Politician Identity and Religious Conflict in India[*]

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Abstract

This paper investigates the impact of Muslim political representation on religious conflict in India during 1980-2007. We code religion from name and construct updated conflict data from Times of India archives. The analysis is currently conducted at the district level. We instrument the share of Muslims elected to state assemblies from the index district with the share of Muslims who won against non-Muslims in close elections in that district. Preliminary results suggest that raising the share of Muslim politicians in state assemblies results in a sizeable decline in the incidence of Hindu-Muslim riots, consistent with evidence that Muslims are more often the victims of such incidents. Some part of the total effect arises from positive selection of minority leaders. Our results are consistent with parochial politics and with theories that indicate the relevance of political identity for policy outcomes (Besley and Coate, 1997). They also suggests a cause of conflict, and hence a solution for the control of conflict, that has not been previously considered in the conflict literature (Blattman and Miguel 2010).

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1.   Introduction

Civil violence, often representing ethnic, religious or racial conflict has been rising through the past half-century (Gleditsch et al. 2002), but we still have only a limited understanding of its causes. While there is considerable evidence that the outbreak of civil conflict results from poverty (e.g. Miguel et al. 2004; Bohlken and Sergenti 2010; Do and Iyer, 2010), the evidence on other potential causes including the importance of social divisions and political grievances is more controversial (Blattman and Miguel, 2010: p.45). This paper examines Hindu-Muslim violence in India. Muslims constitute India's largest religious minority, and the observed patterns of Hindu-Muslim violence suggest that Muslims are more likely to have been the victims of such violence (Mitra and Ray, 2010). Since Muslims are also under-represented in elected office (constituting only 5% of members in the national legislature in 2009, down from nearly 9% in 1980), we investigate whether increasing Muslim political representation lowers the incidence of religious conflict. We put together unique data on both the religious identity of politicians and religious conflict for the period 1960-2007, merged at the state and the district level. We account for the potential endogeneity of Muslim representation by instrumenting the share of Muslim legislators with the share of Muslim legislators who win in close elections against Hindus (a strategy similar to that implemented by Lee, 2001 and Clots-Figueras, 2011a, 2011b).

Our study is related to two important streams of the literature. The first is the importance of political identity. Recent evidence suggests that the identity of the politician, often indicated by gender, race or ethnicity—has sizeable influences on policy choices, tending to shift allocations in favour of the population group that shares the identity of the leader. For instance, the presence of women in political office in India has been shown to result in more women-friendly policies (Chattopadhyay and Duflo, 2004; Clots-Figueras, 2011a), better education and health outcomes (Clots-Figueras, 2011b; Bhalotra and Clots-Figueras, 2011), improved perceptions of women in leadership positions (Beaman et al, 2009), and greater voice for women within the criminal justice system (Iyer et al, 2012). Similarly, there is some evidence of "ethnic favouritism" in India and Kenya (e.g. Pande 2003, Burgess et al. 2011), although Kudamatsu (2010) finds none in Guinea. There is very little evidence, however, of the relevance of the religious identity of political leaders. A further contribution of this paper is to link the literature on political identity to the literature on conflict. There has been very little analysis of the impact of political identity on conflict or crimes against specific sections of society (Iyer et al, 2012 is an exception). If we find that legislator identity

significantly reduces religious violence, this could provide a rationale for mandated religious group representation in political office, as some political parties in India have demanded.

The second stream of research that this paper relates to is the growing literature on the causes and consequences of civil wars. To this we contribute what is possibly the first analysis of the relevance of political identity for the incidence of conflict. Previous research on civil conflict has tended to focus upon incidents that result in greater than a 1000 deaths (see Blattman and Miguel, 2010), but smaller scale ethnic conflict is rife and may have other sorts of causes. We contribute to the handful of studies that specifically examine ethnic conflicts (Sambanis, 2001). To do this we have updated the Varshney-Wilkinson data base on Hindu-Muslim riots in India from 1995 to 2010. Since 1995, India has witnessed significantly faster economic growth, a secular decline in violent crimes, and a substantial increase in political competition. Our extended data base allows us to assess the trends in religious violence over this period of economic and political change.

A further data contribution of our paper is the creation of a unique database on the religious identity of the winner and the runner-up in every constituency for every state election in India over the period 1960-2008, coding religion from the candidates' name. These new data not only allow us to investigate our hypothesis, they also provide the first systematic estimates of the level and trend of Muslim vs Hindu participation across India and its states.

The rest of the paper is structured as follows: Section 2 describes our data and Section 3 details our empirical strategy. Section 4 presents preliminary results and Section 5 concludes.

2. Religion, Politics and Violence in India

India is a country of considerable religious diversity and the constitution enshrines secularism. With more than 100 million Muslims, India is home to the world's third largest Muslim population. Muslims constituted 13.4% of the population in the 2001 census and form the single largest religious minority in India. Their share in the population varies considerably across states, ranging from close to zero to more than 60% in the only Muslim-majority state of Jammu & Kashmir. Their socioeconomic position is on average similar to that of the low caste Hindu population, but the latter groups have access to a range of affirmative action programs in the economic and political spheres, which Muslims do not have.[2] A recent report to the Prime Minister's

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[2] The lowest castes (known as Scheduled Castes) and marginalized tribes have specific electoral constituencies set aside for members of these communities; they also have mandated quotas in higher education and government jobs and preferential access to secondary schooling.

Office cites survey evidence that Muslims feel disenfranchised and somewhat marginalized in the allocation of public services and public sector jobs (Besant and Shariff 2007, Das, Kar & Kayal 2011).

2.1   Religious Identity of Elected State Legislators

We construct a unique data base on the religious identity of state legislators. India is a federal country, with a parliamentary system of government at both the federal and state levels.Elections are held every five years, on a first-past-the-post system in single-member constituencies. Elections are very competitive in India, with more than 100 parties participating in the 2009 national elections. There are no major "Muslim-only" parties, but some parties appeal more to Muslims than others.

We obtained data on state legislative elections from the Election Commission of India and they contain information on the name, sex, party affiliation and votes obtained by every candidate in every election held in India since Independence. We used the legislator names to infer religious identity. To minimize measurement error, we had two independent teams working on the classification of legislator names. The first team used a software program called Nam Pehchan, which was able to classify about 72% of the names, and manually classified the rest. A second (India-based) team performed the whole classification manually using their judgment gained from prior work with Election Commission files. We classified a legislator as Muslim only if both teams classified the same as Muslim.[3] This means that errors of classification, if any, will most likely underestimate the proportion of Muslim legislators.

In this draft, we focus on data from the period 1980-2007, for 17 major states of India which account for over 95% of the total population.[4] Over this period, electoral constituency boundaries remained fixed, and therefore we do not have to worry about concerns such as gerrymandering which might affect the proportion of Muslims elected to state legislatures. In future research, we will also include the period from 1960-1980.

The share of Muslim legislators in the country has remained fairly constant at 7-8% over the past three decades, which is considerably less than their population share of 13% (Figure 1). To the best of our knowledge, this is the first estimate of the proportion of Muslims in India's state legislatures.

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[3] In ongoing research, we will examine cases of non-agreement more closely to assign a better classification.
[4] In 2001, three states were split into two. We aggregate the data from the split states to the original unsplit boundaries to maintain a balanced panel data set.

Figure 1: Percentage of Muslim state legislators 1980-2007 (17 Major States)
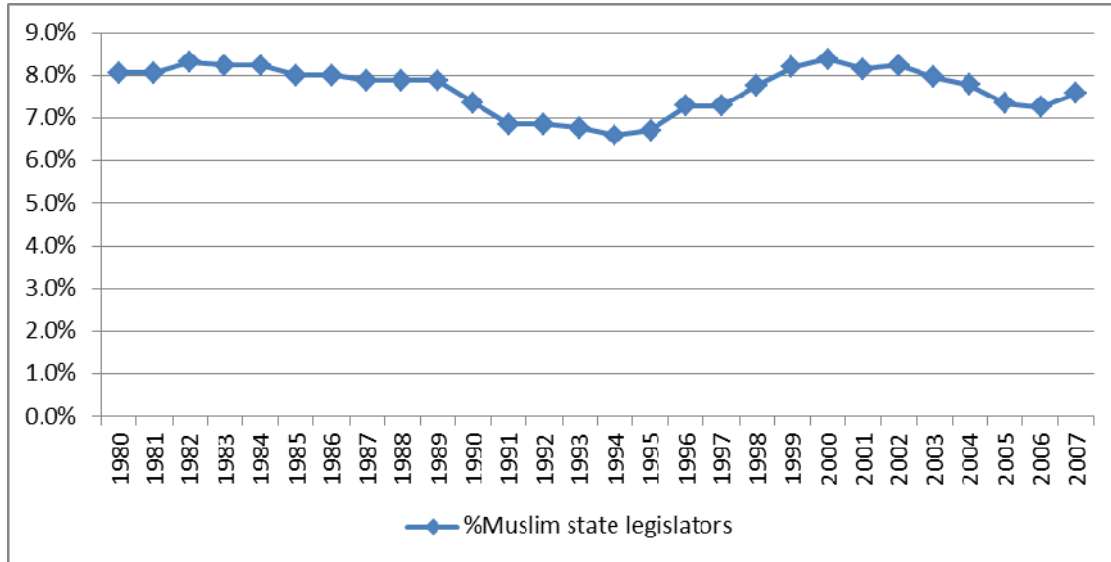
Our data set also reveals that Muslims are systematically under-represented in state legislatures, compared to their population share in almost every state (Figure 2); the major exception is the Muslim-majority state of Jammu & Kashmir, where the percentage of Muslim legislators closely reflects the population proportion.

Figure 2: Percentage of Muslim state legislators and Muslim population across major Indian states,   1980-

2007

%Muslim legislators (1980-2007) **%Muslim population (2001)**
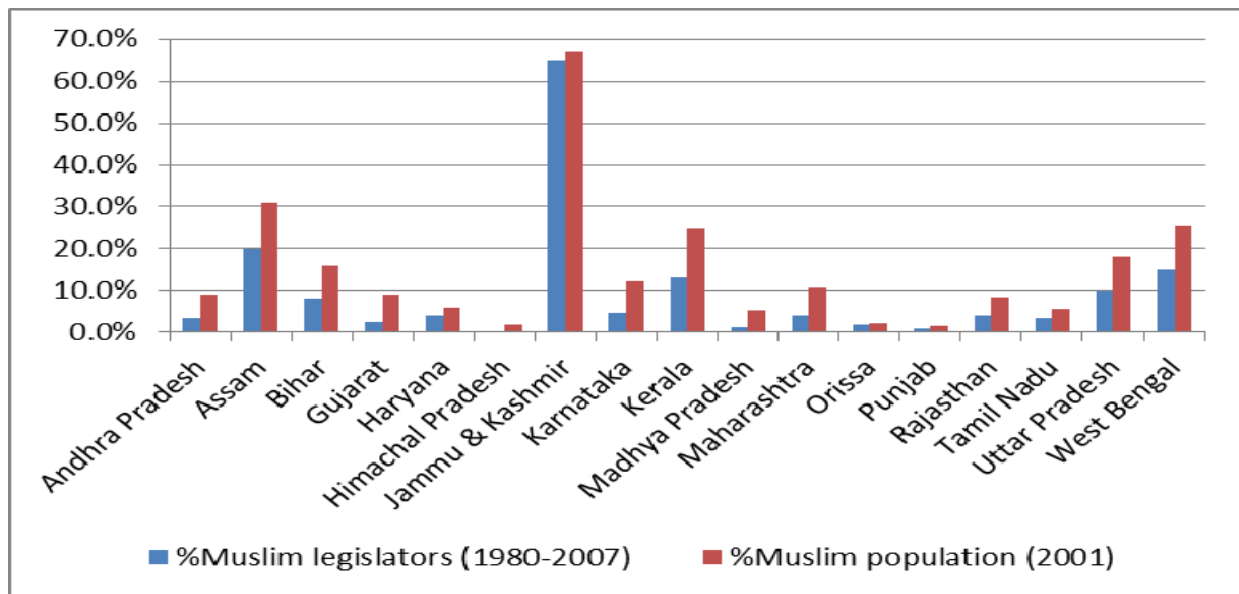
2.2 Data on Religious Violence

We updated a data base on Hindu-Muslim violence originally put together by Ashutosh Varshney and Steve Wilkinson (Varshney and Wilkinson, 1995). The original data set was based on newspaper articles published in *The Times of India* (Mumbai edition), a national newspaper over the period 1950-1995. This was the first systematic data set on religious violence in India over time, and has been used in several previous academic studies (discussed in more detail below). We extend this data base until 2010, using the same methodology as the original data base (as documented in Varshney, 2002, Appendix 3), and building upon the work of other researchers (notably Mitra and Ray, 2010, who extend the data base until 2000). In this draft, we use the data until 2007; data for the remaining three years is currently being collected.

The original Varshney-Wilkinson data set has been widely used to examine the determinants of religious violence in India. Previous work has identified several important factors which contribute to the prevalence or prevention of religious violence. Varshney (2002) highlights the importance of consociational links i.e. the strength of inter-religious civil society organizations, based on shared business or economic interests. Jha (2008) also highlights the importance of historically determined economic complementarities between Hindus and Muslims. In particular, he shows that cities which used to be medieval ports have a greater degree of such economic complementarity and a lower incidence of riots. Bolhken and Sargenti (2010) find that a 1% increase

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in state-level GDP growth reduces the incidence of riots by 5%; their estimation relies on rainfall shocks as an exogenous determinant of state-level GDP growth. Mitra and Ray (2010) show that differential economic growth across Hindus and Muslims can generate conflict, due to resentment over relative economic well-being; their analysis strongly suggests that Hindus are the aggressors in such riots (Chua, 2003 discusses the role of differential economic growth in ethnic violence more generally).

Remarkably, there has been little work on documenting the effects of politicians on Hindu-Muslim violence, though leading politicians have sometimes been implicated in such incidents.[5] The major focus on politics has been the work of Wilkinson (2004), who shows that greater political competition results in a lower incidence of riots against Muslims.[6] The obvious assumption behind such analysis is that elected officials have the capacity (if not the willingness at all times) to prevent or to escalate potential religious tensions towards a point of violence. We also take this as our working assumption, and in further research, will examine some potential mechanisms through which elected officials choose to exercise such power. In our analysis, we will control for some of the variables identified by these previous researchers, most importantly the "effective number of parties" used as a proxy for electoral competition in the state.[7]

The updated V-W data set shows some interesting trends in the post-1995 period. The incidence of Hindu-Muslim riots is lower in the post-1995 period compared to the period 1980-1995, except for the upsurge in violence in 2002, which was concentrated in the state of Gujarat (Figure 3). A similar trend is visible for the number of people killed in the riots.[8] This overall decline in the incidence of religious violence is in line with the overall decline in other violent crimes in India (such as murders) in the period after 1990.

Figure 3: Number of Hindu-Muslim riots and riot deaths in India, 1980-2008

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[5] For instance, Chief Minister Narendra Modi has been accused of gross negligence and failure to prevent violence against Muslims during the Gujarat riots of 2002.

[6] Wilkinson finds that the proportion of Muslims in the state cabinet has no significant relationship with the incidence of Hindu-Muslim riots, but does not examine the role of overall Muslim representation in the legislature, or the presence of Muslim legislators in specific districts.

[7] This is the primary variable used by Wilkinson (2004). See Chibber and Nooruddin (2004) for a definition of this variable, which they show to be a significant determinant of public service provision by state governments.

[8] The data for the number of people killed is still preliminary.
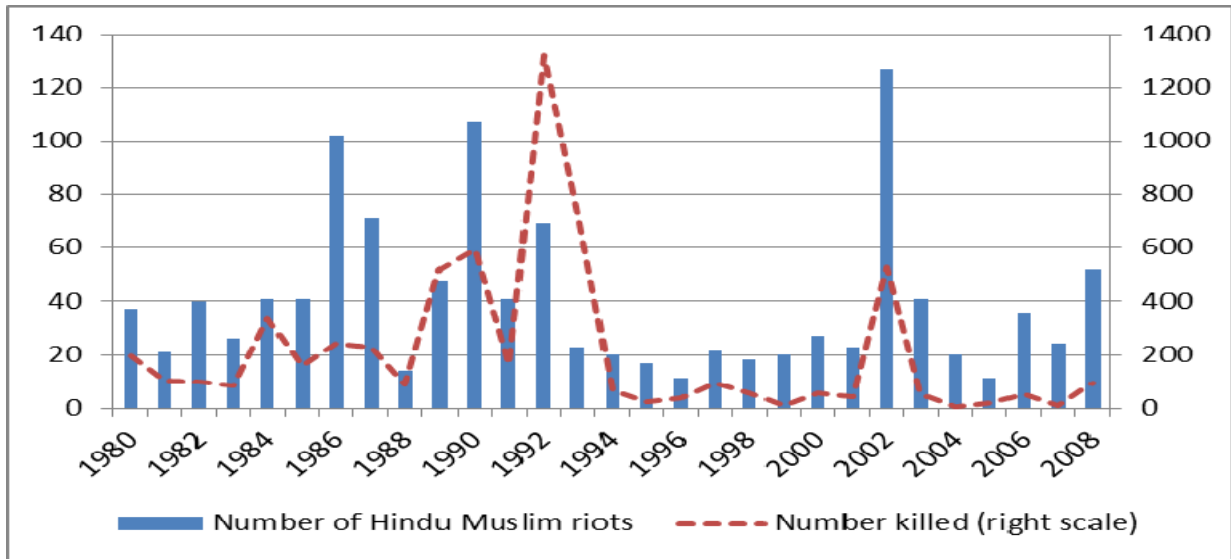
This decline in the incidence of Hindu-Muslim violence in the post-1995 period is observed in almost all the states (Figure 4). However, there remains a strong correlation between the incidence of riots in the two periods i.e. states which witnessed a high level of riots before 1995 also witnessed a high level of riots after 1995.

Figure 4: Number of Hindu-Muslim riots across Indian states 1980-2008

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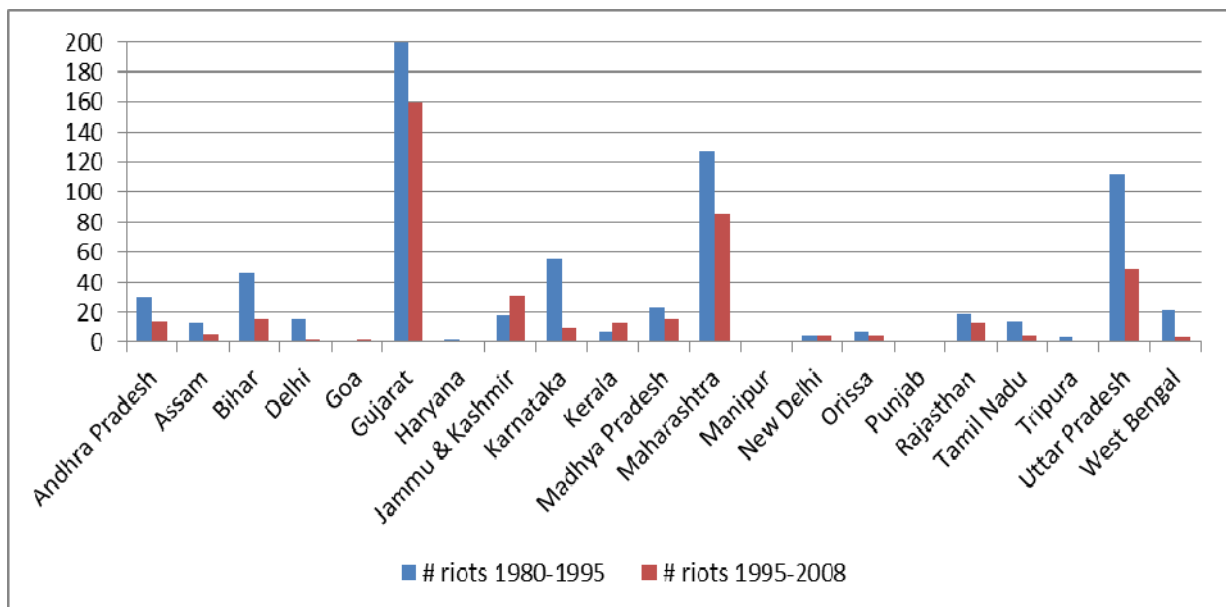
3. Identifying the Effects of Legislator Identity

We will examine the effect of legislator identity on religious violence using regression analysis at both the state and district levels. At the state level, our main empirical specification is as follows:

$$(1) \qquad Log\ (0.1 + NRiots_{it}) = a_i + b_t + dMuslim_{it} + fX_{it} + e_{it}$$

where $NRiots_{it}$ is the number of Hindu-Muslim riots in state i and year t; a_i is a state fixed effect to control for all time-invariant state characteristics, b_t is a time fixed effect to control for nationwide changes in year t, $Muslim_{it}$ is the proportion of Muslim legislators in the state in year t, X_{it} is a vector of other time-varying state characteristics and e_{it} is an error term. Since almost half of all state-year observations in our data have zero riots, we use the log transformation above to avoid dropping these observations. Another way to deal with this highly skewed count data is to run a negative binomial specification with the number of riots ($NRiots_{it}$) as the dependent variable. Finally, we will also use a linear probability model with the dependent variable as a dummy for whether any riots occurred in state i in year t ($RiotDummy_{it}$). In work in progress we analyse the number of people killed as a measure of riot intensity and we model arrests with a view to identifying mechanisms by which Muslim politicians may impact the incidence of riots.

We exclude the state of Jammu & Kashmir from our analysis, because of several factors. It is the only Muslim-majority state in the country, which means that the interpretation of Hindu-Muslim riots as an attack by the majority community on the minority community may not be valid for this state. Also this state is the scene of a long-running territorial dispute between India and Pakistan and such an international dimension to religious relations makes this state very different from the rest of the country, and thus not comparable to the other states.

In all state-level regressions, we cluster standard errors at the level of the state and electoral cycle.[9] We include controls for time-varying demographic and economic characteristics of the states (proportion Muslim, proportion urban, proportion female, proportions belonging to Scheduled Castes and Scheduled Tribes, proportion engaged in farming, per capita state domestic product), as well as the effective number of parties as a proxy for electoral competition.

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[9] We also run a robustness exercise where we cluster standard errors at the level of the state, even though there are only 16 major states.

We also estimate district level regressions using a similar specification as (1) above:[10]

$$(2) \qquad Log\ (0.1 + NRiots_{idt}) = A_{it} + dMuslim_{idt} + fX_{idt} + e_{idt}$$

where $NRiots_{idt}$ is the number of riots occurring in district d of state i in year t, A_{it} is a state-year fixed effect which proxies for all state level happenings in state i and year t, $Muslim_{idt}$ is the fraction of Muslim legislators elected to the state assembly from district d, and X_{idt} are other controls. Each administrative district contains 5-10 electoral constituencies on average. Standard errors are clustered at the level of district. We also run a robustness check where we include district fixed effects instead of state-year fixed effects (note that this specification assumes that the occurrence of riots in a given district is independent of their occurrence in any other district).

In the analysis described above, the fraction of Muslim legislators is potentially endogenous. There might be omitted factors which determine both the presence of Muslim legislators and the occurrence of riots (e.g. the relative economic progress of the two communities, changing norms about minority engagement in politics, changing relations between religious groups in the local area); in addition, the occurrence of religious violence itself might change the incentives for Muslims to participate in politics. Our OLS estimates therefore can be biased in unknown directions.

We therefore implement an instrumental variable strategy, where we instrument the fraction of Muslim legislators with the fraction of Muslim legislators who are elected in close elections against a non-Muslim ($MuslimClose_{it}$). The identification assumption here is that the outcomes of close elections are decided on an essentially random basis.[11] Of course, places in which a Muslim competes in a close election against a non-Muslim may be different in unobservable ways from places in which Muslim candidates are not competitive. To account for these differences we control for the fraction of seats in which close elections between a Muslim and a non-Muslim are observed ($Close_{it}$). Our two-stage specification is therefore as follows:

$$(3) \qquad Muslim_{it} = a_i + \beta_t + \lambda MuslimClose_{it} + \theta Close_{it} + \mu X_{it} + e_{it}$$

$$(4) \qquad Log\ (NRiots_{it}) = a_i + b_t + dMuslim^*_{it} + kClose_{it} + fX_{it} + e_{it}$$

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[10] In future work, we will also conduct the analysis at the level of the town or city (a key finding in Varshney, 2002, is that the vast majority of religious violence happens in urban areas).

[11] A similar instrument was used by Clots-Figueras (2011a, 2011b) and Bhalotra and Clots-Figueras (2011) to estimate the effect of female legislators.

where *Muslim*$_{it}$* represents the predicted values from the first stage regression in equation (3).

We plan to extend the empirical work in two directions in the near future, in addition to robustness checks for the current specifications. First, we will include data from before 1980, which is currently being collected. Second, we will perform a more disaggregated analysis at the level of the town or city. This will enable us to identify the presence of Muslim legislators more precisely with regard to the location of the violence. To the extent that town or city match up with constituency, we will be able to investigate regression discontinuity towards identification. Table 1 shows the summary statistics of all our variables at the state level.

4. Does Legislator Identity Matter for Religious Violence?

OLS Estimates: We begin by discussing the results from state-level OLS regression estimates of specification (1). These do not indicate any significant relationship between the proportion of Muslim legislators and Hindu-Muslim riots (Table 2: columns 1-3). However district level OLS estimates (Table 3: col. 1-3) indicate a negative relationship between the proportion of Muslim legislators and the incidence of Hindu-Muslim riots once we restrict our sample to observations where there was at least one close election between Muslims and non-Muslims (columns 2-3 and 5-6). This result holds irrespective of whether we control for state*year or district and year fixed effects

IV Estimates: As discussed earlier, OLS regressions might be subject to various biases. We therefore implement the instrumental variables strategy based on close elections discussed in Section 3. See columns (4)-(6) of Table 2 (Panels B and C). The IV regressions estimated on state level data show a more consistently negative relationship between the proportion of Muslim legislators and the incidence of Hindu-Muslim riots but the estimated coefficients are not statistically significant. It may be that state level data are too aggregated and noisy to estimate the relationship precisely. Indeed, the estimated coefficients are significant when the equation is estimated at the district level. Table 4 reports the first stage regressions for our instrumental variables strategy, based on specification (3) for district level. The close elections instrument is a strong and significant predictor of the proportion of Muslim legislators across all specifications. Table 5 shows the district level instrumental variables estimates. The negative relationship observed in Table 3 continues to hold, and when restricted to the sample of close elections, the relationship is statistically significant

(columns 2 and 5). We are in the process of checking whether districts with close elections are matched on observables with districts with non-close children, which would indicate the external validity of these estimates. As they stand, the estimates suggest large impacts of politician identity. The estimates in column 2 of Table 5 suggest that a one standard deviation increase in the proportion of Muslim legislators results in a 3 percentage point decline in the probability of a Hindu-Muslim riots (i.e. a decline of 35% compared to the mean) and a 10% decline in the number of riots.

Since the identifying assumption is that the religious identity of the elected candidate is quasi-random in close elections, we investigated robustness to the definition of close. Table 6 shows that the estimates are robust to narrowing the victory margin from the baseline 3.5% to 3% or 2%, the coefficient of interest varying by less than half a standard error in each case. In work in progress we check whether districts in which Muslims win in close elections are systematically different from districts in which non-Muslims win in close elections, which checks on the assumption that the outcome of a close election is random. As this is a key variable, we have also confirmed that the results are robust to increasingly flexible controls for the district-level share of the population that is Muslim.

At this stage, it is unclear what the mechanisms are by which raising Muslim political representation results in less religious violence. We investigate this in two ways. First, we examine selection. In a democratic setting with parochial voting, the numerically dominant group has an electoral advantage and as a result the quality of elected politicians from a group with a demographic majority will tend to be weaker than the quality of politicians elected from a population minority (Banerjee and Pande, 2007). In the country as a whole, Muslims are the minority so it may be that they are positively selected compared with Hindus. This can be tested by exploiting the considerable variation in the percentage population share of Muslims across districts. To allow for a continuous relationship between politician quality and population share, we interact the variable of interest (share of district seats in the state assembly occupied by Muslim politicians) with the district population share of Muslims. The estimates are in Table 7. They show that the effectiveness of Muslim politicians in controlling violence is decreasing in the share of Muslims in the district from which they are elected. This is consistent with some of the estimated impact arising from selection or quality effects. To assess the size of this effect in column 2 of Table 7, we estimate the change in the coefficient of interest associated with a one standard deviation increase in the Muslim population share (0.133). This lowers the beneficial impact of Muslim politicians by 39% (from -0.44 to -0.27)

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for riot incidence and by 37% (from -1.3 to -0.82) for number of riots. These are fairly large effects. In order to investigate what it is that Muslim politicians actually do, we are currently modeling data from news archives on arrests made. Our hypothesis is that politicians who are more committed to controlling violence make more arrests.

5. Conclusions and Further Research

This paper finds that raising the share of Muslim leaders in state assemblies in India results in a substantial decline in the incidence of Hindu-Muslim conflict in the period 1980-2007. The conditional correlation is unstable and imprecisely determined but once we focus upon politicians elected in close elections against the other religion and on districts with at least one close election, the hypothesized effect emerges and is sizeable. Preliminary estimates suggest that a significant but small part of the total effect arises from positive selection of minority leaders. Insofar as Muslims in India value security more than Hindus (Mitra and Ray, 2010; Wilkinson, 2004), our results are consistent with parochial politics and with theories that indicate the relevance of political identity for policy outcomes (eg. Besley and Coate, 1997).Our estimates also suggests a cause of conflict- and hence a solution for the control of conflict- that has not been previously considered.

In work in progress we are extending the data back to 1960, taking into account the month in which riots occur alongside election months so as to allow for within-year changes in politician identity, testing robustness of these results, investigating heterogeneity in this relationship and extending the analysis to look at public goods other than security. In future work we will subject the results in this paper further testing. We are also working to conduct the analysis at a lower level of aggregation, matching town to constituency.

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