

Ao, Chon-Kit; Chatterjee, Somdeep

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# The Effects of Political Reservations on Credit Access and Borrowing Composition: New Evidence from India

Chon-Kit Ao\*      Somdeep Chatterjee†

## Abstract

We estimate the impacts of mandated political reservation for minorities on household credit access and borrowing behavior. To identify causal effects, we exploit the exogenous state-time variation in the allocation of constituencies (electoral districts) to the two reserved minority groups in Indian states. Using a household level panel data with observations before and after the redistricting, we find that the effect is concentrated on the disadvantaged population groups. Political reservation for Scheduled Tribes (STs) increases household probability of getting a loan by 3.7 percentage points, while political reservation for Scheduled Castes (SCs) has no effect on the likelihood of getting a loan. However, conditional on having a loan, reservation for SCs does lead to fewer but larger loans. We also find considerable changes in household borrowing composition.

Keywords: Affirmative action, Political reservation, Credit access, Borrowing composition

JEL codes: D78, J15, J78, O12

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\*Department of Economics, National Cheng Kung University, 1 University Road, Tainan City 701, Taiwan (email: chonao@mail.ncku.edu.tw)

†Business Environment Group, Indian Institute of Management Lucknow, Prabandh Nagar, IIM Road, Lucknow, Uttar Pradesh 226013, India (email: somdeep@iiml.ac.in). *Corresponding Author*

# 1 Introduction

A major affirmative action policy in India is the caste-based political reservations for the historically disadvantaged sections of the population. This important aspect of the political economy of the country has been widely studied in the literature both from the perspective of redistribution (Chin and Prakash 2011; Iyer et al 2012; Kaletski and Prakash 2016) and public policy (Pande 2003; Duflo 2005). While these papers study the impact of mandated political reservations on the very obvious issues in a developing economy, such as poverty, child labor and crime rates, the literature is somewhat passive about the impacts of such affirmative action policies on another very important aspect of a development, ie, the functioning of credit markets. In this paper we attempt to bridge this gap by providing (to the best of our knowledge) the first empirical evidence of the impact of such a program on borrowing and lending patterns of households using state level electoral quotas.<sup>1</sup>

In their *Handbook of Development Economics* chapter, Karlan and Morduch (2009) summarize the literature outlining the importance of access to credit in developing countries and how empirical evidence on the impacts of direct policies targeted towards this end is inconclusive. Our paper relates this strand of literature to affirmative action to estimate its effects on credit composition. Since the political reservations are not directly targeting the removal of credit constraints, our research contributes to the literature by providing new evidence of potential general equilibrium effects of affirmative action. The basic premise of this paper is to understand the role such affirmative action plays in the functioning of credit markets in a developing country.

Why do we think affirmative actions directed at increasing political representation of disadvantaged groups should have any impact on borrowing and lending? Political reservation in India mandate a fixed proportion of representation for minority groups in legislative bodies. Since these elected representatives have direct control over distribution of public goods and government policies (see discussions in Duflo (2005)), it is not unlikely that borrowing and lending through the

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<sup>1</sup>Bardhan, Mookherjee, and Torrado (2010) look at capture-clientelistic practices to study allocation of credit to beneficiaries as an impact of political reservations for local government elections. Firstly, their main analysis is not focussed at the impact of reservations on credit access or composition and secondly, their setup is restricted only to lower levels of government for only one state of India. Finally, they study the impact of gender based reservations in addition to caste based which makes our study distinct from theirs.

public sector will be affected by such affirmative actions. Moreover, an increase in cultural proximity between political leaders and borrowers of disadvantaged groups may foster efficiency in credit market and, therefore, increases quantity of credit. This is supported by a recent study by Fisman, Paravisini, and Vig (2017) who find that borrowers get a larger quantity of credit and reduce default if borrowers and lenders are culturally proximate. Another motivating study is by Khwaja and Mian (2005), which finds evidence of preferential bank lending to firms which are politically connected. Apart from this, it is a commonly accepted idea that a lot of the members on the boards of public sector banks (which is a major source of lending in countries like India) are elected politicians who have considerable influence over loan disbursements.<sup>2</sup> In our setting instead of firms we have social groups as the subject of study. The basic premise is that if an elected SC or ST representative can influence loan disbursements either through direct influence or recommendations and canvassing or lobbying, it may be likely that caste networks come to the forefront and disadvantaged sections of the society may get better access to credit and their borrowing composition may change.

Estimating causal effect between minority political reservation and household credit access is difficult because the affirmative action policy is likely to be endogenous. For instance, unobserved factors such as economic development and attitude toward minorities may affect both household access to credit and percentage of minority reservations. This study exploits the institutional features of political reservations which introduce exogenous state-time variation in the share of seats reserved for minorities. In particular, the Indian Constitution mandates number of seats reserved for minorities in the state legislative assemblies based on the share of minority population from the last preceding census, and the actual revision of reserved seats only occur in the state's new election after the Delimitation Commission makes its suggestions. This generates time lags in variation of minority political representation in the state legislative assemblies. This identification strategy is in line with Pande (2003) and Chin and Prakash (2011).

Exploiting the revision of reserved seats for SCs and STs in the state legislative assemblies in 2008, using a household panel data in 2005 and 2012, we estimate that political reservation for STs

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<sup>2</sup>For instance this article on rediff.com: <http://www.rediff.com/business/interview/interview-banking-sector-needs-a-t-n-seshan/20160323.htm> provides anecdotal evidence of such a fact.

affects household credit access at the extensive margin, while political reservation for SCs affects credit access at the intensive margin. Furthermore, we find, along expected lines, that the effects of affirmative action is concentrated on the historically disadvantaged households. This is consistent with the idea of *exclusionary aspect of ethnic politics* as discussed in Munshi and Rosenzweig (2016), ie, resources are captured by *insiders* at the expense of one's who do not belong to the group.<sup>3</sup>

For these households, a one percentage increase in ST reservation increases their probability of getting a loan by 3.7 percentage points. Although SC reservation has no impact on likelihood of getting more loans, at the intensive margin of households who have had a loan in the past 5 years, SC reservation leads to disadvantaged households taking fewer but larger loans. Specifically, SC reservation increases the size of largest loan by 15.4% and households reduce their number of loans by 1 unit, although the estimated coefficients have lesser precision.

We further investigate the impact of SC and ST political reservations on household borrowing composition. We find that an increase of ST representation makes disadvantaged households more likely to borrow from relatives, while SC representation reduces their likelihood of borrowing from informal sector such as employers and more likely to get largest loan from formal institutions. The results on borrowing composition has important welfare implications for developing countries which aspire to increase dependence on the formal credit markets. These different policy effects of SC and ST political reservations on credit access are in line with existing literature which also finds that ST and SC reservations have dissimilar consequences on government policies (Pande 2003), poverty (Chin and Prakash 2011), and child labor (Kaletski and Prakash 2016).

The rest of this paper is organized as follows. Section 2 presents backgrounds on the federal structure of India and characteristics of disadvantaged minority groups. Section 3 describes the data. Section 4 discusses the empirical strategy. Section 5 reports results, and Section 6 concludes.

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<sup>3</sup>It must be noted here that we are not making any assumption about the welfare consequences of such capture if it exists. It may well be that the backward households were severely credit constrained and hence increased access to credit leads to improved welfare for them.

## 2 Background

In this section, we briefly point out the background of the mandated political reservations in India and discuss some of the existing findings on the impacts of such affirmative action on outcomes of interest, to lay down the context of this paper.

### 2.1 Electoral Quotas in India: Reservations for SCs and STs

Historically, scheduled castes and scheduled tribes have been socially and economically isolated, with low social and ritual hierarchy.<sup>4</sup> Relative to scheduled tribes, scheduled castes are both more educated and geographically more dispersed. On the other hand, scheduled tribes include indigenous peoples who live in concentrated and homogeneous communities, and they are geographically isolated.

In order to improve the well-being and social status of scheduled castes and scheduled tribes, the 1950 Indian Constitution mandates political representation for SCs and STs in every state and national election. All states in India are divided into several constituencies (akin to electoral districts in the U.S.) and each constituency elects a unique representative to the state legislative assemblies. Eventually the political party with a simple majority of representatives (more than 50%) forms the government at the state. The affirmative action policy mandates a certain proportion of constituencies/seats in the state legislative assemblies to be reserved for scheduled castes (SCs) and scheduled tribes (STs). As a result, such reserved constituencies can be contested by only candidates from SCs and STs, but voters of all social groups in the constituencies are eligible to vote.

Based on the latest census, the Delimitation Commission of India allocates number of reserved constituencies/seats to SCs and STs in proportion to their representation in each state. Therefore, with every new census the potential for revision of the allocated/reserved number of constituencies arises, and the actual implementation of such revisions only occur after the Delimitation Commission makes its suggestions, which may take several years, as well as in the state's new election. The latest revision happened in 2008 when constituency boundaries were redrawn (electoral redistrict-

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<sup>4</sup>These two groups were geographically segregated in places outside of town or village boundary, they were not allowed to enter most schools and many temples.

ing) by the Commission. In this latest revision in 2008, the proportion of reserved constituencies to SCs and STs in each state was revised based on their population share in each state in the 2001 Census (the latest census before 2008). Our empirical analysis uses household panel data in 2005 and 2011, then exploits the revision of reserved constituencies for SCs and STs in 2008, to identify the effect of political representation on credit access.

## **2.2 Reservations, Efficiency and Welfare: The Context of the Study**

Affirmative action in political representation basically involves restriction of candidate entry based on social status. So essentially, providing representation to disadvantaged communities would mean that certain constituencies would be earmarked for candidates belonging to those historically backward castes and individuals not belonging to those castes are not allowed to run. This in itself may have welfare consequences in terms of inefficiencies associated with restricting the choice set of voters based on caste identity; however that is not the main consideration of our study.

Our paper is more concerned about whether the reservations lead to some impacts on the functioning of credit markets in the economy which is a very important institution in the context of development economics. There are essentially two possible ways to think about this issue. First, if caste networks are at play, does representation of minorities lead to better access to financial institutions in terms of empowerment? For instance, do elected SC and ST representatives care more about their own communities and try to get better resources delivered to them as in Munshi and Rosenzweig (2016)? If this is the case and we consider that SC and ST households are severely credit constrained, then affirmative action should lead to some of the constraints being relaxed, as long as the elected representatives are able to influence loan disbursements. Second, if affirmative action is a signal of modernization, then do we expect better credit markets over time? If so, then does such advancement actually lead to a decline in the reliance on caste networks? In this case we are likely to find that disadvantaged communities substitute away from informal credit sources towards formal institutions.

Some of the recent literature seems to suggest that public goods provision may improve with affirmative action in the presence of *co-ethnic* preferences (Das, Mukhopadhyay, and Saroy 2017) although papers on effects of redistribution are largely negative (Jensenius 2015). Our paper ac-

tually goes on to find some positive redistribution effects (in terms of credit markets) of these reservations and therefore corroborates some of the efficiency findings. An explanation of why credit access improves with reservations could hinge on the fact that in the counterfactual, ie, in the absence of reservations, the probability of winning for a candidate from disadvantaged communities is a lot lower (Bhavnani 2017). This suggests that the candidates elected under affirmative action are likely to be of lesser quality (as perceived by voters) and hence there may exist a moral hazard problem in terms of allocating preferential credit and using political offices to influence loan disbursements to caste groups. Even though this apparently seems like a perverse consequence, in the presence of credit constraints, this may eventually be a welfare improving outcome.

### 3 Data

To investigate the effect of affirmative action on credit accessibility and the sources of debt, we require data on household credit access and source of borrowing, and states' share of seats reserved for SCs and STs in the legislative assemblies. We obtain the former from the India Human Development Survey (IHDS) and the latter from the Election Commission of India. We also collect state socioeconomic control variables from various sources. As we describe below.

Household-level data on credit access and sources of loans are taken from the India Human Development Survey (IHDS). It is a nationally representative household panel survey conducted across India. The first wave of IHDS was completed in 2005, then most of the households were reinterviewed in 2011-12.<sup>5</sup> Our sample is an unbalanced panel which contains households who are interviewed in both waves.<sup>6</sup> In our analysis, outcome variables include credit access in both extensive and intensive margins, and sources of borrowing which measures household borrowing behaviors. It includes a binary variable of whether a household borrowed at least a loan in the last 5 years, total number of loans a household borrowed in the past 5 years, and a set of binary variables indicate whether a household obtained their largest loan from the following sources: employer, money lender, friend, relative, bank, non-governmental organization (NGO), community credit group, government program, and other sources. The IHDS also contains various demo-

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<sup>5</sup>The attrition rate in the second round is about 17%.

<sup>6</sup>This is an unbalanced panel since a household in the first wave can split to 2 households in the second wave.



graphic information such as age, working status, individual educational attainment, caste, religion, household expenditure, and whether an individual lived in rural or urban area. The advantage of using the IHDS panel survey is that it allows us to control for unobserved household-specific characteristics in our empirical analysis.

Information for minority seat reservation in state legislative assemblies is collected from the Election Commission of India's reports on state elections. We measure seat reservation for scheduled castes and scheduled tribes as the share of jurisdictions reserved for that group in each state.

We include two sets of minority population share in our empirical analysis. The first is the SC and ST population shares in the last preceding census, we use population share in censuses 2001 and 2011. The second is the estimated current population share in 2005 and 2012, we obtain these intercensal estimates of the population in each state via linear interpolation, then calculate the estimated current population share, as in Pande (2003) and Chin and Prakash (2011). We also control for state socioeconomic variables such as state income per capita last year, rural population share, and state election year dummy in our empirical analysis. We collect state income per capita from the Central Statistics Office. Rural population from various censuses of India, and interpolated intercensal estimates for 2005 and 2012. State election year dummy equals one if a state  $s$  has an election in year  $t$ , which is coming from the Election Commission of India.

After merging the IHDS longitudinal household-level data with state-level minority seat reservation in legislative assemblies, and state socioeconomic variables. Our empirical analysis contains households who lived in 15 major states,<sup>7</sup> and the unit of observation in our analysis is at the household-level.<sup>8</sup> Table 1 shows summary statistics for variables used in our analysis. This table shows summary statistics for full sample, sample belong to disadvantaged groups: SC, ST, and other backward castes, and sample belong to non-disadvantaged groups. In the full sample, around 52% of households have borrowed at least a loan in last five years, and households are having an average of 1.6 loans in the past five years. 12% of heads are female, 82% of head are working, and average household size is 5 people. Average educational level of household head is 5.1 years,

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<sup>7</sup>These 15 major states are: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal.

<sup>8</sup>Our sample is an unbalanced household-level panel data. For instance, there are cases that households did not answer whether they have a loan or not in 2005, but had an response to the same question in 2012.

72% of households live in rural area. When we look at households who have had a loan in the bottom panel, households have 3.1 loans on average, about 29% of households obtained their largest loan from bank, 27% are from money lender, 19% are from relative, and 10% are from friend.

## 4 Empirical Strategy

A way to estimate the effects of such affirmative action on credit outcomes would be to compare outcomes in reserved constituencies to those not reserved. However, political reservation is potentially endogenous and reservation is not random. Therefore, such a comparison is likely to run into issues of selection. To address this concern, we use a nationally representative household panel survey (the IHDS), and exploit state-time variation in the number of reserved constituencies as our identification strategy. As discussed in Section 2, the Delimitation Commission meets from time to time to changes assignments of constituencies to SCs and STs from unreserved to reserved and vice-versa.

The last reconstruction of state reserved constituencies for SCs and STs in 2008 provides an exogenous variation from institution features. In our analysis, we exploit exogenous variation of the reconstitution in 2008 with two rounds of a household panel survey—one interviewed households before 2008 and another after 2008—to identify the causal effect of political reservation of minorities on their credit access. This identification strategy is adopted in previous literature (Pande 2003; Chin and Prakash 2011) in which we are able to exploit the variation of seat reservations for minorities within state and across time. Furthermore, our household panel survey data in 2005 and 2012 allows us to examine the changes of credit access at a disaggregate level as household. We estimate the following equation:

$$y_{hst} = \alpha_d + \delta_t + \beta_1 ResSC_{st} + \beta_2 ResST_{st} + \varepsilon_{hst} \quad (1)$$

where  $y_{hst}$  represents credit access (i.e., number of loans or has a loan in last 5 years) or borrowing composition such as source of borrowing of largest loan for household  $h$  who lives in state  $s$  in year  $t$ .  $\alpha_d$  is district fixed effects which control for unobserved time-invariant district characteristics,  $\delta_t$  is year fixed effects which account for common shocks to all states.  $ResSC_{st}$  and  $ResST_{st}$  are

the share of legislative seats reserved for SCs and STs in each state.  $\varepsilon_{hst}$  is the error term. The coefficients of interest are  $\beta_1$  and  $\beta_2$ , which capture the effects of political reservation.

Estimating equation (1) might not give us the causal effect of minority reservation on credit access. The main threat to validity is omitted time-varying state characteristics which simultaneously determine reservation and credit access. However, in the context of India, the institutional feature of the rule on reservation precludes such omitted variable bias. As mentioned in Section 2, the Delimitation Commission changes seat reservation of SCs and STs based on their share of the state's population in the last preceding census. In other words, after the delimitation, the share of reserved seat for minorities on the state's legislative assemblies must equal to the proportion of minorities in each state from the last preceding census. This simple policy rule makes changes of seat reserved for minorities exogenous to unobserved time-varying factors. One main thread in estimating equation (1) is state's minority population share, since it determines reservation and, possibly, correlated households' credit access. To alleviate this concern, we follow the previous literature (Pande 2003; Chin and Prakash 2011; Kaletski and Prakash 2016) by controlling state's population share of minorities in the estimation.

Note that if minority population share was identical to the share of reserved seat for minorities across-state and across-time, we would not be able to separately identify the effect of political reservation because of perfect collinearity in the estimation. However, the specific features of policy rule and its implementation procedure allow us to address this problem. First, seat reservation for minorities is based on the last preceding census, so it is possible to control for current minority population share while estimating the effect of minority political reservation, since the latter is equal to a census share of minority population, but not the current share. In addition, the revision of seat reservation only happen after the Delimitation Commission revises constituencies, and the 1976 42nd Constitutional Amendment of India required the allocation of reserved seats thereafter have to be based on the 1971 Census, and prohibited new delimitation until after 2000. As shown in Figure 1, since our data is drawn from a household panel survey in 2005 and 2012, and there was no new delimitation occurred between 2001 and 2005, the state's political reservation for minorities in 2005 is based on the 1971 Census. Following the new delimitation in 2008, state's reserved seats in our 2012 data is based the 2001 Census; the last preceding census of the latest delimitation.

These institutional features in India allows us, while estimating the effect of political reservation for minorities, to control for both the current minority population share in 2005 and 2012 and the minority population share in the last preceding censuses of 2001 and 2011. Specifically, we estimate the following equation:

$$y_{hst} = \alpha_h + \delta_t + \beta_1 ResSC_{st} + \beta_2 ResST_{st} + \theta_1 CurrentPop_{st} + \theta_2 CensusPop_{st} + \rho\Gamma + \varepsilon_{hst} \quad (2)$$

an important feature of our household panel survey is that we are able to include household fixed effects ( $\alpha_h$ ), which account for unobserved household-specific characteristics.  $CurrentPop_{st}$  denotes the minority share of the population in state  $s$  at time  $t$  and  $CensusPop_{st}$  is the minority share of the population in the last preceding censuses in state  $s$  at time  $t$ .

We also control for state and household socioeconomic characteristics in  $\Gamma$ , which is a vector representing state income per capita last year, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion. All other variables are defined in equation (1). The standard errors are clustered at the state level.<sup>9</sup> In this equation,  $\beta_1$  and  $\beta_2$  estimate the the causal effects of political reservation.

## 5 Results

In this section, we present our results in two parts. First, we look at the impact on extensive and intensive margin. The results on extensive margin assess the impact of political reservation on credit access. For instance, will increase in minority political representation allows households to be more likely to have a loan? Furthermore, we also look the intensive margin in terms of the effect on number of loans and loan sizes. Second, we investigate whether there are changes in borrowing composition in response to the minority reservation; is it possible that the reservation induces more formal sector borrowing and lending, or do we still observe continued dependence on the informal lending sector?

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<sup>9</sup>Serial correlation at the state level may appear since the minority reservation is implemented at the state, so it is preferable to cluster at the state level (Bertrand, Duflo, and Mullainathan 2004). Standard errors clustered at the district level are also presented in the robustness check.

## 5.1 Impact of Political Representation on Credit Access

Table 2 shows estimation results from equation (2). Each column represents results from a separate regression, with robust standard errors clustered at the state level in parentheses. The dependent variable *Has loan* in columns 1 and 2 report effects on whether a household ever borrowed a loan in the last five years or zero otherwise, and *Number of loans* in columns (3) and (4) represents total number of loans a household has taken in the past 5 years. Columns 5 to 8 look at the intensive margin, which focuses on households who have a loan in the last 5 years. The dependent variable *Log(largest loan amount)* denotes log of the largest loan amount in Rupee, and *Number of loans* in columns 7 and 8 shares the same definition as that in columns 3 and 4. The last two rows denote model specification. Other control variables include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.

Column (1) shows that ST political reservation increases household credit access, but no effect for SC political reservation. The coefficient shows that reservation for ST increases household probability of having a loan by 3.4 percentage points. However, reservation for SC has no impact on household credit access. We further control for household fixed effects in column 2, which account for unobserved household-specific characteristics. The estimated effect of political reservation is essentially unchanged. The ST political reservation increases household probability of having a loan by 3.3 percentage points, but no effect for SC political reservation. The magnitude of these coefficients is around 6.3% to 6.5% of the mean of outcome variable—52% of households have a loan in the past 5 years. When we look at the effect on total number of loans using the whole sample, column 3 shows that ST political reservation has a positive effect on number of loans. However, although the point estimate is similar, the effect becomes statistically insignificant after accounting for household fixed effects in column 4. These results are consistent with the existing literature that the effect of political representation mainly come from ST political reservation and usually no effect is found for SC reservation.<sup>10</sup>

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<sup>10</sup>Existing literature finds that minority political reservation increases policy influence for minorities, and the effect is concentrated in ST political reservation (Pande 2003). Moreover, other studies find that only ST political reservation reduces poverty (Chin

Columns (5) to (8) show results on the intensive margin. Conditional on households who have had a loan in the past 5 years, columns 5 and 7 indicate that SC political reservation increases loan amounts of household largest loan (column (5)) and substituting it by having fewer number of loans (column (7)). After controlling for household fixed effects, although the coefficient becomes statistically insignificant in column 6, the point estimate is still positive and essentially unchanged, and the coefficient in column 8 is negative and significant at the 10% level. In sum, although SC political reservation has no effect on the extensive margin, among households who have had a loan in the past 5 years in column 5 to 8, the results suggest that SC political reservation affects the intensive margin of the household credit access; households are getting a larger loan size for their largest loan and replacing it with a fewer number of loans. This provides a new evidence, which is not established previously in the literature, that most of the outcomes studied in the literature so far are extensive margin decisions. Since STs have been historically more marginalized, the impact of political reservation appears to be large along that margin. However, for SCs who are also marginalized and relatively better off than STs, it is possible that any effect of the reservation in their favor could appear as an intensive margin effect. Since the household fixed effects control for unobserved household-specific characteristics, we use specification with household fixed effects in all of the following analyses.

## **5.2 Does Social Status Matter for Credit Access?**

Given the affirmative action policy is targeted at promoting political power of minorities, a natural question is to understand whether these effects are different across social groups. In other words, whether household of minorities are mostly affected by the reservation policy; minorities may benefit more from an increase in minority political representation. We classified households from SCs, STs, and other backward castes as disadvantaged groups, and households from all other castes not belonging to the aforementioned disadvantaged castes as non-disadvantaged groups.

Table 3 shows estimated results from equation (2). Each column represents a separated regression and all regressions control for household fixed effects. Panels A and B restrict sample to disadvantaged households and non-disadvantaged households, respectively. The results show that,

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and Prakash 2011) and child labor (Kaletski and Prakash 2016), but no effect is found for SC political reservation.

regardless of extensive or intensive margin, the effect of minority political reservation concentrates on households who belong to disadvantaged groups. Panel A shows that ST political reservation increases the probability of having a loan for disadvantaged households by 3.7 percentage points (column (1)) and increases 0.3 loan in the past 5 years (column (2)). In term of intensive margin which restricts sample to disadvantaged households who have had a loan in the past 5 years, SC political reservation increases the amount of largest loan by 15.4% and decreases number of loans by 1 unit, though the coefficients are marginally significant at the 10% level. The results for non-disadvantaged households in panel B indicate that minority political reservation has no effect on credit access.

### **5.3 Impact of Political Representation on Borrowing Composition**

Another important question is to look at the effect of political representation on household sources of borrowing. One may think that minority political representation may affect household borrowing composition from informal or formal sector. Table 4 presents results on overall sample. each column represents a separate regression, with the outcome variable at the head of each column. The results show that SC political reservation reduces household borrowing from informal sector such as employer (column (1)), and has no detectable effects on all other sources of borrowing. Interestingly, ST political reservation increases the probability of households getting their largest loan from informal sector such as relative (statistically significant at 10% level, column (4)) and decreases the probability of getting largest loan from bank (column (5)). In order words, an increase of ST political reservation causes households to substitute their largest loan source from formal sector to informal sector.

To gain more insight on the effect of this affirmative action on minorities, we further divide the sample into disadvantaged and non-disadvantaged groups in Table 5 panels A and B. Conditional on disadvantaged households in panel A, the results on ST political reservation is similar to that of overall sample. ST reservation increases probability of getting loans from relative and reduces likelihood of getting loans from bank. In other words, ST reservation makes households to switch their borrowing sources from formal to informal sector. Interestingly, coefficients of SC political reservation show the opposite. SC reservation reduces household probability of get-

ting their largest loan from employers, instead, households are more likely to receive their largest loan from formal sector such as banks or government programs. Panel B indicates that, for non-disadvantaged households, ST political reservation makes them less likely to get their largest loan from bank and more likely to receive loan from other sources.

#### **5.4 Robustness Checks**

Given the affirmative action policy is implemented at the state level where serial correlation may appear, the estimated results in all previous analyses cluster standard errors at the state level. However, a caveat is that standard errors might be less reliable in samples with few clusters (Angrist and Pischke 2009). We address this concern by clustering standard errors at the district level in Tables 6 and 7. Table 6 shows that effects of SC and ST political reservations remain and coefficients are more statistically significant. In Table 7, ST political reservation increases probability of getting their largest loan from relative, while SC reservation reduces household probability of getting their largest loan from employers. In sum, the results with district-level clustering do not change the interpretation of SC and ST political reservations, especially for results on extensive and intensive margins of credit access.

#### **5.5 Differential Impacts of SC and ST Political Reservations**

The intriguing findings of heterogeneous impacts of SC and ST political reservations on credit access and borrowing sources of disadvantaged households are consistent with different characteristics of scheduled castes and scheduled tribes. Historically, STs are more geographically isolated and living in concentrated and homogeneous communities. Rather, compared to STs, SCs are relatively more educated and geographically more dispersed. Because STs are geographically concentrated and living in close neighborhood, after an increase of ST political representation, ST members are easier to get loan (Table 3 panel A) and get their largest loan from relatives (Table 5 panel A). However, for SCs who have relatively more education and geographically more diffuse, they have more access to formal institutions and, therefore, an increase in SC political power makes them substitute away from borrowing less number of loans to having a larger loan amount of largest loan. Furthermore, SC households are less like to borrow their largest loan from employer



and more likely to get loans from formal sector such as banks and government programs (Table 5 panel A).<sup>11</sup>

## 6 Conclusions

This is the first paper to quantify the impact of affirmative action policy on household credit access in both extensive and intensive margins, and substitution among household borrowing sources. Using a natural experiment introduced by the institutional feature of India, and a nationally representative household-level panel data, we find that minority political reservation affects household credit access at both the extensive and intensive margins. Furthermore, we find that the effects of affirmative action is concentrated on the disadvantaged groups—the intended beneficiaries. Looking at extensive margin of disadvantaged households, a one percentage point increase in share of ST political reservation increases probability of getting a loan by 3.7 percentage points. However, SC political reservation has no impact on household credit access. On the other hand, for disadvantaged households who have had a loan in the past 5 years, SC political reservation makes households to substitute their number of loans with a larger loan size of their largest loan; a one percentage point increase in share of SC political reservation increases the amount of largest loan by 15.4%, while household number of loans decreased by 1 unit, though the estimates are significant at the 10% level.

Results on borrowing composition show that an increase in ST political representation makes them more likely to get their largest loan from relatives, while SC political representation reduces household probability of borrowing their largest loan from informal sector such as employers and more likely to get largest loan from formal institutions.

The heterogeneous effects of SC and ST political reservations are consistent with differences in scheduled caste's and scheduled tribe's characteristics. Because STs are geographically concentrated in specific areas, an increase in ST political representation makes them more easy to get loan and get their largest loan from relatives. On the contrary, because relatively more educated and

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<sup>11</sup> Although the coefficients on bank and government program are not statistically significant with district-level clustering in Table 7, the positive point estimates are consistent with the story that households are more likely to receive their largest loan from the formal sector.

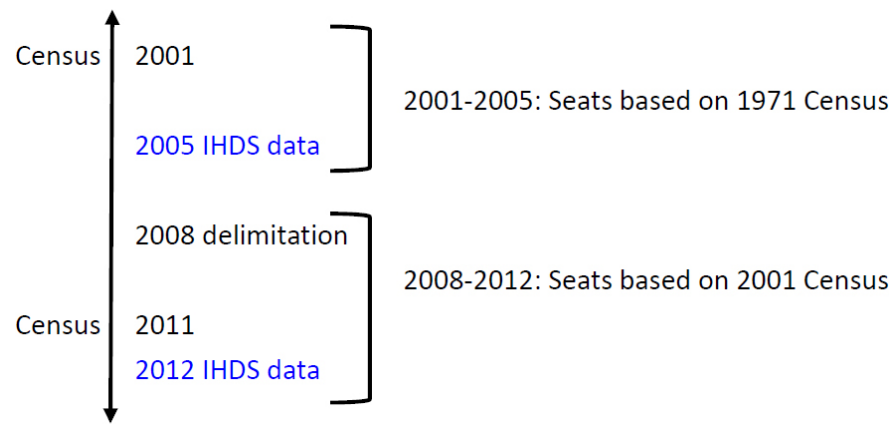
geographically more dispersed SCs have higher chances of getting access to formal institutions, an increase in SC political reservation makes them to receive a larger loan amount and require less number of loans. Moreover, they are less likely to get their largest loan from informal sector such as employers, and switching their largest loan source to formal institutions like banks and government programs.

The findings in this study suggest that minorities exposure to the same affirmative action policy may generate different consequences. We find that political reservations of ST affects the extensive margin of credit access, political reservations for SC, a group analogous with ST, affects the intensive margin. The differential effects of SC and ST political reservations in this study are consistent with the existing literature, which also finds that SC and ST political reservations have differential effects on government and welfare spending (Pande 2003), poverty (Chin and Prakash 2011), and child labor (Kaletski and Prakash 2016). The implications in this study suggest that policy makers need to be clear about their objectives and beneficiaries of affirmative action policies, since the consequences on targeted groups may be the same.

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## 7 Figures



**Figure 1:** Timeline of Delimitation

## 8 Tables

**Table 1:** Summary Statistics

	Full sample		Disadvantaged groups		Non-disadvantaged groups	
	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.
Has a loan last 5 years	0.52	0.50	0.55	0.50	0.43	0.49
Number of loans last 5 years	1.61	2.76	1.73	2.85	1.23	2.45
Age	48.83	13.55	48.11	13.39	50.99	13.79
Head is female	0.12	0.32	0.12	0.32	0.11	0.32
Head's working status	0.82	0.39	0.84	0.37	0.75	0.43
Family size	5.37	2.79	5.41	2.82	5.26	2.71
Head Years of schooling	5.05	4.79	4.34	4.49	7.21	5.03
Rural	0.72	0.45	0.75	0.43	0.61	0.49
SC caste dummy	0.25	0.43	0.33	0.47		
ST caste dummy	0.08	0.27	0.10	0.31		
Other backward caste (OBC) dummy	0.43	0.49	0.57	0.50		
Other castes dummy	0.25	0.43				
Hindu dummy	0.84	0.37	0.89	0.32	0.71	0.46
Muslim dummy	0.10	0.30	0.07	0.25	0.19	0.39
Log of household expenditures	8.17	1.83	8.07	1.82	8.46	1.83
SC share reserved, %	16.02	5.22	16.01	4.78	16.05	6.36
ST share reserved, %	7.22	7.35	7.44	7.64	6.55	6.34
SC census pop share, %	17.00	5.28	16.93	4.80	17.22	6.53
ST census pop share, %	7.94	7.42	8.24	7.67	7.04	6.50
SC current pop share, %	17.19	5.33	17.12	4.85	17.41	6.57
ST current pop share, %	8.04	7.42	8.34	7.68	7.13	6.51
Real GDP last year	30942.74	14705.25	30429.03	14595.66	32496.65	14925.15
Rural population share, %	68.93	10.34	69.12	10.54	68.37	9.70
Election dummy	0.16	0.36	0.15	0.36	0.18	0.38
Observations	57648		43325		14323	
<i>Household has a loan last 5 years</i>						
Log of largest loan amount	9.92	1.48	9.79	1.45	10.42	1.51
Number of loans last 5 years	3.10	3.18	3.15	3.21	2.88	3.04
Largest loan from employer	0.02	0.14	0.02	0.14	0.02	0.14
Largest loan from money lender	0.27	0.45	0.31	0.46	0.15	0.35
Largest loan from friend	0.10	0.30	0.10	0.30	0.10	0.30
Largest loan from relative	0.19	0.39	0.19	0.40	0.17	0.38
Largest loan from bank	0.29	0.45	0.26	0.44	0.41	0.49
Largest loan from NGO	0.01	0.08	0.01	0.08	0.00	0.06
Largest loan from credit group	0.03	0.16	0.02	0.15	0.03	0.18
Largest loan from govt. program	0.01	0.09	0.01	0.08	0.01	0.11
Largest loan from others	0.09	0.29	0.09	0.28	0.10	0.30
Observations	29953		23812		6141	

*Notes:* Each observation represents a household. Sample consists households in the IHDS 2005 and 2012. The sample includes respondents who lived in 15 major states. Disadvantaged groups include SC, ST, and other backward castes.

**Table 2:** The Impact of Political Reservation for Minorities on Credit Access

	Has a loan last 5 years							
	Has loan		Number of loans		Log(largest loan amount)		Number of loans	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SC share reserved	0.001 (0.026)	-0.000 (0.037)	-0.340 (0.261)	-0.342 (0.370)	0.127** (0.046)	0.122 (0.073)	-0.863*** (0.276)	-0.955* (0.469)
ST share reserved	0.034*** (0.008)	0.033** (0.012)	0.286** (0.123)	0.286 (0.173)	-0.029 (0.020)	-0.025 (0.027)	0.223** (0.090)	0.252 (0.150)
SC census pop share	0.166 (0.128)	0.162 (0.182)	-1.788 (2.145)	-1.785 (2.995)	0.460 (0.453)	0.269 (0.723)	-6.404** (2.513)	-7.292 (4.573)
ST census pop share	0.361** (0.163)	0.362 (0.228)	3.246 (2.267)	3.281 (3.188)	-0.334 (0.307)	-0.623 (0.509)	3.263* (1.821)	3.365 (3.185)
SC current pop share	-0.158 (0.207)	-0.150 (0.293)	3.881 (3.549)	3.879 (4.962)	-1.064 (0.746)	-0.782 (1.181)	12.036** (4.148)	13.469* (7.498)
ST current pop share	-0.793** (0.288)	-0.793* (0.404)	-5.464 (4.297)	-5.566 (6.072)	-0.071 (0.477)	0.320 (0.759)	-2.298 (3.262)	-1.700 (5.317)
R-squared	0.190	0.618	0.197	0.571	0.456	0.872	0.202	0.724
N	57648	57648	57648	57648	29953	29953	29953	29953
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household fixed effects		Yes		Yes		Yes		Yes

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Robust standard errors clustered at the state level are in parentheses. Each column represents a separate regression. Dependent variable has loan is an indicator variable equals one if a household ever borrowed a loan in the last five years or zero otherwise, and number of loans represents how many loans a household has taken in the past 5 years. Dependent variables in the last four columns only contain households who have a loan in the last 5 years. Log of largest loan amount denotes log of largest loan amount in Rupee if households have loans in last 5 years, and number of loans in columns (7) and (8) represents, for households who have had a loan, how many loans they have taken in the past 5 years. Other controls include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.

**Table 3:** The Impact of Political Reservation for Minorities on Credit Access By Social Status

	Panel A: Disadvantaged groups			
	Has loan	Number of loans	Has a loan last 5 years	
			Log(largest loan amount)	Number of loans
	(1a)	(2a)	(3a)	(4a)
SC share reserved	-0.002 (0.034)	-0.466 (0.392)	0.154* (0.075)	-1.015* (0.478)
ST share reserved	0.037*** (0.011)	0.314* (0.156)	-0.031 (0.026)	0.257* (0.138)
SC census pop share	0.237 (0.191)	-2.410 (3.166)	0.477 (0.812)	-7.975* (4.474)
ST census pop share	0.390 (0.223)	3.696 (2.820)	-0.671 (0.506)	3.873 (3.070)
SC current pop share	-0.251 (0.304)	5.203 (5.278)	-1.122 (1.358)	15.145* (7.397)
ST current pop share	-0.775** (0.359)	-5.567 (5.304)	0.236 (0.725)	-2.063 (4.797)
R-squared	0.611	0.567	0.863	0.727
N	43325	43325	23812	23812
Other controls	Yes	Yes	Yes	Yes
Household fixed effects	Yes	Yes	Yes	Yes

	Panel B: Non-disadvantaged groups			
	Has loan	Number of loans	Has a loan last 5 years	
			Log(largest loan amount)	Number of loans
	(1b)	(2b)	(3b)	(4b)
SC share reserved	-0.014 (0.035)	-0.184 (0.247)	-0.009 (0.074)	-0.919 (0.583)
ST share reserved	0.008 (0.019)	0.085 (0.240)	-0.019 (0.031)	0.069 (0.211)
SC census pop share	-0.166 (0.238)	-1.726 (2.235)	-0.653 (0.485)	-7.593 (5.431)
ST census pop share	0.259 (0.279)	1.118 (3.562)	-0.301 (0.417)	1.580 (4.124)
SC current pop share	0.343 (0.397)	3.235 (3.683)	0.838 (0.808)	13.058 (8.945)
ST current pop share	-0.740 (0.562)	-2.579 (7.068)	0.508 (0.457)	-0.678 (7.196)
R-squared	0.626	0.588	0.887	0.716
N	14323	14323	6141	6141
Other controls	Yes	Yes	Yes	Yes
Household fixed effects	Yes	Yes	Yes	Yes

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Robust standard errors clustered at the state level are in parentheses. Each column represents a separate regression. Panel A includes sample of disadvantaged groups: SC, ST, and other backward castes. Panel B includes sample of non-disadvantaged groups. Dependent variable has loan in columns (1) and (5) is an indicator variable equals one if a household ever borrowed a loan in the last five years or zero otherwise, and number of loans in columns (2) and (6) represents how many loans a household has taken in the past 5 years. Dependent variables in the last two columns of panels A and B only contain households who have a loan in the last 5 years. Log of largest loan amount in columns (3) and (7) denotes log of largest loan amount in Rupee if households have loans in last 5 years, and number of loans in columns (4) and (8) represents, for households who have had a loan, how many loans they have taken in the past 5 years. Other controls include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.

**Table 4:** The Impact of Political Reservation for Minorities on Borrowing Sources

	Dependent variable								
	Employer	Money lender	Friend	Borrow loan from			Credit group	Govt program	Others
				Relative	Bank	NGO			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SC share reserved	-0.014*** (0.003)	-0.001 (0.036)	-0.023 (0.031)	0.004 (0.022)	0.027 (0.017)	0.000 (0.004)	0.015 (0.013)	0.003 (0.002)	-0.011 (0.046)
ST share reserved	-0.001 (0.001)	0.006 (0.011)	-0.008 (0.006)	0.016* (0.008)	-0.016** (0.006)	0.001 (0.001)	0.002 (0.002)	-0.000 (0.001)	0.001 (0.014)
SC census pop share	-0.075* (0.038)	-0.140 (0.275)	-0.016 (0.138)	0.115 (0.251)	0.179 (0.171)	0.029 (0.048)	0.098 (0.065)	-0.011 (0.015)	-0.179 (0.387)
ST census pop share	0.021 (0.014)	0.099 (0.135)	0.056 (0.124)	0.211 (0.203)	-0.161 (0.123)	0.006 (0.021)	0.019 (0.045)	-0.011 (0.012)	-0.239 (0.284)
SC current pop share	0.149** (0.065)	0.208 (0.475)	0.101 (0.250)	-0.153 (0.397)	-0.326 (0.284)	-0.043 (0.080)	-0.215* (0.119)	0.013 (0.024)	0.266 (0.629)
ST current pop share	-0.004 (0.027)	-0.036 (0.246)	-0.192 (0.196)	-0.295 (0.236)	0.292 (0.194)	-0.018 (0.030)	0.025 (0.071)	0.029* (0.014)	0.199 (0.313)
R-squared	0.760	0.747	0.728	0.754	0.788	0.775	0.740	0.747	0.700
N	29953	29953	29953	29953	29953	29953	29953	29953	29953
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Robust standard errors clustered at the state level are in parentheses. Each column represents a separate regression. Each dependent variable represents in columns (1) to (9) are indicator variables equals one if a household borrowed a loan from specific sources in the last 5 years or zero otherwise. Other controls include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.



**Table 5:** The Impact of Political Reservation for Minorities on Borrowing Sources By Social Status

Panel A: Disadvantaged groups									
	Employer	Money lender	Friend	Borrow loan from			Credit group	Govt program	Others
				Relative	Bank	NGO			
	(1a)	(2a)	(3a)	(4a)	(5a)	(6a)	(7a)	(8a)	(9a)
SC share reserved	-0.015*** (0.004)	0.001 (0.027)	-0.033 (0.027)	-0.003 (0.019)	0.032* (0.018)	0.001 (0.006)	0.010 (0.011)	0.003* (0.001)	0.005 (0.033)
ST share reserved	-0.001 (0.001)	0.009 (0.009)	-0.008 (0.005)	0.017** (0.007)	-0.015** (0.007)	0.000 (0.001)	0.002 (0.002)	-0.001 (0.000)	-0.003 (0.009)
SC census pop share	-0.095 (0.061)	-0.120 (0.230)	-0.049 (0.138)	0.005 (0.250)	0.199 (0.195)	0.037 (0.061)	0.053 (0.066)	-0.014 (0.012)	-0.015 (0.291)
ST census pop share	0.015 (0.018)	0.116 (0.127)	0.062 (0.122)	0.211 (0.192)	-0.202 (0.126)	0.003 (0.028)	0.017 (0.043)	-0.019* (0.010)	-0.202 (0.212)
SC current pop share	0.185 (0.108)	0.146 (0.406)	0.191 (0.258)	0.037 (0.412)	-0.409 (0.326)	-0.054 (0.103)	-0.128 (0.128)	0.015 (0.019)	0.017 (0.481)
ST current pop share	-0.008 (0.033)	0.003 (0.220)	-0.200 (0.176)	-0.263 (0.221)	0.332* (0.186)	-0.025 (0.041)	0.015 (0.068)	0.025* (0.014)	0.121 (0.218)
R-squared	0.747	0.741	0.715	0.748	0.777	0.766	0.724	0.736	0.697
N	23812	23812	23812	23812	23812	23812	23812	23812	23812
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: Non-disadvantaged groups									
	Employer	Money lender	Friend	Borrow loan from			Credit group	Govt program	Others
				Relative	Bank	NGO			
	(1b)	(2b)	(3b)	(4b)	(5b)	(6b)	(7b)	(8b)	(9b)
SC share reserved	-0.010 (0.007)	-0.019 (0.061)	-0.003 (0.034)	0.010 (0.025)	0.020 (0.019)	-0.002 (0.002)	0.027 (0.017)	-0.000 (0.004)	-0.024 (0.041)
ST share reserved	0.003 (0.003)	0.007 (0.027)	-0.014 (0.010)	0.006 (0.010)	-0.019*** (0.004)	-0.000 (0.001)	-0.007 (0.005)	0.001 (0.002)	0.023* (0.012)
SC census pop share	-0.021 (0.063)	-0.163 (0.411)	-0.051 (0.162)	0.340 (0.200)	0.267* (0.126)	-0.011 (0.016)	0.171 (0.105)	-0.019 (0.038)	-0.512* (0.282)
ST census pop share	0.048 (0.055)	0.022 (0.275)	0.031 (0.141)	0.236 (0.140)	-0.034 (0.104)	0.019 (0.016)	-0.008 (0.061)	0.015 (0.029)	-0.328 (0.236)
SC current pop share	0.069 (0.102)	0.259 (0.651)	0.083 (0.281)	-0.513 (0.313)	-0.379 (0.222)	0.022 (0.027)	-0.356* (0.174)	0.040 (0.061)	0.776 (0.481)
ST current pop share	-0.022 (0.080)	-0.098 (0.416)	-0.196 (0.246)	-0.492** (0.177)	0.261* (0.137)	0.005 (0.017)	0.124 (0.115)	0.028 (0.043)	0.390 (0.265)
R-squared	0.816	0.754	0.785	0.785	0.808	0.852	0.787	0.771	0.743
N	6141	6141	6141	6141	6141	6141	6141	6141	6141
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Robust standard errors clustered at the state level are in parentheses. Each column represents a separate regression. Panel A includes sample of disadvantaged groups: SC, ST, and other backward castes. Panel B includes sample of non-disadvantaged groups. Each dependent variable represents in columns (1) to (9) are indicator variables equals one if a household borrowed a loan from specific sources in the last five years or zero otherwise. Other controls include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.

**Table 6:** The Impact of Political Reservation for Minorities on Credit Access, Clustered by District

	Full sample			
	Has loan	Number of loans	Has a loan last 5 years	
			Log(largest loan amount)	Number of loans
	(1)	(2)	(3)	(4)
SC share reserved	-0.000 (0.023)	-0.342* (0.188)	0.122* (0.067)	-0.955** (0.419)
ST share reserved	0.033*** (0.012)	0.286** (0.116)	-0.025 (0.026)	0.252 (0.162)
R-squared	0.618	0.571	0.872	0.724
N	57648	57648	29953	29953
Panel A: Disadvantaged groups				
	(1a)	(2a)	(3a)	(4a)
SC share reserved	-0.002 (0.023)	-0.466** (0.227)	0.154** (0.071)	-1.015** (0.444)
ST share reserved	0.037*** (0.012)	0.314*** (0.118)	-0.031 (0.027)	0.257 (0.157)
R-squared	0.611	0.567	0.863	0.727
N	43325	43325	23812	23812
Panel B: Non-disadvantaged groups				
	(1b)	(2b)	(3b)	(4b)
SC share reserved	-0.014 (0.029)	-0.184 (0.152)	-0.009 (0.108)	-0.919 (0.571)
ST share reserved	0.008 (0.017)	0.085 (0.163)	-0.019 (0.059)	0.069 (0.462)
R-squared	0.626	0.588	0.887	0.716
N	14323	14323	6141	6141

Notes: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Robust standard errors clustered at the district level are in parentheses. Each column represents a separate regression. The top panel shows results of overall sample. Panel A includes sample of disadvantaged groups: SC, ST, and other backward castes. Panel B includes sample of non-disadvantaged groups. Dependent variable has loan in is an indicator variable equals one if a household ever borrowed a loan in the last five years or zero otherwise, and number of loans represents how many loans a household has taken in the past 5 years. Dependent variables in the last two columns of all panels only contain households who have a loan in the last 5 years. Log of largest loan amount denotes log of largest loan amount in Rupee if households have loans in last 5 years, and number of loans represents, for households who have had a loan, how many loans they have taken in the past 5 years. All regressions include SC and ST current share of population, SC and ST share of population in the last preceding censuses, and household fixed effects. Other controls include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.

**Table 7:** The Impact of Political Reservation for Minorities on Borrowing Sources, Clustered by District

	Full sample								
	Employer	Money lender	Borrow loan from				Credit group	Govt program	Others
			Friend	Relative	Bank	NGO			
			(3)	(4)	(5)	(6)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SC share reserved	-0.014** (0.005)	-0.001 (0.034)	-0.023 (0.021)	0.004 (0.024)	0.027 (0.020)	0.000 (0.004)	0.015 (0.010)	0.003 (0.003)	-0.011 (0.025)
ST share reserved	-0.001 (0.003)	0.006 (0.012)	-0.008 (0.006)	0.016* (0.008)	-0.016 (0.011)	0.001 (0.001)	0.002 (0.004)	-0.000 (0.002)	0.001 (0.012)
R-squared	0.760	0.747	0.728	0.754	0.788	0.775	0.740	0.747	0.700
N	29953	29953	29953	29953	29953	29953	29953	29953	29953
Panel A: Disadvantaged groups									
	Employer	Money lender	Borrow loan from				Credit group	Govt program	Others
			Friend	Relative	Bank	NGO			
			(3a)	(4a)	(5a)	(6a)			
	(1a)	(2a)	(3a)	(4a)	(5a)	(6a)	(7a)	(8a)	(9a)
SC share reserved	-0.015** (0.006)	0.001 (0.037)	-0.033 (0.022)	-0.003 (0.025)	0.032 (0.021)	0.001 (0.005)	0.010 (0.011)	0.003 (0.003)	0.005 (0.024)
ST share reserved	-0.001 (0.003)	0.009 (0.012)	-0.008 (0.007)	0.017** (0.009)	-0.015 (0.011)	0.000 (0.001)	0.002 (0.004)	-0.001 (0.002)	-0.003 (0.012)
R-squared	0.747	0.741	0.715	0.748	0.777	0.766	0.724	0.736	0.697
N	23812	23812	23812	23812	23812	23812	23812	23812	23812
Panel B: Non-disadvantaged groups									
	Employer	Money lender	Borrow loan from				Credit group	Govt program	Others
			Friend	Relative	Bank	NGO			
			(3b)	(4b)	(5b)	(6b)			
	(1b)	(2b)	(3b)	(4b)	(5b)	(6b)	(7b)	(8b)	(9b)
SC share reserved	-0.010 (0.014)	-0.019 (0.046)	-0.003 (0.030)	0.010 (0.042)	0.020 (0.044)	-0.002 (0.003)	0.027 (0.017)	-0.000 (0.009)	-0.024 (0.043)
ST share reserved	0.003 (0.006)	0.007 (0.019)	-0.014 (0.013)	0.006 (0.015)	-0.019 (0.025)	-0.000 (0.001)	-0.007 (0.007)	0.001 (0.003)	0.023 (0.021)
R-squared	0.816	0.754	0.785	0.785	0.808	0.852	0.787	0.771	0.743
N	6141	6141	6141	6141	6141	6141	6141	6141	6141

*Notes:* \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Robust standard errors clustered at the state level are in parentheses. Each column represents a separate regression. The top panel shows results of overall sample. Panel A includes sample of disadvantaged groups: SC, ST, and other backward castes. Panel B includes sample of non-disadvantaged groups. Each dependent variable represents in columns (1) to (9) are indicator variables equals one if a household borrowed a loan from specific sources in the last five years or zero otherwise. All regressions include SC and ST current share of population, SC and ST share of population in the last preceding censuses, and household fixed effects. Other controls include district fixed effects, year fixed effects, state income per capita last year, rural population share, state election dummy, household head age, head sex, head working status, family size, head education level, log of household expenditures, dummy variable for rural, caste, and religion.