Cow-related Violence and State Elections in India

Abstract: Cow-related religious violence, usually committed by Hindu nationalist groups on Muslims and Dalits, is closely linked with BJP victory in Vidhan Sabha elections in India. Geographically, cow-related violence is most prevalent in urban areas around Delhi and rural areas in northwest Uttar Pradesh. Temporally, more violence incidents happen after than before an election. Demographically, cow-related violence is positively correlated with higher Muslim population proportion, higher urbanization rate and access to utilities, and lower scheduled tribe population proportion. Also, assembly constituencies with BJP MLAs in average are more likely to experience cow-related violence. Sub-sample analyses suggest that both exogenous and endogenous impacts of BJP electoral victory on cow-related violence afterwards seem to exist, and violence is positively associated with BJP victory afterwards even when BJP is not incumbent. However, this study is unable to detect exogenous impact of BJP on cow-related violence in the following year or election cycle with a regression discontinuity design.

1. introduction

Cow-related violence is on the rise in India. The issue of cow, which is believed to be sacred in Hinduism, plays an important role in the identity politics of religion. On the one hand, Indian states are doubling down on severe restrictions or even complete bans on cow slaughtering. On the other hand, Muslims and Dalits, traditionally the major consumers of beef, are being attacked around the country by cow vigilante groups for “illegally” slaughtering, transporting cows or eating beef. Therefore, as the Hindu-nationalist Bharatiya Janata Party (BJP) is consolidating its dominance in India’s national politics at the expense of traditionally secular Indian National Congress (INC) and other left-wing and regional parties, the relationship between cow-related violence and electoral politics is of great academic significance and policy relevance.

Hindu-Muslim riots in modern India have been well documented and comprehensively analyzed. It has been convincingly established that Hindu-Muslim riots helped the BJP to get elected, and secular party victory inhibited Hindu-Muslim riots afterwards. However, systematic data on cow-related violence is not available until very recently, and to the best knowledge of the author, there is little academic discussion with a focus on this topic. Utilizing a recent dataset compiled by The Spending & Policy Research Foundation, this study aims to thoroughly describe the geographic, demographic and temporal patterns of cow-related violence in India. It also attempts to causally identify the impact of BJP victory in Vidhan Sabha (state legislature) elections on post-election cow-related violence.

The rest of this paper is organized as follows. Section 2 briefly reviews quantitative work on religious violence in South Asia, with a focus on their identification strategies. Section 3 introduces the FactChecker.in dataset, along with election and local-level socio-economic data used. Section 4 conducts descriptive analyses on cow-related violence, providing information on the geographical distribution and demographic characters of MLA electorates with cow-related violence. Furthermore, it describes the temporal relationship between Vidhan Sabha election cycle and cow-related violence: in order to compare the relative prevalence of violence in assembly constituencies (ACs) ruled by BJP and non-BJP parties, the indicator of violence density is developed. Section 5 attempts to detect the causal relationship between BJP electoral victory and cow-related violence afterwards with a regression discontinuity design. Section 6 further explores the possible mechanisms behind the effect of BJP victory on cow-related violence by separately examining the violence density patterns around close and non-close elections, as well as in electorates with BJP and non-BJP parties incumbent. Section 7 concludes.

2. literature review: the politics of religious violence in India and South Asia

This section reviews existing quantitative work on religious violence in India and South Asia. Firstly, it surveys their use of data, causal identification strategies and conclusions. Secondly, it pays special attention to mechanisms of the interaction between electoral politics and religious violence, and discusses how the unique dataset of this study contributes to current literature.

2.1. Quantitative work on religious violence in India and South Asia

Riots targeted at Muslims, usually incited by Hindus, have drawn wide academic interest. With regard to subject, in addition to electoral politics, current work on ethnic violence has also paid attention to economic growth and inequality and historical ethnical institutions, as shown in table 2.1.1. For now, quantitative work on Hindu-Muslim riots at the national level largely relies on the dataset compiled by Varshney and Wilkinson (2006) and extended by Mitra and Ray (2014). However, this dataset only covers incidents prior to 2000, and is thus of limited use in exploring the newest dynamics of religious violence. In addition to Hindu-Muslim riots at the national level, series of bloody anti-Muslim riots that took place in Gujarat in 2002 have also been subject to academic investigation, and two datasets have been complied by individual authors. Lastly, an important piece of work is done by Nellis and Siddiqui (2017) in the Pakistani context.

Table 2.1.1. Quantitative work on religious violence in India and South Asia

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Paper | Subject | Data source | Time span | Causally identified |
| Iyer and Shrivastava (2018) | The impact of Hindu-Muslim riots on election results | Varshney and Wilkinson (2006); Mitra and Ray (2014) | 1950-2000 | Yes |
| Nellis and Siddiqui (2017) | Impact of secular party rule on local religious conflict in Pakistan | BFRS Political Violence in Pakistan Dataset | 1988-2011 | Yes |
| Nellis et al (2016) | The rule of Indian National Congress and reduced religious violence | Varshney and Wilkinson (2006); Mitra and Ray (2014) | 1962-2000 | Yes |
| Ticku (2015) | Riots’ effect on BJP’s voteshare | Varshney and Wilkinson (2006); Mitra and Ray (2014) | 1979-2000 | Yes |
| Mitra and Ray (2014) | The impact of increased Muslim income on religious conflict | Varshney and Wilkinson (2006); Mitra and Ray (2014) | 1979-2000 | Yes |
| Jha (2014) | The impact of historical inter-ethnic complementarity and competition on contemporary religious violence in Gujarat | Jha (2014) | 2002 | Yes |
| Blakeslee (2014) | The impact of BJP electoral campaign on riots | Varshney and Wilkinson (2006) | 1989-1991 | Yes |
| Arcand and Chakraborty (2013) | Determinants of Hindu-Muslim riots | Varshney and Wilkinson (2006) | 1981-1995 | No |
| Bohlken and Sergenti (2010) | The impact of economic growth on religious violence | Varshney and Wilkinson (2006) | 1982-1995 | Yes |
| Wilkinson (2006) | Impacts of electoral competition and state capacity on Hindu-Muslim violence | Varshney and Wilkinson (2006) | 1950-1995 | No |
| Field et al (2008) | The impact of residential segregation on religious violence in Gujarat | Field et al (2008) | 2002 | Yes |

Not all quantitative work on religious violence has convincing causal identification strategy to address endogeneity. Table 2.1.2. summarizes the causally identified pieces of research and their conclusions. Four sets of causal identification strategies are utilized in quantitative studies of religious riots. Firstly, to identify the causal impacts of religious riots, researchers usually take the instrumental variable strategy, exploiting the as-if-randomness of timing of Hindu festivals, temperature and route of religio-political campaigns. Secondly, to causally identify the impacts of characters of the ruling party, regression discontinuity design is most widely used with the assumption that results of close elections are as-if random. Thirdly, to identify the causal effects of economic variables, rainfall and relative incomes among different occupations are seen as exogenous. Fourthly, historical institutions are considered as exogenous in themselves. Existing work seems to suggest that BJP electoral victory and religious riots are causally linked in both ways.

Table 2.1.2. Identification strategies and conclusions

|  |  |  |
| --- | --- | --- |
| Paper | Identification method | Main conclusion |
| Iyer and Shrivastava (2018) | Instrument variable: Hindu festivals falling on Friday as an instrument of religious riots | Riots happening in the year prior to elections increases the vote share of BJP |
| Nellis and Siddiqui (2017) | Regression discontinuity on close elections | The election of secular parties reduces local religious conflict. |
| Nellis et al (2016) | Regression discontinuity on close elections | The election of INC into power reduced religious riots. |
| Ticku (2015) | Instrument variable: higher temperature as an instrument for Hindu-Muslim riots | Hindu-Muslim riots increase BJP vote share. |
| Mitra and Ray (2014) | Instrument variable: income changes of different occupation classes as an instrument of expenditures of Hindus and Muslims, who usually have different jobs. | Increase in per capita expenditures of Muslims generates increase in future religious conflict. |
| Jha (2014) | Historical Hindu-Muslim complementarity is seen as random. | Riots in Gujarat tend to happen more in historically compliment cities, and people tend to vote for the incumbent BJP after riots. |
| Blakeslee (2014) | Geographical randomness: localities being en route of BJP’s religio-political campaign, except for big cities, are as good as random. | Exposure to BJP’s religio-political campaign increases the probability of religious riots. |
| Bohlken and Sergenti (2010) | Instrument variable: percentage change in rainfall as an instrument of economic growth | Economic growth inhibits the breakout of Hindu-Muslim riots. |
| Field et al (2008) | Residential segregation is seen as random. | Communities with high religious diversity tend to have more riots. |

2.2. Causal mechanisms between religious violence and electoral politics

In addition to causally identifying the relationship between religious violence and electoral politics, existing work has also explored possible causal mechanisms between them. On the one hand, Iyer and Shrivastava (2018) have affirmed the hypotheses that religious violence in the year prior to election reduces the registration rates of Muslim voters, and makes Hindus more likely vote along religious lines, i.e. support the BJP. However, they also argued that religious riots do not reduce the turnout ratio among Muslim voters who are nevertheless registered to vote. On the other hand, Nellis et al (2016) have found that INC is incentivized to rein in religious violence when it is in power because it relies on Muslim support and Hindu-Muslim riots would polarize the electorate along religious lines and thus benefit the BJP. Similarly, Nellis and Siddiqui (2017) found that in Pakistan, ideologically secular parties are incentivized to control local religious conflict because they would be severely penalized by their victimized electorate if they fail to do so. However, they rejected the hypothesis that more competent or conciliatory politicians are self-selected into secular parties. Therefore, the proposition that religious riots penalize secular parties and benefit ethno-religious parties not only underlies the effect of religious violence on elections, but also explains why different parties would have different policies towards religious violence when they are in power.

2.3. contribution of this study

This study intends to contribute to current literature in three ways. Firstly, it uses a dataset that covers a much more recent time period. Secondly, it employs a different mapping strategy that allows analysis at MLA electorate level, instead of aggregating election data to the district level, which will be explicated in section 3.1. Thirdly, it takes into account the interplay between BJP and its associated Hindu nationalist and cow vigilant organizations. In other words, the BJP exerts influence on religious violence not only by controlling the state as the ruling party, but also by mobilizing societal organizations and the mass, regardless of whether it is in power or not.

3. Data

This section introduces datasets used in this study. On the cow-related violence side, this study utilizes the dataset composed by FactChecker.in initiative of The Spending & Policy Research Foundation. Electoral data are gathered from Election Commission of India. Data on district level socio-economic indicators is gathered from 2011 national census.

3.1. cow-related violence data from FactChecker.in initiative

FactChecker.in (2019) considers cow-related violence a type of religion-based hate crime, on which they collect data from the English media. Two caveats of this dataset are pointed out. Firstly, since their cases are gathered from media sources, the dataset cannot be an exhaustive record of all such incidents in India. Secondly, the comprehensiveness of information on different cases are different. In particular, details about number of injured persons are not reported in all cases and thus should be treated with caution. In addition, although FactChecker.in sets the start year of its hate crime records at 2010, the first cow-related violence is its database took place in 2012, and number of cases before 2015 is small, as shown in plots 3.1.1 and 3.1.2.

In contrast to previous work, this study maps each incident to MLA electorate level. Geographical information of cow-related violence is collected and cleaned in two steps. Firstly, this study locates each incident in India’s administrative division system down to the village and town level. Secondly, it matches detailed geographical information of each incident with MLA electorates, using maps of Vidhan Sabha elections. In total, 125 cases were gathered from FactChecker.in.

For most cases, the website of FactChecker.in does not provide geographical information detailed enough to locate each case to MLA electorate level, and therefore this study has to re-code the geographical information in two steps. Firstly, it traces each case to the piece of media report cited by FactChecker.in, and searches for information on the state, district, sub-district and village or town that the incident takes place in.[[1]](#footnote-1) However, not all these data points can be filled only by checking the original media piece. In many cases, only names of the state, district and village of an incident are reported; and when incidents happen in urban areas, only names of the city and urban block are reported. Therefore, this study also uses geographical information lookup system provided by Onefivenine.com and Data{Meet} Community Maps Project to further locate and cross-check each incident. Not all media reports used by FectCheck.in provide adequate information to locate an incident to the village level even with the help of Onefivenine.com and Data{Meet} Community Maps Project. Hence, this study also searched other English media pieces from mainstream news sites of the same case and gathered any relevant information.

Mapping incidents to MLA electorates is where this study differs from previous ones. Although Varshney and Wilkinson (2006) did provide geographical information of Hindu-Muslim riots to the village level, existing studies usually aggregate them to state or district level due to limited availability of their socio-economic control variables at lower levels of administrative division. This study utilizes Vidhan Sabha electorate information of village and urban localities provided by Onefivenine.com and Data{Meet} Community Maps Project, and locate each incident to a Vidhan Sabha electorate. Among the 125 cases gathered, this study is able to code Vidhan Sabha information for 123 of them.

3.2. Vidhan Sabha election data

This study is able to gather Vidhan Sabha election data of 29 states from 2005 to 2018, with a few Vidhan Sabha elections missing. A list of Vidhan Sabha elections gathered by this study is reported in table 3.2.1. Name, gender, age, caste and tribe status, party affiliation and number of votes of each candidate are provided. By ranking the numbers of votes that candidates of the same AC got in an election, winners and winning margins can be identified.

Table 3.2.1. Vidhan Sabha elections with data available

|  |  |
| --- | --- |
| State | Year |
| Andhra Pradesh | 1999, 2004, 2009, 2014 |
| Assam | 2001, 2006, 2011, 2016 |
| Bihar | 2005, 2010 |
| Chhattisgarh | 2013 |
| Delhi | 2010, 2015, 2017 |
| Goa | 2002, 2007, 2012, 2017 |
| Gujarat | 2002, 2007, 2012, 2017 |
| Haryana | 2000, 2005, 2009, 2014 |
| Himachal Pradesh | 2003, 2007, 2012, 2017 |
| Jammu & Kashmir | 2017 |
| Jharkhand | 2005, 2009, 2014, 2017 |
| Karnataka | 2012, 2017 |
| Kerela | 2001, 2006, 2011, 2016 |
| Madhya Pradesh | 2013, 2017 |
| Maharashtra | 1999, 2004, 2009, 2014 |
| Manipur | 2002, 2007, 2012, 2017 |
| Meghalaya | 2013, 2018 |
| Nagaland | 2013, 2018 |
| Odisha | 2000, 2004, 2009, 2014 |
| Puducherry | 2001, 2006, 2011, 2016 |
| Punjab | 2002, 2007, 2012, 2017 |
| Rajasthan | 2013, 2017 |
| Sikkim | 1999, 2004, 2009, 2014 |
| Tamil Nadu | 2001, 2006, 2011, 2016 |
| Tripura | 2013, 2018 |
| Uttaranchal | 2012, 2017 |
| Uttar Pradesh | 2002, 2007, 2012, 2017 |
| West Bangel | 2001, 2006, 2011, 2016 |

Vidhan Sabha elections can take more than one day to finish: in big states like Uttar Pradesh, the polling process can last for as long as a month. Government would generally form within a month after polling is finished. Therefore, for each Vidhan Sabha election, this study gathers the time when polling began, the time when polling finished, and the time when the new government was formed. In following analyses on the temporal relationship between elections and cow-related violence, all three times will be used as robust checks.

3.3. socio-economic indicators

This study intends to explore the social and economic factors behind cow-related violence by gathering local-level socio-economic indicators. However, to the knowledge of the author, India does not systematically publish things as simple as GDP data even to the district level. Therefore, this study uses 2011 census data to measure local socio-economic conditions instead. District level data on religious composition, scheduled caste and tribe composition, proportion of 5 to 19 year-olds in school, proportion of households with access to utility, and urbanization rate is collected.

4. descriptive statistical analyses

4.1. summary statistics

4.1.1. temporal and geographical distribution

This section summarizes the cow-related violence dataset that this study uses. The temporal distribution of incidents is reported in plots 3.1.1 and 3.1.2. Most cases included in our sample took place after 2015, and 43 of them took place in the year of 2017. 2016 and 2018 also both have more than 30 incidents reported. Moreover, the number of cases seems to follow a seasonal pattern, with more cow-related violence breaking out during summer months.

The geographical distribution of cases is reported in plots 4.1.1 to 4.1.4. At the state level, Uttar Pradesh and Haryana had the highest number of cow-related incidents and victims. At the district level, Delhi and areas surrounding the capital city, including Alwar in Rajasthan, Faridabad and Gurgaon in Haryana, as well as Bulandshahr and Gautam Buddha Nagar in Uttar Pardesh, see the highest numbers of violence. Other hotspots of violence include Udupi in Karnataka, Giridih in Jharkhand and Ahmedabad in Gujarat. Plots 4.1.5 to 4.1.6 show the number of cow-related violent incidents per resident. At the state level, Haryana witnessed the highest number of incidents per resident, followed by Jharkhand and Jammu & Kashmir. At the district level, some rural areas in northwest Uttar Pradesh, including Muzaffarnagar, Bareilly, Moradabad, as well as some urban districts including Chennai and Ghaziabad, see the highest number of incidents per resident.

With the help of onefivenine.com and Data{Meet} Community Maps Project, this study is also able to locate incidents to the MLA electorate level. Most electorates only had one incident documented. Gangoh in Uttar Pradesh, Dadri in Uttar Pradesh, Moodabidri in Karnataka, Gandey in Jharkhand, Sohna in Haryana, Gurgaon in Haryana and Garhisampla-Kiloi in Haryana all registered two incidents. Ramgahr in Rajasthan had three incidents.

4.1.2. demographic features and cow related violence

Areas with and without cow-related violence have different demographic profiles. Firstly, as shown in plot 4.1.7, districts with cow-related violence reported in our sample in average have 16.7% of their population being Muslims, whereas districts without cow-related violence have 12.2% of their population being Muslims.

Secondly, district-wise GDP data is not readily available, and therefore this study uses four sets of socio-economic indicators collected by censuses as proxies for level of economic development. It calculates the proportion of 5 to 19 year-olds attending educational institution as a measurement of level of human capital development. Also, it calculates the proportion of households with within-premise tap water from treated source as main source of drinking water, access to electricity and latrine. As shown in plots 4.1.8 and 4.1.9, there is no statistically significant difference in terms of human capital development between districts with and without cow-related violence cases. However, as measured by availability of water, electricity and latrine facilities, cow-related violence tend to take place where these utilities are readily available. In addition, as shown in plot 4.1.10, cow-related violence was more likely to happen in districts with high urbanization rates.

Thirdly, cow-related violence also seems to be negatively linked to the presence of scheduled tribe populations, but the existence of scheduled castes does not seem to be associated with lynching. As shown in plot 4.1.11, here is no significant difference in mean proportion of scheduled caste population proportions between districts with and without cow-related violence. As shown in plot 4.1.12, districts with lower proportions of population being scheduled tribes are more likely to witness cow-related violence. T-test results of the demographic variables above are reported in table 4.1.1.

Table 4.1.1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Mean of districts with cow-related violence | Mean of districts without cow-related violence | Difference: 95% confidence interval | p-value |
| Hindu population proportion | 0.768 | 0.735 | (-0.011, 0.078) | 0.141 |
| Muslim population proportion | 0.167 | 0.122 | (0.010, 0.081) | 0.014\* |
| Total 5-19 year-olds school attendance rate | 0.715 | 0.725 | (-0.028, 0.007) | 0.245 |
| Female 5-19 year-olds school attendance rate | 0.697 | 0.712 | (-0.035, 0.005) | 0.149 |
| Utility availability rate | 0.209 | 0.143 | (0.022, 0.110) | 0.003\*\* |
| Urbanization rate | 0.344 | 0.250 | (0.037, 0.152) | 0.002\*\* |
| Proportion of scheduled caste population | 0.162 | 0.155 | (-0.010, 0.024 ) | 0.441 |
| Proportion of scheduled tribe population | 0.085 | 0.211 | (-0.164, -0.088) | 0.000\*\*\* |

4.2. the temporal relationship between election cycles and cow-related violence

This section summarizes the temporal pattern of cow-related violence and elections. Firstly, it introduces how this study links cow-violence data to election data. Secondly, it presents the changes in number of incidents before and after Vidhan Sabha elections. Thirdly, it explores the interaction between violence patterns and electoral performance of the BJP.

This study defines the running-up period of an election as 12 months before an election. Vidhan Sabha elections are held every five years in India, so most cow-related violence in fact did not take place during the running-up period. In fact, cow-related violence happened more around two years before Vidhan Sabha elections, as shown in plot 4.2.1. Among 125 cases of cow-related violence, only 7 of they took place one year or less before a Vidhan Sabha election. Similarly, this study defines the post-election period as 12 months after an election, and 17 cases in the sample fall into the post-election period. As shown in plot 4.2.3, the frequency of cow-related violence increases after Vidhan Sabha elections.

After identifying cow-related violence that took place less than one year before or after a Vidhan Sabha election, this study explores that relationship between cow-related violence and party incumbency. In table 4.2.1, new ruling party is defined as the party that won the Vidhan Sabha seat less than one year before or after an incident, and incumbent party is defined as the party that won the same Vidhan Sabha seat in the election prior. Most cow-related incidents took place around elections in which BJP unseated a non-BJP ruling party.

Table 4.2.1. party incumbency and number of cow-related violence

|  |  |  |  |
| --- | --- | --- | --- |
| Number of incidents | | Incumbent party | |
| BJP | Non-BJP |
| New ruling party | BJP | 3 | 7 |
| Non-BJP | 0 | 4 |

4.3. violence density: relative prevalence of cow-related violence in BJP- and non-BJP-ruled ACs

To establish the link between BJP unseating incumbent party and occurrence of cow-related incidence, numbers of incidents need to be normalized by number of Vidhan Sabha seats controlled by BJP and non-BJP parties. As shown in plot 4.2.4, for electorates with data available, the number of them ruled by BJP increased rapidly from 2012 to 2015, whereas the number of electorates ruled by other parties remained stable. Plot 4.2.5 shows the proportion of electorates rule by BJP: again, BJP has been gaining momentum at Vidhan Sabha elections over time. In 2013, BJP ruled merely more than 10% of total ACs, whereas in 2019, almost 40% of them were under BJP rule.

To systematically compare prevalence of cow-related violence in BJP- and non-BJP-ruled ACs, this study defines violence density as following:

denotes the total number of cow-related violent incidents in month in ACs ruled by party . takes the value of 1 when an AC is ruled by BJP and 2 when an AC is ruled by non-BJP parties. denotes the total number of ACs ruled by party in month . As shown in plots 4.3.1 and 4.3.2, ACs under BJP witnessed higher violence densities between 2016 to 2019, the time period our sample mostly covers.

Plots 4.3.3 to 4.3.5 show the distribution of cow-related violence relative to Vidhan Sabha elections. Firstly, ACs which the BJP won witnessed much higher level of violence both before and after an election. Secondly, in ACs won by the BJP, there seems to be a jump in violence density right after the election. By contrast, in ACs won by non-BJP parties, there is little difference in violence density before and after elections.

5. identification strategy: regression discontinuity design

In order to causally identify the relationship between BJP victory in Vidhan Sabha elections and following cow-related violence, this study follows a regression discontinuity design, assuming that BJP winning or losing a close election is quasi-random. To measure the closeness of an election, this study defines relative BJP vote share for all Vidhan Sabha electorates in which BJP came the first or second. denotes the relative BJP vote share in AC in year ; refers to the number of votes for BJP, and refers to the number of votes for the other party.[[2]](#footnote-2) when BJP wins an election and when BJP loses an election. The closer is to 0, the closer an election is.

The distribution of is reported in plot 5.1, which is close to normal distribution. The peak of distribution of is positive rather than exactly 0. Plot 5.2 depicts the change of VS over time: there does not seem to be any significant pattern change of over time.

Cow-related violence is linked to election cycles in two ways. Firstly, an incident is defined as happening in the aftermath of an election when it happens within 365 days’ post-election. Secondly, an incident is defined as happening in the election cycle when it takes place in the term of an MLA until the next Vidhan Sabha election. Plots 5.3 to 5.5 show that although electorates with higher BJP vote share witnessed relatively more cow-related violence in the following year, there does not seem to be any discontinuity at . Plots 5.6 to 5.8 show similar results patterns with regard to cow-related violence in the following election cycle.

Although the case for regression discontinuity is not particularly strong, this study still attempts to formally test it. Logit regressions are suitable for the independent variables of interest, namely the occurrence of cow-related violence, because they take the values of either 0 or 1. Equations (1) to (3) tests the discontinuity effect of BJP winning on cow-related violence within one year after the election. is the polynomial term of up to the second degree. is year dummy. takes the value of 1 if , and takes the value of 0 otherwise. takes the value of 1 if at least one cow-related incident occurred within one year after the election in AC in year , and takes the value of 0 otherwise. Equations (4) to (6) tests the discontinuity with regard to violence in the following election cycle. takes the value of 1 if at least one cow-related incident occurred in the election cycle after the election in AC in year , and takes the value of 0 otherwise. All the following regressions are performed only on close elections, which are defined by .

(1)

(2)

(3)

(4)

Regression results are reported in table 5.1. BJP winning a close election does not have statistically significant impact on the probability of cow-related incidents taking place in the following year or following election cycle. Changing the definition of time of election to the end of polling and the formation of new government, results remain similar, which are reported in tables 5.2 to 5.3. Therefore, this study tentatively concludes that BJP victory in MLA elections does not have any independent impact on the probability of cow-related violence afterwards. The regression discontinuity tests above are also graphically shown in plots 5.9 to 5.14.

6. mechanisms

This section discusses possible mechanisms behind the relationship between BJP electoral victory and post-election cow-related violence. Firstly, it argues that existing research on religious violence and electoral politics is inadequate in explaining increased violence in the aftermath of BJP wining an election. Secondly, it discusses possible mechanisms underlying cow-related violence, and how our dataset can help to distinguish between them.

6.1. inadequacy of existing work

Existing studies have addressed causal links in both ways – how religious violence prior to an election increased the odds of BJP wining and why secular parties curbed religious violence under their constituencies. However, they have actually only explored mechanisms from religious violence to electoral politics, demonstrating that the occurrence of religious violence benefits communal parties and penalizes secular parties. On the one hand, in the aftermath of pre-election religious violence, Muslim voters were intimidated from registering or voting, and Hindu voters were mobilized along communal lines to vote for the BJP. One the other hand, in anticipation of the electoral effects of ethnic violence, incumbent secular parties would take measures to control religious with an eye on the next election. In short, the electoral effect of religious violence, by the very fact or by anticipation, explains causal links in both ways.

However, by only focusing on government action (inciting or suppressing religious violence) and electorate response, current literature fails to capture other important players in Indian electoral politics, namely civil society organizations. On the one hand, Hindu nationalist organizations play an important role in campaigning for BJP in elections (Narayan, 2014). In turn, these organizations also hold formidable sway over policies of the BJP. In other words, control over the state as the ruling party is not the only, or even the most important tool with which the BJP can encourage or incite religious violence: action of the BJP can have an impact on religious violence even it is out of power. Moreover, the state is not the only agency that determines the level of religious violence: civil society organizations – in the case of cow-related violence, cow vigilante groups – can also act independently.

The role of cow vigilante groups in cow-related religious violence is well documented, and the most notorious among them are under the umbrella of Bhartiya Gau Raksha Dal (Indian Cow Protection Organization, BGRD). The involvement of BGRD in cow-related violence cases is well documented (Masoodi, 2016). Moreover, cow vigilante groups work closely with the local police, especially in BJP-ruled states, to gather information on “illegal cow-slaughtering activities” (Siddiqui et al, 2017). With “gau raksha” (cow protection) being an important election issue for the BJP, it is unreasonable to assume that the action of cow vigilante groups would resonance with the election cycle.

6.2. possible mechanisms using available data

This section utilized data available to explore the possible mechanisms behand the positive relationship between BJP rule and cow-related violence. Firstly, it explores the patterns of violence density in electorates where elections were fought closely and not closely. Secondly, it looks into the impacts of identity of the incumbent party, namely the previous winner in the election prior.

6.2.1. close and non-close elections

This study defines close election as those with absolute value of less than or equal to 0.2: in other words, an election is only closely fought when the number of votes going to the largest party is equal to or smaller than 1.22 times of the number of votes going to the second largest party. Among 2198 elections in our sample in which BJP finished the first or the second, 834 of them are considered close elections.

Plots 6.2.1 to 6.2.3 depicts the pattern of violence density in close elections. Firstly, violence density in electorates where BJP won are higher than in electorates where BJP lose, both before and after the election. Secondly, violence density in electorates where BJP lost remained somehow unchanged before and after the election, whereas violence density in electorates where BJP won somehow increased after the election – although there seems to be no “jump” in election density at the time of election. Plots 6.2.4 to 6.2.6 depicts the pattern of violence density in non-close elections. Electorates where BJP won saw significantly higher violence density both before and after an election, and no “jump” in election density is visible at the time of election.

Together with section 5, this section provides hints on possible exogenous impact of BJP electoral victory on cow-related violence. If the effect of BJP victory on cow-related violence is purely exogenous, there should be significant difference in violence density before and after a close election in which BJP wins, and there should be no significant difference in pre-election violence density between elections in which BJP wins and loses. By showing difference in pre-election violence density in close elections, our data does not confirm this theory. On the other hand, if the effect of BJP victory on cow-related violence is purely endogenous, there should be no difference in violence density in close elections, both before and after the election. Our data does not fully confirm this theory either.

Therefore, both exogenous and endogenous effects of BJP electoral victory on cow-related violence seem to exist. However, with a small sample in our hand, we do not have enough statistical power to identify exogenous effect. This conclusion agrees with the results in section 5: after controlling for polynomial terms of relative BJP vote share, the coefficient of BJP victory is positive, but not statistically significant at conventional levels.

6.2.2. effects of incumbent party

By now, we have only discussed the relationship between wining party in an election and cow-related violence right before and after the election. This section explores the association between the incumbent party and cow-related violence around the next election. As shown in plots 6.2.7 to 6.2.9, even when the BJP is already in power, higher violence density is associated with BJP electoral victory in the next election. As shown in plots 6.2.10 to 6.2.12, when BJP is not in power, higher level of cow-related violence is also associated with BJP victory in the next election. These two patterns seem to suggest that even when the BJP is not in power, cow vigilante organizations could still incite violence and help BJP get elected in the next election.

7. conclusion

Using cow-related violence data provided by FactChecker.in, this study is able to depict the geographic, temporal and demographic profiles of districts with cow-related violence reported. Urban districts in and around Delhi and rural districts in northwest Uttar Pradesh see both high numbers of total incidents and numbers of incidents per resident. More incidents happened right after an election as compared to before an election. With regard to socio-economic characters, districts with cow-related violence tend to have higher proportions of Muslim residents, better access to utilities, higher urbanization rates and lower proportions of scheduled tribe population.

This study found that cow-related violence is positively related with BJP rule. Standardized by total numbers of constituencies ruled by each party, number of cow-related violence is much higher in BJP-ruled constituencies than non-BJP-ruled constituencies. Moreover, when a Vidhan Sabha seat is won by the BJP, there seems to be a jump in the prevalence of cow-related violence right after the election. Using a regression discontinuity design, this study tries to causal relationship between BJP victory and cow-related violence afterwards. However, due to limited sample size, the impact of BJP victory is not statistically significant.

This study also explored the possible mechanisms behind link between BJP electoral victory and cow-related violence. Firstly, by examining the different patterns around close and non-close elections, this study concluded that both exogenous and endogenous effects seem to exist. Secondly, by dividing the sample by incumbent party, this study demonstrated that even when BJP is not in power, cow vigilante groups can still incite violence and increase the odds of BJP being elected in the next election.

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1. The administrative division of India is structured at four levels. As of 2011 census, on which this study is based on, India has 35 states and union territories. States and union territories are divided into districts, which amount to 593 nationwide. Districts comprises of sub-districts, which are named differently in different states and union territories. Sub-districts are further divided into villages and towns, which are the lowest administrative units. See Office of Register General & Census Commissioner, India (2019). [↑](#footnote-ref-1)
2. Only Vidhan Sabha elections that took place after 2010 are selected, considering that FactCheck.in only systematically gathers cow-related violence data from 2015 on. Also, in our sample, no state has ever held Vidhan Sabha election more than once in a year. Therefore, subscript can uniquely identify all elections in out sample. [↑](#footnote-ref-2)