Stabbed in the back? Mandated political representation and murders

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Abstract

This paper provides the first country-wide research evidence that an affirmative action policy may induce a backlash. I exploit the timing of the implementation of caste-based electoral quotas across and within the states of India. The results show that the implementation of the electoral quotas coincides with an increase in the number of murders targeting members of the lower castes. The analysis of these administrative crime data is backed up by the complementary analysis of a nationally representative household survey. Households' answers reveal an increase in inter-caste tensions and discrimination during the operation of caste quotas. The results are consistent with a backlash against electoral quotas (due to sabotage or retaliation), and inconsistent with other interpretations (such as empowerment).

Keywords: sabotage; backlash; affirmative action; electoral quota; crime; caste
JEL: D72; D74; J15; K42; O12

1 Introduction

The terrible thing about fairness is that while (almost) all of us love the principle, it is difficult to agree on how to achieve it. Take the example of affirmative action. While the concern for fairness motivates its implementation, any particular affirmative action is controversial, and people outside its target can feel unfairly treated (Fryer and Loury 2005). In fact, a nascent body of experimental literature shows that implementing affirmative action may induce a backlash (see for example Gangadharan et al., 2016). Such a reaction automatically undermines the benefits of the affirmative action for its beneficiaries. Is there any evidence of such backlash outside of laboratory experiments?

The case of India offers an ideal quasi-natural experiment to document whether affirmative action can be vitiated by backlash. Caste still is a source of taste-based discrimination in India (Banerjee and Gupta, 2015), while a constitutional amendment enacted in 1993 reserves a quota of seats in local elections for members of lower castes. Transposing to castes the identity theory of Akerlof and Kranton (2010), if one's caste identity affects one's utility function, then the empowerment of members of lower castes thanks to the affirmative action may carry a cost for members of higher castes. This cost could lead some members of higher castes to seek to limit the empowerment of members of lower castes, potentially through violence. Whether such violence may follow electoral quotas is a crucial question. More than 100 countries have electoral quotas for women and/or minority groups (Krook and O'Brien; 2010), and the visibility inherent in electoral quotas may exacerbate the risk of a backlash.

My identification strategy relies on the times when electoral quotas are implemented both across and within states. As outlined in Iyer et al. (2012), different states have started to implement quotas in different years and, once in place, these quotas rotate across local constituencies. To assess whether a backlash is taking place, I first make use of a unique crime dataset covering the entire country. This dataset consists of exhaustive administrative crime records, which disclose the number of crimes against members of the so-called Scheduled Castes (henceforth, SCs), who have historically suffered discrimination.[1] Crimes

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[1] Members of the Scheduled Castes and Tribes (SCs and STs) form the social groups who suffer most from caste-based discrimination. This paper focuses on SCs only, leaving aside STs, for two main reasons. First, SCs represent a bigger minority, forming 16 per cent of the Indian population in the 2001 Census as against 8 per cent for STs. Second, the SCs have more frequent interaction with the majority: historically STs live in isolated autonomous villages while SCs belong to multi-caste villages. Today, SCs still represent a significant minority in 80% of rural Indian villages in the nationally

targeting members of the SCs are registered as such only if the victim is a member of an SC and the perpetrator is a member of a higher caste. Once the share of SC households is controlled for, these crime records provide an original quantitative measure of violence specifically directed at members of the SCs.[2]

The results indicate an increase in the number of murders of members of lower castes following the implementation of caste quotas in local elections. These murders increase immediately, the very first year of the implementation of the quotas. Caste quotas appear to increase targeted murders by 30%, which means about 200 murders of SCs each year on average although, reassuringly, the effect may slowly taper off over time. Caste-based offences – symbolically loaded crimes – also increase with the implementation of caste quotas, but the relationship is non-robust. Other crimes targeting members of SCs are unaffected.

These results are consistent with an increase in the violence targeted against members of the SCs. Quotas may through two fundamentally different channels increase the number of crimes recorded: crime perpetuation (consistent with a backlash) and crime reporting (consistent with empowerment). In a context where the backlash may for example take the form of police officers not recording some crimes, the literature considers the evolution of the number of murders recorded as the most trustworthy statistic (because a body is hard to hide, Aneja and Ritadhi, 2020; Bros and Couttenier, 2015; Iyer et al., 2012). The murder of a member of an SC may still be concealed, however, most easily by recording it either as a suicide, or as a general murder (since caste-based crimes are recorded only if they are committed by non-SC perpetrators against SC victims). It is thus essential to note that the SC quotas have no connection with the recording of murders in general, or of suicides. These results are consistent with the idea that quotas trigger strategic sabotage, or spiteful

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representative IHDS 2011, while STs are a significant minority in only 30% of the villages (a significant minority means that the group represents 1% to 50% of a village population). I denote all non-SC/ST castes as 'higher caste'.

[2] These crimes may specifically target members of SCs who act as if empowered. For press reports on murders, the most extreme form of caste-based violence in many contexts, see 'Caste hatred in India – what it looks like', available from: https://www.bbc.com/news/world-asia-india-43972841#. See also Mathew (2003), Narula (1999), Purohit et al. (2002), or Sumathi and Sudarsen (2005) for accounts of caste murders in the political sphere, to prevent lower castes members from running for election to reserved seats, or, when elected, from taking an active part in politics. For example, Mathew (2003, p.156), notes, 'There has been a sharp increase in violent manifestations of casteism in local communities ever since the local government system got strengthened through the Constitution amendments. Once the panchayati raj institutions were perceived by the upper castes as the tool for the lower castes to assert their rights as individuals living in a democratic polity the latter have become targets of caste-based discrimination and violence'. Such reports contrast with the easy implementation of other forms of affirmative action for SCs, which have an older legacy and a still debated effect (Deshpande, 2019; Jaffrelot, 2002).

retaliation.[3] Ultimately, both actions result in reducing the benefit of the affirmative action, be it through murdering its beneficiaries to prevent any future empowerment (sabotage), or murdering its already empowered beneficiaries (retaliation).

To document more precisely what is happening, I complement the above analysis of the administrative police records with evidence from a new household survey on inter-caste conflicts and the practice of untouchability. Members of higher castes appear to declare more conflict overall and more inter-caste conflicts when their village has an electoral SC quota. More importantly, higher caste members declare a shift in their attitude to SCs: the practice of untouchability increases when SC quotas are implemented. Last, a household's trust in institutions bears no significant relationship to the SC quota in its village.[4] These results are again consistent with an increase in violence against members of SCs following the implementation of quotas.

Finally, the results suggest that it is the existence of the quota policy in itself, rather than the particulars of the implementation of quotas or the type of policies implemented by SC leaders, that appears to be related to murders. I investigate three variations in the way that quotas are implemented and SC leaders come to power. First, electoral years do not appear to be particularly prone to increased crime, although elections could have led to heightened tensions. Second, the relationship between quotas and crimes holds independently of the implementation of exclusive special courts, intended to provide members of lower castes with a better judicial system. I then examine whether murders really derive from SC quotas or from the specific policies implemented by the SC leaders. The non-experimental nature of the data makes it difficult to causally disentangle these two. We can still note three main sets of results consistent with the increase in murders being caused by the quotas themselves. First is the fact that murders already increase during the very first electoral year with quotas implementation, which is too early for significant political changes to already have taken place thanks to the elction of SC leaders. Second, once quotas are installed, changes in the size of the quotas (i.e., changes in the number of seats reserved for members of the SCs or the

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[3] Sabotage is distinct from retaliation in that sabotage is strategic (Brown and Chowdhury, 2017), while retaliation is spiteful (Fallucchi Quercia, 2016).

[4] If the coefficient was precisely estimated, members of the SC would declare that they trusted the police less in the presence of SC quotas (p-value at 13%). If trust in the police declines, it becomes harder to report crimes when SC quotas are in force, contradicting the interpretation that the quotas bring empowerment. Yet, there is ample room for improvement in the relationship between the police and members of lower castes: in 2001, lower caste members were not allowed to enter police stations in 28% of the villages (Shah et al. 2006).

ultimate number of SCs being elected) do not affect the number of crimes. Third, all the results in the household data are tied to the SC quotas alone, while the (endogenous) elections of SC leaders show no relationship to inter-caste tensions.

The main contribution of this paper is to provide what is, to the best of my knowledge, the first country-wide evidence consistent with violence being triggered by an affirmative action policy. A backlash is a possible side-effect of legislators seeking to level the playing-field. In laboratory experiments, quotas may either increase the effort (Calsamiglia, et al. 2013; Dato and Nieken, 2014), provoke a backlash (by peers: Leibbrandt et al., 2017), or provoke retaliation (by members of the dominant group: Fallucchi and Quercia, 2018), whereas in horse-races handicapping increases sabotage (Brown and Chowdhury, 2017). The only artefactual field experiment known to me reports a backlash from members of the dominant group after the implementation of gender quotas (Gangadharan et al., 2016). Last, Banerjee et al. (2018) introduce an important nuance: in their laboratory experiment, backlash follows affirmative action only if the unprotected players discover that they have lost the game because of the affirmative action. Such visibility of the role played by quotas in laboratory results may be reminiscent of the visibility of caste electoral quotas (which exclude members of higher caste from running for the elections they would traditionally win). However, while carefully designed, the set of existing experiments reaches diverging conclusions as to whether and when members of a minority group face violence due to affirmative action. My contribution is to investigate the question based on measures of violence actually taking place in a country of more than a billion inhabitants.

The second main contribution of the paper is to underscore that the effects of an affirmative action policy depend on the acceptability of the criteria that determine who is targeted by the policy (as shown in the lab, Balafoutas et al., 2016). My empirical results provide an alarming counterpoint to the seminal findings of Iyer et al. (2012) on gender quotas.[5] The

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[5] In Iyer et al. (2012), the increase in crimes against women recorded in India after gender quotas is consistent with the better access of women to justice. Indeed, the number of crimes that are prone to reporting bias (such as rape and kidnapping) increase after gender quotas, but the murders of women do not. Iyer et al. (2012) also report that caste quotas do not affect the number of rapes against members of lower castes. The latter results are puzzling, since SC women are frequent victims of crime and are vulnerable to both gender-based and caste-based electoral quotas. But if both gender and caste quotas had an empowerment effect, shouldn't SC women have been the ones with the strongest response? Intrigued by this puzzle, I focused on crimes targeting members of SCs and extended the study sample by six states to cover all of India's 17 major states, and by six years to 2013. Taking into account this complete state sample leaves the identification strategy unchanged, but the number of murders of members of SCs then appears to increase after the SC quotas. This result is essential: a precise estimation of the relationship between imposing caste quotas and caste murders is consistent with fundamentally different effects of gender quotas and caste quotas on crimes.

increase in rapes after gender quotas in Iyer et al. (2012) is consistent with an increase in the number of crimes recorded, and thus with empowerment. The increase in caste murders after caste quotas in the present paper is consistent with more crimes being committed, and thus a backlash effect. Moreover, the rape declarations by SC women – the only record specific to this group – do not react to quotas: SC women do not seem to have been empowered by either gender or caste quotas. Such differences in answer to a similar policy highlight the danger of the 'one-size-fits-all' logic in seeking to empower marginalized groups.

Third, the paper contributes to the literature on the impact of affirmative action in India. Electoral quotas appear to have improved the situation for minority members overall, whether through better access to public goods for the leaders' peers (Besley et al., 2004; Iyer et al., 2012), the higher agency and aspirations of minority members (Beaman et al., 2012; Ghani et al., 2014), or reduced daily discrimination against them from majority members (Chauchard, 2014; Girard, 2018). The present paper sheds light on an aspect so far little explored of the consequences of quotas, that runs concurrently with their tangible benefits: the risk of backlash.[6]

Last, my results extend a nascent body of literature that shows how crimes targeting members of lower castes can be interpreted as tools to perpetuate the caste hierarchy. Indian castes are socially segregated, and violence is quick to erupt: a relative change in the wealth of members of high and lower castes is enough to spark violence (Sharma, 2015). The segregation is not only economic: water is a symbolically loaded good and as a result the type of water source that is used can trigger caste-based murders (Bros and Couttenier, 2015). Interestingly, these murders may decrease when the endogenous electoral process – fundamentally different from, if not the opposite of, imposed quotas – leads to some seats being won by parties representing members of lower castes (Aneja and Ritadhi, 2020). In all cases, the evolution of crimes against members of lower castes discloses information on the nature of inter-caste interactions rather than mirroring the evolution of other crimes.

In the next section, I present the background of this study and its sources of data on castes, crime trends, and the reservation system. I present the state level analysis in section 3, and the

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[6] Focusing on SC quotas in the state assembly of Uttar Pradesh, Jensenius (2017) concludes "although SC politicians still experience micro-aggressions, they are spared overt discrimination" (p. 162). The present paper asks what the prospects are for the whole population during quotas in *Panchayats* – the political institutions closest to the population.

household level analysis in section 4. Discussion over variations in quota implementation and SC leaders' policies appears in section 5, before a concluding section.

2   Contextual elements and administrative data on castes, crime, and political quotas

2.1   Castes

The caste system has shaped the Indian social setting for more than 3,000 years. Three key features of the caste system are worth keeping in mind. First, castes at the individual level are hereditary, exclusive and virtually unchangeable. Second, castes are ordered on a social status ladder. Third, and closely linked to the second, caste groups are segregated. These theoretical aspects still affect everyday life through business networks (Munshi, 2011), spouse selection (Banerjee et al., 2013), and politics (Jaffrelot, 2005).

Indian administrations record castes as four broad groups: scheduled castes (SC), scheduled tribes (ST), other backward castes (OBC) and other castes (OC). SC households, encompassing the backward castes who were known as the 'untouchables', still suffer from caste-based discrimination such as exclusion from public goods (Shah et al., 2006), labor and credit markets (respectively Ito, 2009 and Kumar, 2013), and spatial segregation (Deliège, 2004).

On average, SCs account for 16.6 per cent of the population. Of the 17 states in the sample, Gujarat has the smallest representation of SCs (6.7 per cent of the state population in 2011, 7.4 in 1991) and Punjab the biggest (31.9 per cent of the state population in 2011, 28.3 per cent in 1991). Data on the share of SC households in each state come from three census waves (1991, 2001 and 2011), interpolated to yearly values.

Figure 1 shows how compelling caste still is nowadays, how victims are more reluctant than perpetrators when it comes to acknowledging discriminatory actions, and how these actions vary across states. Untouchability is a form of caste-based discrimination that specifically targets members of the SCs.[7] In 2011, 31% of the members of the higher castes surveyed in

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[7] In practice, the IHDS asks only the members of the SCs if they are victims of untouchability practices. The question of practicing untouchability is put to members of all castes. The reported statistics correspond to the responses from non-SCST members, to reflect the analysis of crime data.

rural areas answered straightforwardly that they practiced untouchability, and 25% members of the SCs acknowledged suffering some form of untouchability. The figures are high, all the more since untouchability has been constitutionally forbidden since 1949. Figures are significantly higher in the states of the Hindi Belt.

The persistence of caste-based discrimination has motivated the Indian government to take many actions, including the specific recording of crimes and the affirmative action policy that I describe in the next two sub-sections.

Figure 1: Untouchability practice and victims

Source: author's calculation on IHDS 2011. Untouchability practice is the state average of the sum of answers to questions to TR4A and TR4B by members of higher castes (non-SCSTs). 'Untouchability victim' is the state's average answer by SC households to question TR4C. The map shows India's political borders as of 2019, the source data are older (as detailed in footnote 11).

2.2   Crimes

The National Crime Records Bureau (henceforth, NCRB) of the government of India maintains annual records of crimes under different headings. Of interest for this paper are the crimes against the SCs, which are further subdivided into special and local law crimes, murder, rape, physical assault or bodily harm, kidnapping, robbery, arson, dacoity and others. Like Sharma (2015), I separate special and local law crimes (henceforth, special crimes) from

other crimes, which are recorded under the standard headings as crimes against the Indian penal code (henceforth, penal code crimes).

Special crimes represent offenses related to the persistence of caste-based practices that are outlawed today, and/or the intentional humiliation of lower castes. These crimes are subject to specific registration and procedure under the Protection of Civil Rights Act of 1955, further reinforced by the Prevention of Atrocities Act, 1989. Both acts provide graver punishment for some – symbolically sensitive – offenses than the penal code would provide, for example, if a higher caste member denies access to a water source to a low caste member (the complete list from 1989 is in the Appendix). The list includes offences that may be recorded either under 'special crimes' or under various headings in the Indian penal code, such as hurt, robbery or even rape. Murders, unlike these other offences, always belong to the Indian penal code.

The NCRB provides crime data in its publication 'Crime in India'. It records First Information Reports, which correspond to complaints filed with the police. Yearly information on crimes against the SCs is available at the state level for the period 1992-2013 (Mayer, 2017). Crimes are recorded as such only if (i) the victim is from an SC and (ii) the perpetrator is from a higher caste (hence neither SC nor ST. However, the statistics merge together crimes perpetrated by members of the OCs and the OBCs). Otherwise, crimes are recorded in the general crime category. For example, if one SC member murders another SC member, it is logged under the general heading of murders rather than murder specifically against an SC.

Thus, if SC-related crimes by higher castes are a mere random subset of other crimes, it should be possible to explain the dynamics of these crimes by accounting for the changing number of general crimes and the ratio of SCs in a state population. However, this is not the case. In 1992, the NCRB recorded two special crimes per 100,000 SC population. 21 years later, the last year of my sample, the NCRB recorded seven special crimes per 100,000 SC. The absolute increase observed in special crimes could be good news if it were due to an

increase in reporting, thus signaling stronger self-confidence among the victims and better access to the police. But this increase might also indicate a backlash effect.[8]

The different evolution pattern of the number of murders and rapes allows a first discussion of the likelihood of a backlash *versus* a reporting effect. Murder is considered the least likely crime to suffer from reporting reluctance, if only because hiding a body is difficult. Conversely, rape is very likely to be affected by disclosure reluctance because it is easy to hide, and often humiliating for the victim to admit. Murder reports among non-SCs have steadily decreased since 1992, but have slightly increased among the SCs (Appendix Figure 3). In the meantime, rape reports have steeply increased among the non-SCs, with less of an increase among the SCs (Appendix Figure 4). Looking at Figure 4, we may reflect that either disclosure reluctance may have followed a different pattern among the SC and non-SC populations or that rape was reallocated to special crimes. Looking at Figure 3, one may worry instead that there has been a relative increase in the incidence of crime against SCs.

On top of the special treatment in police statistics, members of the SCs benefit from affirmative action under a variety of schemes. In the present paper, I consider one of the most recent and visible of these schemes: political quotas in local elections.

2.3   Electoral quotas policy

In 1993, the 73rd amendment to the Constitution of India established local political councils called *panchayats*, elected bodies that have decision-making power over the construction and maintenance of local public goods, such as roads and water works, or the designation of the households that are entitled to social programs. *Panchayats* are composed of a council of representatives and a head, elected either directly by the constituents, or indirectly by the members of the council. *Panchayats* form a three-tier system: the largest entity is the district *panchayat*, which is divided into block *panchayats*, and then *gram panchayats*.

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[8] The discrepancy between the intensification of crimes against members of lower castes and the population share of these castes is evidence that some crimes specifically target members of lower castes, leading Sharma (2015) to refer to these crimes as 'hate crimes'.

Table 1: Dates of Panchayati Raj implementation across the states of India

Year of first election with a SC quota	Number of states
1962	1
1981	1
1991	1
1992	1
1993	1
1994	1
1995	6
1996	1
2001	2
2006	1
2007	1
Total	17

The 1993 reform is important for this study because it implemented quotas as a tool for affirmative action. The seats of the head and/or council members were to be reserved for low caste members (SCs, STs and sometimes OBCs) and/or women. These seats are reserved for one term at a time and are rotated among the *panchayats*. The proportion of caste quotas varies between states and is proportional to the weight of the caste in the state population. Similar mandated political representation was imposed on urban local bodies.

Although mandated by the constitution, the year in which political representation for lower castes was implemented in local councils varied between the states (Table 1). The reasons were, first, differences in the election dates: some states already had local councils and these were allowed to complete their term. Second, some of these states (Maharashtra and Madhya Pradesh) had pre-existing reservation policies, or slightly anticipated the ratification of the constitution (Kerala, for example). Other states faced delays due to issues with the implementation of the law (in Bihar, for example, a lawsuit challenged the reservation of seats for the intermediary status OBC, which were not stipulated by the constitution) or with budgetary problems in organizing elections (Assam). State fixed effects allow me to account for all state-invariant characteristics, such as the presence of local governments before the amendment of the constitution. The data on *panchayats* originate from Iyer et al. (2012) and have been cross-checked online with the state's electoral commissions.

	year before SC quotas	Difference	year of first SC quotas	P>|z|

2.4. Descriptive statistics on crimes around the implementation of SC quotas

Mean comparison tests on the year just before and just after the implementation of SC quotas show that the reporting of some crimes increased in the very first year after the implementing of the SC quotas (Table 2). Special crimes and murders significantly increased after the quotas. Crimes also increased in total but the estimate is imprecise.

The most worrying part of Table 2 is the increase in murders, since murders are the most reliable crime statistics, and their increase is thus the hardest to attribute to empowerment. Admittedly, SC quotas may affect crime records in different ways. SC quotas may induce police officers to perform better in front of SC victims, SC victims to report crimes more easily, and non-SC perpetrators to either commit fewer crimes (if they adjust to the change in the behaviors of the police and SC members) or commit more crimes (if SC quotas trigger a backlash). An increase in crimes which stigmatize those who report them, such as special crimes, can thus be consistent with both an empowerment of the victims and a backlash. Conversely, a reduction in these crimes may be consistent with either fewer crimes being committed or a backlash, if the backlash takes the form of police officers refusing to register complaints by a members of an SCs (unfortunately a known and documented practice: Deswal, 2013; Kumar,2015; Minj, 2018; Shah et al., 2006).

Table 2: Mean comparison tests on the crimes committed around the imposition of quotas

Total	16.0		16.43	
	(6.0)		(5.75)	
Special crime	6.45	<	7.15	*
	(2.89)		(2.87)	
Penal code crime	9.56		9.28	
	(3.30)		(2.98)	
Murder	0.21	<	0.28	*
	(0.06)		(0.08)	
Rape	0.76		0.76	
	(0.21)		(0.17)	

The table displays the means and standard errors (in parentheses) for each crime, each year, over the maximum sample of 13 states. P>|z| tells the p-values of the non-parametric sign-rank paired test, that the difference between the year just before or just after the implementation of the SC quotas is zero. *** p<0.01, ** p<0.05, *p<0.1.

3   Empirical analysis of SC electoral quotas and SC crime reporting with State data

3.1. Empirical model

My aim is to examine the relationship between caste quotas and crimes targeting SC households. The baseline specification is the following:

$$C_{st} = \alpha_1 \, post\_quotas\_SC_{st} + \alpha_2{'} \, X_{st} + \delta_s + \delta_t + \varepsilon_{iv} \qquad (1)$$

where C_{st} is the log of the number of crimes of type C committed against members of the SCs in state s during year t, per 100,000 members of the SCs, transposing to caste quotas the baseline specification of the work by Iyer et al. (2012) on gender quotas. C can stand for five different crime categories. C first corresponds to all crimes, divisible into two categories, Special and Local Laws crimes (aimed at enforcing caste hierarchies) and Indian penal code crimes. Moreover, penal code crimes include two categories of particular interest: murder and rape.

post_quotas_SC$_{st}$ is a dummy equal to one in the years including and following the first election with political representation for SCs in state s in the *panchayat* elections. The coefficient of interest, α_1, conveys the effect of the affirmative action policy of mandated political representation for the SCs on their crime reporting. δ_s stands for state fixed effects and δ_t for year fixed effects. X_{st} is a vector of state varying controls. The baseline set includes the SC to non-SC share of the population and its square, literacy rates, real per capita GDP

and its square, and urbanization. I later introduce the size of the state police force (per 100,000 inhabitants), which may deter crime but is also endogenous; and the share of seats reserved to SCs in the state legislative assembly; as well as the share of votes received by the Bahujan Samaj Party, which historically supports members of the lower castes, in an effort to disentangle local politics from higher level representatives.[9] I later account for other controls such as the differential increase in incomes across caste groups, and the probability of encounter between members of different castes around water sources (respectively Sharma, 2015; Bros and Couttenier, 2015).[10] The standard errors ε_{st} are cluster-robust with clustering by states (Iyer et al., 2012). Because the sample consists of 17 states, I also check the robustness of my results when I compute standard errors using the cluster bootstrap-t of Cameron et al. (2008). Appendix Table 9 provides descriptive statistics for the sample of the study, namely the 17 major states of India over the period 1992-2013.[11]

3.2. Crimes and quotas: State-level results

Table 3 documents the increase in murders targeting members of the SCs after the implementation of SC quotas. The coefficient on murders is stable across all specifications: the most parsimonious, the baseline, and the inclusion of state-specific trends. Murders increased by 23% to 32% (although the inclusion of all 17 state-specific time trends increases the p-value to 12%). Other crimes (total crimes, penal code crimes, and rapes) do not appear

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[9] All data coming from the Censuses of India for 1991, 2001 and 2011 are interpolated to annual values. Exceptions are the crime and police data provided by the NCRB, the real per capita GDP provided by the Ministry of Statistics and Programme Implementation and the electoral data provided by the States Election Commissions, Ministry of Panchayati Raj or Ministry of Rural Development. Urbanization is the share of the state population living in towns.

[10] All the data from the HDPI 1993, the IHDS 2005 and the IHDS 2012 (NCAER, 1994; Desai et al., 2005; and Desai et al,. 2015), are interpolated to annual values. The probability of encounters between members of different castes around a water source transposes the measure used in Bros and Couttenier (2015), with a focus on members of SCs. It is the product of 4 shares: SCs in a state, SC households which have no drinking water on their premises, non-SCST households and non-SCST households which have no drinking water on their premises. Tube wells and taps are excluded from the definition of shared water sources, since they limit the risk of ritual pollution.

[11] The states included are the large states of India, which account for more than 90% of the crimes committed in each of the crime categories. These states are Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal. Like Iyer et al. (2012), I use the 1992 definition of the frontiers of the states throughout the analysis of state data, to maintain comparable units over time. Hence, I attribute crimes committed within the three new states created between 2001 and 2012 to the states that they initially belong to: I reunite the data of Andhra Pradesh with that of Telangana, of Chhattisgarh and Madhya Pradesh, of Jharkhand and Bihar, and of Uttarakhand and Uttar Pradesh. In two of these cases, the *panchayat* elections in the new states took place a few years after the *panchayat* election taking place in the mother state, which introduces measurement error in my estimates. For a visual overview, the data in Figure 1 cover the exact area that forms the sample of my study (although the data in Figure 1 span 22 states, because they appear with the current political frontiers which also include the 2019 separation of Jammu and Kashmir and Ladakh).

to be robustly affected by political representation, although in the baseline specification special crimes increased after SC quotas.[12]

Table 3: SC crime declaration after the implementation of SC quotas

Dep. Variable:	(1) Total	(2) Special crime	(3) Penal code	(4) Murder	(5) Rape
Panel 1: parsimonious specification.					
post_quotas_SC	-0.231	0.769	-1.216	0.221**	-0.060
	(0.380)	(0.525)	(1.059)	(0.103)	(0.153)
Observations	357	334	354	305	337
R-squared	0.881	0.714	0.581	0.855	0.906
Panel 2: baseline specification.					
post_quotas_SC	0.001	1.357**	-0.749	0.274**	0.055
	(0.321)	(0.566)	(0.728)	(0.097)	(0.099)
Observations	357	334	354	305	337
R-squared	0.890	0.766	0.601	0.859	0.916
Panel 3: Add to specification 2 state-specific trends					
post_quotas_SC	-0.103	0.071	-0.763	0.205	-0.012
	(0.220)	(0.395)	(0.768)	(0.124)	(0.131)
Observations	357	334	354	305	337
R-squared	0.943	0.899	0.716	0.866	0.929

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects. The parsimonious specification controls only for the SC to non-SCST share of the population and its square. The baseline set of controls corresponds to the literacy rates, real per capita GDP and its square, SC to non-SCST share of the population and its square, urbanization. *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

The results are robust to several further changes. First, the results are virtually unchanged when I vary the controls (Appendix Tables 11A and 11B). The relationship between political quotas and murders is orthogonal to each state's police strength or the share of SC seats in the state assembly (columns 3 and 4 of Table 11A), the vote share for the BSP, a traditional support of the lower castes, changes in relative wealth between SC and non SCST

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[12] Any pure effect of SC quotas on reports of special crimes is likely to be difficult to pick up in Table 3 because the law became more stringent on special crimes in 1989, immediately before the start of the crime data sample. Thus, the SC quota may have magnified the impact of the law change in empowering the SCs but the pure quota effect is hard to disentangle from any of the other sources of empowerment trend following the law change. Moreover, the change in the special crime definition may also have led to a reallocation of crimes: offences that were initially recorded under different headings of the penal code became recorded under the heading of special crimes, which may explain why the total number of penal code crimes barely changes with political quotas. In particular, some rapes may have been reallocated to items 11 and 12 of the special crimes (listed in Appendix 13). Murders are the only crimes with such a clear definition that the recording of them was not affected by the 1989 re-definition of special crimes.

households, and the probability of encounter around a shared water source (columns 1 to 3 of Table 11B).[13] Second, the results remain the same, even if slightly less precise, when I compute standard errors using the cluster bootstrap-t advocated by Cameron et al. (2008) when the number of clusters is small (Appendix Table 12).[14] Third, the results are robust to the exclusion of any specific state (Appendix Figure 5).

3.3. Dynamic analysis

This section focuses on the dynamic effect of quotas on crime, as a function of the age of the quotas. Figure 2 reports the coefficients α_k, estimated from a modified version of the baseline Equation (1). To estimate the dynamic relation between the age of the quotas and crimes, Equation (2) includes a set of dummies that take value one for each age k of the quotas:

$$C_{st} = \sum_k (\alpha_k \cdot age\_quotas\_SC_k) + \alpha_2' X_{st} + \delta_s + \delta_t + \varepsilon_{iv} \qquad (2)$$

where k denotes the age of the quotas, and α_k tells the relation between crime C and quotas that are k years old. For each state, $k=0$ the year the quotas were implemented in the state, and k takes negative values before quotas, and positive values after them. For example, when $k=-3$, the dummy $age\_quotas\_SC_k$ takes value one for the states and years that are three years away from the first implementation of the quotas, such that α_{-3} tells the relationship between crimes and quotas that will be implemented three years afterwards. Except for the introduction of dummies for the age of quotas, all estimations behind Figure 2 are like the baseline estimations (in panel b of Table 2). X_{st} is the baseline vector of state- varying controls (SC to non-SC share of the population and its square, literacy rates, real per capita GDP and its square, urbanization), δ_s stands for state fixed effects, δ_t for year fixed effects, and the standard errors ε_{st} are cluster-robust with clustering by states (Iyer et al., 2012). For the hypothesis of absence of the pre-trend to be verified, the α_k must be jointly equal to zero for all k below zero. Figure 2 panel (a) tests for the existence of a pre-trend by excluding two

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[13] These additional controls have the expected relationship to crimes. The share of votes for the BSP has a negative relationship, if any, with crimes. Interestingly, if I interact this vote share with the post-reservation dummy, the interaction term has a significantly negative relationship with murders, attenuating the negative main effect of the post reservation dummy. Consistent with Sharma's findings on district data from 2001 to 2010, an increase in the income of non SCST households translates into a significant decrease in overall and penal code crimes (Sharma, 2015). Consistent with the findings of Bros and Couttenier (2015) on district data from 2001 to 2011, an increase in the probability of encounter has a positive but imprecisely estimated relationship with the number of murders (and with the number of rapes).

[14] Critical values are drawn from a t-distribution to account for the small number of clusters, where the degree of freedom is equal to the number of clusters minus the number of regressors that do not vary within the clusters. I use 1000 replications.

data points that are far apart (following Borusyak and Jaravel, 2017); here, these are one and eight years respectively before the implementation of quotas. Panel (b) then shows the dynamic effect of quotas.

Focusing on murders, Figure 2 brings new insights about the speed with which they react to quotas. Visually, in Figure 2 panel (a), α_k do not display a clear pre-trend for years before the quotas. Moreover, the joint test of the pre-quota dummies rejects their significance (F-test p-value at 0.14). Given this absence of a significant pre-trend, we can turn to panel (b), which shows the dynamic effect of quotas on murders.

Panel (b) in Figure 2 points out that murders increased even in the very first year of quota implementation. Furthermore, panel (b) shows the reasonably stable effect of quotas as they begin to age, justifying the use of the "canonical regression" for the baseline results in this paper: that regression shows the average effect of quotas on murders, regardless of the age of the quota. To study the longer-term effects of quotas, I also check the effect of the number of years since the reform and its squared term as regressors in Equation (1). The squared term is significantly negative, suggesting that the rise in the number of murders slows down over time. However, the magnitude of the squared term is small, such that the number of murders of members of SCs would be expected to decline only 18 years after the implementation of the electoral quotas.

For other crimes – total, penal, special and rape – Figure 2 confirms what Table 2 hints at. Visually, none of these crimes appear to have a clear pre-trend. However, the F-test does not reject the existence of a pre-trend in panel (a) for any of these crimes (all p-values are below the 1% threshold). Looking at the estimates from both panels jointly, we can still note visual discrepancies before and after the implementation of the quotas, suggesting that something may be at play, for special crimes in particular (Freyaldenhoven et al., 2019). However, since the F-test does not reject the presence of pre-trends, in the absence of a valid instrument that would allow us to tease out the part played by the pre-trend from the part played by the quotas, and given the high sensitivity of the quota coefficients in Table 2 when I control for a linear time trend (comparing Panels 2 and Panel 3 for all categories except murders), it is impossible to conclude what the statistical effect of the quotas is on these crimes.

Figure 2: dynamic relation between quotas and crimes
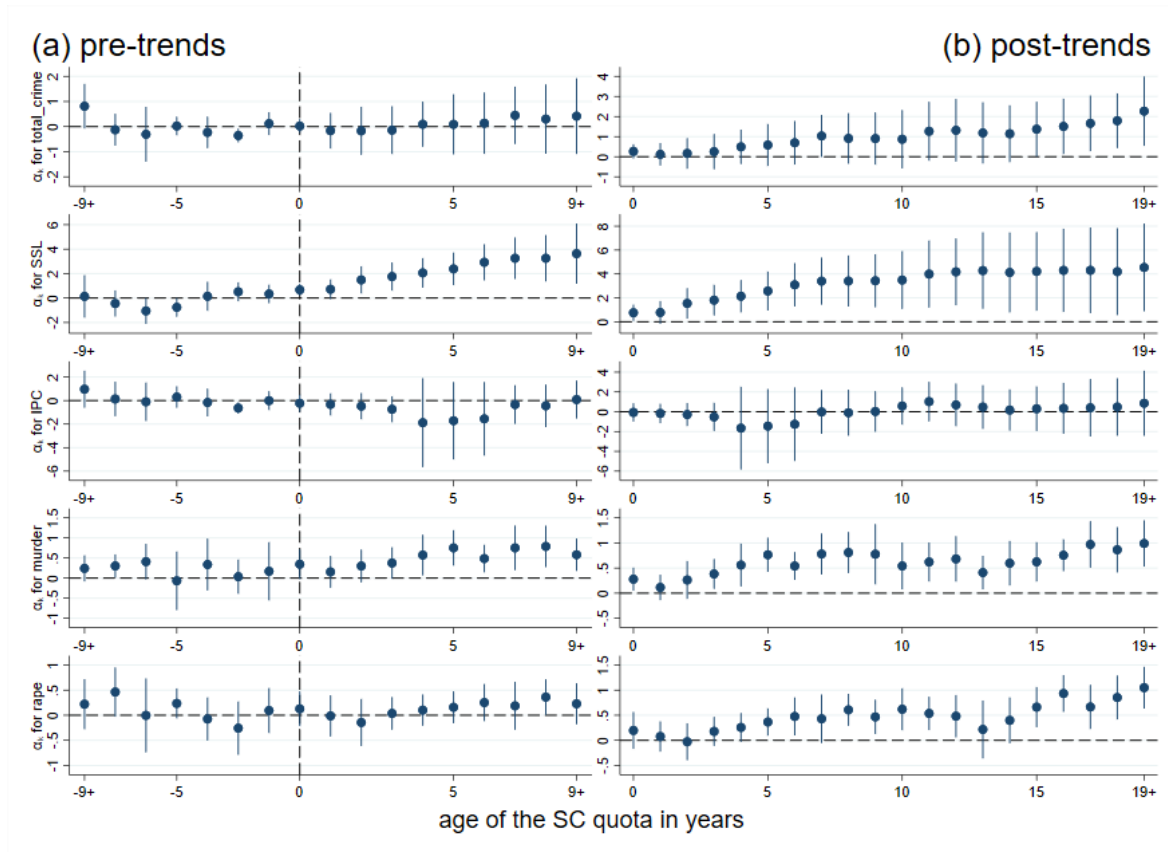
Note: The dots in each graph visually represent the coefficients α_k estimated from an ordinary least square specification described in Equation (2). The bar around each dot tells its 95% confidence interval. Each estimation covers the complete sample of states. The y-axis of each graph tells us the crime in question, the x-axis tells the age of the quota, in years. The analysis follows Borusyak and Jaravel (2017): panel (a) shows the pre-trend analysis, and panel (b) shows the dynamic treatment effect.

3.4. Discussion of state level results: empowerment or backlash?

The increase in murders by 32% concurrently with the mandated SC quotas is consistent with the interpretation that these quotas triggered a backlash. Three main aspects of the empirical results align them with a backlash effect. First, the reliability of the murder count compared to other crimes is the reason why Iyer et al (2012) and Bros and Couttenier (2015) use murders as a benchmark: a body is hard to hide. Thus, an increase in reported murders is likely to correspond to an increase in actual murders. Second, this increase in murders is not accompanied by a robust increase in the report of stigma-associated crimes, such as special crimes or rape targeting members of SCs (such an increase could correspond to both empowerment and sabotage). Third, I can further confirm that the increase in the number of murders of members of SCs stems neither from a general increase in violence and conflicts

during SC quotas (which would increase murders or rapes for the entire population), nor from a re-allocation of murders of SC members by people of a higher caste which used to be recorded either in the general murder category or as suicides (since this would reduce the figures for other murders or suicides). Indeed, suicide or general murder are the two categories where an SC murder could most easily be concealed. However, SC quotas are unrelated to suicides, non-SC murders or non-SC rapes (columns 1 to 3 of Appendix Table 13). Unfortunately, the data are not perfect; in particular, there is no specific record of the number of accidental death or manslaughter of members of SCs (and other sources of the mis-recording of dead bodies could certainly be found). All that can be inferred is that none of the results based on the existing data is consistent with greater willingness to report or record crimes following SC quotas.

Backlash after quotas may be motivated by identity payoffs in the utility function (Akerlof and Kranton, 2010).[15] Caste is in general a significant aspect of social identity in India, where it still triggers taste-based discrimination (Banerjee and Gupta, 2015), and quotas are after all aimed at empowering members of the SCs. In this context, a member of a higher caste who sees a member of the SCs performing an action deemed inappropriate in terms of status may resort to violence to limit this empowerment. In support of this interpretation, while not all the murderer have been interviewed, academic papers, press articles and activists outline that SC murders target individuals who behave in a manner deemed unacceptable for their SC status – that is, members of the SCs that are relatively empowered. Mirroring the fact that quotas trigger the empowerment of all members of SCs, the additional murders following quotas may target any of them. The existing literature backs up the interpretation of SC murders as evidence that the empowered members of the SCs are the ones who are targeted . Mathew (2003), Narula (1999), Purohit et al. (2002), Sumathi and Sudarsen (2005) have all written on the political dimension of these crimes, while press articles detail motives in daily interactions.[16] Using the same country-wide data as the present paper, Bros and Couttenier

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[15] The framework allows us to formalize why one individual may choose an action that seems economically absurd at first sight but makes sense if the identity group norms are considered and that these norms craft the individual payoff. For example, Akerlof and Kranton (2010) demonstrate that if there is a norm in a black identity group to not work productively for members of a white identity group, the members of the black identity group will lose some economic payoff (the wage that they forgo) but will gain some identity payoff (through their peers or themselves for doing what is deemed right in their value system). In the case of a murder motivated by an identity concern, the perpetrator may lose her freedom of movement (if she ends up going to jail), but gain some identity payoff (peer recognition or a warm glow).

[16] Narula (1999), for example, reports that: "In the village of Melavalavu, Madurai district in Tamil Nadu, following the election of a Dalit to the village council presidency, members of a higher-caste group murdered six Dalits in June 1997, including the elected council president, whom they beheaded". See Footnote 4 for more examples.

(2015) also show that the reporting of murders of members of SCs, given the availability of water sources, is consistent with the ongoing enforcement of untouchability (they exploit the fact that water is symbolically important in the Hindu religion). Thus, if one accepts that the "success" or "output" of the murder concerns social status and symbolic capital of the identity group, the increase in murders following quotas may be interpreted as a direct backlash.

This backlash on quotas may take the form of either sabotage or retaliation. Strategic sabotage would correspond to murdering the (potential) beneficiaries, to prevent future empowerment. Retaliation would correspond to a spiteful murdering of already empowered beneficiaries. The fact that murders increase as soon as the year of the first election with quotas, that is, before the members of the SC leaders have been in a position to exert any power, is consistent with sabotage as a motive. However, part of the increase in murders may also be traced back to retaliation. Ultimately, both actions result in a clear and direct reduction of the benefit of the affirmative action, in killing some of its beneficiaries.[17]

The links between quotas and crimes against members of SCs display a fundamentally different pattern than the pattern that Iyer et al. (2012) document for crimes against women. Focusing on crimes against all Indian women, Iyer et al. (2012) report an increase in rapes and no change in the number of murders after the implementation of gender quotas. Hence, they develop an argument showing that the increase in rapes is consistent with quotas that bring empowerment to women, while the absence of results on women's murders is inconsistent with the occurrence of a backlash. Focusing on crimes against all members of the SCs, the results in Table 3 reverse those for women in Iyer at al. (2012): Table 3 documents an increase in caste-based murders after caste quotas and no change in caste-based rape. Due to the sample extension, the results from Table 3 also differ from the results that Iyer and al. briefly report on caste quotas and crimes against members of SCs. First, the link between special crimes and quotas appears to be non-robust to state trends. A link between special crimes and quotas would be the perfect mirror for castes of the empowerment effect they document for women since reporting a special crime attracts a stigma. Second, caste murders in Table 3 appear to be related to caste quotas. This last difference in results comes from the

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[17] An additional question, although fully testing it goes beyond the scope of the data available for this paper, is whether these murders have also a negative externality on the empowerment of other members of the SCs. We note here one suggestive result consistent with such a negative externality. Using the REDS 2006, the murders of members of the SC that took place during the electoral term before an election have a negative correlation with the election of members of SCs beyond the SC quotas. However, this correlation cannot be interpreted as causal, and the REDS sample is small, with only 42 observations at the state*panchayat term level, calling for further work on the question.

sample definition. Indeed, Table 3 estimates for caste-based crimes rest on data from the 17 major states of India, while the caste quotas results of Iyer et al. (2012) rest on the sample of 11 states that implemented caste quotas in 1995 or later.[18] The differences in empirical results are important because they are consistent with opposed interpretations in terms of empowerment *versus* backlash.

In the next section of the paper, I take advantage of the detailed information provided by a recent household survey to disentangle further what is the most likely reason for the increase in murders after SC quotas.

4   Households' perspectives on crimes and trust in institutions during quotas

4.1. Household data on conflicts, caste discrimination and trust

The Indian Human Development Survey (IHDS) compiled in 2011 provides an original complement to the police records since it discloses households' answers independently of any recording bias that might have come from the reporting reluctance of the victims or inappropriate behavior of the police. Social norms may affect exchanges with interviewers, but this is a fundamentally different source of bias than the recording bias that could haunt police statistics. The nationally representative sample of the IHDS encompasses more than 27,000 rural households spread over 1,381 villages in 271 districts and 31 states (Desai et al., 2015). The limitation of the IHDS is that it provides only a cross section, collected quite late after the implementation of SC quotas.

The main interest of the IHDS 2011 is to document both SC and higher caste households' perceptions on conflicts, caste-based discrimination, crime, and trust in institutions. Moreover, the village schedule of the survey tells us the share of each caste group in the

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[18] I assess the consequence of excluding or including different states in Appendix Table 10. In column 1, I restrict the sample to the 11 states used by Iyer et al. (2012) to study caste quotas. In column 2, I restrict the sample to the 13 states which implemented SC quotas in 1993 or later, so that none of the states is affected by quotas during the first year for which crime data are available. In column 3, I use all 17 states. The magnitude of the coefficient changes importantly between columns 1 and 2, but not between columns 2 and 3. Column 3 estimates are more precise than column 2 estimates, but the magnitudes of the coefficients are barely affected. Such observations lend support to working with the full sample of 17 states. Note that on the samples with all 17 states, since four states implemented SC quotas in 1992 or before, and since the SC crime data start in 1992, these four states appear as "always treated" (however, since all the other states implemented quotas after 1992, the quota variable is not a linear function of the states' fixed effects). Importantly, including these four states neither affects the identification strategy, nor leads to statistically different magnitudes of estimates, but it does reduce standard errors. Last, the extension of the sample by six years does not lead to any significant changes (see column 4 of Appendix Table 10).

village population, and whether the seat of the *Pradhan*, the head of the local council, is reserved through an SC quota. By local council I mean here the Gram Panchayat, the 3rd tier of the 3-tier *panchayat* system.

Table 4: State level correlation matrix for different measures of caste-based tension

	Murder 92 - 2013	Special crime 92 – 2013	Untouchability Practice	Untouchability Victim
Murder 92 - 2013	1			
Special crime 92 - 2013	0.59 (0.01)	1		
Untouchability Practice	0.45 (0.05)	0.20 (0.41)	1	
Untouchability Victim	0.47 (0.04)	0.39 (0.10)	0.70 (0.00)	1

N=17. Spearman's rank correlations. p-value of each correlation in parentheses. Untouchability variables are the ones defined in Figure 1 but now taking the state-level averages for the 17 states.

While discrimination is notoriously difficult to measure, households' declarations on untouchability provide a good starting-point. First, differences in average answers across villages are informative, even if individual answers are an imperfect measure of absolute discrimination (Bertrand and Duflo, 2016). Second, state-level averages built from the household data allow us to bring a complementary viewpoint to the administrative data. In Table 4, murder records correlate significantly with households' declarations of both practicing and being a victim of untouchability in Table 4, by Spearman's rank correlations, and Appendix Table 14 by Pearson's pairwise correlations. This double correlation is even more interesting that perpetrators' and victims' declarations correlate with each other only in Spearman's rank correlations (Table 4), while the Pearson's correlation is highly insignificant (Appendix Table 14). The divergence between victims' and perpetrators' views is documented in a dedicated literature, from Duncan (1976) to Baumeister et al. (1990). Last, special crime records, which are meant to include all untouchability-related offences, do not correlate as well as murders with the household level measures of caste-based tensions in Table 4. This calls for a particularly cautious interpretation of the special crime statistics as a barometer of inter-caste tensions.

4.2. Empirical model

To document the relationship between caste quotas and household perceptions I estimate the following specification:

$$Y^c_{iv} = \beta^c_1 + \beta^c_2 \, quota\_SC_v + \beta^c_3 {}' X_i + \beta^c_4 {}' X_v + \delta_d + \varepsilon_{iv} \qquad (3)$$

where Y^c_{iv} stands for several outcomes of interest for households i of castes c living in village v. c can designate two groups: either the SCs, or the non SCSTs, to compute the parameters of interest for each of these groups.

$quota\_SC_v$ is a dummy equal to one in villages where the head of the local political council is a member of the SCs elected on a caste quota. The coefficient of interest, β^c_2, tells the relationship between the presence of a local caste quota and Y^c_{iv} for households of caste c.

The main challenge in this specification is to identify β^c_2 since the rule of attribution of caste quotas is not publicly available for all states. β^c_2 cannot be perfectly identified in these circumstances. I rely on two aspects of the quota policy to interpret β^c_2 as the closest possible to the true parameter. First, the attribution of caste quotas is exogenous to the main variables of interest. The attribution of caste quotas is a decision of each state administration. Hence, the fact that the local council of a given village has an SC leader in a given electoral term is not due to the villagers' actions, the political landscape, or the relationship between castes in the village. Second, Equation (2) controls for the main determinant of the administration decisions. Indeed, administrations assign quotas either at random or based upon village characteristics. The share of SC households in one village in relation to that in other villages in its area is the main assigning criterion that administrations use (when they do not assign quotas at random). This rule for assigning quotas allows Chauchard (2014), Dunning and Nilekani (2013), and Krishnan and Palaniswamy (2012), to use a regression discontinuity design to identify the impact of caste quotas within an area. The IHDS sample is not an exhaustive sample, and therefore I cannot rely on a regression discontinuity. However, I am able to control for the share of SC households in each village (in X_v) and to introduce district fixed effects (through δ_d).

X_i is a vector of household level controls. It includes information on the household caste, religion, the main source of income of the household (through 11 dummies corresponding to the main sectors of activity), the number of household members, the income per capita in the

household and the age of the household head. X_v is a vector of village level controls. It accounts for the share of SC households in the population of the village and the square of this share, and whether the head of the local political council is a woman elected after a gender quota.[19] δ_d are district fixed effects. The standard errors ε_{st} are cluster-robust to account for intra-village correlation in the answers, since the variable of interest is recorded at the village level.

4.3. Results on conflicts, discrimination and quotas

The pattern in households' answers clearly supports the attribution of the increase in crimes to an increase in their incidence (backlash), rather than in their reporting (empowerment).

Table 5 shows that, according to members of the higher castes, conflicts, and caste conflicts in particular, are higher in villages where the council head is reserved for an SC (panel B, columns 1 and 2). However, conflicts in general need not be caste conflicts (column 1), and caste-conflicts may involve other different caste groups than the SCs (column 2). I thus turn to two questions of untouchability, that is, of a form of caste-based discrimination which targets only members of SCs. These questions are prone to narrower interpretation margins than questions on conflicts.

The main results of Table 5 are in columns 3 and 4. Higher caste members declare that they practice untouchability more during SC quotas (panel B, column 4). While the coefficient is imprecise, the share of members of the SCs who assert that they suffer more from untouchability during SC quotas is also of remarkably similar magnitude to the share of higher caste households that assert that they practice untouchability more (panel A, column 3).

Acknowledging that the IHDS 2011 took place long after quotas were implemented strengthens the results, while taking into account the SC leaders elected to a *Pradhan* seat outside SC quotas leaves the results unchanged. Appendix Table 15 shows that a control for the number of years since the implementation of the quotas in each state has a negative

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[19] The IHDS data do not allow us to keep track of cases when SC and gender quotas overlap: these cases may have been recorded either in the SC quota, or in the gender quota treatment, introducing measurement error in my estimate. However, such error would introduce an attenuation bias since it means that the control group may be contaminated by the treatment.

coefficient of small magnitude; including this control magnifies the size and increases the precision of the dummy on quota incidence. Quotas then appear to increase the answers on untouchability by both members of SCs and members of non SCSTs (Table 15 columns 3 and 4). Once again, the two coefficients have similar magnitudes (statistically indistinguishable).

Table 5: Households' declarations on conflicts and SC quotas

Dep. Variable:	(1) Conflict	(2) Caste conflict	(3) Untouchability Victim	(4) Untouchability Practice
Panel A: SC households				
quota_SC	-0.013	0.021	0.031	
	(0.035)	(0.048)	(0.055)	
Observations	6,234	6,233	5,815	
R-squared	0.419	0.361	0.287	
Panel B: Non SC ST households				
quota_SC	0.075*	0.098**		0.043*
	(0.039)	(0.040)		(0.024)
Observations	17,071	17,065		17,075
R-squared	0.344	0.332		0.355

Standard errors clustered by villages in parentheses. All specifications include district fixed effects and the baseline set of controls (household caste, religion, the main source of income of the household, the number of household members, the income per capita in the household and the age of the household head, the share of SC households in the population of the village and the square of this share, and whether the head of the local political council is a woman elected after a gender quota). *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

If SC members complained more about untouchability while members of the higher caste declared no change, we might be worried that victims had become more sensitive to a given level of offences thanks to affirmative action, and hence had started to report more crimes. However, Table 5 and Appendix Table 15 reveal the opposite pattern: the SC quotas have a more precise effect on the increase in practice of untouchability by members of the non SCST. Given that victims' and perpetrators' views on violence often diverge,[20] it is also striking that in all these tables the effect of SC quotas on untouchability declarations by members of the SCs and the non SCSTs are similar in magnitude.

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[20] Table 4 shows the absence of correlation of victims' and perpetrators' answers in the IHDS raw data. Duncan, 1976, and Baumeister et al., 1990 discuss this divergence in other contexts. Krumpal (2013) underlines the risk of social desirability bias in survey responses, a bias that is likely to affect the claims by victims and by perpetrators differently. However, even if the survey questions on untouchability are not the ideal measures of absolute levels of discrimination, the magnitudes of their reaction to quotas may tell us something about the impact of the quotas (Bertrand and Duflo 2016).

4.4. Discussion of the household survey results

Further results obtained from IHDS data align with the results of the experimental literature on violence as a response to affirmative action (Banerjee et al., 2018; Brown and Chowdhury, 2017; Fallucchi and Quercia, 2018; Gangadharan et al., 2016; Leibbrandt et al., 2017).

Further evidence that the increase in crimes following SC quotas is unlikely to come from an improvement in the relationship to institutions is that SC quotas at the local level have no significant relationship with households' trust in institutions (Appendix Table 17). If the coefficient were more precisely estimated, the trust of members of the SCs in the police would decline when the local leader was elected as part of an SC quota (p-value at 13%). This result is again the opposite of what Iyer et al. (2012) document for women: the quality of women's interaction with the police improves when there are gender quotas. Last, I can show that caste quotas are not related to an increase in the general feeling of insecurity (Appendix Table 18).

These results feed the literature on inter-caste relationships in India showing that members of the higher castes are willing to resort to violence to improve their statutory condition (Bros and Couttenier, 2015; Fehr et al., 2008; Sharma, 2015). The results bring a nuance to the findings that affirmative action may help reduce the intention of non-SC households to intimidate SC households and the prevalence of publicly observable caste-based discrimination (Chauchard, 2014; Girard, 2018). To be precise, the results are consistent with differential evolutions of discrimination in the public and private sphere: the main results in Chauchard and Girard focus on the public sphere. However, in the private sphere, Chauchard finds no significant results on cooperation, while Girard documents some increase in the labor market discrimination against members of SCs. Taking all these results together suggests that a publicly observable and collectively enforced social norm may not follow the same evolutionary pattern as the actions performed in a more private setting, such as a hiring decision or a crime scene.

5   SC quotas, their implementation, and SC politics.

This section investigates whether the increase in violence is tied to the implementation of SC quotas themselves, rather than to the mode of implementation of these quotas, or the potentially different policies put in place by elected SC leaders.

5.1. The existence *versus* the implementation of quotas

Table 6: Crimes and the implementation of quotas

Dep. Variable: Murders	(1)	(2)	(3)	(4)
post_quotas_SC	0.250**	0.349**		0.224*
	(0.106)	(0.120)		(0.114)
election	-0.209			
	(0.471)			
post_quotas_SC *election	0.244			
	(0.466)			
post_quotas_SC *special court		-0.108		
		(0.102)		
post_quotas_SC * size quota			1.345*	0.339
			(0.664)	(0.812)
Observations	305	305	305	305
R-squared	0.859	0.859	0.858	0.859

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects. The parsimonious specification controls for the SC to non-SCST share of the population and its square. The baseline set of controls corresponds to the literacy rates, real per capita GDP and its square, SC to non-SCST share of the population and its square, urbanization. *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

To assess whether the mode of implementation of SC quotas may mitigate the risk of violence, I investigate two variations: the timing of the electoral process, and the existence of an improved judiciary service for members of SCs.

First, could elections trigger an increase in crime, independent of a backlash effect against SCs? Table 6 documents that the link between crimes and SC quotas does not stem from the organization of elections by itself (column 1). I introduce a binary variable equal to one during election years only, and both this dummy variable and its interaction with the quota variable are insignificant.[21]

Second, what part does an improved judiciary system play? I investigate the existence of state heterogeneity in the relationship between mandated political representation and crimes, depending on whether a state has an exclusive special court. Exclusive special courts are a

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[21] Although most elections in the sample take place during the post quota period some states did run elections before quotas were implemented. These results are robust to alternative definitions of the electoral period (tables available upon request).

prime example of the special judicial measures taken to improve access to justice for marginalized communities: crime-prone Indian districts have exclusive special courts to deal solely with atrocity cases.[22] The post-reservation period shows no heterogeneity in reporting crime between states with and without exclusive special courts (Table 6 column 3). Such a result is consistent with reports highlighting that it is still difficult for the SC members to have proper access to justice, notwithstanding the exclusive special courts (Centre for Study of Casteism, Communalism and Law, 2004; Mangubhai and Singh, 2014).[23]

5.2. SC quotas *versus* SC politicians

A key remaining question is whether the effect comes from the quotas, or is in fact tied to the policies implemented by SC politicians. The SC quota is difficult to disentangle from the SC politicians. The election of members of the SCs outside quotas is indeed likely to occur in certain places, because of historical caste-based status, present day discrimination, and because members of SCs hardly ever represent the majority in a village population; in 80% of the villages of the IHDS 2011 the SC share is below 50% of the whole. Acknowledging the specificity of SC elections outside quotas, this subsection examines three sets of evidence that suggest that the quotas may have a causal effect on murders.

The first important aspect is the timing of the backlash compared to the implementation date of the quotas. Table 2 and Figure 2 panel (b) show that quotas have a significant effect on murders even during the very first year of the first election implementing them. The year of election is a short time for a significant political change to have already taken place due to the actions of an SC leader. Moreover, the murder statistics do not appear to follow the electoral cycle. Electoral years in general, beyond the first year of quota implementation, would see fewer murders if they were a function of the policies in place, but this is not what appears in

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[22] A virtuous interaction could ensue if, for example, the special courts were to function better after quotas had been implemented, or if the special courts could top up the empowerment effect of political quotas. Otherwise, a vicious interaction might arise if, for example, members of higher castes were more likely to practice sabotage in places where inter-caste relationships were becoming tenser. So far, nine of the sample states (namely Andhra Pradesh, Bihar, Gujarat, Himanchal Pradesh, Karnataka, Madhya Pradesh, Rajasthan, Tamil Nadu and Uttar Pradesh) have an exclusive special court in one district at least. I create a binary variable that takes the value one for states with exclusive special courts because the date of the actual implementation of exclusive special courts is not, to the best of my knowledge, public knowledge in every state. This crude coding induces an attenuation bias for empirical results, and it does not allow me to compute the main effect of an exclusive special court (this is eliminated by state fixed effects).

[23] An amendment to the Prevention of Atrocities Act passed in 2015 aims, among other things, to improve the quality of service provided by the special courts. Its efficiency in facilitating the access to justice for the SCs is to be evaluated in a future work.

Table 6 column 1. Similarly, the event study graphs should show a pattern following electoral cycles if SC leader policies were the issue, but this is not what appears in Figure 2 panel (b).

A second aspect is the absence of relation between the backlash and the size of the quotas. The results in Table 6 show that it is only the existence of SC quotas that is related to crimes. Indeed, the size of SC quotas is not significantly related to crimes once the existence of the quotas is accounted for (comparing the results from Table 6 columns 3 and 4).[24] As a further check, I examine the effect of SC political representation beyond the *panchayat* level. The number of SCs in the state and national assemblies does not alter the reporting of crimes (although seats won by low caste parties may empower them: Aneja and Ritadhi, 2020). The results on both the timing of the impact of the quotas, and the irrelevance of the size of quotas are consistent with the murders' reacting to SC quotas rather than to any policies implemented by SC leaders.

Last, the backlash in household answers appears only as a reaction to the SC quotas, and not during the election of SC leaders outside quotas. There is no national administrative record of the election of SC leaders outside SC quotas, but the IHDS survey data provide cross-sectional information for the year 2011. Focusing on *Panchayats* without SC quotas in the IHDS 2011, only 7% of the 1,237 *Pradhans* of the sample belong to a Scheduled Caste.[25] In Appendix Table 16, these SC leaders elected outside SC quotas do not trigger any significant change in answers from members of either the SC or the non SCST in terms of conflict, caste conflict, or untouchability practice. Most importantly, these SC leaders do not appear to affect the practice of untouchability by members of higher castes: the point estimate is extremely close to zero (column 4 of Table 16). While the elections of SC leaders outside SC quotas are endogenous, such that the results in Appendix Table 16 cannot be interpreted causally, we can note that these results are consistent with the rest of the subsection. All the results are consistent with the SC quotas themselves triggering the backlash, rather than a change in the individuals holding offices and the policies that they implemented.

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[24] The 73rd amendment of the Constitution requires SC quotas to mirror the proportion of SCs in each state population. I use the share of SC in each state population at the last census before an election to measure the proportion of *Panchayat* seats reserved for members of the SCs. Since there is one census per decade, but the population share of SCs changes continuously, by controlling for the interpolated population share, I can identify the effect of increased SC representation due to the within-state variation resulting from the adjustment in quota size at each election following a census. This strategy is similar in essence to that of Pande (2003) for the size of SC quotas in state elections.

[25] This rate of election of SC candidates is significantly smaller than the SC household share in these villages which is 23%.

6   Conclusion

Affirmative action strives to improve the social status and economic achievements of certain minorities. However, the beneficiaries of affirmative action policies may, as a side effect of these policies, be the victims of a backlash effect. Backlash after affirmative action has recently been documented in experimental settings (Banerjee et al.; 2018; Brown and Chowdhury; 2017; Fallucchi and Quercia, 2018; Gangadharan et al., 2016; Leibbrandt et al., 2017). This paper is the first to test the question on nation-wide data.

In India, this paper shows that the national implementation of caste-based electoral quotas coincided with an increase in violence against members of scheduled castes. Indeed, electoral quotas at the village and district levels increased the reporting of murders of members of SCs. The interpretation of the increase in murders recorded by the administration that it was the result of a backlash linked to quotas is backed up by four main sets of results. First, the results rule out a re-allocation of deaths recorded elsewhere – as general crimes or suicides – to SC murders. Second, there is no robust relationship between quotas and crime categories that are prone to stigma (in particular, the crimes registered under the heading of Special and Local Laws and the rapes of SC women, which should both increase when plaintiffs are empowered). Third, data from a new and nationally representative household survey reveal an increase in caste-based discrimination during the implementation of caste quotas. Last, the results suggest that the backlash does not react to the policies implemented by SC leaders, but rather to the very existence of SC quotas. An open question remains the relative share of sabotage and retaliation as motives for this backlash. The increase in murders as early as the very first year of the implementation of quotas suggests that sabotage does account for some of them, but retaliation cannot be ruled out.

The perfect policy for empowering marginalized groups is yet to be crafted. Affirmative action is a powerful policy tool in some ways – such as the re-allocation of resources to villages where members of lower castes live – and may help reduce some forms of discrimination. Focusing on Indian women, Iyer et al. (2012) document the positive effect of gender quotas on female empowerment as far as crime reporting is concerned. Focusing on members of the Scheduled Castes – and extending the study of Iyer et al. (2012) with respect to space, time, and data sources – the set of results presented in this article shows that the legislator has more difficulties in empowering members of SCs through the same channel.

The transparent application of affirmative action policies may, paradoxically, make more salient the identity demarcation that it is hoped to erase and lead to a backlash. The question remains to be examined in other countries and settings such as quotas in education institutions or public employment.

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A.1. Figures

Figure 3: Murder reporting
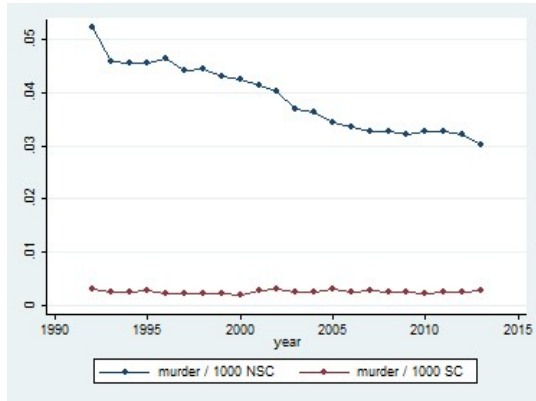
Figure 4: Rape reporting
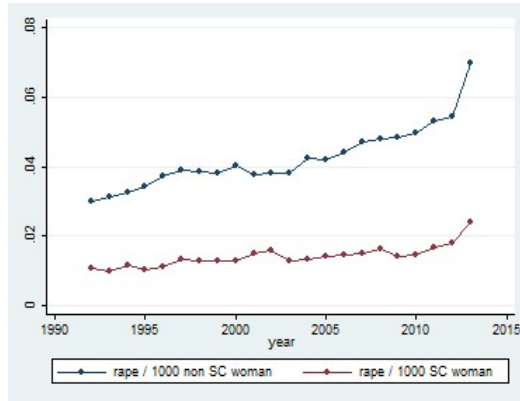
Figure 5: Stability of the coefficient of quotas on murders, when excluding states one by one
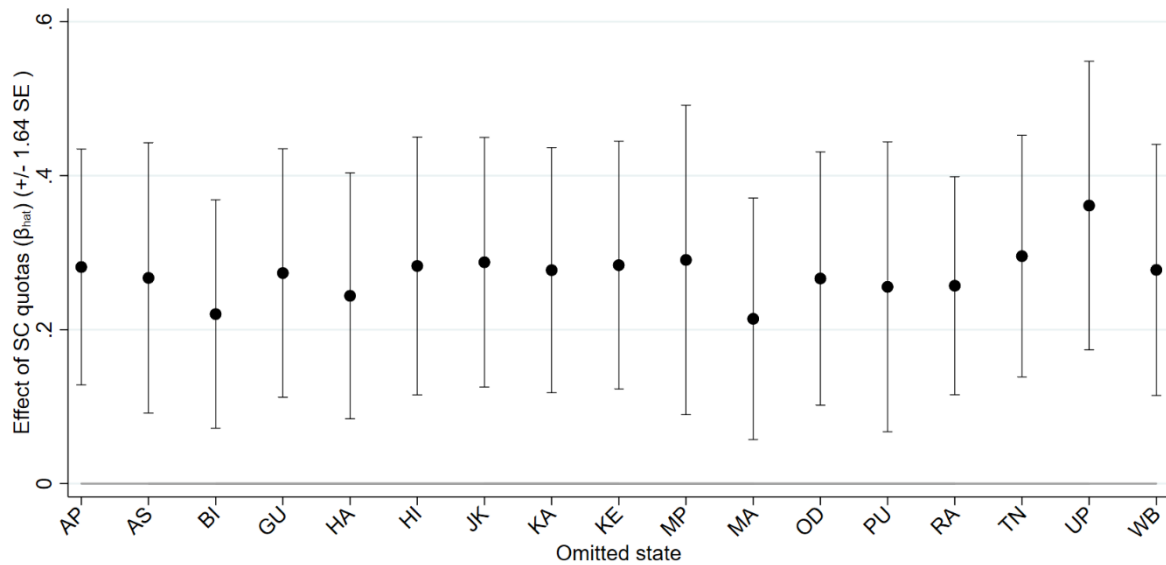
Note: Each dot indicates the coefficients of the effect of quotas on murders estimated from an ordinary least square specification described in Equation (1). The bar below each dot shows its 95% confidence interval. Each estimation covers a sample of 16 states, excluding the state referred to in the x-axis. The y-axis of each graph gives the crime in question.

A.2. Tables

Table 9: Descriptive statistics

	Mean	Standard Deviation	Minimum	Maximum
Total	16.1	15.6	0	76.6
Special crimes	5.13	6.03	0	32.4
Penal code crimes	10.9	12.9	0	65.5
Murder	0.26	0.26	0	1.18
Rape	1.40	1.63	0	8.34
SCs to higher castes ratio	0.22	0.09	0.08	0.48
Rural population (%)	0.67	0.20	0.17	1
Literate population (%)	0.64	0.15	0.33	1
Farming population (%)	0.15	0.05	0	0.29
Per capita real GDP	2.27	1.10	0.42	6.15
Police strength	158	103	8.37	730
Share SC seats GE	0.15	0.07	0	0.31

Crime statistics (total crimes, special crimes, penal code crimes, murder and rape) and Police strength are expressed per 100,000 members of the SCs.

Table 10: Impact of sample definition on the link between quotas and murders

Sample:	(1) 11 states with 95 and later quotas Crimes in 92-2007	(2) Adding 2 states with 93 and later quotas	(3) Adding all states (17 major states)	(4) Adding all years (crimes until 2013)
Dep. Variable: Murder				
Panel A. Controlling only for SC share and its square				
post_quota_SC	0.234	0.229	0.255***	0.221**
	(0.155)	(0.139)	(0.066)	(0.103)
Observations	146	161	225	305
R-squared	0.801	0.875	0.861	0.855
Panel B. Standard controls				
post_quota_SC	0.154	0.220	0.268***	0.274**
	(0.250)	(0.196)	(0.092)	(0.097)
Observations	146	161	225	305
R-squared	0.812	0.881	0.864	0.859
Panel C. Adding controls for the police strength				
post_quota_SC	0.158	0.238	0.285**	0.275**
	(0.229)	(0.192)	(0.098)	(0.098)
Observations	146	161	225	305
R-squared	0.815	0.883	0.865	0.859

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects. *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

Table 11A: SC crime declaration and SC quotas, varying controls

Specification includes controls:	(1) SC to NSCST ratio	(2) SC to NSCST ratio baseline	(3) SC to NSCST ratio baseline police strength	(4) SC to NSCST ratio baseline police strength SC seat state
Panel A. Dependent variable: ln (Total/100,000SC)				
post_quota_SC	-0.231	0.001	0.021	0.022
	(0.380)	(0.321)	(0.301)	(0.293)
Observations	357	357	357	357
R-squared	0.881	0.890	0.897	0.897
Panel B. Dependent variable: ln (Special crime/100,000SC)				
post_quota_SC	0.769	1.357**	1.358**	1.354**
	(0.525)	(0.566)	(0.566)	(0.530)
Observations	334	334	334	334
R-squared	0.714	0.766	0.767	0.774
Panel C. Dependent variable: ln (Penal code/100,000SC)				
post_quota_SC	-1.216	-0.749	-0.662	-0.671
	(1.059)	(0.728)	(0.515)	(0.525)
Observations	354	354	354	354
R-squared	0.581	0.601	0.649	0.651
Panel D. Dependent variable: ln (Murder/100,000SC)				
post_quota_SC	0.221**	0.274**	0.275**	0.275**
	(0.103)	(0.097)	(0.097)	(0.101)
Observations	305	305	305	305
R-squared	0.855	0.859	0.859	0.859
Panel E. Dependent variable: ln (Rape/100,000SC)				
post_quota_SC	-0.0599	0.055	0.063	0.063
	(0.153)	(0.099)	(0.098)	(0.098)
Observations	337	337	337	337
R-squared	0.906	0.916	0.917	0.917

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects and control for the ratio of SC households and its square. *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

Table 11B: SC crime declaration and SC quotas, varying controls

Specification added to baseline controls:	(1) BSP vote share state assembly Elections	(2) ln (income SC) and ln(income NSCST)	(3) p(encounter) around a shared water source
Panel A. Dependent variable: ln(Total/100,000SC)			
post_quota_SC	0.023	0.113	0.090
	(0.318)	(0.294)	(0.227)
Observations	357	357	357
R-squared	0.901	0.907	0.911
Panel B. Dependent variable: ln(Special crime/100,000SC)			
post_quota_SC	1.360**	1.365**	1.323**
	(0.595)	(0.570)	(0.515)
Observations	334	334	334
R-squared	0.772	0.767	0.774
Panel C. Dependent variable: ln (Penal code/100,000SC)			
post_quota_SC	-0.661	-0.129	-0.583
	(0.532)	(0.318)	(0.497)
Observations	354	354	354
R-squared	0.650	0.783	0.658
Panel D. Dependent variable: ln(Murder/100,000SC)			
post_quota_SC	0.283***	0.265**	0.274**
	(0.090)	(0.095)	(0.099)
Observations	305	305	305
R-squared	0.859	0.861	0.859
Panel E. Dependent variable: ln(Rape/100,000SC)			
post_quota_SC	0.068	0.073	0.055
	(0.094)	(0.100)	(0.101)
Observations	337	337	337
R-squared	0.918	0.918	0.918

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects and the baseline set of controls (literacy rates, real per capita GDP and its square, SC to non-SC share of the population and its square, urbanization). In each column, I add the control mentioned in the column heading. Most headings are self-explanatory. Footnote 10 describes the computation of p(encounter). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 12: Replication of the main table with standard errors drawn from a t distribution

Dep. Variable:	(1) Total	(2) Special crime	(3) Penal code	(4) Murder	(5) Rape
post_quota_SC	0.001	1.357**	-0.749	0.274**	0.055
	(0.327)	(0.606)	(0.852)	(0.130)	(0.0913)
Observations	357	334	354	305	337
R-squared	0.890	0.766	0.601	0.859	0.916

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects and the baseline set of controls (literacy rates, real per capita GDP and its square, SC to non-SC share of the population and its square, urbanization). *** p<0.01, ** p<0.05, * p<0.10.

Table 13: Placebo: quotas and general suicides, murders or rapes
(those which are not recorded as instances of a non-SC member targeting an SC member)

Dep. Variable:	(1) Suicides	(2) Other murders	(3) Other rapes
post_quota_SC	0.101	-0.035	0.012
	(0.088)	(0.061)	(0.090)
Observations	374	373	374
R-squared	0.954	0.844	0.907

Standard errors clustered by state in parentheses. All specifications include state and year fixed effects and the baseline set of controls (literacy rates, real per capita GDP and its square, SC to non-SC share of the population and its square, urbanization). *** p<0.01, ** p<0.05, * p<0.10.

Table 14: Conflicts, untouchability and time since the implementation of SC quotas

	Murder 92 - 2013	Special crime 92 – 2013	Untouchability Practice	Untouchability Victim
Murder 92 - 2013	1			
Special crime 92 - 2013	0.37 (0.13)	1		
Untouchability Practice	0.47 (0.04)	0.21 (0.40)	1	
Untouchability Victim	0.57 (0.01)	0.31 (0.19)	0.15 (0.43)	1

N=17. Pearson's correlations. p-value of each simple correlation in parentheses. Untouchability variables are the ones defined in Figure 1 but now taking the state-level averages for the 17 states.

Table 15: Conflicts, untouchability and time since SC quotas

	(1)	(2)	(3)	(4)
		caste	untouchability	
Dep. Variable:	conflict	conflict	victim	practice
Panel A: SC households				
quota SC	0.047 (0.076)	0.204* (0.117)	0.190* (0.101)	
quota SC * age quota	-0.004 (0.003)	-0.012** (0.005)	-0.010* (0.005)	
Observations	5,868	5,867	5,497	
R-squared	0.407	0.357	0.300	
Panel B: non SCST households				
quota SC	0.208*** (0.074)	0.230*** (0.074)		0.103** (0.041)
quota SC * age quota	-0.009*** (0.003)	-0.009*** (0.003)		-0.004*** (0.002)
Observations	15,736	15,730		15,740
R-squared	0.348	0.332		0.364

Standard errors clustered by villages in parentheses. All specifications include district fixed effects and the baseline set of controls (household caste, religion, main source of household income, number of household members, income per capita in the household and the age of the household head, the share of SC households in the population of the village and the square of this share, and whether the head of the local political council is a woman elected after a gender quota). *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

Table 16: Conflicts, untouchability and SC leaders with and without quotas

Dep. Variable:	(1) conflict	(2) Caste Conflict	(3) untouchability victim	(4) untouchability practice
Panel A: SC households				
quotas SC	-0.015	0.021	0.036	
	(0.036)	(0.050)	(0.054)	
pradhan SC outside quotas	-0.009	0.003	0.030	
	(0.043)	(0.049)	(0.052)	
Observations	6,234	6,233	5,815	
R-squared	0.419	0.361	0.288	
Panel B: non SCST households				
quotas SC	0.077*	0.099**		0.043*
	(0.039)	(0.040)		(0.025)
pradhan SC outside quotas	0.026	0.020		0.0002
	(0.029)	(0.032)		(0.024)
Observations	17,071	17,065		17,075
R-squared	0.344	0.332		0.355

Standard errors clustered by villages in parentheses. All specifications include district fixed effects and the baseline set of controls (household caste, religion, main source of household income, number of household members, income per capita in the household and the age of the household head, the share of SC households in the population of the village and the square of this share, and whether the head of the local political council is a woman elected after a gender quota). *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

Table 17: Households' trust in institutions and SC quotas

Dep. Variable: Trust in…	(1) Politicians	(2) *Panchayat*	(3) Police	(4) Justice
Panel A: SC households				
quota_SC	0.027	-0.011	-0.044	0.016
	(0.042)	(0.024)	(0.029)	(0.014)
Observations	6,222	6,222	6,220	6,207
R-squared	0.253	0.218	0.225	0.125
Panel B: Non SC ST households				
quota_SC	-0.033	-0.023	-0.004	-0.004
	(0.029)	(0.022)	(0.017)	(0.009)
Observations	17,063	17,048	17,051	17,010
R-squared	0.166	0.149	0.132	0.140

Standard errors clustered by villages in parentheses. All specifications include district fixed effects and the baseline set of controls (household caste, religion, the main source of income of the household, the number of household members, the income per capita in the household and the age of the household head, the share of SC households in the population of the village and the square of this share, and whether the head of the local political council is a woman elected after a gender quota). *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

Dep. variable:	(1) Theft	(2) Break-in	(3) Attack	(4) Eve teasing
Panel A: SC households' sample				
quota_SC	0.006	0.009	0.004	-0.014
	(0.010)	(0.009)	(0.008)	(0.027)
Observations	6,234	6,234	6,234	6,232
R-squared	0.130	0.096	0.126	0.203
Panel B: Non-SC ST households' sample				
quota_SC	-0.016	-0.001	0.003	-0.007
	(0.011)	(0.004)	(0.010)	(0.026)
Observations	17,080	17,079	17,079	17,063
R-squared	0.065	0.043	0.057	0.209

Standard errors clustered by villages in parentheses. All specifications include district fixed effects and the baseline set of controls (household caste, religion, main source of household income, number of household members, income per capita in the household and the age of the household head, the share of SC households in the population of the village and the square of this share, and whether the head of the local political council is a woman elected after a gender quota). *** $p<0.01$, ** $p<0.05$, * $p<0.10$.

A.3. Crimes included under the Special Local Laws (special crimes) against SCs

A.3.1 The Protection of Civil Rights Act, 1955

Sections 3 - 7A of the Act define the following as offenses if committed on the ground of 'untouchability': (1) Prevention from entering public worship places, using sacred water resources. (2) Denial of access to any shop, public restaurant, hotel, public entertainment, cremation ground etc. (3) Refusal of admission to any hospital, dispensary, educational institutions etc. (4) Refusal to sell goods and render services. (5) Molestation, causing injury, insult etc. (6) Compelling a person on the ground of untouchability to do any scavenging or sweeping or to remove any carcass etc.

A.3.2 The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989

Whoever, not being a member of a Scheduled Caste or a Scheduled Tribe: (1) Forces a member of a Scheduled Caste or a Scheduled Tribe to drink or eat any inedible or obnoxious substance; (2) Acts with intent to cause injury, insult or annoyance to any member of a Scheduled Caste or a Scheduled Tribe by dumping excreta, waste matter, carcasses or any other obnoxious substance in his premises or neighborhood; (3) Forcibly removes clothes from the person of a member of a Scheduled Caste or a Scheduled Tribe or parades him naked or with painted face or body or commits any similar act which is derogatory to human dignity; (4) Wrongfully occupies or cultivates any land owned by, or allotted to, or notified by any competent authority to be allotted to, a member of a Scheduled Caste or a Scheduled Tribe or gets the land allotted to him transferred; (5) Wrongfully dispossesses a member of a Scheduled Caste or a Scheduled Tribe from his land or premises or interferes with the enjoyment of his rights over any land, premises or water; (6) Compels or entices a member of a Scheduled Caste or a Scheduled Tribe to do 'beggar' or other similar forms of forced or bonded labor other than any compulsory service for public purposes imposed by Government; (7) Forces or intimidates a member of a Scheduled Caste or a Scheduled Tribe not to vote or vote for a particular candidate or to vote in a manner other than that provided by law; (8) Institutes false, malicious or vexatious suit or criminal or other proceedings against a member of a Scheduled Caste or a Scheduled Tribe; (9) Gives any false or frivolous information to any public servant and thereby causes such public servant to use his lawful power to the injury or annoyance of a member of a Scheduled Caste or a Scheduled Tribe; (10) Intentionally insults or intimidates with intent to humiliate a member of a Scheduled Caste or a Scheduled Tribe; (11) Assaults or uses force to any woman belonging to a Scheduled Caste or a Scheduled Tribe with intent to dishonor or outrage her modesty; (12) Being in a position to dominate the will of a woman belonging to a Scheduled Caste or a Scheduled Tribe and uses that position to exploit her sexually to which she would not have otherwise agreed; (13) Corrupts or fouls the water of any spring, reservoir, or any other source ordinarily used by members of the Scheduled Caste or the Scheduled Tribe so as to render it less fit for the purpose for which it is ordinarily used; (14) Denies a member of a Scheduled Caste or a Scheduled Tribe any customary rite of passage to a place of public resort or obstructs such members so as to prevent him for using or having access to a place of public resort to which other members of public or any section thereof have a right to use or access to; (15) Forces or causes a member of a Scheduled Caste or a Scheduled Tribe to leave his house, village, or any other place of residence.