Online Appendix for

"Ethnic Quotas and Political Mobilization: Caste, Parties, and Distribution in Indian Village Councils"

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This appendix contains tables and other supplementary materials to which we refer in our paper.

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Sampling Design

District selection

Karnataka: Purposive sample (designed to boost variation on the identity of dominant sub-castes).
Selected districts: Bangalore Rural, Chamarajanagar, Davanagere, Mandya, Mangalore, and Ramanagar

Rajasthan: Random sample.
Selected districts: Ajmer, Alwar, Barmer, Bilwara, Chittaurgarh, Churu, Dausa, Jodhpur, Kota, and Udaipur

Bihar: Random sample.
Selected districts: Araria, Bhojpur, Bhagalpur, Gaya, Jamui, Katihar, Khagaria, Munger, Muzaffarpur, Nalanda, Pashchim Champaran, Saran, Siwan, and Vaishali

Sub-district (block) selection

Most sub-districts located in each selected district were included.

Karnataka

In Karnataka, a few sub-districts were not needed to achieve target sample size for village councils (for instance, only one block is included from Mandya district).

Bihar

In Bihar, a few sub-districts were excluded because pairs of councils could not be found that satisfied the bandwidth selection criteria described in note 23 in the paper.

Rajasthan
Selected blocks:
Ajmer district: Kekri, Pisasngan, Srinagar
Alwar district: Kathumar, Lachhmangarh, Rajgarh, Ramgarh
Barmer district: Dhorimanna, Sheo, Sindhari
Bhilwara district: Banera, Kotri, Bhilwara, Chittorgarh
Churu district: Sujangarh, Taranagar
Dausa district: Lalsot, Mahwa
Jodhpur district: Bilara, Luni, Mandor, Shergarh
Kota district: Khairabad, Sangod
Udaipur district: Girwa, Mavli. (In Udaipur, only Girwa and Mavli blocks were included because other selected blocks—Kherwara, Kotra, and Lasadiya—are in Scheduled Areas and thus all village councils in those blocks have SC/ST reservation for the village council presidency, i.e., there is no within-block variation in SC/ST reservation status. Here, the additional village councils were selected from within Mavli block, rather than Kherwara, Kotra, or Lasidiya.)

Village council selection

See the paper for a detailed description of the within-sub-district selection procedure for village councils using our RD-like design.

Table A1 below gives an additional example of Scheduled Caste reservation history, for Chamarajanagar sub-district in Karnataka.

One selected panchayat—in Jhajha block (Jamui district), located in a Naxal-affected area—was not surveyed. (The survey team entered in the panchayat on foot—the panchayat is in the core of the forest area, with no motorbike or car access—but was not allowed to conduct the survey.)

Village selection (citizen surveys)

Karnataka: Headquarter village for the village council (usually the largest village)

Bihar and Rajasthan: Simple random sample of two villages in each panchayat, with 8 citizens to be surveyed in each village. If there was only one revenue village listed in census data, that village was selected (and all 16 citizens were surveyed in that village)

Respondent selection (citizen surveys)

Karnataka: In each village, we sought to draw a simple random sample of 5 non-SC/ST citizens and a simple random sample of 5 SC/ST citizens. Note that this is an oversample of SC and ST citizens. (We use sampling weights in the analysis when estimating parameters for the whole population, rather than SC/ST alone, to correct for the oversample.)

Residential segregation facilitated the oversampling of SCs/STs: investigators chose a starting point in the SC or ST colony/portion of the village and then used interval sampling to select households within the colony (surveying every 4^{th} household). We instructed investigators in how to vary their starting points across villages, to attempt to make the starting point as close to random as possible.

In the non-SC/ST areas of the village, investigators also chose a random starting point and then used interval sampling to select households.

Within households, we used the birthday method (adult with next upcoming birthday) to select respondents.

When respondents did not know their birthdays, we asked for ration cards, ID cards, or other identity documents with birthday on them.

Rajasthan and Bihar:

In each village, we sought a stratified random sample of adults, using random starting points, interval sampling of households, and the birthday method for selecting respondents inside households. Here, we did not oversample SCs and STs. We stratified instead on gender, randomly selecting an equal

number of men and women in each village. (Thus, if the first adult selected in a household via the birthday method was male, and we had interviewed four men in the village, the interviewer used the birthday method again until a female respondent was identified).

Table A1. Additional Example of Scheduled Caste Reservation History (Chamrajanagar Sub-District, Chamrajanagar District, 1994-2007)

Village Council	Total Seats	SC seats	1994	2000	2002	2005	2007
HONGANOOR	18	9	1				1
ATTAGULIPURA	15	8	1				1
SANTHEMARAHALLI	20	7	1				1
JYOTHIGOWDANAPURA	21	7	1				1
HEBBASUR	16	7	1				
SHIVAPURA	17	7		1			
MASANAPURA	15	6	1				
PUNAJANUR	17	6	1				
KAGALAVADI	18	6		1			
BISALAVADI	15	6		1			
BAGALI	14	5		1			
NAGAVALLI	18	5		1			
ALUR	21	5		1			
KUDERU	17	5			1		
BHOGAPURA	14	5			1		
BHOGAPURA	14	5			1		
NAVILUR	16	4		1			
KUDALUR	15	4			1		
KEMPANAPURA	17	4			1		
MADAPURA	17	4			1		
VENKATAIAHNA CHATRA	21	4			1		
BADANAGUPPE	22	4				1	
HEGGOTARA	19	4				1	
MANGALA	16	3			1		
DEMAHALLI	15	3			1		
ERASAVADI	11	3		1			
KOTHALAVADI	19	3				1	
YARAGANHALLI	17	3				1	
HARAVE	18	3				1	
UDIGALA	16	3				1	
HONNAHALLI	14	3				1	
CHANDAKAVADI	18	3				1	
AMACHAVADI	17	3				1	
ARAKALAVADI	18	3				1	
UMMATHUR	13	2				1	
MALIYURU	14	2					1
NANJEDEVANAPURA	18	2					1
KULAGANA	14	2					1
GULIPURA	15	2					1
HARADANAHALLI	19	1					1
SAGADE	16	1					1

Additional Balance Tests

Table A2. Additional Pre-Treatment Covariates (Pooled Study Group)

	Quota for SC/ST President **(A)**	No Quota for SC/ST President **(B)**	Difference of Means **(A) - (B)**	*p*-value
Mean male non-workers	1570.6 (54.7)	1716.9 (64.5)	-146.3 (84.6)	0.08
Mean female cultivators	197.6 (14.2)	230.4 (17.4)	-32.9 (22.5)	0.14
Mean household industry workers	103.6 (12.4)	101.4 (11.3)	2.2 (16.8)	0.90
Mean male marginal agricultural workers	142.4 (11.3)	151.4 (12.5)	-9.0 (16.9)	0.59
Mean number of workers	2763.7 (68.4)	2943.5 (76.4)	-179.8 (102.5)	0.08
Mean population	6503.0 (185.7)	7047.8 (215.5)	-544.8 (285.0)	0.06
Mean population aged 0-6	1137.7 (42.7)	1244.6 (49.8)	-107.0 (65.6)	0.10
Mean female workers, other industry	100.3 (11.4)	115.8 (13.0)	-15.5 (17.3)	0.37
Mean female literates	2139.8 (73.8)	2282.1 (83.8)	-142.2 (111.6)	0.20
Percentage SC	18.1 (0.5)	17.7 (0.5)	0.4 (0.8)	0.56
Percentage ST	7.7 (0.7)	6.6 (0.5)	1.1 (0.9)	0.21
N	256	256	512	

The table presents balance tests on pre-treatment covariates other than those presented in the Table II in the paper. The unit of analysis is the village council. Data are from the 2001 census. Cells in the first three columns give the average values; standard errors are in parentheses. The *p*-values in the final column give the probability of observing a *t*-statistic as large in absolute value as the observed value, if Group (A) and Group (B) have equal means.

Table A3. Balance Tests: Karnataka Only

	Quota for SC/ST President **(A)**	No Quota for SC/ST President **(B)**	Difference of Means **(A) - (B)**	p-value
Karnataka				
Mean number of illiterates	2607.5 (127.3)	2739.7 (114.2)	-132.2 (171.0)	0.44
Mean number of workers	2860.1 (103.0)	3017.6 (92.4)	-157.5 (138.4)	0.26
Mean number of marginal workers	648.1 (41.9)	631.6 (43.3)	16.5 (60.2)	0.78
Number of households	1135.1 (41.8)	1209.5 (39.1)	-74.4 (57.3)	0.20
Mean population	5684.2 (200.4)	6055.3 (180.6)	-371.1 (269.8)	0.17
Mean male population	2873.2 (103.0)	3064.4 (93.0)	-191.2 (138.8)	0.17
Mean agricultural laborers	520.9 (46.8)	525.0 (42.8)	-4.2 (63.4)	0.95
Mean cultivators	816.6 (55.7)	853.6 (63.5)	-37.1 (84.5)	0.66
Mean population aged 0-6	698.2 (27.0)	755.6 (25.4)	-57.5 (37.06)	0.12
Mean female non-workers	1693.1 (71.3)	1833.1 (73.2)	-140.0 (102.2)	0.17
Mean SC population	1119.2 (91.9)	1114.2 (67.8)	5.1 (114.2)	0.97
Mean ST population	505.5 (56.7)	444.9 (43.9)	60.7 (71.7)	0.40
N	100	100	200	

The table presents balance tests on pre-treatment covariates used in the Table II of the paper for Karnataka alone. The unit of analysis is the village council. Data are from the 2001 census. Variables from Table II in the paper are used. Cells in the first three columns give the average values; standard errors are in parentheses. The *p*-values in the final column give the probability of observing a *t*-statistic as large in absolute value as the observed value, if Group (A) and Group (B) have equal means.

Table A4. Balance Tests: Rajasthan Only

	Quota for SC/ST President **(A)**	No Quota for SC/ST President **(B)**	Difference of Means **(A) - (B)**	*p*-value
Mean number of illiterates	2661.9 (105.1)	2792.1 (119.3)	-130.2 (159.0)	0.41
Mean number of workers	2177.4 (84.8)	2296.5 (94.6)	-119.1 (127.1)	0.35
Mean number of marginal workers	618.1 (51.8)	560.1 (38.7)	58.0 (64.7)	0.37
Mean population	4536.2 (188.2)	5078.0 (255.9)	-541.8 (317.7)	0.09
Mean main agricultural laborers	94.6 (11.0)	88.2 (12.5)	6.4 (16.7)	0.70
Mean main cultivators	1018.1 (61.2)	1118.7 (80.7)	-100.5 (101.3)	0.32
Mean male population	2335.9 (100.0)	2637.3 (136.4)	-301.4 (169.2)	0.08
Mean population aged 0-6	893.8 (42.6)	988.9 (53.2)	-95.0 (68.1)	0.17
Mean female non-workers	1293.0 (74.3)	1514.1 (113.7)	-221.1 (135.8)	0.11
Mean SC population	730.8 (55.0)	780.7 (59.1)	-50.0 (80.7)	0.54
Mean ST population	541.7 (67.4)	501.6 (60.1)	40.1 (90.3)	0.66
N	74	74	148	

The table presents balance tests on pre-treatment covariates used in the Table II of the paper for Rajasthan alone. The unit of analysis is the village council. Data are from the 2001 census. Cells in the first three columns give the average values; standard errors are in parentheses. The *p*-values in the final column give the probability of observing a *t*-statistic as large in absolute value as the observed value, if Group (A) and Group (B) have equal means. Other tests indicate balance on related census variables.

Table A5: Balance Tests: Bihar Only

	Quota for SC/ST President **(A)**	No Quota for SC/ST President **(B)**	Difference of Means **(A) - (B)**	*p*-value
Mean number of illiterates	5869.0 (232.4)	6432.3 (299.1)	-563.3 (379.0)	0.14
Mean number of workers	3158.5 (134.6)	3452.9 (172.4)	-294.4 (219.0)	0.18
Mean number of marginal workers	889.0 (55.5)	1006.1 (76.1)	-117.1 (94.1)	0.22
Mean number of households	1515.2 (61.3)	1641.7 (78.7)	-126.5 (99.7)	0.22
Mean population	9262.1 (318.9)	10083.8 (431.0)	-821.7 (536.2)	0.13
Mean male population	4761.5 (172.1)	5207.1 (230.2)	-445.6 (287.4)	0.12
Mean main agricultural laborers	1008.4 (74.9)	1076.4 (79.2)	-68.1 (109.0)	0.53
Mean main cultivators	824.0 (37.4)	859.9 (42.1)	-35.9 (56.3)	0.52
Mean population aged 0-6	1897.0 (67.2)	2078.0 (92.0)	-181.0 (114.0)	0.11
Mean female non-workers	3599.7 (128.8)	3885.3 (169.4)	-285.6 (212.8)	0.18
Mean SC population	1819.4 (79.0)	1845.6 (83.7)	-26.2 (115.1)	0.82
Mean ST population	151.1 (50.7)	143.8 (51.0)	7.2 (71.9)	0.92
N	82	82	164	

The table presents balance tests on pre-treatment covariates used in the Table II of the paper for Bihar alone. The unit of analysis is the village council. Data are from the 2001 census. Cells in the first three columns give the average values; standard errors are in parentheses. P-values in the final column give the probability of observing a t-statistic as large in absolute value as the observed value, if Group 1 and Group 2 have equal means.

Table A6: Balance Tests: Karnataka Large-N Study Group

	Quota for SC/ST President **(A)**	No Quota for SC/ST President **(B)**	Difference of Means **(A) - (B)**	p-value
Mean number of illiterates	3222.1 (47.2)	3113.8 (48.9)	108.3 (68.0)	0.11
Mean number of workers	3149.2 (37.3)	3059.4 (38.6)	89.8 (53.7)	0.09
Mean number of marginal workers	681.5 (15.5)	662.2 (16.6)	19.3 (22.7)	0.40
Mean number of households	1221.5 (14.2)	1196.3 (15.3)	25.2 (20.9)	0.23
Mean population	6403.5 (71.2)	6231.9 (77.1)	171.6 (105.0)	0.10
Mean male population	3250.2 (37.6)	3158.0 (39.8)	92.2 (54.7)	0.09
Mean main agricultural laborers	679.4 (18.8)	653.9 (18.0)	25.5 (26.0)	0.33
Mean main cultivators	1131.1 (22.9)	1064.7 (22.4)	66.4 (32.1)	0.04
Mean population aged 0-6	920.9 (12.8)	891.4 (13.5)	29.5 (18.6)	0.11
Mean female non-workers	1879.2 (25.9)	1845.2 (28.3)	34.0 (38.3)	0.38
Population ST	638.6 (26.8)	583.6 (26.1)	55.00 (37.41)	0.14
Age distribution	142.7 (1.0)	141.9 (1.0)	0.8 (1.4)	0.56
Sex Ratio	975.1 (2.1)	977.4 (1.9)	-2.3 (2.9)	0.43
Child Sex Ratio	951.7 (2.8)	948.6 (2.7)	3.1 (3.9)	0.43
Literacy Rate	50.2 (0.4)	50.5 (0.4)	-0.3 (0.6)	0.63
Total workers	3149.2 (37.3)	3059.4 (38.6)	89.8 (53.7)	0.09
ST percentage	9.6 (0.4)	9.5 (0.4)	0.01 (0.5)	0.86
SC percentage	17.8 (0.3)	17.8 (0.3)	0.01 (0.5)	0.97
N	715	715	1430	

The unit of analysis is the village council. Data are from the 2001 census, for councils in the Department of Rural Development and Panchayati Raj dataset. Here, we use several additional covariates available in this dataset. Cells in the first three columns give the average values; standard errors are in parentheses. Other notes are as above.

External Validity

Table A7: Representativeness of RD Study Group: Rajasthan

	Average of Councils in Study Group (SD)	Average of Councils in Rajasthan (SD)	Difference of means (SE)
Population	4,814.4 (1,960.9)	4,721.1 (1,916.7)	93.3 (161.2)
Scheduled Caste population	756.4 (491.2)	816.2 (619.9)	-59.8 (40.4)
Scheduled Tribe population	520.9 (544.3)	820.0 (1,259.4)	-299.1* (44.7)
Number of literates	2,115.7 (1,211.4)	2,098.0 (1,141.8)	17.7 (99.6)
Number of employed workers	2,239.0 (773.4)	2,154.1 (821.5)	84.9 (63.6)
Number of main cultivators	1,070.1 (620.0)	1005.5 (540.7)	64.6 (51.0)
Number of main agricultural laborers	91.3 (101.2)	102.4 (111.4)	11.1 (8.32)
Number of marginal workers	588.1 (388.1)	645.1 (421.1)	-57.0 (31.9)
Number of non-workers	2,606.0 (1,376.9)	2,567.0 (1,287.8)	39.0 (105.0)
Female population aged 0-6	453.3 (198.5)	447.1 (191.1)	6.2 (16.3)
Number of female illiterates	1,665.2 (571.3)	1,591.2 (633.0)	74.0 (47.0)
Number of councils	148	9,729	

The unit of analysis is the village council; data are from the 2001 census. The first column gives the sample means and standard deviations (SD) for our Rajasthan study group. The second column gives the population means and standard deviations, as measured by the census. The final column gives the difference between the first and second columns. The standard error (SE) in the final column is the standard deviation in the first column, divided by the square root of 148. Here, *p*-values will give the probability of observing a sample mean as far in absolute value from the population mean as the observed value, if the N=200 study group is a simple random sample from the population. * $p<0.05$

Table A8: Representativeness of RD Study Group: Karnataka

	Average of Councils in Study Group (SD)	Average of Councils in State of Karnataka (SD)	Difference of means (SE)
Population	5869.7 (1912.03)	6132.1 (2287.1)	-262.4 (135.2)
Scheduled Caste population	1116.7 (805.7)	1129.7 (760.2)	-13.0 (57.0)
Scheduled Tribe population	475.2 (506.5)	512.5 (715.8)	-37.3 (35.8)
Number of literates	3196.1 (1133.4)	3122.7 (1326.7)	73.4 (80.1)
Number of employed workers	2938.9 (979.3)	3005.9 (1092.5)	-67.0 (69.2)
Number of councils	200	5760	

The unit of analysis is the village council; data are from the 2001 census. The first column gives the sample means and standard deviations (SD) for our Karnataka study group. The second column gives the population means and standard deviations, as measured by the census. The final column gives the difference between the first and second columns. The standard error (SE) in the final column is the standard deviation in the first column, divided by the square root of 200. Here, *p*-values will give the probability of observing a sample mean as far in absolute value from the population mean as the observed value, if the N=200 study group is a simple random sample from the population. * $p<0.05$

Descriptive Statistics

Table A9. Descriptive Statistics: Citizens' Surveys

	Karnataka		Rajasthan		Bihar	
Citizens:	All	SC/ST	All	SC/ST	All	SC/ST
Received a job or benefit from village council in previous year—%	42.2 (49.4)	50.8 (50.0)	9.6 (29.4)	8.8 (28.3)	5.9 (23.6)	9.2 (28.9)
Received job through the MGNREGA scheme—%	--	--	31.5 (46.5)	39.4 (48.9)	8.6 (28.1)	17.4 (37.9)
Received benefit from any government scheme—%	--	--	57.1 (49.5)	57.5 (49.5)	64.4 (47.9)	72.4 (44.7)
SCs or STs have the most influence over council—%	32.1 (46.7)	31.9 (46.7)	21.5 (41.1)	40.6 (49.2)	16.0 (36.6)	23.5 (42.4)
SCs or STs receive priority from council funds—%	49.4 (50.0)	47.3 (50.0)	60.4 (48.9)	68.8 (46.4)	73.5 (44.2)	72.6 (44.7)
Council serves SCs and STs effectively—1-5 scale (Karnataka), 1-7 scale (Raj./Bihar)	1.96 (0.95)	2.00 (0.98)	4.44 (1.96)	4.34 (1.98)	4.32 (1.98)	4.04 (1.97)
Respondent's priority for council spending perceived as the council's actual priority—%	--	--	19.9 (40.0)	16.7 (37.4)	28.1 (45.0)	27.8 (44.9)
Presidents favor their caste or tribe in allocating jobs and benefits—% yes (Karn.), 1-7 scale (Raj./Bihar)	30.0 (45.8)	30.0 (45.9)	4.44 (1.97)	4.35 (1.98)	4.67 (2.08)	4.51 (1.94)
Presidents favor people from their party in allocating jobs and benefits—1-7 scale	--	--	4.60 (2.08)	4.50 (2.08)	4.70 (2.00)	4.57 (1.82)
Council presidents favor their gender in allocating jobs and benefits—**citizens**, 1-7 scale	--	--	3.05 (1.86)	3.17 (1.90)	2.72 (1.91)	2.89 (1.82)
Attended an open meeting (Gram Sabha) in previous two years—%*	63.8 (48.1)	63.5 (48.2)	28.5 (45.2)	26.1 (43.9)	--	--
Reports knowing the caste (*jati*) of council president—%	95.8 (20.0)	95.4 (21.0)	99.2 (8.4)	99.2 (8.8)	96.9 (17.4)	97.0 (17.2)
Reports knowing the political party of council president—%	81.8 (38.6)	81.8 (38.6)	96.6 (18.1)	95.8 (20.1)	42.7 (49.5)	39.1 (48.8)

The table reports mean responses, averaging across councils with and without quotas for the presidency. Standard deviations based on the sample data are in parentheses. "--" indicates that the question was not asked of citizens in the corresponding state. Sampling weights are used to correct for the oversampling of SC/ST citizens in Karnataka (first column). Answers of "doesn't know/doesn't reply" to questions about knowledge of the president's caste and party are coded as zero, otherwise as missing. Sample size: Karnataka, N= 1,966 citizens (SC/ST=968) in 200 village council constituencies; Rajasthan, N=2,370 (SC/ST=642) in 148 council constituencies; Bihar, N=2,640 (SC/ST=558) in 164 council constituencies.

Table A10. Descriptive Statistics: Council Members and Presidents

	Karnataka		Rajasthan		Bihar	
	All	SC/ST	All	SC/ST	All	SC/ST
SCs or STs have the most influence or power over village council—%	12.0 (32.6)	10.2 (30.3)	22.0 (41.5)	31.0 (46.4)	29.5 (45.7)	31.5 (46.6)
SCs or ST receive priority when the council allocates funds—%	19.1 (39.4)	13.7 (34.4)	67.2 (47.0)	72.6 (44.8)	79.5 (40.4)	77.9 (41.6)
Council effectively serves needs of SCs and STs—1-5 ascending scale (Karnataka)	4.31 (0.83)	4.37 (0.79)	--	--	--	--
Stated priority of respondent is the council's actual priority—%	86.7 (34.0)	84.8 (36.0)	27.2 (44.7)	30.0 (46.0)	31.9 (46.6)	34.5 (47.7)
Council members favor their own caste (*jati*) for jobs and benefits—% yes (Karnataka), 1-7 scale (Raj./Bihar)	44.0 (49.7)	40.6 (49.2)	3.75 (2.27)	3.75 (2.32)	3.08 (2.19)	3.05 (2.22)
Council members most often disagree about the identity of beneficiaries—%	35.9 (48.0)	32.9 (47.1)	12.1 (32.6)	13.7 (34.5)	9.3 (29.0)	8.4 (27.9)
Reports knowing caste (*jati*) of president—(members only, %)	89.1 (31.2)	98.5 (12.0)	95.8 (20.0)	97.4 (16.0)	35.3 (47.8)	23.7 (42.7)
Reports knowing party of president—(members only, %)	84.7 (36.0)	93.8 (24.3)	87.9 (32.6)	90.2 (29.8)	50.6 (50.1)	52.0 (50.1)

The table reports mean responses, averaging across councils with and without quotas for the presidency. Standard deviations based on the sample data are in parentheses. "--" indicates that the question was not asked of members and presidents in the corresponding state. Answers of "doesn't know/doesn't reply" to questions about knowledge of the president's caste and party are coded as zero, otherwise as missing. The "SC/ST" columns report answers only for SC/ST respondents. Sample size: Karnataka, N=481 members and presidents in 200 councils; Rajasthan, N= 425 members and presidents in 148 councils; Bihar, N=453 presidents and members in 164 councils.

Causal Effects of Quotas (Notes on Tables A11-A15)

In the following tables, we use different definitions and estimators of the causal effect of quotas.

1) Table A11 disaggregates the pooled results from Table III in the paper by state. Recall that for the citizens' analysis, we weight cluster means by a measure of the SC/ST population. This gives us a valid estimator for the average causal effect of all SC/ST citizens in our study group (those living in the councils we selected through the RD design). That is, it is designed to answer the question: given the rotating reservation scheme we describe in the paper, what is the difference in average benefit receipt (or other outcome) among these SC/ST citizens if all the councils in our study group were given quotas, relative to what would happen if no councils were given quotas. For the council members/presidents analysis, we do not use weights, because we are answering a different question: here, we take the councils themselves as the units, and ask what is the average difference in perceptions of council priorities or SC/ST influence if all the councils in our study group were given quotas, relative to what would happen if none were given quotas.
2) Table A12 presents the cluster-mean estimates for the citizens' survey but does not weight by SC/ST population size in the citizens' analysis. This estimator answers a different question, i.e., what is the difference in the simple average SC/ST benefit receipt (or other outcome) *within* each council constituency, if all the councils in our study group were given quotas, relative to what would happen if not councils were given quotas. The parameter we are estimating in Tables III and A11 makes more sense; however, we want to show that weighting is not material to the qualitative results.
3) Table A13 uses individual-level data and regresses each outcome variable on a constant and a dummy for treatment assignment (quotas vs. no quotas). However, we cluster the standard errors by village council constituency. This takes account of clustering of treatment assignment, but in a more parametric way than our approach using cluster-mean analysis.
4) Table A14 presents a simple difference-of-means across councils with and without quotas, using individual-level data. This is the most naïve approach, because it does not account for the clustered assignment of all citizens living in the same council constituency to the same treatment condition (quota or no quota). If potential outcomes are more similar within constituencies than across them, clustered assignment will increase the variance of treatment-effect estimators, relative to individual-level randomization with the same number of individuals. It is likely the case that individuals living in the same village share some common influences, and this results in some homogeneity of potential outcomes. The reason we presented this naïve analysis in the first submitted version of the paper is that cluster-mean analysis will usually increase the estimated standard errors; and we are presenting largely null results. So we wanted to show that we do not discern effects even with this very non-conservative assumption of zero clustering of potential outcomes
5) Table A15 presents results on the effects of quotas for women presidents.

Table A11. Estimated Causal Effects of Quotas, By State (Differences of Cluster Means or Percentages, Weighted for Citizens)

	Karnataka	Rajasthan	Bihar
SC and ST citizens:	Estimated Causal Effect	Estimated Causal Effect	Estimated Causal Effect
Received a job or benefit from village council in previous year—%	3.17 (7.02)	-0.64 (3.06)	-1.71 (2.55)
Received a job through the MGNREGA scheme—%	--	-2.74 (7.53)	5.56 (4.13)
Received a benefit from any government scheme—%	--	-2.22 (8.96)	-3.61 (9.33)
Council serves SCs and STs effectively—mean on 1-5 scale (Karnataka), 1-7 scale (Rajasthan/Bihar)	-0.02 (0.13)	-0.20 (0.54)	-0.61 (0.46)
SCs or STs have the most influence over council—%	-0.41 (6.31)	13.54 (12.53)	1.71 (5.39)
SCs or STs receive priority from council funds—%	12.8* (6.08)	12.09 (12.76)	-6.91 (9.31)
Respondent's priority for council spending perceived as the council's actual priority—%	--	-6.64 (4.43)	-5.50 (4.89)
Council members and presidents:			
Council effectively serves needs of SCs and STs—mean on 1-5 scale	0.00 (0.16)	--	--
SCs or STs have the most influence or power over village council—%	-2.24 (4.15)	6.64 (5.28)	11.3* (4.79)
SCs or ST receive priority when the council allocates funds—%	-9.68* (4.76)	4.15 (5.88)	6.07 (3.94)
Priority of respondent perceived as the council's actual priority—SC/ST respondents, %	15.12 (9.34)	14.0 (9.26)	0.04 (10.86)
N	200	148	164

The table breaks down the pooled estimates in Table III in the paper by state. The unit of analysis is the village council constituency. Standard errors are in parentheses. Here, survey data from SC and ST citizens and council members and presidents are aggregated to their council constituency means. The estimated causal effect of SC and ST quotas is the difference of the averages of council-constituency means or percentages, across constituencies with and without quotas for the village council president. For the citizens' analysis, we compare weighted averages of council-constituency means, using the proportion of SC/ST citizens (as measured in the census) as the weights. Here, "--" indicates that the question was not asked in the corresponding state and category of respondent. For some questions, the effective N is lower than in the final row. * $p<0.05$ + $p<0.10$

Table A12. Estimated Causal Effects of Quotas: Unweighted Cluster Means (Differences of Unweighted Means or Percentages)

	Pooled	Karnataka	Rajasthan	Bihar
SC and ST citizens:	Estimated Causal Effect	Estimated Causal Effect	Estimated Causal Effect	Estimated Causal Effect
Received a job or benefit from village council in previous year—difference of %	1.19 (2.94)	3.39 (4.43)	0.50 (3.09)	0.94 (2.81)
Received job through the MGNREGA scheme—difference of %	3.09 (3.84)	--	-3.11 (5.74)	10.07* (4.17)
Received benefit from any government scheme—difference of %	2.99 (4.44)	--	0.04 (6.26)	5.34 (6.22)
Council serves SCs and STs effectively—difference of means	0.04 (0.16)	-0.01 (0.11)	-0.09 (0.23)	0.22 (0.26)
SCs or STs have the most influence over council—difference of %	4.89 (3.46)	0.73 (5.88)	8.46 (6.74)	5.91 (5.30)
SCs or STs receive priority from council funds—difference of %	13.3*** (3.64)	14.4* (5.73)	13.4+ (6.97)	11.40* (5.74)
Respondent's priority for council spending perceived as the council's actual priority—difference of %	-6.16 (3.95)	--	-5.80 (5.06)	-6.82 (5.95)
N	512	200	148	166

This table presents cluster-mean estimates of the average causal effect without weighting the cluster means by SC/ST population size (in contrast to Table III in the paper and Table A11). Standard errors are in parentheses. The unit of analysis is village council constituency. The estimated causal effect of quotas is the difference of means or percentages, across constituencies with and without quotas for the village council president. We use survey data from Scheduled Caste and Scheduled Tribe citizens and all council members and presidents, respectively. Here, analysis is at the level of treatment assignment (the village council constituency), so individual responses are aggregated to their council constituency means. The effective N is smaller for some questions than indicated in the final row. + $p<0.1$, * $p<0.05$, *** $p<0.001$

Table A13. Estimated Causal Effects of Quotas: Regressions with Clustered SEs (Unweighted Regressions with Standard Errors Clustered by Village Council)

	Pooled	Karnataka	Rajasthan	Bihar
SC and ST citizens only:				
Received a job or benefit from village council in previous year—difference of %	-0.61 (3.11)	1.14 (4.52)	-1.06 (2.76)	-0.72 (2.87)
Received job through the MGNREGA scheme—difference of %	3.47 (4.00)	--	-2.65 (5.66)	9.59 (4.45)
Received benefit from any government scheme—difference of %	2.40 (4.66)	--	-2.20 (6.47)	8.33 (6.01)
Council serves SCs and STs effectively—difference of means	-0.08 (0.16)	0.00 (0.11)	-0.23 (0.21)	-0.06 (0.23)
SCs or STs have the most influence over council—difference of %	6.47 (4.55)	-1.98 (6.23)	14.29 (9.46)	6.18 (5.29)
SCs or STs receive priority from council funds—difference of %	10.30** (3.89)	12.87 (5.81)	12.38 (6.93)	3.98 (5.66)
Respondent's priority for council spending perceived as the council's actual priority—difference of %	-5.05 (3.30)	--	-6.17 (3.91)	-2.93 (5.31)
Council members and presidents:				
Council effectively serves needs of SCs and STs—mean on 1-5 scale	0.15 (0.10)	0.15 (0.10)	--	--
SCs or STs have the most influence or power over village council—%	5.76* (2.80)	-1.02 (4.22)	6.30 (5.32)	10.37* (4.57)
SCs or ST receive priority when the council allocates funds—%	4.40 (3.74)	-5.26 (4.74)	3.42 (5.91)	6.16 (3.77)
Priority of respondent perceived as the council's actual priority—SC/ST respondents, %	-2.53 (4.86)	5.34 (5.43)	1.50 (8.28)	1.80 (6.87)
N (SC/ST citizens)	2,107	910	640	557
N (members/presidents)	1,359	481	425	453
N (council constituencies)	514	200	148	166

The unit of analysis is the individual respondent. Unlike Table III in the paper and Tables A11-A12, here we do not aggregate the individual-level survey data from citizens, council members, and presidents; instead, we regress each outcome variable on a constant and an indicator variable for assignment to a quota for SC or ST village council president. Estimated standard errors in parentheses are clustered at the village council constituency level, using Stata's vce(cluster) option. The estimated coefficient on the indicator variable is reported in each cell. The effective N is smaller for some questions than indicated in the final rows. ** $p<0.01$

Table A14. The Causal Effects of Quotas: Individual Analysis, Assuming No Clustering (Differences of Means or Percentages)

	Pooled			Karnataka	Rajasthan	Bihar
SC and ST citizens only:	Quota **(A)**	No Quota **(B)**	Estimated Causal Effect **(A-B)**	Estimated Causal Effect	Estimated Causal Effect	Estimated Causal Effect
Received a job or benefit from village council in previous year—difference of %	26.7 (1.36)	27.3 (1.36)	-0.61 (1.94)	1.14 (3.32)	-1.06 (2.24)	-0.72 (2.45)
Received job through the MGNREGA scheme—difference of %	30.9 (1.88)	27.4 (1.83)	3.47 (2.62)	--	-2.65 (3.86)	9.59** (3.20)
Received benefit from any government scheme—difference of %	65.6 (1.94)	63.2 (1.97)	2.40 (2.77)	--	-2.20 (3.91)	8.33* (3.77)
Council serves SCs and STs effectively—difference of means	3.32 (0.06)	3.40 (0.06)	-0.08 (0.09)	0.00 (0.07)	-0.23 (0.16)	-0.06 (0.17)
SCs or STs have the most influence over council—difference of %	35.7 (1.64)	29.3 (1.55)	6.47** (2.25)	-1.98 (3.86)	14.3*** (3.91)	6.18+ (3.73)
SCs or STs receive priority from council funds—difference of %	67.0 (1.56)	56.7 (1.64)	10.3*** (2.26)	12.87*** (3.78)	12.4*** (3.71)	3.98 (3.89)
Respondent's priority for council spending perceived as the council's actual priority—difference of %	19.3 (1.68)	24.3 (1.89)	-5.04* (2.53)	--	-6.17* (3.11)	-2.93 (4.11)
Council members and presidents:						
Council effectively serves needs of SCs and STs—mean on 1-5 scale	4.38 (0.08)	4.40 (0.08)	-0.02 (0.11)	-0.02 (0.11)	--	--
SCs or STs have the most influence or power over village council—%	23.6 (1.71)	17.8 (1.49)	5.79* (2.26)	0.97 (3.02)	6.30 (4.11)	10.4* (4.46)
SCs or ST receive priority when the council allocates funds—%	56.7 (1.99)	52.4 (1.92)	4.33 (2.76)	-5.57 (3.66)	3.42 (4.61)	6.16 (3.91)
Priority of respondent perceived as the council's actual priority—all SC/ST respondents, %	51.2 (2.80)	53.8 (3.54)	-2.53 (4.51)	5.34 (5.24)	1.50 (8.22)	1.80 (7.41)
Priority of respondent perceived as the council's actual priority—SC/ST members only, %	48.5 (4.33)	48.4 (4.10)	0.14 (5.93)	2.16 (7.91)	3.95 (10.2)	9.43 (9.23)
N (SC/ST citizens)	2,107			910	640	557
N (members/presidents)	1,359			481	425	453
N (council constituencies)	514			200	148	166

Here, we present the simple difference of means or percentages, across constituencies with and without quotas for the village council president; there is no adjustment to account for possible clustering of potential outcomes within village-council constituencies. The unit of analysis is the individual citizen; data are from surveys of SC and ST citizens and council members and presidents. Note that the differences of means are identical to the estimated bivariate regression coefficients in Table A13; however, the standard errors differ. + $p<0.1$ * $p<0.05$ ** $p<0.01$ *** $p<0.001$

Table A15: Causal Effect of Quotas for Women Presidents, Female Respondents (Differences of Means or Percentages)

Women respondents:	Quota for Woman President **(C)**	No Quota for Woman President **(D)**	Estimated Effect of Quotas **(D-C)**
Respondent received job or benefit from village council in previous year—%	18.1 (2.1)	16.4 (1.5)	1.7 (2.6)
Received job through the MGNREGA scheme—% (Rajasthan and Bihar only)	24.3 (2.3)	16.1 (1.6)	8.2* (2.7)
Received benefit from any government scheme—% (Rajasthan and Bihar only)	63.3 (2.7)	59.9 (2.2)	3.4 (3.6)
Council serves women effectively—difference of means on 1-7 scale (Rajasthan and Bihar only)	3.39 (0.12)	3.05 (0.08)	0.34* (0.1)
Respondent's priority for council spending perceived as the council's actual priority (Rajasthan and Bihar only)—%	23.1 (2.0)	23.5 (1.6)	-0.4 (2.6)
Council's priority for spending is the respondent's priority (Udaipur district of Rajasthan only)	12.2 (4.1)	27.4 (13.4)	-15.2 (10.6)

This table estimates the causal effect of quotas for women presidents. The unit of analysis is the village council constituency. Responses of women respondents are averaged at the village council constituency level and averages of these (unweighted) cluster means are compared across councils with and without quotas. Note that gender-based quotas are assigned by lottery in Rajasthan and Bihar; in Karnataka, councils are ordered by female population and a rotation scheme is used (Nilekani 2010). For questions tapping council priorities, respondents were asked what *should be* the gram panchayat's priority for spending. The response categories were: "Road construction/repair; Tank/reservoir construction/repair; Street lighting; Digging/repairing wells for drinking water; Building protective fences around trees/other plants; Building fences alongside roads; or other." Respondents were then asked what, *in actuality*, is the gram panchayat's priority, using the same response categories. This dichotomous variable equals 1 if the two answers matched and zero otherwise (for respondents who answered both questions).
Here we present analysis by cluster-mean. In individual-level analyses that do not account for possible clustering of potential outcomes within clusters, the estimated standard errors are smaller, and the significant estimated effects in this table remain significant; the estimate in the final column is then also significnt. Note that the *negative* estimated effect for Uidapur goes against the theory that quotas for female presidents lead to policy outcomes more favorable to women.

Caste (*Jati*) and Benefit Receipt

Table A16. Sharing the President's Caste (*Jati*) and Benefit Receipt (Differences of Percentages, Shares President's *Jati* minus Does Not Share *Jati*)

	Karnataka	Rajasthan	Bihar
	Difference of Percentages	Difference of Percentages	Difference of Percentages
Received job or benefit from council (all respondents)	1.22 (4.58)	3.91* (1.69)	-1.19 (1.60)
Received job or benefit from council (SC/ST only)	6.02 (5.67)	2.95 (2.93)	-3.71 (3.82)
Received job through the MGNREGA scheme	--	5.08+ (2.63)	0.41 (1.99)
Received benefit from any government scheme	--	1.10 (2.79)	3.07 (3.43)
Respondent's priority perceived as the council's actual priority	--	1.58 (2.42)	2.30 (3.52)
N	924 (SC/ST=463)	2,081 (SC/ST=562)	1,780 (SC/ST=439)

The unit of analysis is the individual citizen. The differences of means subtract the average percentage of respondents who come from a different *jati* as the president, and said they received the job or benefit, from average percentage of respondents who share the president's *jati* and received a benefit. The *jati* of the council president is measured through surveys of presidents, members, and secretaries. In Karnataka, due to some coding issues at the time our survey was completed, data on president's *jati* are not reliable for a substantial portion of the Karnataka dataset, resulting in a reduced N there (and data are signficiantly less likely to be missing on this variable in reserved councils); thus, the Karnataka results should be interpreted with caution. The effective N is smaller for some questions than indicated in the final row. Here, + $p<0.1$ * $p<0.05$

Co-Partisanship and Benefit Receipt

Table A17. Party Affiliation and Benefit Receipt, by State
(Difference of Percentage Points, Members of President's Party Minus Non-Members)

	Karnataka	Rajasthan	Bihar
Received job or benefit from council (all respondents)	11.5*** (3.35)	3.1* (1.35)	2.34* (0.98)
Received job or benefit from council (SC/ST only)	7.8+ (4.78)	0.97 (2.49)	1.54 (2.56)
Received job through the MGNREGA scheme	--	8.5*** (2.12)	2.0+ (1.16)
Received benefit from any government scheme	--	3.94+ (2.26)	2.51 (1.99)
Respondent's priority perceived as the council's actual priority	--	4.8** (1.93)	0.16 (2.04)
Received job or benefit from council (all respondents, by feeling close to party)	3.66 (2.81)	1.71 (1.23)	-2.05 (1.12)

This table shows the percentage-point difference across members and non-members of the president's party; the final row codes the party to which the respondent feels closest, rather than membership. Standard errors are in parentheses. The estimates in Table V in the paper are weighted averages of these state-level estimates, where the weights are the shares of respondents in each state. Here, + $p<0.1$ * $p<0.05$ ** $p<0.01$ *** $p<0.001$