Do Quotas for Marginalized Groups Improve Women's Representation? Evidence from India's Village Elections*

Priyadarshi Amar†

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Abstract

Electoral quotas are commonly used to address historical inequalities in descriptive representation. However, these quotas are often implemented along a single dimension of identity, such as gender or ethnicity, despite the fact that inequalities are often multidimensional. This raises an important question: how do quotas focused on a single dimension impact the representation of individuals who sit at the intersection of multiple marginalized identities? I argue that when gender norms are correlated with social status, quotas for marginalized groups may affect women's representation. To empirically test this, the paper examines the impact of quotas for marginalized ethnic groups on women's representation in rural India. I find that in seats with quotas for marginalized ethnic groups, the likelihood of women running for and winning political office is higher than in seats without such quotas. These results suggest that within contexts of discrimination and social hierarchy, status may act as a barrier for women in politics.

Keywords: electoral quotas, local government, gram panchayat, caste, gender, India

1   Introduction

Many countries are increasingly adopting electoral quotas to improve the descriptive representation of historically marginalized groups. Gender and ethnic quotas are prominent examples of these measures (see Krook and O'Brien (2010) for a comprehensive list of countries with state-mandated electoral quotas). Several studies have examined the implications of such quotas on public goods provision (Clots-Figueras and Iyer 2023), policy influence (Clayton 2021), and political participation (Htun and Ossa 2013; Hughes 2011; Krook 2010). However, most of these quotas address inequality along a single dimension such as gender, class, or ethnicity, while individuals vary along multiple cross cutting dimensions, such as gender and ethnicity (Crenshaw 2013; McCall 2005). These cross-cutting dimensions raise an important question: what are the consequences of quotas for those at the intersection of multiple disadvantaged identities?

Early studies on intersectionality in politics show that women from marginalized groups are more underrepresented than men from these same groups (Darcy et al. 1993; Huang 2012). However, recent studies emphasize the complexity of intersectionality and suggest that it may not necessarily lead to worse outcomes (Bejarano 2013; Celis et al. 2014; Fraga et al. 2008; Mügge 2016). Most of this research, however, focuses on comparing marginalized men and women or women from privileged and marginalized groups. There is limited research examining differences in representation between men and women across communities.

This paper contributes to the debate on intersectionality by examining whether quotas for marginalized ethnic groups affect women's representation. In contexts where both women and members of marginalized ethnic groups face discrimination, I theorize that the correlation between gender norms and social status affects women's decisions to run for office and effectively participate in elections. In the Indian context, several studies have documented that women from privileged caste groups face more restrictions due to purity norms, particularly the fear of pollution associated with prox-

imity to marginalized groups (Agte and Bernhardt 2023; Cassan and Vandewalle 2017; Chakravarti 1993; Field et al. 2010; Jayachandran 2020). These purity norms increase the cost of running for office but also affect the likelihood of winning, as they may hinder the formation of cross-community coalitions and campaigning in neighborhoods where marginalized communities reside. Therefore, I hypothesize that quotas for marginalized groups, which reduce the number of seats available to privileged groups, may increase women's candidacy and, consequently, women's representation.

To test these hypotheses, I compare women's representation in seats with quotas for marginalized ethnic groups and seats without any quotas in village council (GP) elections in Maharashtra, India's second-largest state. Local government in India is a crucial case for studying quotas, as it is an institution with one of the largest adoptions of electoral quotas (Beaman et al. 2009; Bhavnani 2009; Chattopadhyay and Duflo 2004a; Chauchard 2017; Jensenius 2015). Like other states in India, Maharashtra has reserved seat electoral quotas for marginalized ethnic groups—Scheduled Castes (SC), Scheduled Tribes (ST), and Other Backward Classes (OBC)—and women. In this study, I focus on the intersectional consequences of ethnic quotas on women's representation; hence, I restrict my sample to seats without quotas for women.

My empirical strategy takes advantage of quasi-random variation in the assignment of ethnic quotas due to the following institutional features: First, a specific percentage of sarpanch (village chief) seats is reserved for marginalized ethnic groups, with the quota status rotating each term. This rotation ensures that seats in villages with varying proportions of marginalized groups have ethnic quotas in different electoral terms. Second, some council member seats are embedded in wards (called multi-member wards) with the same electorate, wherein a single member is elected for each seat in the ward, and the quota status of the seats may be different. This allows for the comparison of two seats with the same electorates (essentially, the same constituency) but different quota status.

I rely on large-scale, publicly unavailable administrative data on election statistics, which includes candidates' and winners' characteristics for village elections from 2018 to 2022. First, I examine the causal effect of ethnic quotas on women's candidacy and find that the likelihood of having at least one woman candidate is significantly higher in seats with ethnic quotas compared to those without. This result holds across different types of GP seats, including sarpanch (village chief) and member (council member) seats. Second, the positive effects extend beyond candidacy to the likelihood of women winning an election. I find that the likelihood of a woman winning in ethnic quota seats is higher than in open seats. Altogether, there is robust evidence that quotas for marginalized ethnic groups improve women's representation in political office as well as on the ballot. These results mitigate concerns that unidimensional affirmative action policies may benefit privileged individuals among historically marginalized groups and hence create new cross-cutting inequalities.

To explore the mechanism, I examine the gender gap in candidacy and representation in seats without quotas. Consistent with my theory, I find that the gender gap is higher among high and middle castes (also known as general castes) compared to SC, ST, and OBC castes. This suggests that women from marginalized groups face fewer restrictions due to gender norms. Additionally, I compare potential women politicians from marginalized castes and general castes in seats without institutional protection for women. To do so, I compare the characteristics of women winners in seats with gender quotas to those in seats with both gender quotas and quotas for marginalized caste groups, as gender quotas may provide a pathway to political power in seats without institutional protection for women (Bhavnani 2009; Goyal 2024; Karekurve-Ramachandra 2020). I find that women from marginalized castes have fewer children, are younger, and possess more past electoral experience compared to women from general castes. Altogether, the findings provide suggestive evidence in support of the mechanism that gender norms associated with status make it costly for women from general castes to

4

participate in activities outside the household that require engagement with marginalized castes.

This paper makes several contributions to the existing literature on electoral quotas. First, it builds on existing theoretical insights to explain how the interaction between electoral quotas, status, and gender norms shapes representation. Understanding intersectionality in politics is crucial because descriptive representation has important welfare consequences, especially in low- and middle-income countries (Brulé and Toth 2022). Several studies demonstrate that improvements in the descriptive representation of underrepresented groups as a result of quotas affect policy influence (Barnes 2016; Pande 2003) and the type of public goods provided (Chattopadhyay and Duflo 2004b; Chin and Prakash 2011; Gulzar et al. 2023; Jensenius 2015).

Second, I provide novel causal estimates on the intersectional effects of electoral quotas, addressing a gap where most existing work offers only correlational evidence, with the exceptions of Karekurve-Ramachandra and Lee (2020) and Cassan and Vandewalle (2017). This study complements a relatively new but growing body of literature that examines the political effects of electoral quotas, such as representation when quotas are removed (Bhavnani 2009), mobilization (Dunning and Nilekani 2013), political competition (Auerbach and Ziegfeld 2020), upward political mobility (Goyal 2024; Karekurve-Ramachandra 2020), and participation in public meetings (Parthasarathy et al. 2019).

Lastly, I contribute to the interdisciplinary literature on intersectionality and affirmative action policies more broadly. Several studies have highlighted that individuals at the intersection of race and gender experience worse outcomes in various settings, such as the labor market (Reskin 2000) or admission to academic institutions (Fernandez et al. 2022). To address these inequalities, governments have implemented affirmative action policies in government jobs and higher education (Kaletski and Prakash 2016). The findings of this underscore the conditions under which intersectionality may

exacerbate or mitigate inequalities in other institutions with affirmative action policies.

2   Ethnic Quotas and Women's Representation

In context where certain groups are historically underrepresented, citizens from traditionally elite groups dominate candidate pool and political office as they typically have lowest cost of running for office (Chattopadhyay and Duflo 2004b). In single member electoral districts, electoral quotas limit office citizens of particular group, thereby increasing their descriptive representation. However, electoral quotas are typically implemented on a single dimension while individuals belong to multiple identities like gender, ethnicity.

How do electoral quotas shape the representation of those with multiple, cross-cutting identities? Specifically, what are the consequences for individuals at the intersection of multiple disadvantaged identities, such as women from minority ethnic groups, in contexts where both women and minorities are underrepresented?Assuming that compounding inequalities increase the cost of running for office, different dimensions of disadvantaged identities intersect and amplify one another. Several studies have highlighted the consequences of this phenomenon by examining disparities in descriptive representation. For instance, Darcy et al. (1993) show that redistricting efforts improved the representation of Black politicians, but most of these gains were for Black men, not women. In a setting with gender quotas and quotas for indigenous groups, Huang (2012) find that the representation of indigenous women worsened over time, even as the representation of other women increased. The authors argue that this occurred because neither indigenous groups nor women's groups prioritized the representation of indigenous women, suggesting the need for multi-dimensional quotas.

On the contrary, other studies argue that outcomes for those at the intersection of multiple disadvantaged identities may not always be worse. The socioeconomic status of women from marginalized minority groups may be better due to the high incidence of incarceration among men, leading to poor levels of education for the latter (Philpot and

Walton Jr 2007; Scola 2013). Additionally, voters may prefer women from marginalized groups over men, as they may be considered less radical (Celis et al. 2014; Mügge 2016). For the same reason, marginalized women might find it easier to build or be a part of cross-cutting coalitions (Bejarano 2013; Fraga et al. 2008).

In this paper, I explore how differential social norms across groups impact individuals at the intersection of multiple disadvantaged identities. Focusing on the consequences of ethnic quotas on women's representation, I examine how varying gender norms across ethnic groups influence women's political participation. Ethnic quotas for marginalized groups reduce the number of seats available for traditionally elite groups to contest. This reduction in eligible seats can either enhance or diminish women's representation, depending on the gender norms within each ethnic group. Specifically, if gender norms are more restrictive for women from traditionally elite groups, ethnic quotas can improve women's representation, and vice versa. Gender norms may affect candidacy by increasing the cost of running for office and may also limit the formation of electoral alliances with other ethnic groups, thereby influencing the probability of winning. Drawing on insights from the extensive literature on caste and gender, I argue that gender norms are particularly restrictive for women from traditionally elite groups due to cultural norms that limit their mobility outside the home (Agte and Bernhardt 2023; Cassan and Vandewalle 2017; Chakravarti 1993; Field et al. 2010; Jayachandran 2020). Consequently, I expect ethnic quotas to improve women's representation.

Theoretically, this paper builds on the insights provided by Karekurve-Ramachandra and Lee (2020) and Cassan and Vandewalle (2017), which examine the intersectional effects of gender quotas on less privileged groups and highlight the role differential gender norms in explaining their results. A key distinction between gender and ethnic quotas is that under gender quotas, women compete with other women, who can be from the same or different communities. However, in seats with ethnic quotas, women and men from the same community compete for political office. Hence, within-ethnicity gen-

7

der norms play a more significant role under ethnic quotas compared to gender quotas, where both inter-community dynamics and differential gender norms are at play.

In other words, under gender quotas, traditionally elite individuals—typically upper and landed elite men—can field a proxy, often a female family member. Proxy women representatives allow traditionally elite men to retain power (Heinze et al. 2024). However, in seats with ethnic quotas, traditionally elite men or their family members cannot run for political office, making it relatively costly to field a proxy.

3 Context

In this section, I build on the theoretical discussions from the previous section by providing context on caste and gender in rural India, followed by a discussion of the institutional details of gram panchayats in Maharashtra.

3.1 Caste and Gender in Rural India

The caste system stratifies the Hindu society into four varnas and outcastes, who are excluded from the varnas (Dirks 1992; Srinivas 1957). Each hierarchical class is further sub-divided into caste or Jati, which is associated with a traditional occupation (Risley 1892). The salience of this structure persists through strict norms on within-caste marriage. Hence, understanding the relationship between caste and gender in this context is crucial to assessing the costs associated with running for office for women from different ethnic groups.

Several studies indicate that caste norms impose more restrictive conditions on upper-caste women, affecting their mobility and economic activity (Agte and Bernhardt 2023; Cassan and Vandewalle 2017; Chakravarti 1993). Upper-caste women, constrained by the responsibilities of maintaining their high status and fears of pollution from physical proximity to lower-caste individuals, often face barriers to activities outside the home.

These purity norms restrict the physical mobility of women from high castes in

the political process, especially local governments (Cassan and Vandewalle 2017). The fear of pollution due to physical mobility significantly decreases the likelihood of winning an election, as it hinders the formation of cross-caste alliances and limits effective campaigning across the constituency. The low likelihood of winning also decreases the likelihood of running for elections, as contesting elections is costly (Gulzar 2021).

3.2 Gram Panchayats in Maharashtra

With a population of around 112 million, Maharashtra has more than 25,000 gram panchayats (GPs). Elections are held every five years, with the timing varying according to a predetermined schedule. This variation is due to factors such as boundary changes, the establishment of new villages, the death or resignation of council members, and motions of no confidence. Each GP consists of 7 to 17 members and a sarpanch (village chief), with the number of seats depending on the population of the GP. Sarpanches were usually elected indirectly from among council members; however, between July 2017 and March 2020, and from August 2022 onwards, they were directly elected by voters. GP office bearers have several responsibilities, including organizing regular public meetings, maintaining vital records like birth registrations, ensuring the effective implementation of government schemes and proper utilization of funds, supervising and controlling the work of GP staff and officers, and exercising additional powers and duties as directed by the State Government.

In 1992, the 73rd Constitutional Amendment to the Indian Constitution mandated state governments to establish, hold regular elections for, and empower gram panchayats. Along with mandating decentralization, the 73rd Amendment also directed states to introduce quotas to enhance the descriptive representation of historically underrepresented groups, such as women and marginalized castes like Scheduled Castes (SC) and Scheduled Tribes (ST). Since then, a certain proportion of seats are reserved at the block level (an administrative unit higher than the GP), and a specific proportion of seats within each gram panchayat are reserved for these disadvantaged groups.

9

Later, most states, including Maharashtra, adopted quotas for Other Backward Classes (OBCs).

The quota assignment for sarpanch seats is temporary and rotates every term. The rules require reserving a certain proportion of seats for women, marginalized ethnic groups i.e., SC, ST, OBC, and women from SC, ST, and OBC within a block. The process begins with the reservation of seats for SC, ST, and OBC groups. The assignment rules for ethnic quotas are somewhat complex and vary among SCs, STs, and OBCs. For SCs, gram panchayats (GPs) that had SC quotas in the last two terms are excluded from consideration. The remaining GPs are then listed in descending order of their SC population proportions, and the top GPs on this list are assigned SC quotas based on the required number of seats. For STs, the assignment depends on whether a block is considered a scheduled area or not.[1] In non-scheduled and partially scheduled areas, the ST quota assignment follows a procedure similar to that for SCs. However, in fully scheduled areas, a sarpanch seat is always reserved for STs. After assigning SC/ST quotas, a list is prepared excluding GPs that had OBC quotas in the last three terms. From the remaining GPs, 27% of the seats are randomly assigned OBC quotas. Once SC, ST, and OBC quotas are assigned, the remaining seats are designated as General. Within each category—SC, ST, OBC, and General—50% of the seats are then reserved for women. This means that, apart from General seats that are not reserved for women, all other seats are subject to either an ethnic quota, a gender quota, or both.

For council member seats, which are the smallest unit of local governance in rural areas, the assignment rules require reserving certain proportions of seats within a GP. Similar to sarpanch seats, SC, ST, and OBC quotas are assigned first, following the same rules as described above, except in scheduled areas. In fully scheduled areas, a minimum of 50% of the seats in a GP must have ST quotas, with the possibility of extending this based on their population percentage in the GP. Some seats are combined

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[1]Regions identified by a high share of the Scheduled Tribes (ST) population—a historically disadvantaged minority group.

into a ward, which is jointly represented, and each member is elected by the electorate of the entire ward.

4 Data and Empirical Strategy

The main aim is to examine the impact of ethnic quotas for marginalized groups on women's representation. To systematically study this, I leverage quasi-random spatial variation in the assignment of quotas and rely on a novel administrative micro-dataset on GP elections in Maharashtra. This data, collected and compiled by the Maharashtra State Election Commission—the statutory body responsible for conducting local elections in the state—includes seat-wise election statistics, as well as candidates' and winners' characteristics for sarpanch and council member seats across 22,499 GPs between 2018 and 2022.[2]

Since my main outcome is the gender of the politician, I restrict my sample to seats without gender quotas and compare those reserved for marginalized ethnic groups (the treated group) with those without any reservations (the control group). This restriction removes all gender quota seats and gender-specific ethnic quota seats, i.e., seats with quotas for women, OBC women, SC women, and ST women for both sarpanch and council member seats. After excluding seats with gender quotas, the distribution of seats by quota status is shown in Table 4.1.

Table 4.1: Seat distribution by quota status in the sample

Seat type	Quota status	N
Sarpanch	No quotas	2301
Sarpanch	Ethnic quota	2818
Member	No quotas	33837
Member	Ethnic quota	37171

Figure 4.1 presents the distribution of outcomes by the quota status of the seats.

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[2]The data for the sarpanch seat is limited to directly elected sarpanch elections. As discussed in the previous section, Sarpanch were usually indirectly elected from among council members directly elected from smaller constituencies known as wards. However, between July 2017 and March 2020, and from August 2022 onwards, they were directly elected by voters.

Overall, approximately 17% of the seats have at least one woman candidate, and 8% have a woman winner. The data also show a statistically significant difference in the proportion of women candidates and winners by quota status, with a significantly higher representation of women in seats with ethnic quotas. Therefore, these descriptive results provide suggestive evidence supporting the hypothesis that ethnic quotas improve women's representation.

Figure 4.1: Distribution of Main Outcomes
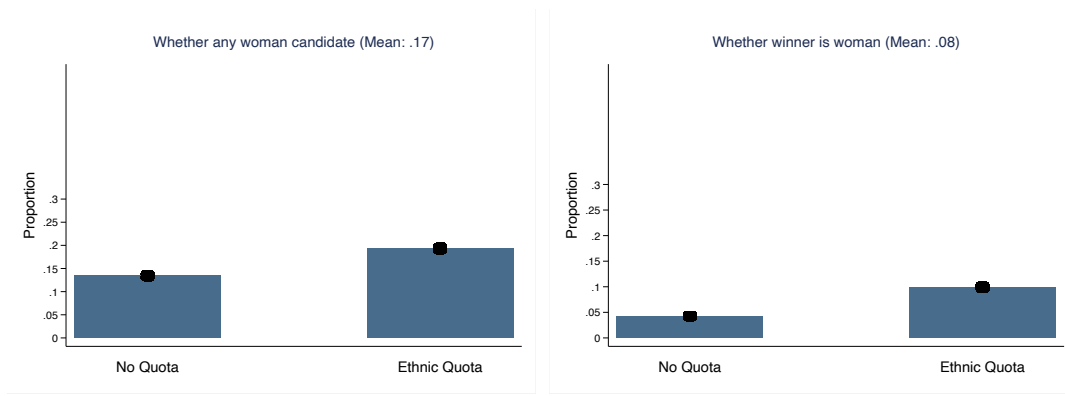
I use the following empirical specification to study the consequences for sarpanch (village chief) seats:

$$Y_{pbt} = \alpha + \beta \text{Ethnic Quota}_{pbt} + X'\theta_{pbt} + \gamma_b + \delta_t + \epsilon_{vbt} \tag{1}$$

where Y_{pbt} is an outcome of interest for a sarpanch seat in a GP p, block b (an administrative unit higher than GP), and election year t. The main outcomes include: 1) whether there is any woman candidate, 2) the number of women candidates, and 3) whether the winner is a woman. Ethnic Quota$_{pbt}$ takes a value of 1 if the seat has quota for either SC,ST, or OBC and 0 for a seat without quotas. Since the assignment rule for SC/ST quotas is based on population shares, I control for the share of SC and share of ST population in a GP as per the 2011 census. The 27% OBC quotas are randomly assigned

to the seats remaining after the assignment of SC/ST quotas and those reserved in the recent past. I also control for election year fixed effects and block fixed effects.[3] Furthermore, I exclude sarpanch seats in fully scheduled areas because there is no variation in treatment assignment within a block as all seats are reserved for STs. The identifying assumption is that the assignment of quotas is quasi-random in the restricted sample, controlling for block-level characteristics, election year-specific factors, and the share of SC and ST populations in the GP.

For the GP council member seats, I use the following empirical specification

$$Y_{swpt} = \alpha + \beta\text{Ethnic Quota}_{swvt} + \gamma_w + \delta_t + \epsilon_{swvt} \tag{2}$$

where Y_{swvt} is an outcome of interest in a seat s, ward (sub-GP level unit) w, GP p, and election year t. This specification controls for time-invariant specific ward fixed effects γ_w.[4] The use of ward fixed effects further restricts the sample to multi-members wards after excluding seats with quotas for women, but it allows for leveraging variation in quota assignment within a ward. In other words, this approach compares seats with the same set of voters but varying ethnic quota assignment statuses. The identification strategy ensures that we compare seats with different quota statuses but the same electorate (constituency), thereby balancing constituency characteristics across treatment and control groups. Alternately, I use specification with GP fixed effects instead of ward fixed effects to study the effects for the sample with all village council member seats.

5   Results

I begin by examining the effect of ethnic quotas on women's representation both on the ballot and in political office. Tables 5.1 present the results for two measures of representation: whether any woman contested (Panel A) and whether the winner is woman

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[3]Note that this analysis uses cross-sectional data, leveraging spatial variation. However, there is temporal variation due to the differing timing of village council elections across the state.

[4]Note that as the analysis is done on cross-sectional data, hence, the specification cannot control ward-year fixed effects.

(Panel B). The table provides results for sarpanch seats in columns (1) and (2) and for GP member seats in columns (3) and (4). In the baseline specification for sarpanch seats, I control for block fixed effects and election year fixed effects in column (1). In column (2), I additionally control for the share SC and share ST populations in the GP. In column (3), which presents results for council member seats, I include GP fixed effects to account for time-invariant GP-level characteristics. Finally, in column (4), I include ward-specific fixed effects and present results for a restricted sample with multiple seats and variation in treatment assignment within a ward.

In Panel A, I find that the likelihood of a woman contestant is approximately 13 percentage points higher in seats with ethnic quotas compared to seats without quotas in columns (1) and (2), respectively. The results show that the likelihood of a woman contestant is approximately 5 percentage points higher in column (3). Finally, in column (4), the results indicate that ethnic quotas increase the likelihood of a woman contestant by 7 percentage points. All estimates are significant at the 1% level.

Furthermore, the results in Panel B for the likelihood of a woman winner follow a similar pattern. The likelihood of a woman winning is approximately 8 percentage points higher in seats with ethnic quotas compared to open seats in columns (1) and (2), respectively. In column (3), which includes GP fixed effects for the sample with multiple seats in a GP, the results show that the likelihood of a woman winning is approximately 6 percentage points higher. Lastly, in column (4), controlling for ward-specific fixed effects in a sample with multiple seats within a ward, the findings reveal that ethnic quotas increase the likelihood of a woman winning by 5 percentage points. All estimates are significant at the 1% level.

Additionally, I examine the consequences on other measures of women's candidacy in Table A.1, including the proportion of women candidates (Panel A) and the proportion of women winners (Panel B), and find that the results are consistent across measures. It is important to note that I observe a significant decline in the number

14

Table 5.1: Effect of Ethnic Quotas on Women's Representation

	(1) Sarpanch	(2) Sarpanch	(3) Members	(4) Members
Panel A: Outcome– Whether any woman candidate				
Ethnic Quota	0.13***	0.13***	0.054***	0.076***
	(0.014)	(0.015)	(0.0030)	(0.0060)
Control Mean	.17	.172	.132	.129
No. of Observations	4336	3947	65822	20970
Panel B: Outcome– Whether winner is woman				
Ethnic Quota	0.075***	0.076***	0.064***	0.064***
	(0.011)	(0.012)	(0.0025)	(0.0047)
Control Mean	.057	.057	.041	.051
No. of Observations	4279	3903	58454	19699
Block FE	Yes	Yes	-	-
GP FE	-	-	Yes	-
GP Ward FE	-	-	No	Yes
Year FE	Yes	Yes	Yes	Yes

Notes: This table uses data from village panchayat elections in Maharashtra between 2018 and 2022. The sample is restricted to seats without gender quotas. Each observation represents a GP seat. Ethnic Quota takes the value 1 if the seat is subject to an ethnic quota and 0 otherwise. Column (1) presents results for the sarpanch seat only. Column (2) shows results for sarpanch seats with controls for the share of SC and share of ST populations in the GP. Column (3) provides results for all GP member seats, while Column (4) presents results for member seats with variation in treatment assignment within a war. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the block level in Columns (1) and (2) and at the GP level in Columns (3) and (4).

of candidates due to ethnic quotas, which aligns with the findings of Auerbach and Ziegfeld (2020). However, the percentage decline in the number of women candidates is much greater than the overall percentage decline in the total number of candidates, suggesting that the effect on women's candidacy is driven more by a decline in women candidates rather than a general reduction in political competition.

Altogether, the results provide strong evidence that ethnic quotas increase both women's candidacy and representation across different types of seats. The effect sizes range from 5 to 13 percentage points for the likelihood of a woman candidate and from 6 to 8 percentage points for the likelihood of a woman winning. These effects are substantial, given that the control mean is less than 0.20 for the likelihood of a woman candidate and less than 0.10 for the likelihood of a woman winner, implying at least a 40% increase relative to control mean in women's representation both on the ballot and in office. In comparison, Cassan and Vandewalle (2017) and Karekurve-Ramachandra and Lee (2020) report effect sizes ranging from 50% to 70% for the intersectional effects of gender quotas. While their effect sizes overlap with those found for the likelihood of having at least one woman candidate, they are much smaller when compared to the likelihood of winning, where the coefficient size suggests more than a 100% change relative to the control mean in the likelihood of a woman winner. These relatively higher effects imply that the intersectional consequences of ethnic quotas may be more substantial than those of gender quotas. Furthermore, since the sarpanch is elected by a larger and more heterogeneous electorate and holds greater powers, while council members are elected from much smaller and more homogeneous electorates, these results suggest that the impact of ethnic quotas does not seem to depend on political stakes, electorate size, or demographic heterogeneity.

6   Discussion

In this section, I present evidence supporting the underlying mechanism, explore alternative explanations, and discuss the robustness of the results under alternate specifica-

tions.

6.1 Mechanism

Recall, I argue that women from marginalized groups have lower entry costs and a greater likelihood of winning due to purity norms that limit the participation of women from privileged groups. In the previous section, the results showed that in seats with ethnic quotas, women are more likely to contest than in seats without such quotas. One potential interpretation of this result is that women from privileged groups face stronger barriers to candidacy. Hence, when the number of seats for privileged groups is less, women's candidacy improves.

To support this interpretation, I examine the caste and gender distribution by quota status in Figure 6.1. The left panel shows the proportion of women politicians by caste in seats without quotas, while the right panel shows this for seats with ethnic quotas. The plot suggests that in seats without quotas, the gender gap in candidacy is higher among general castes than marginalized castes (SC/ST/OBC). There seems to be no noticeable difference in the proportion of women candidates from marginalized castes in seats with and without quotas. This pattern provides suggestive evidence that women from privileged groups face greater barriers. On the other hand, the gender gap in representation is similar between general castes and marginalized castes in seats without quotas, but the gender gap is relatively lower in seats with ethnic quotas, which drives the main result on the likelihood of women winner. This suggests that marginalized women are more likely to win when contesting in seats with ethnic quotas.

To further examine political consequences of differential gender norms, I examine the differences in characteristics of the women winners in seats with gender and ethnic quotas and gender quota in Table 6.1. [5] Several studies have exposure to gender

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[5]This analysis requires combining election winners' data with data from affidavits submitted by candidates when submitting papers. Unfortunately, the affidavit data do not contain a seat identifier, and hence, combining the two datasets requires matching on poll date and fuzzy merge on candidate name. The process used algorithms designed to fuzzy merge transliterated Indian names. Furthermore, the affidavit data does not include elections from 2021, resulting in a smaller matched sample for council

Figure 6.1: Gender and Caste of Candidates
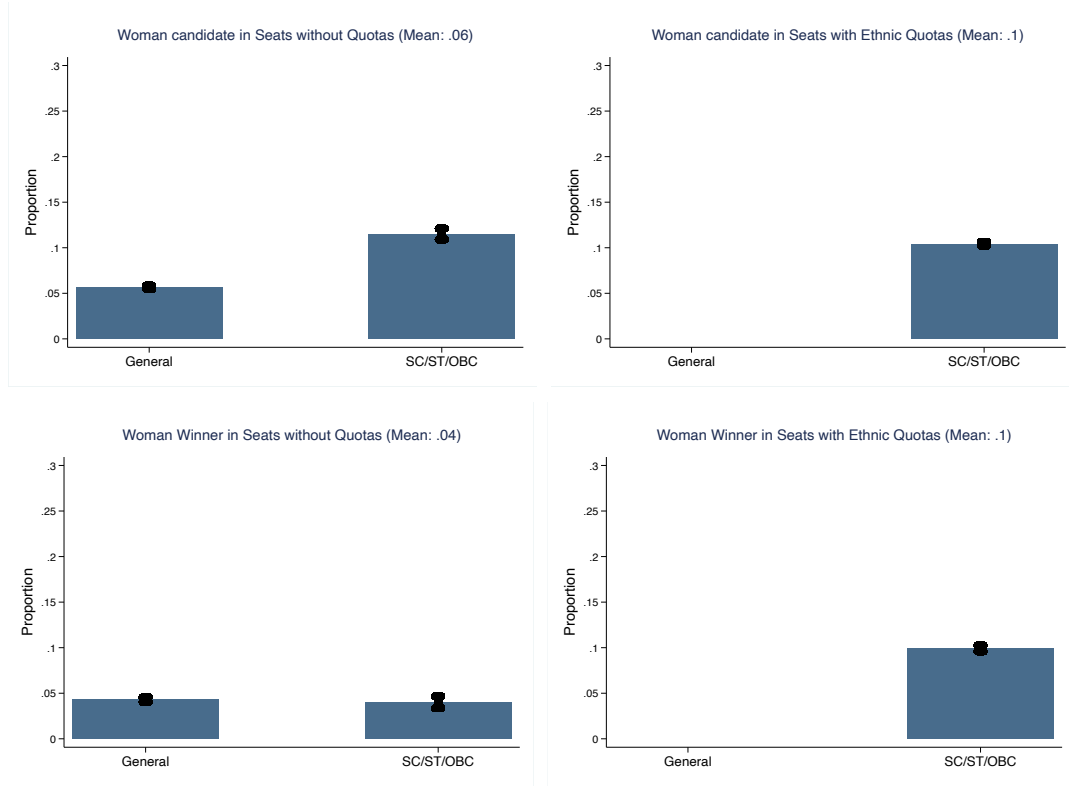
quotas may increase political participation even gender quotas with exposure to quotas being a pathway to political power in seats with without institutional protection for women (Bhavnani 2009; Goyal 2024; Karekurve-Ramachandra 2020). Hence, one can expect women in seats with gender quotas and gender quotas are potential future candidates. As per the gender norm hypothesis, I expect women politicians from marginalized castes have characteristics that go against the gender norms. Consistent with the expectation, the results show that women in seats with ethnic and gender quotas are younger, have lesser children and more past electoral experience than women in gender quota seats despite being from poor families.

That said, women winners in seats with gender quotas are less likely to be employed. This seems more inconsistent with theory that caste norms impose mobility restrictions, however, the fear of pollution is less a worry in labor market in rural areas members.

as it continues to be segregated by caste (Benjamin et al. 2010; Cassan et al. 2021). Furthermore, differences in labor market opportunities could explain the results instead of gender norms (Sanyal et al. 2015). In other words, if labor market opportunities are likely to be better for women from privileged groups, then they may opt out of running for office because of better outside these opportunities. However, if labor market opportunities were the main factor, one would expect this effect to be similar for both men and women from privileged groups. Therefore, this explanation does not account for greater gender gap among castes in Figure 6.1.

6.2 Alternate Specifications

In the main specification, I define ethnic quota as a combination of quotas for marginalized groups. In Table A.2 and Table A.3, I present the results for each marginalized group separately, examining the effect of OBC, SC, and ST quotas on women's representation. The results indicate that the number of women candidates, the likelihood of any woman contesting, and the likelihood of a woman winning are higher in seats with SC, ST, and OBC quotas compared to seats without quotas. In other words, the effects of ethnic quotas are not limited to or driven solely by a particular marginalized ethnic group.

7   Conclusion

This study finds that ethnic quotas improve women's descriptive representation and help reduce multiple inequalities. It underscores the role of differential gender norms in explaining variations in women's representation across ethnic groups.

First, it highlights how restrictions on women's movement outside the home impact their decision to run for office. Second, it demonstrates that limitations on physical mobility can affect the likelihood of winning office, as effective campaigning and forming cross-cutting alliances are crucial for electoral success.

Additionally, the findings have several implications for Indian politics. They alleviate concerns that efforts to reduce inequality along a single dimension can inadver-

tently improve inequalities across multiple dimensions. Furthermore, while this study examines the impact of restrictions on women's movement on their representation, it is also important to consider that these restrictions may constrain their activities once they are in political office. Therefore, policies and interventions aimed at breaking such gender norms, especially in rural areas, are essential to ensure women become active policymakers rather than mere proxies in local governments.

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Table 6.1: Effect of Gender and Ethnic Quotas on Characteristics of Women Winners

	(1) Sarpanch	(2) Sarpanch	(3) Members	(4) Members
Panel A: Log of Family Income				
Gender & Ethnic Quota	-0.37***	-0.38***	-0.29***	-0.34***
	(0.067)	(0.079)	(0.027)	(0.037)
Dep Var Mean	11.754	11.777	11.231	11.237
No. of Observations	1660	1302	8434	3042
Panel B: Graduate				
Gender Ethnic Quota	-0.024	-0.018	0.0082	0.0018
	(0.016)	(0.018)	(0.0050)	(0.0070)
Dep Var Mean	.157	.162	.072	.067
No. of Observations	2429	1874	18213	7965
Panel C: Age				
Gender & Ethnic Quota	-0.29	0.039	-1.28***	-1.23***
	(0.45)	(0.52)	(0.21)	(0.31)
Dep Var Mean	40.123	40.082	40.241	39.894
No. of Observations	3620	2789	18213	7965
Panel D: No. of children				
Gender & Ethnic Quota	-0.016	-0.0067	-0.11***	-0.16***
	(0.038)	(0.045)	(0.018)	(0.026)
Dep Var Mean	2.004	2	2.024	2.033
No. of Observations	3620	2789	18212	7965
Panel E: Contested previous election				
Gender & Ethnic Quota	-0.012	0.0073	0.088***	0.092***
	(0.017)	(0.019)	(0.0070)	(0.010)
Dep Var Mean	.249	.238	.139	.131
No. of Observations	3616	2786	18181	7940
Panel F: Unemployed				
Gender & Ethnic Quota	0.062***	0.073***	0.029***	0.035***
	(0.018)	(0.020)	(0.0072)	(0.010)
Dep Var Mean	.42	.426	.412	.41
No. of Observations	3620	2789	18213	7965
Block FE	Yes	Yes	-	-
GP FE	No	No	Yes	-
GP Ward FE	No	No	No	Yes
Year FE	Yes	Yes	Yes	Yes

Notes: This table uses data on village panchayat elections in Maharashtra between 2018-2020 and 2022. The analysis restricts the sample to all seats without electoral gender quotas. Each observation represents a seat of a GP. Gender & Ethnic Quota takes value 1 if the seat has gender ethnic quota and 0 for gender quota seat. Column (1) presents results for the sarpanch seat only. Column (2) shows results for sarpanch seats with controls for the share of SC and share of ST populations in the GP. Column (3) provides results for all GP member seats, while Column (4) presents results for member seats with variation in treatment assignment within a war. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the block level in Columns (1) and (2) and at the GP level in Columns (3) and (4).

A   Appendix

Table A.1: Effect of Ethnic Quotas on Women Candidacy

	(1) Sarpanch	(2) Sarpanch	(3) Members	(4) Members
Panel A: Outcome– Prop. women candidates				
Ethnic Quota	0.078***	0.082***	0.049***	0.051***
	(0.0085)	(0.0090)	(0.0021)	(0.0038)
Control Mean	.061	.063	.08	.074
No. of Observations	4336	3947	64707	20970
Panel B: Outcome– No. of women candidates				
Ethnic Quota	0.22***	0.23***	0.10***	0.11***
	(0.026)	(0.028)	(0.0041)	(0.0077)
Control Mean	.202	.203	.143	.147
No. of Observations	4336	3947	64707	20970
Panel C: Outcome– Total no. of candidates				
Ethnic Quota	-0.22***	-0.25***	-0.16***	-0.18***
	(0.047)	(0.046)	(0.0066)	(0.011)
Control Mean	3.209	3.205	2.273	2.333
No. of Observations	4336	3947	64707	20970
Block FE	Yes	Yes	-	-
GP FE	No	No	Yes	-
GP Ward FE	No	No	No	Yes
Year FE	Yes	Yes	Yes	Yes
Control for Sarpanch seat	-	-	-	-
Share of SC and ST pop.	-	Yes	-	-

Notes: Table uses on data from village panchayat elections in Maharashtra between 2018 and 2022. The sample is restricted to seats without gender quotas. Each observation represents a GP seat. Ethnic Quota takes the value 1 if the seat is subject to an ethnic quota and 0 otherwise. Column (1) presents results for the sarpanch seat only. Column (2) shows results for sarpanch seats with controls for the share of SC and ST populations in the GP. Column (3) provides results for all GP member seats, while Column (4) presents results for member seats with variation in treatment assignment within a war. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the block level in Columns (1) and (2) and at the GP level in Columns (3) and (4).

Table A.2: Effect of Ethnic Quotas on Women Candidacy by Caste Group

	(1) Sarpanch	(2) Sarpanch	(3) Members	(4) Members
Outcome– Whether any woman contested				
SC Quota	0.20***	0.21***	0.076***	0.078***
	(0.023)	(0.025)	(0.0048)	(0.0090)
ST Quota	0.16***	0.18***	0.080***	0.073***
	(0.033)	(0.038)	(0.0063)	(0.011)
OBC Quota	0.083***	0.081***	0.067***	0.076***
	(0.019)	(0.020)	(0.0038)	(0.0066)
Control Mean	.17	.172	.129	.129
No. of Observations	4336	3947	64707	20970
Block FE	Yes	Yes	-	-
GP FE	-	-	Yes	-
GP Ward FE	-	-	No	Yes
Year FE	Yes	Yes	Yes	Yes

Notes: Table uses data from village panchayat elections in Maharashtra between 2018 and 2022. The sample is restricted to seats without gender quotas. Each observation represents a GP seat. OBC Quota takes value 1 if the seat has OBC quota and 0 otherwise. Similarly, I code SC and ST Quota. Column (1) presents results for the sarpanch seat only. Column (2) shows results for sarpanch seats with controls for the share of SC and ST populations in the GP. Column (3) provides results for all GP member seats, while Column (4) presents results for member seats with variation in treatment assignment within a war. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the block level in Columns (1) and (2) and at the GP level in Columns (3) and (4).

Table A.3: Effect of Ethnic Quotas on Women Winners by Caste Group

	(1) Sarpanch	(2) Sarpanch	(3) Members	(4) Members
Outcome– Whether winner is woman				
SC Quota	0.11***	0.12***	0.058***	0.057***
	(0.018)	(0.019)	(0.0038)	(0.0072)
ST Quota	0.069***	0.085***	0.066***	0.066***
	(0.023)	(0.026)	(0.0049)	(0.0087)
OBC Quota	0.061***	0.056***	0.068***	0.066***
	(0.013)	(0.014)	(0.0031)	(0.0053)
Control Mean	.057	.057	.041	.051
No. of Observations	4279	3903	58454	19699
Block FE	Yes	Yes	-	-
GP FE	-	-	Yes	-
GP Ward FE	-	-	No	Yes
Year FE	Yes	Yes	Yes	Yes

Notes: Table uses data from village panchayat elections in Maharashtra between 2018 and 2022. The sample is restricted to seats without gender quotas. Each observation represents a GP seat. OBC Quota takes value 1 if the seat has OBC quota and 0 otherwise. Similarly, I code SC and ST Quota. Column (1) presents results for the sarpanch seat only. Column (2) shows results for sarpanch seats with controls for the share of SC and ST populations in the GP. Column (3) provides results for all GP member seats, while Column (4) presents results for member seats with variation in treatment assignment within a war. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the block level in Columns (1) and (2) and at the GP level in Columns (3) and (4).