Politician Identity and Religious Conflict in India*

Sonia Bhalotra
University of Essex

Irma Clots-Figueras
Universidad Carlos III de Madrid

Lakshmi Iyer
Harvard Business School
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Abstract

This paper investigates the impact of Muslim political representation in India’s state assemblies on religious conflict in the district from which candidates are elected using unique data for the period 1980-2007. We coded the religion of candidates for political office from name and constructed updated conflict data from Times of India archives. To address endogeneity flowing from voter preferences, we instrument the share of all Muslims legislators elected from a district with the share of Muslim legislators who won against non-Muslim legislators in close elections in that district.

* Contact: s.bhalotra@bristol.ac.uk; irmaclots@gmail.com; liyer@hbs.edu. We would like to acknowledge funding from the International Growth Centre for the data collection, to thank Nina Kaysser, Maya Shivakumar, Peter Gerrish and Paradigm Data Services for excellent research assistance, and Bradford City Council for sharing software used to decode religion from name.
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, 2011, 2012).

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, 2011), better education and health outcomes (Clots-Figueras, 2012; Bhalotra and Clots-Figueras, forthcoming), 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.

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. A recent report to the Prime Minister’s 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

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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.
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. 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. 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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Figure 1: Percentage of Muslim state legislators 1980-2007 (17 Major States)

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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.
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**

### 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, forthcoming, 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 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 (forthcoming) 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

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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.
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**

![Graph showing number of Hindu-Muslim riots and riot deaths in India, 1980-2008](image)

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

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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.
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

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:

\[
\log (0.1 + NR_{it}) = a_i + b_t + d_{Muslim_{it}} + f_{X_{it}} + e_{it}
\]

where \( NR_{it} \) 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 (\( NR_{it} \)) 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$_{it}$). We will also analyze 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.\textsuperscript{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.

We also estimate district level regressions using a similar specification as (1) above:\textsuperscript{10}

\begin{equation}
\text{Log (0.1 + NRiots}_{idt} = A_{it} + d\text{Muslim}_{idt} + fX_{idt} + e_{idt}
\end{equation}

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

\textsuperscript{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.

\textsuperscript{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).
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 (\(\text{Muslim}_\text{Close}\)). 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 (\(\text{Close}_\text{it}\)). Our two-stage specification is therefore as follows:

\[
(3) \quad \text{Muslim}_\text{it} = \alpha_i + \beta_t + \lambda \text{Muslim}_\text{Close}_\text{it} + \theta \text{Close}_\text{it} + \mu X_{\text{it}} + e_{\text{it}}
\]

\[
(4) \quad \log (\text{NRiots}_\text{it}) = a_i + b_t + d \text{Muslim}_\text{it}^* + k \text{Close}_\text{it} + f X_{\text{it}} + e_{\text{it}}
\]

where \(\text{Muslim}_\text{it}^*\) 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.

The estimation is still in progress (but we will be able to present results by June).

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