is available at best till 2002-3. Data for Chattisgarh is however available only till 2001-2, so accurate estimates of growth are not possible.

a comment about turning Bihar into a Japan in three years by asserting that he could transform Japan into a Bihar in three days. So how come he confounded expectations by winning hands down in the general election? Surprise, Surprise! The average rate of growth of Bihar's GDP during the last five years (1999-2000 to 2003-4) is about 60% **higher** than it was in the previous five years (4.8% per annum). The rate of growth of per capita GDP correspondingly accelerated from 1.9% per year to about 5.4% per year (table 2). The average Bihar (registered) voter would therefore be more likely to vote for the ruling/incumbent state party in election 2004 than in the previous general election.[7] That is why contrary to all forecasts the RJD improved its performance.

3.4 Growth Complexities: Delhi

The 'simple' economic analysis fails for Delhi because the incumbent won despite a reduction in the (per capita) GDP growth rate from 9.6% (5.5%) per year during 1994-5 to 1998-9, to (an estimated) 7.8% (4.2%) per year during the past five years (table 1 (table2)). A more 'complicated' analysis has to account for the fact that the growth rate was still among the highest in India and comparable to the best in the world. The relatively better educated/informed electorate in Delhi was also convinced that the incumbent was sincerely trying to improve governance i.e. the supply of public goods & services in Delhi (including through privatisation of electricity distribution) and would do a better job than the challenger. The governance factor is analysed further below.

3.5 Benchmarks and Expectations: AP & Orissa

What about Andhra Pradesh and Orissa? The International & National media, the stock markets and industry knew that Andhra had been shining under Shri Chandra Babu Naidu while Mr Naveen Patnaik had botched the electricity privatisation! In both these States the rate of economic growth during the past five years is estimated to be approximately the same as that in the previous five years. In Orissa the past five years growth was marginally higher than the 4.3% (2.7%) GDP (per capita) growth in 1994-5 to 1998-9, while in Andhra it was marginally lower than (the same as) the earlier 5.7%

[7] Unregistered voters, those without voter ID cards or those who temporarily resided outside the state do not count in this arithmetic.

(4.3%). Yet one incumbent won and the other lost. The explanation seems to lie in the expectations aroused. The high profile Mr. Naidu raised the benchmark against which Andhra voters judged him, while the low key (non-Oriya speaking) Mr Patnaik lowered the benchmark against which Orissa voters judged him. Another difference was that Mr Naidu had served two terms as CM while Mr Patnaik had served only one. The anti-incumbency/governance factor (see below) was stronger in the former than in the latter. Other factors, such as the association of Mr Naidu with a party that in Gujarat aided violation of citizens' fundamental right to life and security (till the Supreme court intervened), may also have affected voters. As a consequence the former was found by the average/marginal voter to be under-performing while the latter was perceived to be performing at an acceptable level.

3.6 Agriculture Growth & Rural Vote

These results have little to do with rich-poor divide or the India-Bharat divide. There is no data to determine (a) whether the change in poor citizens voting behaviour was different from the change in middle class voter behaviour, (b) that any group (poor, middle-class, rural, urban) voted for or against reforms.

Available data does, however, allow us to delve a little deeper into a sector on which rural voters are relatively more (but not solely) dependent, the agricultural sector. We find that the average rate of growth of agriculture has declined even more sharply from an average of 3.6% per annum during 1994-5 to 1998-9 to an average of 2.1% per annum during 1999-2000 to 2003-4. Thus the average person/voter dependent primarily on agriculture income is likely to have concluded that his/her progress has slowed, rather than accelerated (as per the campaign slogans), during the last five years, relative to the benchmark of the previous five years. He/she would therefore be more likely, ipso facto (i.e. other things being the same) to vote against the party in power at the State level responsible for the poorer agricultural growth performance.

This is however the average national situation and rainfall variations have a strong regional dimension. States such as Karnataka and Andhra Pradesh have been particularly

affected by poor rainfall and drought conditions in the last 3-5 years.[8] In Andhra Pradesh agricultural growth during 1999-2000 to 2003-4 is estimated to be 20-25% lower than during 1994-5 to 1998-9. Thus, following the earlier logic, the average rural voter in Andhra Pradesh was more likely to vote against the ruling party. The ruling party of such states would therefore be more vulnerable (than is implied by the national average) to the attribution of poor agricultural performance to their lack of concern or competence. In Bihar's case the compound growth rate of GDP from agriculture in the last five years was similarly about 50% higher than the average of the previous five years even though the simple average growth was almost the same. This reinforces the earlier analysis of AP and Bihar.

What about the 16% growth in agriculture during 2003-4, which as per arguments advanced then would have endeared the voter to the ruling party? Well, this was preceded by a 10% decline in agriculture output during 2002-3 and all that the 16% growth did was to bring agriculture output in 2003-4 back to where it would have been at a steady 2.3% growth. Unlike the media watcher, the person dependent on agriculture would not likely have forgotten that the fall in agriculture output was earlier explained, as solely due to the weather, so the rise should symmetrically be attributed to the weather. Those directly affected knew quite well that the government had nothing to do with the short term fluctuations, but would remember how the government performed with respect to drought relief measures in 2002-3. The average agriculture dependent voter would consequently be even more likely (i.e. higher probability) to vote against a State government that did not provide adequate relief during the drought of 2002-3.

4 GOVERNANCE & PUBLIC SERVICES

The second important explanatory factor is the widening gap between individual income and the private goods & services purchased with this income (e.g. food, clothing

[8] It is difficult to make accurate estimates of growth for Karnataka and West Bengal, as the data is available till 2001-2 only.

durable goods) and the public & quasi-public goods & services provided by the government. While the former has increased/improved in line with GDP, this is not necessarily true of the latter (police protection, roads, drinking water, sanitation & sewerage, public health, primary education services, agriculture R&D and extension). The ICRIER working papers have shown that there has been a slow but steady decline (over the past 4 decades) in the quality and efficiency of government institutions. The quality and average quantity of public services provided by the government to its citizens has therefore deteriorated. Deterioration in the quality of private goods supplied by government monopolies such as electricity boards has accentuated the citizens' negative experience of government performance (as private purchase from a competitor is not allowed).

4.1 Anti-Incumbency Factor

This deterioration in governance is an important economic factor underlying the so-called 'anti-incumbency' vote observed by political analysts over the last 3&1/2 decades. It has also been argued that the deterioration in governance has 'reduced the ability of the government to do good relative to its ability to do harm to the economy/its citizens' (Virmani(2002)). Unless an incumbent government takes an active interest in improving the supply of public services, benign neglect will inevitably lead to a gradual deterioration. Thus the anti-incumbency factor is closely linked to the slow and steady deterioration of governance systems. As long as the deterioration in governance is not halted and reversed, increasing the expenditure on public and quasi-public goods will not over come the anti-incumbency factor. On the other hand introducing competition into the supply of private goods and services such as electricity can not only help improve the supply of such goods, but also distance the government to some extent from the negative political fall-out of temporary shortcomings (but not permanent ones).

4.2 Beating Anti-Incumbency

Though we do not have detailed information on the quality and quantity of public goods and services provided by States, there is wide agreement among analysts that the Shiela Dixit government in Delhi has beaten the anti-incumbency factor through better

governance and sincerity of purpose. Mr Naidu and Mr Digvijay Singh seem to have also done so in their first re-election bid 4-5 years ago but could not sustain it in the second re-election bid in 2003/2004. Mr Naveen Patnaik has also managed it in his first re-election bid. The voters are perhaps more willing to give credit for good intentions and sincere effort in the first re-election bid, than they are in the second and subsequent re-election bids (when they judge by actual improvement). The credibility of the challenger is clearly important when the voters' judgement is based not on actual performance but on potential.

Only Mr Yadav in Bihar and the Left front in W. Bengal have beaten the anti-incumbency/governance factor the second time to win a third consecutive term. Migration from Bihar to other States and the flow of remittances from these migrants seem to have played a role in accelerating the growth of the Bihar economy (particularly services). Such migrants may also incidentally have voted with their feet (because of caste/party bias in terms of jobs, personal safety etc.) and therefore reduce the anti-incumbency vote. Another factor could be a withering away of red tape and bureaucratic controls along with the State governance apparatus, an eastern version of "Wild West Capitalism"(US West in the 17th century). The negative effect of such withering is perhaps reflected in activities such as extortion, kidnapping for ransom and contract murder. The deterioration in personal safety and security can in principle be managed to ensure that it is largely directed at castes and groups who do not vote for the ruling party. If controlled and moderated, most of the rents can be extracted from such opponent groups and can be channelled to supporting groups to ensure re-election (as against self-aggrandisement). Thus any deterioration in the formers economic well being has no effect on the ruling party vote. Shekhar Gupta has written that the use of coercion and fear (in W Bengal and Bihar) also helps keep the ruling party vote bank intact during elections. This is a possible explanation for W Bengal beating the anti-incumbency factor in the second re-election bid.[9]

[9] Bihar's growth performance seems sufficient to explain the general election success.

5 COMPLEX CONDITIONS

5.1 Different Incumbents: Punjab

Punjab is another interesting/complicated case. At the time of the State elections the economic growth rate under the incumbent (Akali) government had declined to 4% per annum (1993-4 to 1997-8) compared to 4.4% per annum during 1998-9 to 2002-3 (the benchmark). This combined with governance factor, the deteriorating supply of Public services, would have turned the average voter against the incumbent. The victory of the Congress party in the State elections is therefore consistent with our model. But why did the Congress loose Punjab in General election 2004. Within a year the electorate seems to have concluded that the governance of the new incumbent was perhaps even worse than that of the previous governing party. Because there was a Congress govt in the State for only one year the importance that the voters attached to growth performance during this very short period is not clear. Non-economic factors such as the perception of personal vendetta against the former chief minister seem however to have played a role in the voting outcome.

5.2 Non-Economic Factors: Gujarat

There is widespread agreement that the BJP won the Gujarat elections in 2002-3 because of the Post-Godra riots. The results of our analysis support this conclusion. GDP growth during the five years 1998-9 to 2002-3 is estimated to have fallen to 3.1% per annum about 40% of the 7.4% per annum growth during the previous five year period 1993-4 to 1997-8. Thus the average voter would have been a lot less inclined to vote for the incumbent than before. If we add to this the governance factor, the Congress party would have been very likely to win the State election in 2002-3, as most people expected before the riots. Non-economic factors such as the post-Godra riots therefore seem to have played an important role in the re-election of the Modi government in the State elections of 2002-3. Further, it seems that these non-economic factors were diluted over 2003-4, as people realised the full import of what had happened including the negative effect on investment and growth that the failure to punish murderers, was having. Thus in the general elections the growth factor seems to have re-asserted itself.

5.3 Alliance Arithmetic: Tamil Nadu

In Tamil Nadu alliances clearly played a critical role by raising the potential vote for the alliance to an unbeatable 58%, thus virtually guaranteeing a victory. In this situation even a large 8% swing in favour of the incumbent would have no affect on the outcome, and even an unprecedented 20% swing would have had a small effect. Thus non-economic factors such as mis-use of POTA against political opponents or dismissal of State government employees were irrelevant to the seats lost by the incumbent and re-instatement of the employees and free power to farmers will not change the outcome of the next State election. Though economic performance (higher growth and better governance) will increase the vote count of the incumbent this will also not change the outcome as long as the opposition coalition is not undermined in some way. It will however raise the benchmark for the new State government and thus make a return to power more likely after a spell in the opposition.

Alliances may also have changed the seat count in a few other States.

6 CONCLUSION

Contrary to the conventional wisdom economic growth in general and agricultural growth in particular was much lower during the five year tenure (1999-2000 to 2003-4) of the NDA government, than that in the previous 5 years (1994-5 to 1998-9). Thus on the margin the average voter was more likely to vote against the ruling party in the general election of 2004. The Benchmark against which economic performance is judged has also risen during the last two decades because of consistently higher growth during the past 24 years relative to the growth rate prior to that. Rhetorical excess during the 6 months prior to the election raised the benchmark even higher. It was therefore easy for even the un-educated and information deprived to understand that there was large gap between the professed and the actual.

Added to this is the slow but steady deterioration in governance over the past four decades, that has resulted in a deterioration in the quality and quantity of public services provided by the State. This factor is, in our view, closely linked to the anti-incumbency factor observed in the voting behaviour during the past three decades and also operated against incumbent ruling parties and representatives during the 2004 election. In India where the government monopolises even the production of private goods/services like electricity and railways, the deterioration in these services is also attributable to governance failure and adds to the anti-incumbency factor. Parties that have made a sincere effort to improve governance (i.e. the quality and quantity of public goods and services supplied to citizens), have been able to beat the anti-incumbency factor once. More radical changes in governance and policy seem to be necessary for a law-abiding party to beat the anti-incumbency factor more than once in a row.

Non-economic factors such as the Gujarat riots clearly play a role in voter behaviour. They also appear to play a greater role in the relatively few cases in which a(n) party or alliance has been able to beat the anti-incumbency factor more than once in a row.

7 TABLES

Table1: Growth of GDP at 1993-4 prices

		Simple Average Growth Rate			
	Incumbent	1994-5	1999-00	1999-00	2003-4
		1998-9	2003-4	2002-3	estimate
		5 yr	5 yr		
India	lost	6.7%	5.6%	5.0%	8.1%
States					
AP	lost	5.7%	5.5%	4.6%	9.1%
Bihar	won	4.9%	7.7%	8.4%	4.6%
Delhi	won	9.6%	7.7%	7.6%	8.0%
MP	lost	5.4%	3.1%	1.4%	9.7%
Orissa	won	4.3%	4.4%	3.3%	8.8%
Rajasthan	lost	9.4%	3.2%	1.1%	11.3%
Agriculture					
India		3.6%	2.1%		10.0%

Source: (1) State data: NAS for 1993-4 to 2002-3, and author's estimate for 2003-4.

(2) All India: NAS CD ROM & web site.

Note: 2002-3 data is not available (in the floppy) for Karnataka and certain other states.

Table 2 : Per capita GDP growth rate

		Simple average gr rt			
	Incumbent	1994-5	1999-00	1999-00	2003-4
		1998-9	2003-4	2002-3	estimate
India	lost	4.7%	3.8%	3.2%	3.5%
States					
AP	lost	4.3%	4.3%	3.4%	4.1%
Bihar	won	1.9%	5.4%	5.9%	3.4%
Delhi	won	5.5%	4.2%	4.0%	3.7%
MP	lost	3.1%	0.5%	-0.6%	1.4%
Orissa	won	2.7%	3.1%	2.0%	3.4%
Rajasthan	lost	6.7%	0.5%	-1.5%	1.3%

8 REFERENCES

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