A LAYMAN'S SUMMARY OF '*DEMOCRATIC BACKSLIDING IN THE WORLD'S LARGEST DEMOCRACY'*

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Introduction

Dr. Sabyasachi Das' 2023 working paper titled "Democratic Backsliding in the World's Largest Democracy" investigates the fairness and sanctity of the 2019 General Election of India. The paper draws upon the global trend of increasingly unfair elections, which have compromised democratic institutions and ideals in countries such as the US, India, and Bolivia. Citing the glaring irregularities in electoral data and the decreasing credibility of India's Election Commission, Dr. Das embarks on a quantitative and psephological analysis of the 2019 election.

The paper begins with a test for electoral manipulation by both leading political parties—Bharatiya Janata Party (BJP) and Indian National Congress (INC). When the results raise suspicion about BJP's close wins in multiple constituencies, Dr. Das is not quick to jump to any conclusions. Instead, he investigates the effect of BJP's targeted, penetrative campaigning. When he finds no correlation between BJP's state-level successes and their campaigning activity, the author begins to test the election manipulation hypothesis for the party. He studies manipulation through two possible sources: manipulation of the list of registered voters, and manipulation of the counted votes. After conducting multiple statistical tests supportive of the election manipulation hypothesis, Dr. Das concludes that there is ample reason to question the fairness of the 2019 Election. While Dr. Das acknowledges that no part of his paper constitutes "proof" of fraud, he calls for readers to reflect and consider the implications of his findings.

The paper led to a ripple in academic and political spheres albeit not for the reasons most might think. Mixed reactions followed from scholars and politicians, and this paper soon became subject to media scrutiny. News sites and online threads, in an attempt to coax the paper's complex nuances into 'positive' and 'negative' binaries, began to cherry-pick statements made in the paper, making it even more politically divisive. The controversy around this working paper soon became a catalyst for important discussions on academic freedom.

However, very few have paid much attention to the actual contents of the paper itself. At Ashoka University Economic Review, we're a small team of passionate undergraduate students committed to the impartial and unfiltered dissemination of economic knowledge and ideas. At the core of our existence, we are committed to academic freedom and believe wholeheartedly that no field can advance in its absence. We, thus, began to work on an accessible and objective

summary of Dr. Das' paper— one that would allow readers to independently view its contents and make their own conclusions. Through this summary, we hope to kindle the interests of readers from all disciplines and backgrounds in this seminal paper.

Our affiliation with Ashoka University has had no bearing on the contents of this paper.

Irregularities in 2019's General and Election and Potential Electoral Manipulation

Dr. Das' paper is grounded in the fundamental idea that in elections, especially those with slim victory margins, a party's seat wins and losses should ideally gravitate toward a balance around the 50% mark. This suggests that when victory margins are narrow, the outcome should closely resemble a coin toss in terms of the likelihood of success or defeat.

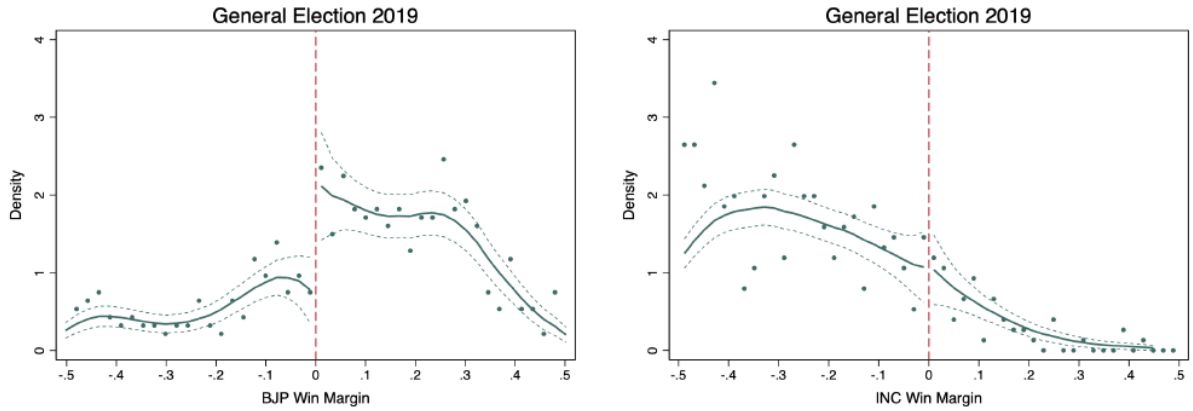
To assess this hypothesis, Dr. Das employs a widely recognized statistical tool known as the McCrary test. It is a statistical method used to detect manipulation in data that follows a discontinuous distribution. In essence, the McCrary test helps researchers identify whether there's a suspicious concentration of observations around a threshold, which could suggest manipulation in assigning individuals to different groups based on the running variable.

This test is crafted using a method called Regression Discontinuity Design (RDD), which provides insights into the patterns within election results. One can think of it as examining a graph where one axis reflects the margin by which a party secures or loses a seat, while the other axis indicates the frequency of these outcomes.

Crucially, attention is directed to the point of zero cutoff. If, at this juncture, the two regression lines converge closely, it indicates that the frequency of wins and losses in closely contested races with margins close to zero tends to even out. Conversely, if there exists a noticeable discontinuity at margins nearing zero, it suggests an uneven bias towards wins or losses.

In this context, Dr. Das applies the McCrary test by calculating the win margins for India's two major national parties, namely the BJP and INC. From the graph below, Dr. Das indicates that the win margin distribution of the BJP exhibits 'excess mass at zero', which is not observed in previous general, or state elections held simultaneously and subsequently. Excess mass at zero

means a high concentration of observations at the threshold value that violates continuity and implying that the BJP secured a disproportionately higher number of closely contested elections.



(a) BJP Win Margin: All States

(b) INC Win Margin: All States

Source: Das (2023)

This forms a pivotal conclusion of the paper. The rare occurrence of McCrary test failures prompts Dr. Das to question the potential presence of electoral manipulation. However, it's essential to note that while McCrary test failure is indicative, it could also be explained by the incumbent party's superior ability and organizational prowess, allowing it to strategically identify and engage in closely contested races—a phenomenon termed as 'precise control' by Dr. Das.

This brings us to the subsequent key insight: Did the BJP campaign more intensely and effectively than other parties? This query steers us to the paper's second significant point.

There is Little Evidence to Suggest that the BJP Campaigned Harder

The realm of "precise control" and evaluating the notion of 'better campaigning' is a complex challenge. In the Indian context, this endeavour involves grappling with an array of qualitative variables—factors such as candidates' caste, religion, past track record, and more. Dr. Das addresses this issue by leveraging a post-poll election survey conducted by CSDS (Centre for the Study of Developing Societies), which features a question that queries, "Did a candidate/party worker of the following parties come to your house to ask for your vote in the last one month?"

In addition, Dr. Das also investigates the idea whether the BJP mobilised active party members at the level of polling stations who monitored and changed voter attitudes. Through this, he hopes to test if the targeted localised campaigning done by the party organization's presence at "grassroots levels" is likely to have facilitated the precise control.

By delving into such datasets and subjecting it to further analysis, Dr. Das arrives at an important observation: there exists scant evidence to suggest that the BJP conducted a more vigorous campaign compared to other parties.

However, recognizing the weight of social media's impact on contemporary election campaigns, Dr. Das delves into the respondents' usage of digital platforms. Intriguingly, his investigation uncovers that the BJP did exhibit a more active social media campaign, particularly on Facebook, than its counterparts. Yet, he dismisses this finding on the grounds that the BJP doesn't fail the McCrary test in regions where it is not the dominant party. Dr. Das also highlights the importance of relative campaigning activity, as opposed to absolute campaigning activity, in determining a party's vote share. He concludes that for precise control to be the primary explanation for the irregular patterns observed in the 2019 general election, the constituencies barely won by BJP should have significantly more campaigning by BJP relative to other parties. Since, this is not the case, Dr. Das heightens his conviction that the irregularities may indeed be indicative of potential electoral manipulation.

Investigating the Possibility of Registration Manipulation and Turnout Manipulation

Having disproved the precise control hypothesis, Dr. Das now turns his full attention to other irregularities in the election that point towards the manipulation hypothesis. He studies election manipulation in two stages: *Registration Manipulation* (that can occur at the stage of voter registration before voting takes place) and *Turnout Manipulation* (that can occur during voting and counting of votes).

To investigate what could enable either form of manipulation, Dr. Das focuses on the Muslim voter pool. He motivates this choice on two levels: 1) Muslim voters do not generally support the BJP (Varshney 2019) and 2) Muslims have culturally distinct and highly identifiable names.

These two attributes of this voter pool make them highly susceptible to being targeted— their names can be found easily on voter lists, and BJP would be incentivised to lower their vote share to further the party's chances of winning.

Dr. Das begins by testing for registration manipulation. For this, he calculates the growth rate of the electorate in each Parliamentary Constituency (PC) since the last General Election, in 2014. The electorate refers to the number of registered voters.

Mathematically, for each PC 'p' he defines,

$$G_p \equiv \frac{Electorate_{p2019} - Electorate_{p2014}}{Electorate_{p2014}}$$

The strategic deletion of Muslim voters in any PC where BJP narrowly won would manifest in a sudden decrease in the electorate growth rate for that PC. In other words, the number of registered voters in any PC, if tampered with to reduce the number of people voting against BJP in 2019, would grow by a smaller-than-expected amount between 2014 and 2019. Dr. Das hypothesises that if this deletion were targeted towards the well-identified minority, we would expect the decrease in growth rate to be larger in areas where Muslims constitute a bigger share of the electorate.

To test the hypothesis, Dr. Das takes a random sample of the registered voters as of 2018 (prior to any possible deletion) and employs RDD on the full sample, as well as on samples of PCs with a higher and lower Muslim voter share than the median share across constituencies. Results show that constituencies barely won by BJP had a 5 percentage points smaller growth rate in the electorate between 2014 and 2019 compared to PCs that barely lost.

Given the mean growth rate of 0.09 across all constituencies, this is a significant decrease— possibly indicative of a deletion of some voters prior to the election. Additionally, while the fall in growth rate is 0.02 in PCs with lower Muslim proportions (and statistically insignificant), the

fall in PCs with a larger Muslim voter pool is 0.06. The evidence drawn by the author thus runs tangential to the earlier hypothesized possibility of registration manipulation.

The paper moves then forth onto turnout manipulation. Dr. Das begins with one of the most peculiar events concerning the 2019 General Election: that the data on election outcomes provided by the Election Commission of India (ECI), typically considered autonomous, was aberrant and contradictory. The ECI published two sets of election data— one detailing the number of votes polled per Parliamentary Constituency (PC) in the first four (of seven) phases of the general election, and the second the number of votes counted in the EVMs per PC. These two values should be equal, however, they were not.

Of the 373 PCs that were present in the first data set, 64% had an increased vote count in the second set, while the rest had a decreased count. The paper analyzes this difference and finds that the large discrepancies are disproportionately concentrated in constituencies where the BJP narrowly won. Further, the disproportionality is larger (and statistically significant) in BJP-ruled states, and statistically insignificant in non-BJP-ruled states. Statistical significance implies that the event would have less than a 5% chance of happening without deliberate intervention. Dr. Das interprets this as evidence of local manipulation of electronic voter machines (EVM) figures, likely conducted "at the polling stations" (Dr. Das 2023), arguing that the results align with those of the McCrary test, and that precise control would not cause the above findings.

In another test for turnout manipulation, Dr. Das employs a method commonly used in election forensics to detect statistical fraud. This method draws upon Benford's Law. According to this law, in any collection of numbers that are generated by a natural or man-made process, the first digits of each number in this collection have been observed to follow a particular distribution. Similarly, the second, third, and so on digits also follow their own distributions. These distributions are modeled by Benford's law, providing an exact probability of any digit taking a specific value. Thus, if a given collection of numbers deviates from this distribution, it is a sign that the given data has been tampered/falsified in some way.

It is important to note, as Dr. Das acknowledges, that deviations from Benford's law are not foolproof indicators of fraud. Indeed, "even in cases without fraud, empirical distributions of

second digits can deviate from Benford's law" (Dr. Das 2023). As such, he does not consider the deviations of individual PCs but instead the overall pattern of deviation.

The accuracy of the law increases with an increase in the range of values. Thus, as the number of values increases, any real-life dataset should more closely adhere to Benford's law. The paper however finds that in absolute vote tallies counted at a polling station level, deviation from Benford's law "typically falls with larger turnout [for non-BJP ruled states], except for PCs won by BJP in BJP ruled states" (Dr. Das 2023), where instead the deviation increases after turnout crosses 800. Since we expect a greater adherence to the Benford Law as the set of values in our polling station data increases, the paper interprets this as yet another evidence for both manipulation and precise control.

Conclusion

Dr. Das interprets these findings as suggestive of potential suppression of Muslim votes, while simultaneously casting doubt on the predominant notion that the BJP's success in closely contested elections solely emanates from superior campaign strategies.

Crucially, Dr. Das emphasizes that his calculations are to be considered preliminary, back-of-the-envelope estimations, and his entire methodology adopts a probabilistic approach. He explicitly clarifies that his endeavour doesn't constitute a presentation of "proofs of fraud," but rather raises significant concerns about the irregularities and gaps evident in the latest General election.

In a more nuanced fashion, one could argue that Dr. Das doesn't state that electoral fraud has taken place; he just states that it would have been better if electoral fraud hadn't taken place, thereby inviting an analytical exploration that serves as a crucial initial stride and prompts a warranted call for deeper scrutiny of the sanctity of India's electoral system.