

Online Appendix

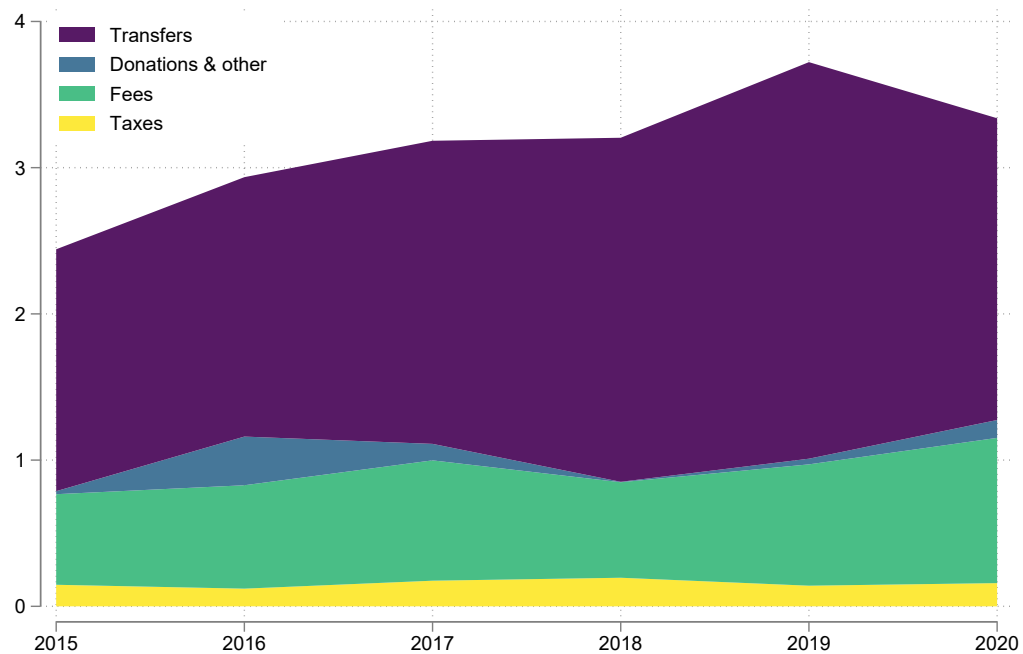
Tax morale, public goods, and politics: Experimental evidence from Mozambique

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A Additional tables and figures

A.1 Municipal budget composition

Figure A1: Quelimane's revenue sources (million USD)



Data from Quelimane Revenues Commission. Exchange Rate: 1 USD = 64.12 MZN (as of December 2022).

A.2 Differential attrition

As outlined in Section 3 of the main text, our sample was produced by placing four points randomly within each randomly selected block. Survey enumerators traveled to each random point and knocked on the door of the corresponding property, asking to speak with the property owner and inviting them to participate in the survey. If nobody was home, surveyors continued knocking doors along an algorithmically determined path until finding an available property owner. If a door was answered but the owner was not available, enumerators asked if it would be possible to schedule a time to return, then continued on the algorithmic path in an attempt to find an available owner. Where both of these methods were successful, multiple interviews were conducted for a single point, leading to a final analysis sample slightly higher than the number of pins initially placed.

Survey enumerators recorded not only their successfully completed surveys, but also each attempt. We therefore have data on which points ultimately resulted in any successful interview, the number of interviews completed per point, and the number of attempts made for each point. Table A1 tests for treatment effects on these variables, using the same specification as in the main text (with the exception that enumerator fixed effects are not included, as the unit of observation is the point rather than the interview, and some points were associated with attempts by multiple enumerators). Differential selection into the sample would manifest as treatment effects on the likelihood of points yielding an interview.

Table A1: Interview attempts and completion by treatment arm

	Any interview	Number of Interviews	Interview Attempts
Public goods	0.007 (0.009)	0.038 (0.034)	0.276 (0.170)
Political autonomy	0.007 (0.010)	0.044 (0.029)	0.386* (0.207)
Public goods $\times$ Political autonomy	-0.005 (0.013)	-0.053 (0.048)	-0.409 (0.303)
N	852	852	852
Mean (control group)	0.986	1.056	2.202
p-val: T1=T2	0.999	0.868	0.592
p-val: T1 + T2 + T1 $\times$ T2 = 0	0.158	0.244	0.105

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. Unit of observation is the point. All regressions include block fixed effects; enumerator fixed effects are not included, as the unit of observation is the point rather than the interview and some points were associated with attempts by multiple enumerators. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Over 98% of randomly sampled points resulted in a successful interview, with no differences across

treatment arms (Column 1). The average number of interviews per sampled point was slightly over one, with no differences by treatment. The number of attempts per point was 2.2 on average in the control group; because almost all points yielded a successful survey, the overall number of attempts per completed interview is roughly the same: 2.2. The number of attempts was slightly higher in the Political Autonomy treatment arm than in the control group ($p < .1$). Overall, we find no more significant differences than would be expected by random chance. We can measure the response rate in two ways: 1) successful interviews as a share of all doors knocked (44%); 2) successful interviews as a share of attempts in which the owner was available (92%).

A.3 Additional validation of survey measures using administrative data

Section 3.3 of the main text described how we matched Quelimane administrative data on tax enforcement and compliance to our sample, creating an indicator for whether each of our survey respondents has a name which matches that of an individual in the administrative data. We regress various survey measures related with tax compliance on this administrative measure of actual compliance, varying whether we include block fixed effects. These correlational regressions shed light on the credibility of our survey measures.

Table A2 presents these correlations. Columns 1 and 2 show that survey respondents whose name appears in the administrative tax data of Quelimane are 21 percentage points more likely to be located in one of the neighborhoods for which administrative data provides any evidence of 2020 tax collection, and 37 percentage points more likely to be located in one of the five neighborhoods with the highest tax collection recorded in the administrative data. Columns 3 and 5 show that these survey respondents are 19-26 percentage points more likely to report ever having their property evaluated (from a base of 8%) and 17-23 percentage points more likely to report ever having paid property tax (from a base of 16%). These large correlations are evident even when including block fixed effects — in other words, while survey respondents in the admin data are more likely to be located in high-tax compliance areas, they are also more likely to report tax compliance even conditional on very granular geography.

Table A2: Descriptive: Respondents in admin data report higher tax compliance

	Located in neighborhood with ...		Property ever evaluated		Ever paid property tax	
	Any tax collection	High tax collection				
Name in admin data	0.209** (0.099)	0.374*** (0.118)	0.257** (0.112)	0.191** (0.086)	0.228** (0.116)	0.166* (0.089)
N	930	930	930	922	930	922
Mean (unmatched)	0.569	0.126	0.077	0.076	0.161	0.161
Block FE				✓		✓

Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

A.4 Baseline political information

The pre-treatment section of our survey included a number of measures of political knowledge (correct answers in parentheses):

- Do you know who the President of the Municipal Council of Quelimane is at the moment? (Manuel de Araùjo)
- Do you know in which year the mayor was first elected? (2011)
- Do you know which elections will be carried out in 2023? (Municipal)
- Do you know which elections will be carried out in 2024? (Presidential, legislative, and/or provincial)
- Do you know which is the ruling party in the municipality of Quelimane at the moment? (RENAMO)
- Do you know which is the ruling party in Mozambique at the moment? (FRELIMO)

We created indicator variables for whether the respondent gave a correct answer to each of these questions, then created an Information Index which averaged these indicators.

Table A3 presents means (bottom row) for these variables and regression coefficients (top row) from correlational regressions of them on an indicator for whether respondents were strong RENAMO partisans, defined as reporting having voted RENAMO in both the 2018 and 2019 elections. The means show that on average, people are very well-informed. Five out of the six questions were answered correctly by at least 78% of the sample; identification of the Mayor was nearly universal at 95%. Figure A2 shows that even the respondents who considered themselves least well-informed about the political problems faced by Quelimane correctly answered over 60% of our questions on political information. Figure A3 shows that a plurality (38%) of respondents correctly pinpointed the precise year in which the current Mayor was first elected — despite the fact that it was an off-cycle by-election caused by the resignation of the sitting mayor at the time.

Table A3's correlational regression coefficients show that, in general, strong RENAMO partisans are not significantly better informed than other respondents. The exception is in identifying the ruling parties of the municipality and the nation. RENAMO partisans are significantly more likely to correctly state that RENAMO is the governing party in the city. They are, however, significantly less likely to correctly identify FRELIMO as the nationally ruling party.

Table A3: Correlations: political information by partisanship

	Name of mayor	Year mayor elected	Which election was held in ...		Ruling party in ...		Information index
			2023	2024	Quelimane	Mozambique	
RENAMO partisan	0.023 (0.018)	0.017 (0.036)	0.028 (0.040)	0.041 (0.038)	0.148*** (0.037)	-0.110*** (0.037)	0.024 (0.020)
N	922	922	922	922	922	922	922
Mean (Non-RENAMO)	0.953	0.379	0.780	0.821	0.802	0.883	0.770

Coefficients from regressing indicators of political knowledge on a dummy for whether respondents report having voted for RENAMO in the 2018 municipal and 2019 national elections. 'Name of mayor' indicates the respondent could name the mayor. 'Year mayor elected' indicates the respondent correctly identified 2011 as the year in which the current mayor was first elected, in a free-response question. 'Which election in 2023/2024' are indicators for whether the respondent correctly stated that the elections in 2023 would be municipal, and that the elections in 2024 would be presidential, legislative, and/or provincial, respectively. 'Ruling party in Quelimane/Mozambique' indicate that the respondent correctly identified that RENAMO governs Quelimane and that FRELIMO governs Mozambique, respectively. 'Information index' is the mean of the foregoing six indicators. All regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure A2: Knowledge index by response to the question
 "How well do you understand the political problems Quelimane faces?"

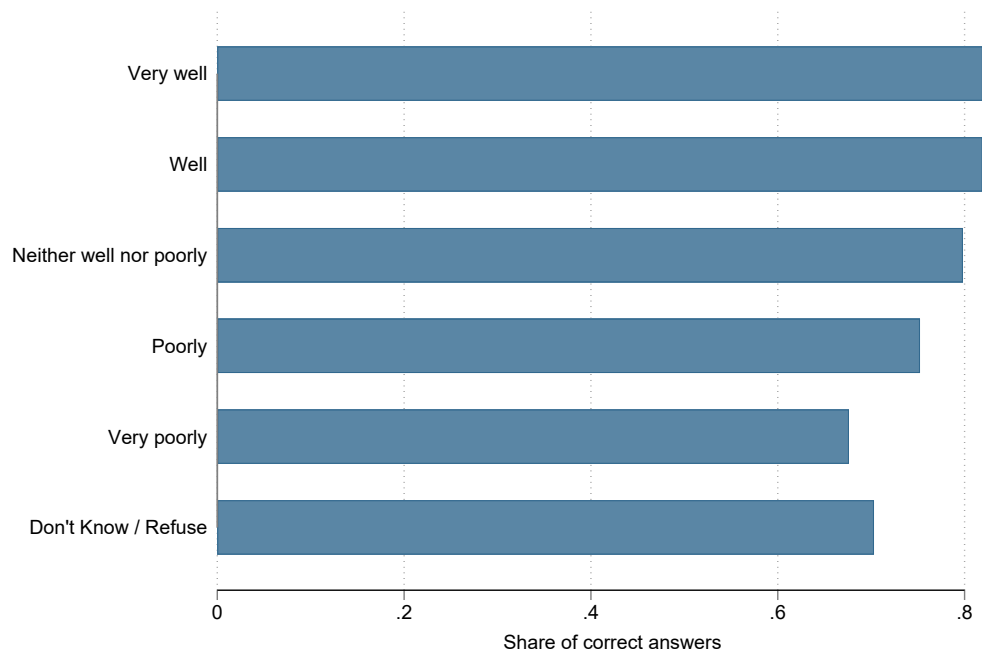
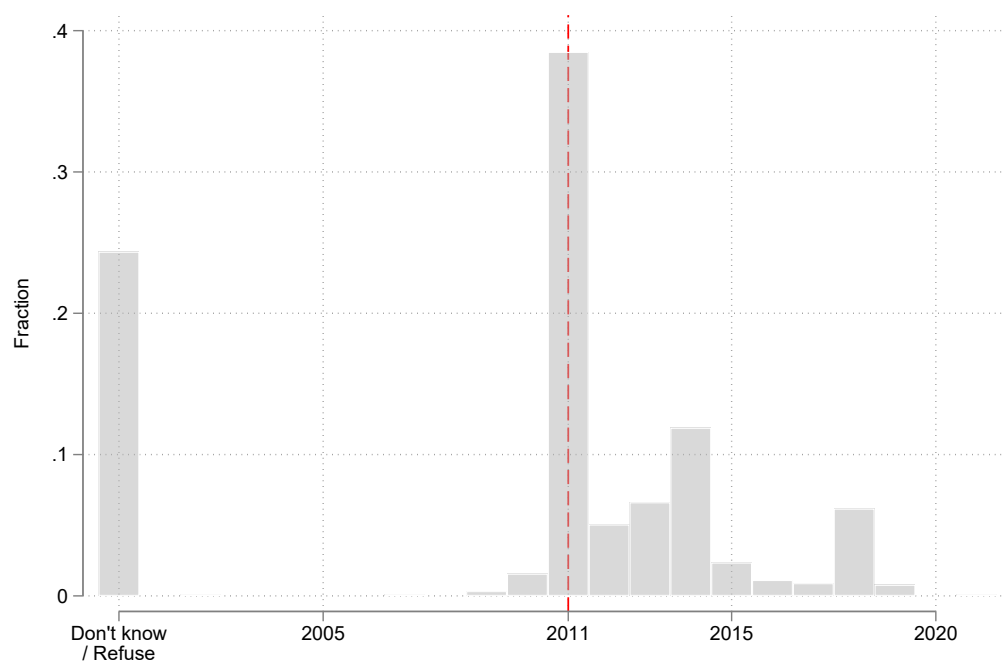


Figure A3: Histogram of responses to the question
“Do you know what year the mayor was first elected?”



A.5 Outcome: text message requesting information or visits

At the end of the survey, we provided a card with a phone number to which respondents could send a text message if they wanted more information or if they wanted to request a visit from tax collectors. This is the language with which this information was presented:

Portuguese	English
Mais uma vez, agradecemos ao Sr/a por ter dedicado o seu tempo a responder a esse inquérito sobre impostos.	Once again, we thank you for taking the time to respond to this survey on taxes.
Vamos deixar consigo um cartãozinho com um contacto que pode usar para obter mais informações.	We will leave with you a card with a contact number that you can use to obtain more information.
Se o/a Sr/a gostaria de receber mais informações sobre como os impostos são coletados e utilizados em Quelimane, pode enviar a palavra "INFO" para esse número (XX XXX XXXX).	If you would like to receive more information about how taxes are collected and used in Quelimane, you can send the word "INFO" to this number (XX XXX XXXX).
Apesar de nós sermos uma equipa de investigação independente, estamos a conduzir esse inquérito com a autorização do município. Se desejar, nós podemos informar o município de que gostaria de receber uma visita dos técnicos da Comissão de Registo de Fontes de Receita para avaliar a sua propriedade. Se quiser o fazê-lo, basta enviar uma mensagem a dizer "VISITA" para esse número (XX XXX XXXX).	Although we are an independent research team, we are conducting this survey with the municipality's authorization. If you wish, we can inform the municipality that you would like to receive a visit from the Revenue Sources Registration Commission's technicians to assess your property. If you would like to do this, simply send a message with the word "VISITA" to this number (XX XXX XXXX).

Table A4 shows that only a very small number of respondents chose to send these texts, with no distinguishable difference across treatment arms. Because of the near-zero take-up rate, this measure is essentially uninformative given the floor effect.

Table A4: Effects on text message requesting information or visits

	Text message: Request info	Text message: Request visit	Text message: Any request
Public goods	-0.005 (0.008)	0.000 (0.000)	-0.004 (0.008)
Political autonomy	-0.003 (0.008)	0.008 (0.006)	0.002 (0.009)
Public goods $\times$ Political autonomy	0.006 (0.012)	-0.004 (0.007)	0.006 (0.013)
N	922	922	922
Mean (control group)	0.009	0.000	0.009
p-val: PG=PA	0.796	0.166	0.435
p-val: PG + PA + PG $\times$ PA = 0	0.919	0.323	0.729

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. The first two columns indicate that the respondent sent a text message to the provided number to request further information about property taxes or a visit from a municipal tax assessor, respectively. The third column indicates that the respondent sent a text message requesting at least one of the above. All regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.6 Balance

Table [A5](#) tests balance on baseline characteristics across treatment arms.

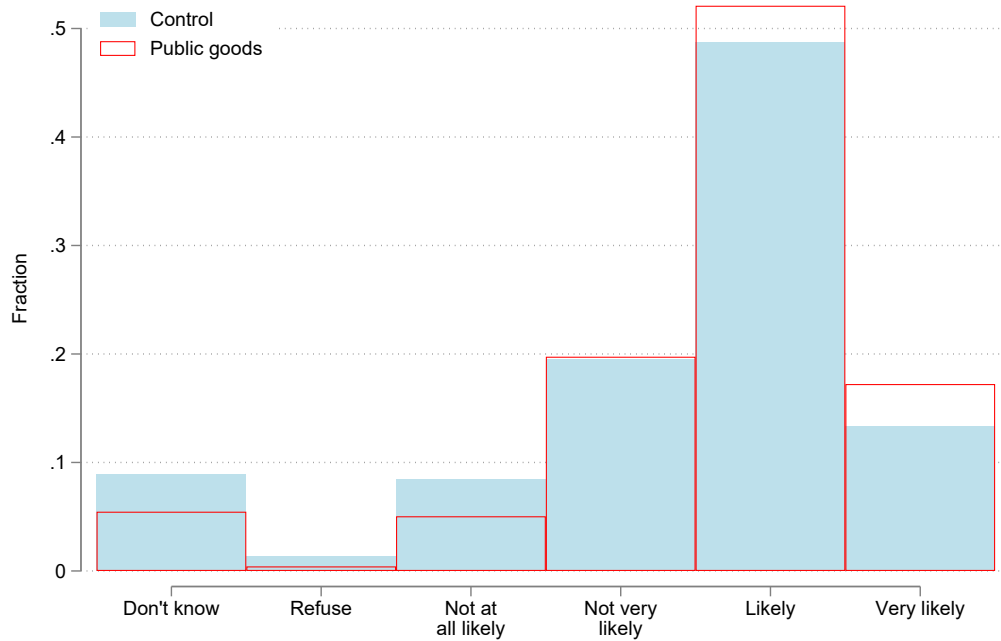
Table A5: Balance

	Control group		Difference with ...			
	Mean	(SE)	Public goods	Local autonomy	Both	N
Demographics:						
Female	0.636	(0.032)	-0.107**	-0.031	-0.076	922
Muslim	0.160	(0.024)	0.041	0.010	0.051	921
Born in Quelimane	0.467	(0.033)	0.006	0.003	-0.016	922
Literate	0.831	(0.025)	-0.001	0.024	0.003	922
Finished secondary school	0.436	(0.033)	-0.020	0.046	0.012	922
Employment: professional	0.165	(0.025)	-0.015	-0.042	0.004	919
Employment: agriculture	0.147	(0.024)	0.004	-0.019	0.009	919
Unemployed	0.223	(0.028)	-0.055*	-0.035	-0.023	919
Weekly income (USD)	26.183	(4.546)	-0.960	2.115	-0.982	782
Owner lives at property	0.969	(0.012)	0.026**	0.005	-0.003	921
Has any property document	0.564	(0.033)	-0.014	-0.047	-0.041	922
Property:						
Built by current owner	0.698	(0.031)	-0.029	-0.029	-0.008	922
Inhabitants of house	5.332	(0.136)	0.211	0.100	0.183	911
Earthen floor	0.369	(0.032)	0.004	0.043	0.013	922
Metal roof	0.911	(0.019)	-0.008	-0.035	0.003	922
Taxes:						
Muni. has authority	0.880	(0.022)	0.021	0.019	0.038	922
Gov. uses tax revenue well	0.587	(0.033)	-0.022	-0.038	-0.031	922
Prefer ↑ taxes, services	0.689	(0.031)	-0.025	0.015	0.028	922
Heard of prop. tax	0.213	(0.027)	0.095***	0.043	0.052	922
Property ever assessed	0.062	(0.016)	0.018	0.023	0.021	922
Paid property tax	0.151	(0.024)	0.016	0.037	0.023	922
Share neighbors paid	0.311	(0.027)	-0.024	0.013	0.002	674
Share owners paid	0.237	(0.020)	-0.009	-0.012	-0.021	669
Belief: Property tax rate	16.589	(1.725)	-2.294	-2.194	-0.814	873
Services:						
Belief: muni. budget	177.242	(111.462)	-79.966	47.177	-80.789	591
Share budget transfers	0.322	(0.024)	-0.000	-0.006	-0.014	606
Gov 'never' collects garbage	0.600	(0.033)	0.008	0.052	0.061*	922
Gov 'never' repairs street	0.524	(0.033)	0.041	0.061	0.028	922
Gov 'never' repairs ditches	0.516	(0.033)	0.073**	0.076**	0.042	922
Politics:						
'Never' discusses politics	0.551	(0.033)	-0.011	0.047	0.024	922
Share owners FRELIMO 2018	0.322	(0.023)	-0.018	-0.014	-0.011	748
Voted in 2018 municipal election	0.836	(0.025)	-0.050	-0.023	-0.010	922
Voted FRELIMO in 2018	0.519	(0.039)	-0.047	-0.034	-0.056	663
Voted in 2019 national election	0.742	(0.029)	0.019	0.003	0.030	922
Voted FRELIMO in 2019	0.608	(0.040)	0.029	0.004	-0.043	638

'Control group' columns show means and standard error of means for the control group. 'Difference' columns show the coefficient from regressing each variable on a treatment dummy while limiting the sample to the control group and the public goods group, the local autonomy group, or the both group, respectively. All these regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. 'N' column shows number of observations for which the variable is non-missing. * p<0.10, ** p<0.05, *** p<0.01

A.7 Effects on the distribution of likelihood to pay

Figure A4: Histogram of responses to payment likelihood question, by treatment



Answers to the question “If assessors came to evaluate your property, how likely is it that you would pay your property tax?” for respondents assigned to control and public goods treatment arms.

A.8 Effects on other outcomes

Table A6: Effects on reported voting outcomes

	Vote for FRELIMO		Vote for RENAMO or MDM		Report voting intention	
	Municipal	National	Municipal	National	Municipal	National
Public goods	-0.011 (0.047)	-0.043 (0.048)	0.030 (0.048)	0.061 (0.049)	-0.014 (0.027)	-0.031 (0.027)
Political autonomy	-0.056 (0.046)	-0.094** (0.044)	0.040 (0.046)	0.074* (0.044)	-0.017 (0.025)	-0.017 (0.025)
Public goods $\times$ Political autonomy	0.063 (0.063)	0.073 (0.059)	-0.042 (0.063)	-0.056 (0.060)	-0.019 (0.034)	0.015 (0.034)
N	830	822	830	822	922	922
Mean (control group)	0.413	0.527	0.549	0.439	0.920	0.916
p-val: PG=PA	0.357	0.330	0.832	0.795	0.915	0.568
p-val: PG + PA + PG $\times$ PA = 0	0.926	0.184	0.551	0.102	0.073	0.252

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. 'Vote for FRELIMO' indicates that the respondent answered 'FRELIMO' to the question 'If the municipal elections were tomorrow, which party would you vote for?' (defined for respondents who did not answer Don't Know or Refuse). 'Vote for RENAMO or MDM' indicates that the respondent answered 'RENAMO' or 'MDM' to this question, with the same restriction. 'Report voting intention' indicates that the respondent gave a response to this question other than 'Don't know' or 'Refuse.' All regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Effects on other ballot outcomes

	Vote for FRELIMO			Submit ballot		
	Municipal	Provincial	National	Municipal	Provincial	National
Public goods	-0.002 (0.044)	-0.023 (0.047)	-0.012 (0.046)	0.009 (0.022)	0.016 (0.021)	0.016 (0.023)
Political autonomy	-0.052 (0.044)	-0.074 (0.047)	-0.080* (0.044)	-0.000 (0.021)	0.005 (0.023)	-0.005 (0.023)
Public goods $\times$ Political autonomy	0.041 (0.062)	0.063 (0.064)	0.053 (0.061)	0.002 (0.029)	-0.005 (0.030)	0.000 (0.030)
N	863	856	858	922	922	922
Mean (control group)	0.400	0.471	0.488	0.933	0.924	0.929
p-val: PG=PA	0.284	0.267	0.156	0.669	0.623	0.344
p-val: PG + PA + PG $\times$ PA = 0	0.762	0.490	0.383	0.636	0.508	0.634

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. 'Vote for FRELIMO' indicates that the respondent submitted a ballot on which they checked the box next to 'FRELIMO' for the stated level of government (defined for respondents who submitted any ballot). 'Submit ballot' indicates that the respondent submitted a ballot. All regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.9 Testing for experimenter demand effects

Table A8: Effects on experimenter demand questions

	Info would increase neighbors' payment	Public goods would increase own payment	Local autonomy would increase own payment
Public goods	-0.001 (0.040)	0.056 (0.038)	0.032 (0.042)
Political autonomy	0.018 (0.041)	0.032 (0.038)	-0.025 (0.040)
PG $\times$ LA	0.002 (0.056)	-0.061 (0.056)	-0.032 (0.054)
N	922	922	922
Mean (control group)	0.564	0.560	0.636
p-val: PG=PA	0.649	0.527	0.155
p-val: PG + PA + PG $\times$ PA = 0	0.637	0.486	0.503

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. The outcome in Column 1 indicates that the respondent answered 'Very likely' or 'Likely' to the question 'Imagine you have a neighbor who doesn't pay their property taxes. If that neighbor could hear this information, how likely is it that they would be more motivated to pay IPRA?' The outcome in Column 2 indicates that the respondent answered 'Very likely' or 'Likely' to the question 'If the municipality improved public service provision, how likely is it that you would be more motivated to pay IPRA?' The outcome in Column 3 indicates that the respondent answered 'Very likely' or 'Likely' to the question 'How likely is it that the idea of the municipality having more independence relative to the central government would make you more motivated to pay IPRA?' All regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.10 Additional Heterogeneity

Table A9: Effects of treatment on public goods contributions

	Baseline public good provision		RENAMO partisan	
	Low	High	Yes	No
Public goods	0.150** (0.059)	0.024 (0.050)	0.263** (0.119)	0.099** (0.042)
Political autonomy	0.027 (0.055)	0.030 (0.062)	0.158 (0.138)	0.048 (0.043)
Both	0.027 (0.067)	0.013 (0.062)	0.282** (0.118)	0.032 (0.046)
N	415	423	107	725
Mean (control group)	0.343	0.296	0.286	0.337
p-val: PG=PA	0.031	0.917	0.220	0.224
p-val: PG=Both	0.053	0.856	0.744	0.142
p-val: PA=Both	0.999	0.796	0.161	0.714

Coefficients from regressing an indicator for whether respondents contributed to the public goods game on treatment group dummies, separating the sample between respondents scoring below vs. above the median on an index of baseline public good provision (Columns 1 and 2), or by whether respondents report having voted for RENAMO in the 2018 municipal and 2019 national elections (Columns 3 and 4). Outcomes are regressed on indicators for "public goods," "political autonomy," and "both" rather than using the interaction term; this is to facilitate comparing outcomes for each group relative to the control group. The correlation between the above-median baseline public goods dummy and the RENAMO voter dummy is 0.015. All regressions include block and enumerator fixed effects. Standard errors clustered at the block level are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.11 Robustness

Table A10: Robustness: Effects of treatment on tax payment intentions and public goods contributions

	Likely to pay property tax		Any contribution		Amount, unconditional		Amount, conditional	
Public goods	0.104*** (0.040)	0.085** (0.040)	0.107*** (0.038)	0.094** (0.040)	2.956 (2.059)	2.311 (1.955)	-1.573 (4.280)	-1.449 (4.209)
Political autonomy	0.039 (0.041)	0.029 (0.041)	0.028 (0.039)	0.025 (0.040)	0.765 (2.182)	0.289 (2.256)	3.679 (4.770)	2.298 (4.532)
PG $\times$ PA	-0.104* (0.056)	-0.090* (0.054)	-0.083 (0.055)	-0.059 (0.055)	-3.411 (2.973)	-1.998 (2.877)	-6.241 (6.254)	-4.738 (5.976)
N	922	922	922	922	922	922	288	288
Mean (control group)	0.618	0.618	0.324	0.324	13.400	13.400	39.839	39.839
p-val: PG=PA	0.103	0.196	0.032	0.079	0.300	0.344	0.283	0.386
p-val: PG+PA+(PG $\times$ PA)=0	0.322	0.572	0.186	0.142	0.881	0.777	0.333	0.362
Enumerator FE	✓		✓		✓		✓	
Cluster SE		✓		✓		✓		✓

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. 'Likely to pay property tax' indicates that the respondent answered 'Very likely' or 'Likely' to the survey question 'If assessors came to evaluate your property, how likely is it that you would pay your property tax?' 'Any contribution' indicates that the respondent contributed a positive amount in the public goods game. 'Amount, unconditional' denotes the amount of meticaís the respondent contributed in the public goods game, with non-contributors taking a value of zero. 'Amount, conditional' denotes the amount of meticaís the respondent contributed in the public goods game, limiting the sample to contributors. All regressions include block fixed effects; odd columns also include enumerator fixed effects. Odd columns report robust standard errors and even columns report standard errors clustered at the level of the block. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11: Robustness: Effects of treatment on public goods contributions

	Baseline public good provision				RENAMO partisan			
	Low	Low	High	High	Yes	Yes	No	No
Public goods	0.150** (0.062)	0.151** (0.063)	0.024 (0.056)	0.004 (0.053)	0.263** (0.122)	0.321*** (0.109)	0.099** (0.044)	0.073 (0.045)
Political autonomy	0.027 (0.060)	0.023 (0.058)	0.030 (0.063)	0.046 (0.064)	0.158 (0.127)	0.196 (0.128)	0.048 (0.044)	0.036 (0.045)
Both	0.027 (0.066)	0.042 (0.067)	0.013 (0.061)	0.036 (0.062)	0.282** (0.123)	0.367*** (0.102)	0.032 (0.046)	0.030 (0.047)
N	415	415	423	423	107	107	725	725
Mean (control group)	0.343	0.343	0.296	0.296	0.286	0.286	0.337	0.337
p-val: PG=PA	0.034	0.040	0.920	0.453	0.251	0.128	0.226	0.412
p-val: PG=Both	0.056	0.102	0.856	0.581	0.833	0.443	0.134	0.379
p-val: PA=Both	0.999	0.759	0.797	0.878	0.217	0.056	0.717	0.888
Enumerator FE	✓		✓		✓		✓	
Cluster SE		✓		✓		✓		✓

Coefficients from regressing an indicator for whether respondents contributed to the public goods game on treatment group dummies, separating the sample between respondents scoring below vs. above the median on an index of baseline public good provision (Columns 1 and 2), or by whether respondents report having voted for RENAMO in the 2018 municipal and 2019 national elections (Columns 3 and 4). Outcomes are regressed on indicators for "public goods," "political autonomy," and "both" rather than using the interaction term; this is to facilitate comparing outcomes for each group relative to the control group. The correlation between the above-median baseline public goods dummy and the RENAMO voter dummy is 0.015. All regressions include block fixed effects; odd columns also include enumerator fixed effects. Odd columns report robust standard errors and even columns report standard errors clustered at the level of the block. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A12: Robustness: Effects of treatment on political outcomes

	Satisfaction with government				Vote for opposition (RENAMO or MDM)					
	Muni.	Muni.	Nat'l	Nat'l	Muni.	Muni.	Prov.	Prov.	Nat'l	Nat'l
Public goods	0.067* (0.038)	0.077* (0.040)	0.092** (0.042)	0.099** (0.042)	0.031 (0.045)	0.029 (0.044)	0.057 (0.047)	0.061 (0.046)	0.056 (0.047)	0.062 (0.045)
Political autonomy	-0.008 (0.037)	0.001 (0.036)	0.001 (0.043)	-0.003 (0.042)	0.054 (0.043)	0.047 (0.044)	0.073 (0.046)	0.080* (0.047)	0.096** (0.045)	0.112** (0.045)
Public $\times$ Political	-0.065 (0.053)	-0.080 (0.056)	-0.117* (0.060)	-0.125** (0.058)	-0.056 (0.063)	-0.045 (0.062)	-0.077 (0.065)	-0.084 (0.062)	-0.083 (0.065)	-0.096 (0.063)
N	922	922	922	922	863	863	856	856	858	858
Mean (control group)	0.707	0.707	0.462	0.462	0.543	0.543	0.466	0.466	0.440	0.440
p: PG=PA	0.033	0.027	0.033	0.021	0.597	0.703	0.722	0.673	0.375	0.269
p: PG+PA+PG $\times$ PA=0	0.870	0.959	0.578	0.525	0.515	0.489	0.263	0.239	0.139	0.084
Enumerator FE	✓		✓		✓		✓		✓	
Cluster SE		✓		✓		✓		✓		✓

Coefficients from the regression specified in Equation 1 of the main text, with standard errors shown in parentheses. 'Satisfaction with government' indicates that the respondent answered 'Very satisfied' or 'Satisfied' to the question 'In general, are you satisfied with political governance in [the municipality of Quelimane / Mozambique]?' 'Vote for RENAMO or MDM' indicates that the respondent submitted a ballot on which they checked the box next to 'RENAMO' or 'MDM' for the stated level of government (defined for respondents who submitted any ballot). All regressions include block fixed effects; odd columns also include enumerator fixed effects. Odd columns report robust standard errors and even columns report standard errors clustered at the level of the block. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B Information treatments

B.1 Control condition

The following text was read to all participants:

Portuguese	English
Agora queremos fornecer algumas informações úteis sobre o papel dos impostos no município, particularmente o Imposto Predial Autárquico ou IPRA.	Now we want to provide some useful information about the role of taxes in the municipality, particularly the Municipal Property Tax or IPRA.
Para propriedades residenciais, a taxa do IPRA é 0,04% do valor da propriedade. Isto quer dizer que se uma propriedade tivesse o valor de 1 milhão de meticaís, o dono teria de pagar 400 meticaís por ano como IPRA.	For residential properties, the IPRA rate is 0.04% of the property value. This means that if a property had a value of 1 million meticaís, the owner would have to pay 400 meticaís per year as IPRA.
Se for uma propriedade comercial, o valor é de 0,07% do valor da propriedade – uma propriedade comercial com o valor de 1 milhão de meticaís teria de pagar 700 meticaís por ano como IPRA.	If it is a commercial property, the value is 0.07% of the property value – a commercial property with a value of 1 million meticaís would have to pay 700 meticaís per year as IPRA.
Pagar o IPRA é necessário para vender a propriedade.	Paying IPRA is necessary to sell the property.
Esses impostos, quando forem pagos, contribuem para o orçamento do município. O orçamento do município é aproximadamente de 500 meticaís por munícipe por ano.	These taxes, when paid, contribute to the municipality's budget. The municipality's budget is around 500 meticaís per citizen per year.

B.2 Public good condition

The following text was read to all participants in the “public good” treatment:

Portuguese	English
O “contrato social” significa que os cidadãos têm dizer sobre como os seus governos se comportam. Os cidadãos podem expressar as suas preocupações. Eles pagam impostos em troca dos serviços públicos que são oferecidos pelo governo. Para que o/a Sr/a tenha uma visão mais ampla do comportamento do governo, vamos fazer uma revisão de alguns dos bens públicos fornecidos pelo município nos últimos 10 anos. Várias das artérias críticas da cidade foram reparadas e os seus buracos tapados, por exemplo as avenidas Eduardo Mondlane, Július Nyerere, 7 de Setembro, Josina Machel, Samora Michel, Marginal, Filipe Samuel Magaia, e 25 de Junho. Várias ruas foram pavimentadas ou asfaltadas: Rua Ahmed Sékou Touré que passa no IFP; a Avenida Alberto Cassimo ligando a Sagrada e o mercado de Aquima; e outras nos bairros Kansa, Vilapita, Mapiazua, Brandão, 17 de Setembro, Sangariveira, e Manhaua, entre outras. Foram mantidas as ruas França e Pio Matos, além da manutenção de rotina de estradas de terra batida, bem como o abaulamento numa extensão de mais de 200 kms. Foi construída uma extensão de 22 kms de valas de drenagem, abertas e fechadas. Houve várias outras construções públicas, entre elas • 2 Bibliotecas Municipais, • Escola Primária Completa de Ivagalane, • Mercado de Sangariveira. Na área de saneamento, foram construídos: • 14 Silos para o depósito dos resíduos sólidos, • 22 poços de água para os diversos bairros, • mais de 100 latrinas para a população carenciada. E foram adquiridos cestos, contentores e camiões de Lixo Também foram atribuídos mais de 2000 DUATs. Agora vou mostrar algumas fotos dos bens públicos do município nos últimos anos.	The “social contract” means that citizens have a say in how their governments behave. Citizens can express their concerns. They pay taxes in exchange for public services that are offered by the government. To give you a broader view of the government’s behavior, let’s review some of the public goods provided by the municipality in the last 10 years. Several of the city’s critical arteries were repaired and potholes filled, for example Eduardo Mondlane, Július Nyerere, 7 de Setembro, Josina Machel, Samora Michel, Marginal, Filipe Samuel Magaia, and 25 de Junho avenues. Several streets were paved or asphalted: Ahmed Sékou Touré which passes by IFP; Alberto Cassimo Avenue connecting Sagrada and Aquima market; and others in the neighborhoods Kansa, Vilapita, Mapiazua, Brandão, 17 de Setembro, Sangariveira, and Manhaua, among others. The streets França and Pio Matos were maintained, as well as the routine maintenance of dirt roads, and the embankment in an extension of more than 200 kms. An extension of 22 kms of drainage ditches, open and closed, was built. There were several other public constructions, among them • 2 Municipal Libraries, • Complete Primary School of Ivagalane, • Sangariveira Market. In the area of sanitation, the following were built: • 14 Silos for the deposit of solid waste, • 22 water wells for the various neighborhoods, • more than 100 latrines for the needy population. And baskets, containers and garbage trucks were acquired. Also more than 2000 DUATs were awarded. Now I will show you some photos of the public goods of the municipality in the last years.

B.2.1 Public good condition photos

Figure B1



(A) Roads



(B) Firefighters



(C) Drains



(D) More roads

B.3 Local autonomy condition

The following text was read to all participants in the “local autonomy” treatment:

Portuguese	English
Agora, o município tem que usar o seu orçamento para reunir todos os seus gastos, inclusivé os bens públicos que fornece aos munícipes.	Now, the municipality has to use its budget to meet all its expenses, including the public goods that it provides to the citizens.
Aproximadamente 70% desse valor vem em forma de transferência do governo central. Algumas pessoas dizem que isso cria uma situação que prejudica a independência política e financeira do município. A ideia é:	Around 70% of this value comes in the form of transfer from the central government. Some people say that this creates a situation that harms the political and financial independence of the municipality. The idea is:
Quando o município depende do governo central para os fundos do seu orçamento, o governo central exerce controlo sobre o município através do controle dos fundos. Se o município está a fazer coisas que o governo central não gosta, o governo central pode reter ou atrasar os pagamentos para tentar influenciar o comportamento do município. Se os objetivos do governo central não são os mesmos que os objetivos do município, isso pode diminuir a autonomia que o município tem de traçar o seu próprio caminho quanto à política.	When the municipality depends on the central government for the funds of its budget, the central government exerts control over the municipality through the control of the funds. If the municipality is doing things that the central government does not like, the central government can withhold or delay payments to try to influence the behavior of the municipality. If the goals of the central government are not the same as the goals of the municipality, this can diminish the autonomy that the municipality has to trace its own path regarding politics.
Numa democracia, os munícipes pagam impostos para que o estado funcione e aja a bem do povo. Afinal de contas, os salários dos funcionários públicos não vêm de nenhum partido político, mas do povo que trabalha para poder pagar os seus impostos.	In a democracy, citizens pay taxes so that the state works and acts for the good of the people. After all, the salaries of public servants do not come from any political party, but from the people who work to be able to pay their taxes.
Então, uma maneira importante de garantir a autonomia do município é pagar impostos para que o município tenha a capacidade de realizar os seus planos sem depender do governo central.	So, an important way to guarantee the autonomy of the municipality is to pay taxes so that the municipality has the capacity to carry out its plans without depending on the central government.
Agora vou mostrar algumas fotos tiradas em eventos do governo atual do município.	Now I will show you some photos taken at events of the current government of the municipality.

B.3.1 Local autonomy condition photos

Figure B2



(A) Bikes



(B) A speech



(C) More bikes



(D) Another speech