Economic Evaluations and the Incumbent Vote in India's Parliamentary Elections (2014, 2019)[1]

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Abstract

In this article, I empirically evaluate a hypothesis broadly referred to as the economic vote (or economic voting) in political science scholarship in the context of the 2014 and 2019 elections to the *Lok Sabha*. The economic vote hypothesis considers the relationship between a voter's retrospective evaluation of their personal or household economic condition and their vote choice for an incumbent. I apply a logistic regression model to individual level data from the National Election Study (NES) post-poll surveys in order to examine this relationship while controlling for the influence of relevant factors such as incumbent party attachment (or partisanship) and the effects of time, among others. I find that a voter's positive evaluation of household economic conditions increases the likelihood of a vote for the incumbent. Conversely, a voter's negative evaluation of household economic conditions lowers the likelihood of a vote for the incumbent. The effect of a negative evaluation on incumbent vote choice is stronger than that of a positive evaluation. I also find that the effect of a positive evaluation was stable over the past two elections and that of a negative evaluation increased in magnitude in 2019 relative to 2014. Finally, I find that attachment to an incumbent party or coalition has a strong positive effect on the incumbent vote, and that the likelihood a voter chooses an incumbent in 2019 is also higher. An analysis of the Bharatiya Janata Party (BJP) vote in 2019 reveals that, in addition to economic evaluations and partisanship, socio-demographic factors such as caste-community identity also play an important role. All Hindu caste groups tend to vote for the BJP relative to other religious communities and castes. The effects of other economic and demographic characteristics, such as class, rurality, and gender, are smaller or nonexistent.

Evaluaciones económicas y el voto actual en las elecciones parlamentarias de la India (2014, 2019)

Abstract

En este artículo, evalúo empíricamente una hipótesis ampliamente referida como el voto económico (o votación económica) en la investigación de ciencias políticas en el contexto de las elecciones de 2014 y 2019 a Lok Sabha. La hipótesis del voto económico considera la relación entre la evaluación retrospectiva de un votante de su condición económica personal o familiar y su elección de voto para un titular. Aplico un modelo de regresión logística a los datos de nivel individual de las encuestas posteriores a la encuesta del Estudio Nacional de Elecciones para examinar esta relación mientras controlo la influencia de factores relevantes como el apego (o partidismo) del partido titular, los efectos del tiempo, entre otros. Me parece que la evaluación positiva de un votante de las condiciones económicas del hogar aumenta la probabilidad de votar por el titular. Por el contrario, la evaluación negativa de un votante de las condiciones económicas de los hogares reduce la probabilidad de votar por el titular. Los efectos de una evaluación negativa en la elección del voto actual son más fuertes que los de una evaluación positiva. También encuentro que el efecto de una evaluación positiva es estable en las últimas dos elecciones y el de una evaluación negativa aumenta en magnitud en 2019 con respecto a 2014. Finalmente, encuentro que el apego a un partido o coalición titular tiene un fuerte efecto positivo en el voto titular, y que la probabilidad de que un votante elija un titular en 2019 también es mayor. Un análisis del voto de BJP en 2019 revela que, además de las evaluaciones económicas y el partidismo, los factores sociodemográficos como la identidad de la comunidad de castas también juegan un papel importante. Todos los grupos de castas hindúes tienden a votar por el BJP en relación con otras comunidades y castas religiosas. Los efectos de otras características económicas y demográficas como la clase, el votante rural y el género son más pequeños o inexistentes.

Palabras clave: economía, votación, votación egotrópica, elecciones parlamentarias, India

2014年与2019年的经济评价及印度议会选举中在职者得票数

摘要

本文中我以2014年和2019年印度人民院选举为背景，实证检验了一个在政治学文献中被广泛称为经济投票的假设。该经济投票假设衡量了选民个人对其自身或家庭经济情况的回顾评价与其对在职者的投票选择之间的关系。我对全国选举研究（选举后调研）得出的个人层面数据进行逻辑回归模型分析，以期检验该关系，同时将相关因素的影响考虑在内，例如现任党派归属感（或党派性）、时间产生的效应、以及其他。我发现，选民对家庭经济情况的积极评价会增加其对在职者投票的可能性。相反，选民对家庭经济情况的消极评价会降低该可能性。消极评价比积极评价更能对在职者投票选择产生影响。我还发现，积极评价产生的影响在过去两次选举中保持稳定，而相比起2014年，2019年消极评价产生的影响有所增加。最后，我发现对现任党派或联盟产生的归属感会对在职者得票数产生强烈的积极影响，并且选民在2019年选择在职者的可能性也会更高。对2019年印度人民党（BJP）得票数进行分析显示，除了经济评价与党派性，社会人口因素，例如种姓社群身份也发挥了重要作用。相比其他宗教社群和种姓，所有印度教种姓群体倾向于为BJP投票。例如阶层、农村选民、性别等其他经济特征和人口特征产生的影响较小或不存在。

关键词：经济，投票，自我财富导向型投票，议会选举，印度

The National Democratic Alliance's (NDA) electoral victory powered by a commanding performance by the Bharatiya Janata Party (BJP) in the election to the *Lok Sabha* in 2019 surprised many observers of Indian politics. Political commentaries in leading newspapers and magazines such as *The Economic Times*, *Business Line*, and *India Today*, among others, pointed to the BJP's electoral losses in key strongholds, such as Chhattisgarh, Madhya Pradesh, and Rajasthan; its parting ways with an important NDA coalition partner from Andhra Pradesh (the Telugu Desam Party); and the possibility of a broad "Third Front" regional alliance (one that ultimately never materialized) as potential impediments to the BJP replicating its 2014 perfor-

mance. More importantly, these articles claimed that public opinion (for instance, the Mood of the Nation study in 2018) had turned against the party that had come to power on the promise of *sabka vikas* (development for all) five years earlier. The predicted number of seats for the BJP ranged between 170 and 270. It appeared that voters would most likely give the BJP another chance to govern, albeit with a drastically reduced majority in 2019.

The BJP's landslide return to national power, winning 37 percent of the vote and 303 seats while confronting a slowing economy and rising unemployment following twin policy disasters—the demonetization of currency in 2016, and the adoption of Goods and Services Tax in 2017—raises a broader question about voting behavior in India. Does the economy matter to the Indian voter? Is there a relationship between a voter's perception of government economic performance and vote choice? In this article, I empirically evaluate a hypothesis broadly referred to as the economic vote (or economic voting) in political science scholarship in the context of the 2014 and 2019 elections to the *Lok Sabha*. The economic vote hypothesis (more specifically, egotropic voting) considers the relationship between a voter's retrospective evaluation of their personal or household economic condition and their vote choice for an incumbent. Does economic voting find empirical purchase in India's parliamentary elections? I apply a logistic regression model to individual level data from the National Election Study (NES) post-poll surveys (2014 and 2019) in

order to examine this relationship while controlling for the influence of relevant factors such as incumbent party attachment (or partisanship) and the effects of time, among others.

I find that a voter's pocketbook matters to the incumbent vote in an election. A voter's positive evaluation of household economic conditions is positively correlated with, i.e., increases the likelihood of, a vote for the incumbent. Conversely, a voter's negative evaluation of household economic conditions is negatively correlated with, i.e., lowers the likelihood of, a vote for the incumbent. Voters react more to a perception of a negative evaluation of economic conditions than positive ones. I also find that the effect of a positive evaluation was stable over the past two elections and that of a negative evaluation increased in magnitude in 2019 relative to 2014. Finally, I find that attachment to an incumbent party or coalition has a strong positive effect on the incumbent vote, and that the likelihood a voter chooses an incumbent in 2019 is also higher. An analysis of the BJP vote in 2019 reveals that socio-demographic factors such as caste-community identity also play an important role. All Hindu caste groups tend to vote for the BJP relative to other religious communities and castes. The effects of other economic and demographic characteristics, such as class, rurality, and gender, are smaller or nonexistent.

The structure of this article is as follows. I first survey the literature on comparative voting behavior and outline the theoretical motivation behind the economic vote and the hypothesis I

propose to test in this study. I then present the empirical strategy and the statistical results. I conclude this analysis with a discussion of the results.

Economic Voting: Theory and Hypotheses

The concern in studies of economic voting is whether economic outcomes affect vote choices in elections. Does a government's economic performance have a systematic effect on electoral outcomes? Does a voter's evaluation of household or personal economic conditions influence the decision to vote for the incumbent? Duch, Lewis-Beck, and Stegmaier; Duch and Stevenson; and Silva and Whitten provide excellent reviews of the theoretical ideas behind economic voting in addition to empirical evaluations.[2] I present a very limited survey here.

The theoretical foundations for the economic vote are provided by rational choice models, which locate economic concerns in a voter's utility function and derive conditions under which a voter will choose an incumbent as the preferred candidate.[3] In "sanctioning" or "reward-punishment" models, voters reward or punish incumbents based on their economic performance. The likelihood of an incumbent getting reelected thus increases if a voter views the government's economic performance favorably. Similarly, poor economic performance by an incumbent is punished by the voter, i.e., the incumbent has a lower chance of getting reelected.[4] The "selection" model draws heavily from rational

expectations theory and suggests that voters identify and evaluate the economic competence of political candidates using past economic performance as signals.[5] The chances of a vote in favor of the incumbent increases if voters perceive incumbents as competent.

While formal models of economic voting provide a theoretical basis for why the economy matters to a voter, empirical evidence for economic voting has come through the statistical analysis of both aggregate and individual level data. Some have sought to identify the effects of aggregate indicators of the "real" economy, such as growth, inflation, and unemployment on voting (typically measured as party or candidate vote shares) in elections to different political offices.[6] Others have focused on individual-level data collected through large-scale surveys such as the American, British, and Canadian National Election Studies, among others, and seek to relate a voter's subjective perception of economic wellbeing to the likelihood of voting for an incumbent.[7]

Cross-national empirical research suggests that the strength and magnitude of economic voting varies from country to country. For instance, selection of political leaders in France and the UK tend to be strongly influenced by economic conditions. However the observed relationship in Denmark, Netherlands, Norway, and Sweden is mixed, and very weak in Italy. The magnitude of the effects of the economy varies not only across nations, but time as well, for example from 13 percent[8] to 38 percent.[9] Duch and Ste-

venson note that "the systematic empirical work on economic voting ... reveals not a universal law of economic voting but, rather, a conditional one. Economic voting *is* very likely widespread and often important; but, its magnitude and nature across elections is almost certainly variable."[10] Similarly, Lewis-Beck, Nadeau, and Elias observe that while "these investigations do not agree on everything they do generally agree on one thing: the economy is a significant determinant of vote choice."[11]

While much of the evidence relating to economic voting comes primarily from analyzing election outcomes, aggregate economic conditions, and survey-based voter evaluations during elections in the US and European democracies, Suri finds evidence for egotropic voting in India. That is, positive retrospective evaluations of household economic conditions did have a significant influence on votes for the incumbent alliance in the election to the *Lok Sabha* in 2009.[12] He suggests that since the Indian state is an important provider of economic goods and opportunities, voters can therefore be expected to reward or punish incumbents based on their economic performance. Specifically, "in India's prevailing situation of scarcity and deprivation of material goods, where voter's dependency on the government for providing basic amenities and attending to personal economic grievances is high… It is also possible that Indian voters, despite postulates about their collectivist attitude, are driven by evaluations of their personal economic condition."[13] It is likely that the economy might matter more to

individuals who live in relatively poor societies precisely because of the extensive role a government assumes in such societies.

The NES 2019 asks an open-ended question, "What was the most important issue for you while voting in this election?" Tellingly, approximately 36 percent identify an economic or related developmental issue as the most important. Responses include unemployment, price rise, wages, poverty, food, rural debt, agrarian crises, economic growth, and development, among others. About 9 percent indicate governance, government performance in infrastructure and service delivery, and state corruption as the most important issues. Identity-related issues (including religion, caste, and policy related to identities) account for a meager 2 percent. Similarly, 2 percent identify national security, domestic terrorism, and foreign policy issues; party, leadership, and candidates matter to about 7 percent. Even among BJP partisans, about 30 percent point to economic issues as the most important issues. It is clear that voters attribute significant, if not all, weight to economic and livelihood concerns while making vote choices.

Political scientists also claim that the economy is a valence issue, i.e., an issue that generates broad agreement among voters.[14] All voters prefer economic prosperity to poverty, expanding economic opportunities over economic stagnation, and improved standards of living over unemployment. It is therefore reasonable to expect Indian voters to punish poor economic performance

and reward prosperity-enhancing performance. That is, voters who perceive an improvement in their economic conditions are more likely to vote for the incumbent relative to those who perceive deterioration in their household economic conditions.

The version of the economic vote hypothesis I test here is as follows:

Voters who evaluate their household economic conditions as having improved over the past five years are more likely to vote for the incumbent party or coalition. Conversely, voters who evaluate their household economic conditions as having deteriorated over the past five years are less likely to vote for the incumbent party or coalition.

As the hypothesis states, I expect a positive correlation between a positive perception of household economic conditions compared to five years ago and the incumbent vote choice and a negative correlation between a negative retrospective evaluation and the likelihood of a voter choosing the incumbent.

Empirical Strategy: Model, Data, and Variables

I begin the empirical section by presenting the statistical model employed to estimate the relationship between a respondent's retrospective evaluation of household economic conditions and the likelihood of voting for the incumbent, controlling for the effects of partisanship, time, and other socioeconomic and demographic characteristics. I then describe the data

source and the coding rules used to create the dependent and independent variables used in this analysis.

In order to estimate a multivariate statistical association between incumbent vote and the set of independent variables of interest, I specify a logistic regression model that takes the form:

$$\ln[\Pr(V_i=1)/1\text{-}\Pr(V_i=1)] = \beta_0 + \beta_1 X_i + + \beta_2 E_i + \beta_3 \text{Year}_i$$

Where $\Pr(V_i=1)$ is the probability that the respondent votes for the incumbent, and the term $\ln[\Pr(V_i=1)/(1\text{-}\Pr(V_i=1))]$ is the natural log of the odds.[15] X_i represents the set of political, social, economic, and demographic characteristics of the respondent, including incumbent party attachment, caste-community identity, economic class, gender, and location. Finally, E_i measures a respondent's evaluation of household economic conditions, and *Year* marks time periods.

The data used in this study comes from the NES 2014 and 2019 post-poll surveys that contain 22295 and 23134 observations, respectively. The surveys, conducted by Lokniti Programme for Comparative Democracy of the Centre for Study of Developing Societies (CSDS), are administered to a representative sample of voters across India in the days immediately following voting. The survey collects information on vote choice, political attitudes, preferences across political and policy alternatives, opinions on current political events, and patterns of political and social participation, among other variables of in-

terest to students of Indian politics. The NES data has been used extensively to study voting decisions and other substantive political questions in India.[16]

Since the data in this study are measured using nominal or ordinal scales, I convert all variables into a set of dichotomous dummy variables that take on values of either one or zero. The dependent variable in this study—the incumbent vote—is taken from a question in the survey that asks "who did you vote for?" and measures whether the respondent voted for an incumbent or not (1 = vote for the incumbent, 0 = otherwise). In this analysis, all constituent members of the Congress-led United Progressive Alliance (UPA) in 2014 and the BJP-led NDA in 2019 are considered incumbents. I drop all responses that are either undisclosed and those who did not vote. The total number of observations in the sample used in this study is 36967. Note that in 2014, the UPA contested 540 seats and the NDA contested 543 seats in 2019.

The independent variable of interest is a voter's retrospective evaluation of household economic conditions over the five-year period of incumbent rule. This variable is constructed using a question asked in both surveys: "As compared to five years ago, how is the economic condition of your household today—would you say it has become much better, better, remained same, worse or much worse?" In addition to the above five response categories, respondents also had the option of choosing "no opinion." I created three variables that represent those who said that their household economic con-

ditions had (a) improved, i.e., respondents choosing "much better" or "better" (*Econ.Impr*), (b) remained the same (*Econ.Same*), and (c) deteriorated, i.e., respondents choosing "worse" or "much worse" (*Econ.Wors*). In the models I estimate, the status quo condition *Econ. Same* serves as the reference category.

Incumbent party attachment (or partisanship) is measured using the questions, "Is there any political party you particularly feel close to?" and "(If yes) Which party?" Respondents who identify UPA coalition members (in 2014) and NDA coalition members (in 2019) as the party they feel closest to is coded as 1 and others are coded as 0.

The other independent variables function primarily as control variables and include respondent characteristics, such as caste-community identity, economic class, gender, and rural, that are likely to have an impact on vote choice. For the caste-community identity variable, I combine caste (Dalit, Adivasi, Other Backward Classes, and upper caste) and religion (Hindu, Muslim, Christian, and Other, including Jain, Buddhist, and Sikh) categories resulting in Hindu Dalit, Hindu Adivasi, Hindu OBC, Hindu upper caste, Muslim minorities (Dalits and Adivasi), Muslim OBC, Muslim others (i.e., Muslim respondents who do not identify as Dalit, Adivasi, or OBC), Christian minorities (Dalits and Adivasi), Christian others, Other minorities (for instance, Sikhs who identify as Dalit), and Others who do not identify as Dalit, Adivasi, or OBC (for instance, Jain upper caste). All female voters are coded as 1 and others as 0 for the gender variable. Similarly,

rural voters are given a value of 1, while non-rural voters are given a value of 0. Economic class is captured with four variables: poor, lower, middle, and rich (created from an index using household assets, agricultural land holdings, and type of housing [*pucca*, mixed, or *kuccha*]).

I pooled the data from the two election years, which results in an independent pooled cross-section design consisting of individuals independently sampled at different points in time. There are several advantages to pooling data.[17] In addition to an increase in sample size, this empirical strategy allows me to also examine the effects of positive and negative evaluations on the incumbent vote over time.

I present the results of the statistical estimation as figures.[18] In these figures, the dots represent the coefficients or point estimates, and the horizontal line passing through the dots indicate 95 percent confidence intervals computed using robust standard errors. A coefficient is considered statistically different from zero, i.e. statistically significant, if its confidence interval does not intersect the vertical dashed line (representing 0).

Descriptive statistics for all variables used in this study is presented in Table A1. Results of the statistical estimation are presented in Tables A2-A3.

Statistical Results

In this section, I present the results of three models. Models 1 and 2 pool the data from both years and estimate the marginal effects of positive and negative evaluations of household economic conditions. In these two models, in addition to the key variable of interest—economic evaluations—I include two other control variables, incumbent party attachment and a time dummy variable (*Year*) that takes a value of 1 if the election year is 2019 and 0 if 2014. In Model 2, I also include a set of interaction terms. I do not include standard socio-demographic controls in these models. Socioeconomic and other demographic factors clearly influence party or candidate choice, but there is no reason to expect them to influence the incumbent vote. That is, there is no reason to expect that Hindu Dalits systematically choose incumbents while Christian Adivasis similarly systematically vote against the incumbent. Clearly context-specific factors matter when explaining the outcomes of specific elections (say, the vote share received by a particular party or coalition in a particular election), but are much less useful for explaining variation in an incumbency vote, where the identity of the incumbent party is likely to change from one election to the next. Model 3 estimates the same relationship focusing only on the BJP vote in 2019. Here I include additional control variables such as caste-community identity, economic class, gender, and rural that are shown to influence the BJP vote. I interpret these results in the specific context of the 2019 elections to the *Lok Sabha*.

Figure 1A presents the results of the first model (Model 1) and Figure 1B presents the marginal effects of the
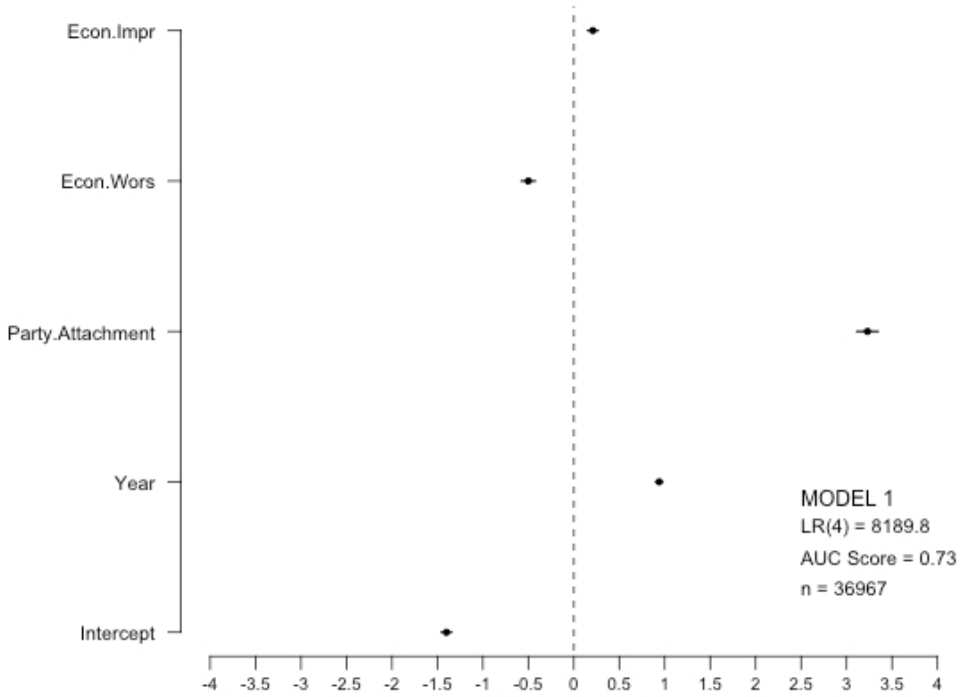
Figure 1A: Logistic Regression [Model 1: Dependent Variable-Incumbent Vote]
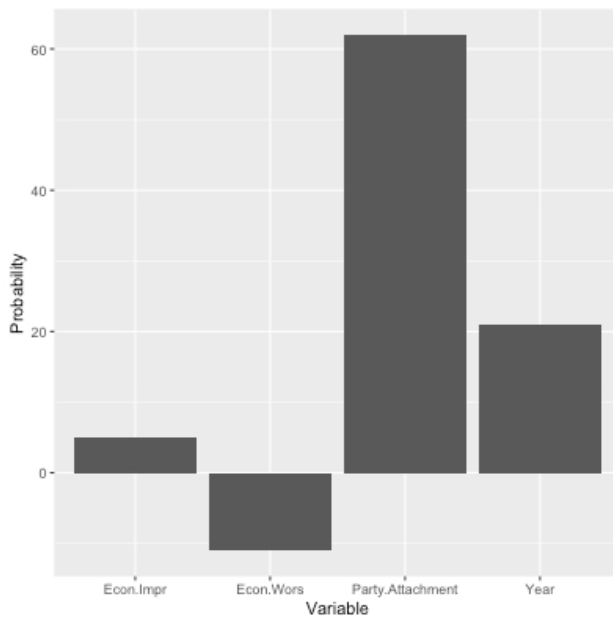

Figure 1B: Marginal Effects (Model 1)

independent variables on the probability of an incumbent vote. Note that the negative values of marginal effects (in Figure 1B) should be interpreted as representing a negative effect on the probability of an incumbent vote.

I find that economic evaluations have statistically significant effects in expected directions on the incumbent vote, controlling for incumbent party attachment and the passage of time. Voters who evaluate their household economic conditions as having improved over the past five years are more likely to vote for the incumbent relative to those who see conditions as unchanged. Note that the coefficient for *Econ.Impr* falls to the right of the vertical zero line and its confidence interval does not intersect the vertical line. Conversely, voters who evaluate their household economic conditions as having declined over the past five years are less likely to vote for the incumbent relative to those who see conditions as unchanged. In this case, the coefficient for *Econ.Wors* falls to the left of the vertical zero line and its confidence interval does not include zero. I also find that attachment to the incumbent party has a statistically significant and positive effect on the vote for an incumbent. This result too is expected and confirms the effect of partisanship on vote choice. Finally, the results also show that the incumbent vote increased in 2019 relative to 2014. That is, voters were more likely to choose the incumbent in 2019 compared to 2014. The positive effect of time on the incumbent vote might be capturing, for instance, an (unobserved) improve-

ment in the ability of a government to leverage incumbency advantage in mobilizing votes (or a similar incumbency related effect on vote choice). It may also suggest an increase in the ability of the BJP to mobilize votes in 2019 (a BJP specific effect). And without additional time periods, we cannot say more about this technical change.

The substantive (or marginal) effects of positive and negative economic evaluations are presented in Figure 1B as probabilities. A positive evaluation increases the likelihood of a vote for the incumbent by 5 percent and a negative evaluation lowers this likelihood by 11 percent. A negative evaluation results in a larger decline in the likelihood of voting for an incumbent compared to a positive one. Attachment to the incumbent party or coalition has the largest effect on the incumbent vote. A voter expressing attachment to a party is 62 percent more likely to choose the incumbent party. Similarly, a voter is 21 percent more likely to choose the incumbent in 2019 relative to 2014.

Is the effect of the economic vote stable or is there a difference across the two time periods? I test for effects of economic evaluations conditional on time by including two multiplicative interaction terms to Model 1. These terms are generated by multiplying the economic evaluations variables with the time dummy variable, i.e., *Econ. Impr*Year* and *Econ.Wors*Year*. The results from Model 2 are presented in Figure 2A and associated marginal effects are presented in Figure 2B.
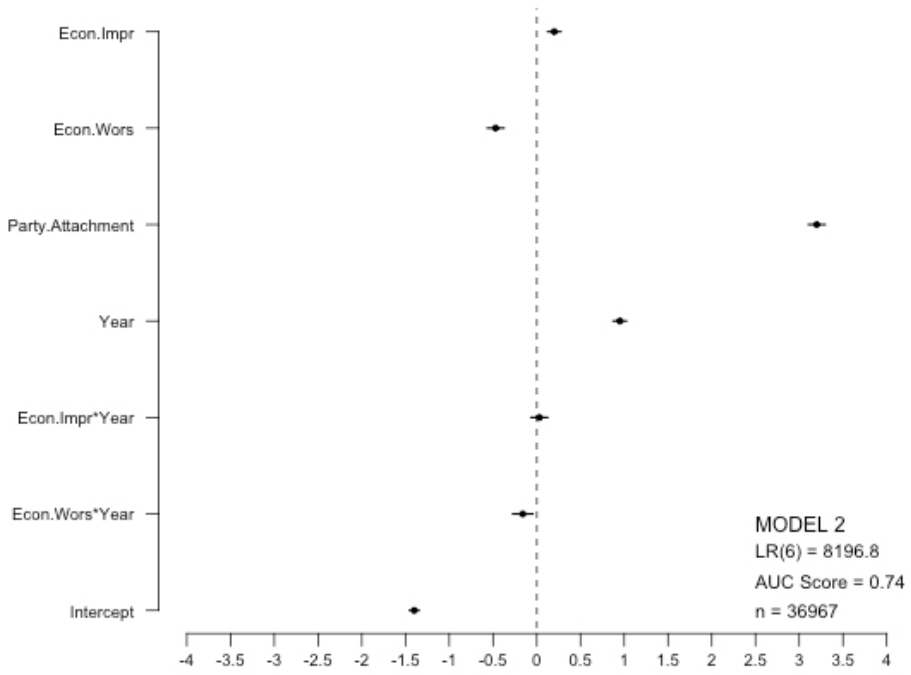
Figure 2A: Logistic Regression with Interaction
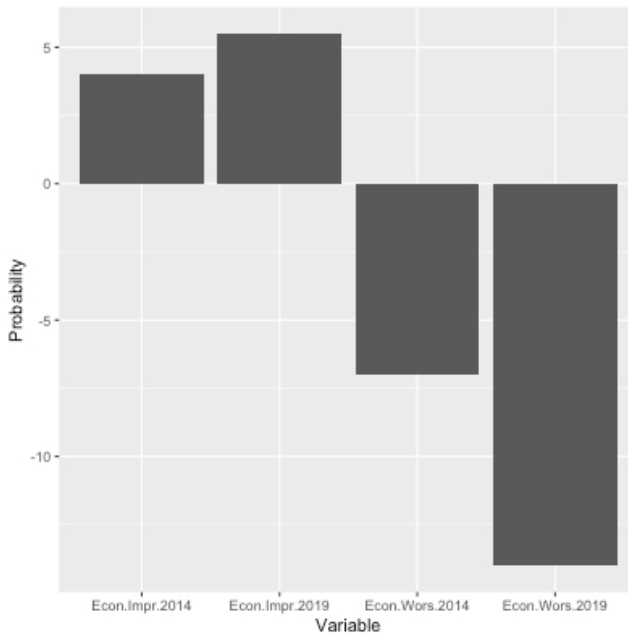[Model 2: Dependent Variable-Incumbent Vote

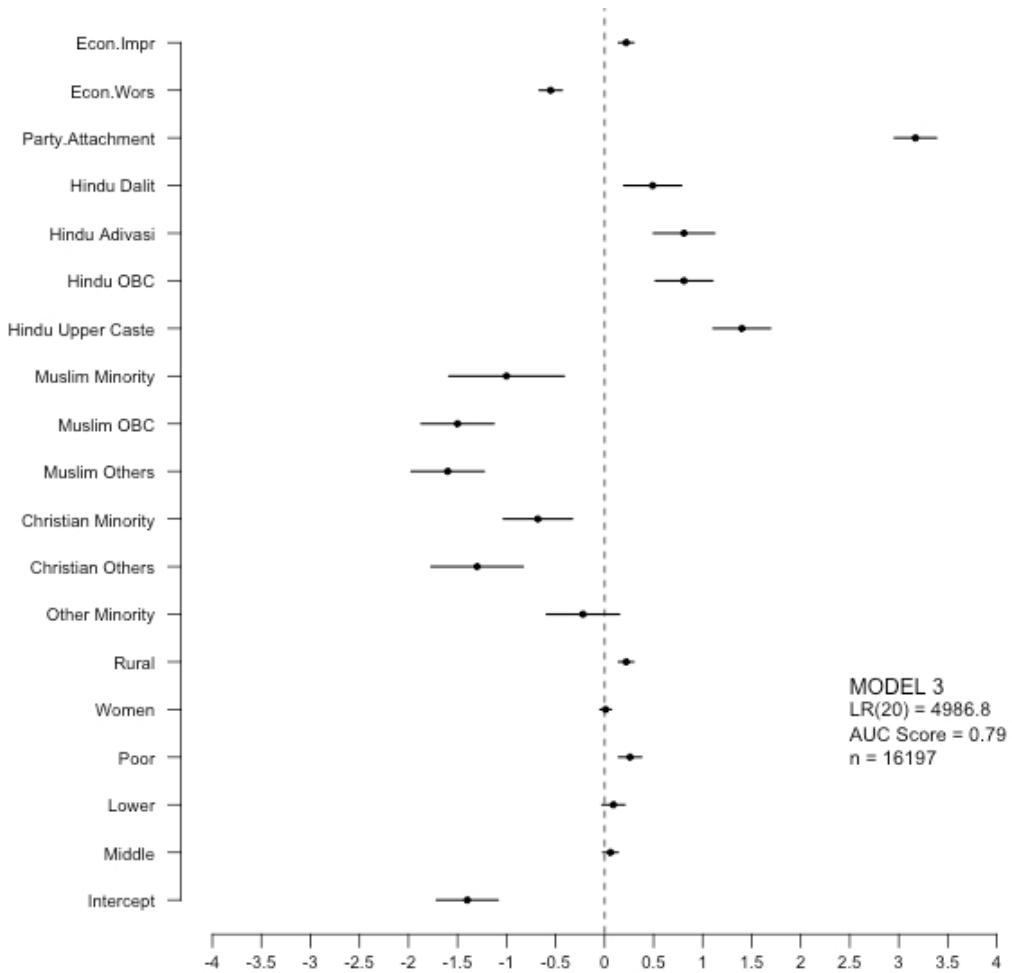***Figure 2B:*** Marginal Effects (Model 2)

Figure 3: Logistic Regression [Model 3: Dependent Variable – Vote for BJP in 2019]

Figure 2A indicates that the coefficients for all variables retain expected signs and significance. Two key results from Model 2 are (a) the marginal effect of a positive evaluation of household economic conditions in 2019 is not statistically different from that in 2014 and (b) the marginal effect of a negative evaluation is statistically greater in 2019 relative to 2014. For instance, the probability that a positive evaluation increases the likelihood of an incumbent vote is about 4 percent in 2014 and increased to about 6 percent in 2019 (as seen in Figure 2B). The difference between the two time periods is not statistically different. The effect of a negative evaluation on the likelihood of an incumbent doubled from 7 percent in 2014 to about 14 percent in 2019. A negative evaluation had a significantly larger effect in 2019. The effect of partisanship is strong, although it drops marginally to around 60 percent, as does the effect of *Year* to 17 percent.[19]

The final model (Model 3) focuses exclusively on the BJP vote in 2019.

The dependent variable is whether the respondent voted for the BJP (coded as 1) or not (coded as 0). Note that I dropped all responses that are undisclosed, a vote for an NDA coalition partner (other than the BJP), or those who did not vote. In this model, I retained *Econ.Impr* and *Econ.Wors* and BJP party attachment. I also included other variables known to have an impact on the BJP vote. These include caste-community identity, gender, rural, and economic class. The results are presented in Figure 3.

I find that as with the previous model's positive and negative evaluations, *Econ.Impr* and *Econ.Wors* have expected signs and are statistically significant. Positive evaluations of the economy increase the likelihood of a BJP vote by approximately 6 percent and a negative evaluation lowers the likelihood of a BJP vote by about 14 percent (relative to those who do not perceive a change in their household economic conditions). Consistent with prior results,[20] party attachment exerts a strong and statistically significant effect on the BJP vote. That is, voters expressing an attachment toward the BJP are approximately 60 percent more likely to vote for the BJP than those who not express an attachment to the BJP. Similarly, I also find that the coefficients for all Hindu caste groups are positive (i.e., fall to the right of the vertical dashed line) and statistically significant. All Hindu caste groups—Dalits, Adivasi, OBC, and upper caste—are more likely to vote for the BJP compared to Other religious communities that identify as upper castes (the reference category).

All caste-community groups identified as both religious and caste minorities (for instance, Muslim Dalit, Sikh Dalit, Christian Adivasi, and so on) are less likely to vote for the BJP compared to other upper castes, since the coefficients are negative and statistically significant. Hindu upper castes are 32 percent more likely to vote for the BJP compared to other upper castes. Similarly, Hindu Adivasi and Hindu OBC are approximately 20 percent, and Hindu Dalits about 12 percent more likely to vote for the BJP compared to other upper castes. Among Muslims, caste minorities are 21 percent less likely to cast a vote for the BJP. Similarly, Muslim OBCs and Muslims identifying as belonging to other castes are about 30 percent less likely to do so. The pattern among Christian caste groups is the same as among Muslims. Christian minorities and others are approximately 15 and 25 percent less likely to vote for the BJP. Rural voters are 5 percent more likely to vote for the BJP compared to urban voters. Once again, consistent with prior studies,[21] I find that the poor are about 7 percent more likely to vote for the BJP as compared to those identified as the upper class. The lower and middle classes are not statistically different from the rich in this regard. I don't find any statistical difference in the likelihood of a BJP vote across men and women.[22]

Do positive or negative household economic evaluations influence vote choice, or does vote choice influence how a voter perceives household economic conditions? A growing body of work has addressed the endogenous

relationship between vote choice and economic evaluations.[23] A longstanding view in studies of US voting behavior is that partisanship becomes the lens (a "perceptual screen") through which a voter views policy decisions and outcomes, evaluates candidates, forms preferences over issues, and makes a vote choice.[24] Attachment to a party thus influences the type of political information voters encounter, the way they interpret this information, and whether they consider this information credible or not. This implies that pre-election vote intention for an incumbent likely drives a voter to evaluate household economic conditions favorably (and *vice versa*) rather than the other way around. This also implies that a number of factors thought to influence the BJP vote in 2019, such as a respondent's view on demonetization, attitude toward national security threats and India's retaliatory action against insurgent groups in Pakistan, a preference for Modi as the next Prime Minister, are in fact determined by partisanship. That is, BJP partisans are more likely to say that demonetization was necessary despite the economic hardship it imposes (0.26), justify military action against Pakistan (0.10), and express a preference for Modi as the next prime minister (0.33). Correlations (in parentheses) indicate that the above attitudinal variables are positively and significantly associated with party attachment to the BJP.

Empirical results are, however, mixed. Some studies find that vote choice and economic evaluations are indeed simultaneously determined,[25] while others consistently find no par-

tisan bias in economic evaluations.[26] In this study, however, I do not address the issue of endogenously determined economic evaluations. The data required to assess causal claims are generated from experimental (or *as-if* experimental) designs and the observational nature of post-poll surveys does not allow me to make stronger (i.e., causal) claims about this relationship. I only point to a statistical correlation between economic evaluations and incumbent vote choice. That being said, these sorts of questions are important and must be studied in greater detail. Adopting design-based approaches and embedding innovations such as survey and list experiments in post-poll and other public opinion surveys will allow us to not only disentangle endogenous relationships and systematically address issues of confounding and selection bias, but also contribute to a broader understanding of complex processes, such as public opinion formation, partisanship, and voting behavior in India.[27]

Discussion and Conclusion

In this article, I empirically evaluate the effects of a voter's retrospective evaluation of household economic conditions on the likelihood of a vote for the incumbent in elections to the *Lok Sabha* in 2014 and 2019. Using the NES post-poll data, I find evidence for an economic vote. A voter's positive evaluation of household economic conditions is positively correlated with the likelihood of a vote for the incumbent. Conversely, a voter's negative evaluation of household economic conditions

is negatively correlated with the likelihood of a vote for the incumbent. The magnitude of the effects of positive and negative evaluations is also different—that is, voters react more to a negative evaluation relative to a positive one. I also find that while the effects of a positive evaluation have not changed in magnitude over time, that of a negative effect almost doubled from 2014 to 2019. What explains this doubling? One possible reason is that the sudden drop in liquidity and consumption (and other sorts of economic dislocation) following demonetization in 2016 produces a stronger effect of negative economic evaluations. A point worth noting is that while UPA was accused by opposition parties for widespread corruption and inefficiency in governance, there were no sudden disruptive shocks to the economy and livelihoods. Finally, I find that attachment to an incumbent party or coalition has a consistently strong positive effect on the incumbent (and the BJP) vote. Party attachment is the strongest predictor of vote choice in all models. While economic evaluations are significant, the substantive effect of partisanship dwarfs that of all other variables. Finally, the winning caste-community coalition assembled by the BJP in 2019, noted by earlier studies, is also clearly evident. The effects of other economic and demographic variables, such as rural location of a voter, economic class, and gender, are smaller or nonexistent.

The results suggest that voters pay attention to their household economic conditions in addition to being influenced by party attachments while making vote choices. While partisanship exerts a strong hold on how voters perceive government policy and performance, can a widespread perception of a decline in household economic conditions (say, due to a sustained decline in "real" economic output) outweigh its effects? Rahul Verma suggests that the BJP's loss in Jharkhand in 2019 is a "clear signal to the BJP that it needs to address economic concerns, which are now hurting average voters. The BJP may very well push its ideological projects (such as removal of Article 370, the construction of Ram temple in Ayodhya, the National Register for Citizens, and the Citizenship Amendment Act) but it won't help them electorally beyond a point, until the government does something urgently to fix the stagnating economy."[28] If anti-incumbent sentiments driven by perceptions of economic non-performance and declining standards of living can shunt the BJP out of power in a state, there is no reason to think that the BJP will not suffer a similar fate nationally come 2024, Modi's magic notwithstanding.

Appendix: Tables A1-A3

Table A1: Descriptive Statistics

Variable	Mean (Standard Deviation)
Incumbent Vote	0.36 (0.47)
ECON.IMPR	0.46 (0.49)
ECON.WORS	0.18 (0.38)
Party.Attachment (Incumbent)	0.11 (0.31)
Year (2019=1)	0.48 (0.49)
Women	0.47 (0.49)
Rural	0.73 (0.44)
Poor	0.29 (0.46)
Lower	0.33 (0.47)
Middle	0.23 (0.42)
Hindu.Dalit	0.14 (0.35)
Hindu.Adivasi	0.08 (0.28)
Hindu.OBC	0.32 (0.47)
Hindu.Upper	0.07 (0.24)
Muslim.Minority	0.01 (0.09)
Muslim_OBC	0.07 (0.24)
Muslim.Other	0.07 (0.24)
Christian.Minority	0.05 (0.21)
Christian.Other	0.21 (0.15)
Other.Minority	0.02 (0.15)

Table A2: Logistic Regression (Models 1-3)

Dependent Variable: Incumbent Vote (Vote)	Figure 1A	Figure 2A	Figure 3
Variable	Model 1 Pooled (2014 & 2019) (logged odds)	Model 2 Pooled-Interactive (logged odds)	Model 3 2019 Only (logged odds)
ECON.IMPR	0.208*** (0.026)	0.196*** (0.040)	0.228*** (0.040)
ECON.WORS	-0.499*** (0.037)	-0.416*** (0.054)	-0.550*** (0.059)
Party.Attachment	3.23*** (0.058)	3.23*** (0.058)	3.17*** (0.105)
Year (2019=1)	0.941*** (0.024)	0.953*** (0.040)	-
ECON.IMPR Year*	-	0.026 (0.053)	-
ECON.WORS Year*	-	-0.166** (0.075)	-
Women	-	-	0.012 (0.037)
Rural	-	-	0.222*** (0.043)
Poor	-	-	0.269*** (0.063)
Lower	-	-	0.095 (0.060)
Middle	-	-	0.059 (0.063)
Hindu.Dalit	-	-	0.494*** (0.155)
Hindu.Adivasi	-	-	0.810*** (0.160)
Hindu.OBC	-	-	0.810*** (0.151)
Hindu.Upper	-	-	1.35*** (0.153)

Muslim.Minority	-	-	-0.999*** (0.303)
Muslim_OBC	-	-	-1.48*** (0.187)
Muslim.Other	-	-	-1.60*** (0.193)
Christian.Minority	-	-	-0.686*** (0.182)
Christian.Other	-	-	-1.30*** (0.244)
Other.Minority	-	-	-0.215 (0.194)
Constant	-1.39*** (0.025)	-1.39*** (0.032)	-1.41*** (0.157)
Observations	36967	36967	16197
-Log Likelihood	20032.76	20029.25	8566.42
LR	8189.83	8196.8	4986.8
Correctly Classified (%)	73.0	73.0	71.0
Area under ROC curve	0.73	0.74	0.79

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A3: Marginal Effects on Pr(V_i=1), Standard Errors, and 95% Confidence Intervals

Variable	Figure 1B Model 1	Figure 2B Model 2
ECON.IMPR	0.048 (0.006) [0.036, 0.060]	0.039 (0.008) [0.023, 0.055]
ECON.WORS	-0.108 (0.007) [-0.123, -0.093]	-0.072 (0.009) [-0.089, -0.054]
ECON.IMPR.Year	-	0.055 (0.008) [0.038, 0.073]
ECON.WORS.Year	-	-0.139 (0.012) [-0.163, -.115]
Party.Attachment	0.627 (0.005) [0.617, 0.638]	0.605 (0.005) [0.594, 0.615]
Year	0.214 (0.005) [0.204, 0.225]	0.176 (0.006) [0.167, 0.184]

Notes

1   I thank Sanjay Kumar (Lokniti, CSDS) for generously sharing NES data. I also thank two anonymous reviewers for their insightful comments. All errors remain my own.

2   Raymond Duch, "Comparative Studies of the Economy and the Vote," in *The Oxford Handbook of Comparative Politics*, ed. Charles Boix and Susan Stokes (New York: Oxford University Press, 2007); Michael Lewis-Beck and Mary Stegmaier, "Economic Models of the Vote," in *The Oxford Handbook of Political Behavior*, ed. Russell Dalton and Hans-Dieter Klingemann (New York: Oxford University Press, 2007); Raymond Duch and Randolph Stevenson, *The Economic Vote: How Political and Economic Institutions Condition Election Results* (Cambridge, UK: Cambridge University Press, 2008); Thiago Silva and Guy D. Whitten, "Clarity of Responsibility and Vote Choice," *The SAGE Handbook of Electoral Behaviour* 1 (2017): 80–91.

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10   Duch and Stevenson, 1.

11   Lewis-Beck, Nadeau, and Elias, "Economics, Party, and the Vote," 84

12   K.C. Suri, "The Economy and Voting in the 15th Lok Sabha Elections," *Economic and Political Weekly* 44 (2009): 64–70.

13   Ibid., 69.

14   Donald Stokes, "Spatial Models of Party Competition," *American Political Science Review* 57 (1963): 368-77; Ruth Dassoneville and Michael Lewis-Beck, "Economic Policy Voting and Incumbency: Unemployment in Western Europe," Political Science Research and Methods1 (2013): 53–66.

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18 Jonathan Kastellec and Eduardo Leoni, "Using Graphs instead of Tables in Political Science," *Perspectives on Politics* 5 (2007): 755–71.

19 I also estimate Models 1 and 2 with additional control variables such as economic class, rural, and gender. I find small but significant effects. Class is negatively correlated with incumbent vote. Upper classes tend to turn against incumbents. Rural and female voters tend to vote for the incumbent. The marginal effects are in the range of 1 to 3 percent. The effects of economic evaluations and party attachment are unaffected. I do not present these results here, but they are available upon request.

20 See, for example, Pradeep Chhibber and Rahul Verma, "The Rise of the Second Dominant Party System in India: BJP's New Social Coalition in 2019," *Studies in Indian Politics* 7 (2019): 131–48.

21 See, for instance, Christophe Jaffrelot, "Class and Caste in the 2019 Indian Election – Why Have So Many Poor Started Voting for Modi," *Studies in Indian Politics* 7 (2019): 149–60.

22 The effects of economic evaluations and partisanship on the BJP vote hold even when I drop Andhra Pradesh, Kerala, Meghalaya, Nagaland, Punjab, and Tamil Nadu (states where the BJP vote shares are small) from the sample. The effects of class and rural, however, disappear.

23 Mark Pickup and Geoffrey Evans, "Addressing the Endogeneity Of Economic Evaluations In Models Of Political Choice," *Public Opinion Quarterly* 77 (2013): 735–54.

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