

Supplementary Appendix for:

**Voting for the Lesser Evil:  
Evidence from a Conjoint Experiment in Romania**

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## Appendix A: Table with Full Vignettes

Attributes	Values
Political experience <sup>1</sup>	<ul style="list-style-type: none"> <li>• The candidate does NOT have previous experience as mayor</li> <li>• The candidate is currently serving as mayor</li> </ul>
Investigation	<ul style="list-style-type: none"> <li>• Currently, there is NO legal action against the candidate on issues of political integrity</li> <li>• The candidate is currently being investigated by the General Anticorruption Agency</li> <li>• The candidate was sentenced for previous acts of corruption by the courts</li> </ul>
Electoral corruption (positive inducement)	<ul style="list-style-type: none"> <li>• The candidate did NOT offer money or social assistance from the municipality in exchange for the vote</li> <li>• Candidate offered 100 RON in exchange for the vote</li> <li>• Candidate offered social assistance from the municipality in exchange for the vote</li> </ul>
Gender	<ul style="list-style-type: none"> <li>• Male</li> <li>• Female</li> </ul>
Income	<ul style="list-style-type: none"> <li>• Candidate does NOT have a high income and lives from their own salary</li> <li>• The candidate has a high income that originates in a business that they manage</li> </ul>
Public policy	<ul style="list-style-type: none"> <li>• The candidate has NOT made any promises to improve roads in the locality or to renovate school buildings</li> <li>• During the campaign, the candidate pledged to renovate schools buildings in the locality</li> <li>• During the campaign, the candidate pledged to improve roads and renovate school buildings in the locality</li> </ul>
Electoral corruption (negative inducement)	<ul style="list-style-type: none"> <li>• During the campaign, the candidate has NOT threatened non-supporters with cutting their municipal social assistance benefits</li> <li>• During the campaign, the candidate has threatened non-supporters with cutting their municipal social assistance benefits</li> </ul>

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<sup>1</sup> Participants can get confused if they have to choose between two candidates with political experience since they might think that both are incumbents. To avoid that issue, respondents always evaluated one candidate with experience and one without experience in the same pair (the order within the pair was randomized).

## Appendix B: Census and Survey data

Given that we have a non-probabilistic sample of Romanian voters, we begin by comparing the socioeconomic characteristics of the respondents in our sample to census data.

**Table 4: Census and Survey Data**

<b>Covariate</b>	<b>Census data</b>	<b>Survey data</b>
Age (median)	40 years	53 years
Female	51%	51%
High-school or more	56%	59%
Rural	45%	49%

The differences in terms of age are explained by the fact that our sample includes only eligible voters, while the census includes all citizens (children represent 16 percent of the total population of Romania). Therefore, by design, our survey should contain older voters. The proportions of female, rural, and educated voters in our sample are good representations of the country according to the last census conducted in 2011. This provides evidence to indicate that our results are not explained by the configuration of an unusual sample.

## Appendix C: Regression Results Figure 1

	Outcome
	Electoral Choice
Female	-0.009 (0.014)
Incumbent	0.062*** (0.018)
Threat to non-supporters	-0.139*** (0.014)
100 RON	-0.203*** (0.017)
Social assistance	-0.075*** (0.018)
Investigated	-0.180*** (0.016)
Sentenced	-0.333*** (0.017)
Renovate schools	0.040* (0.016)
Renovate schools and roads	0.066*** (0.016)
High income	0.007 (0.014)
Constant	0.718*** (0.023)
Respondents	502
Observations	5020

*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

## Appendix D: Confidence Intervals Figure 1

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	Estimate	Lower CI	Upper CI
Female	-0.009	-0.036	0.018
Incumbent	0.062	0.026	0.098
Threat to non-supporters	-0.139	-0.166	-0.111
100 RON	-0.203	-0.237	-0.170
Social assistance	-0.075	-0.110	-0.040
Investigated	-0.180	-0.211	-0.148
Sentenced	-0.333	-0.367	-0.299
Renovate schools	0.040	0.010	0.071
Renovate schools and roads	0.066	0.034	0.098
High income	0.007	-0.020	0.034

## **Appendix E: Conjoint Diagnostics**

First, we conducted simple balance tests to check the randomization of attributes. We regressed respondents' characteristics on the profile attributes. We find that the candidates' attributes do not significantly predict respondents' characteristics (see appendix E and F).

Secondly, we checked that the effects of attributes were not conditional on the order of the candidates in a pair. This means that respondents do not select candidates based on their position in the comparison (first or second candidate). To perform this test, we regressed the outcomes on the attributes, indicators of the order, and an interaction between these variables. We did not find evidence of profile order effects in any of the interactions (see appendix G).

Third, we test the assumption of no carryover effects. This means that the attributes' effects are not conditional on the pair they are evaluated in (our conjoint has five pairs of candidates per respondent); or in other words, a particular attribute will have the same importance for respondents regardless of which pair is evaluated. We follow the same strategy when we check the profile order assumption. In this case, however, the interaction is the number of the pair. We did not find systematic evidence of carryover effects (see appendix H).

## Appendix F: Balance Test 1

	Outcome
	Urban
Female	-0.003 (0.014)
Incumbent	0.0002 (0.001)
Threat to non-supporters	-0.002 (0.014)
100 RON	0.017 (0.016)
Social assistance	0.030 (0.017)
Investigated	-0.001 (0.017)
Sentenced	0.001 (0.018)
Renovate schools	-0.007 (0.017)
Renovate schools and roads	0.004 (0.018)
High income	0.011 (0.014)
Constant	0.477*** (0.031)

*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001



## Appendix G: Balance Test 2

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	Outcome
	High-School
Female	-0.023 (0.014)
Incumbent	0.0001 (0.001)
Threat to non-supporters	-0.012 (0.014)
100 RON	0.008 (0.016)
Social assistance	0.017 (0.017)
Investigated	-0.018 (0.017)
Sentenced	-0.005 (0.018)
Renovate schools	-0.003 (0.016)
Renovate schools and roads	0.022 (0.018)
High income	0.010 (0.014)
Constant	0.593*** (0.030)

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*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

## Appendix H: Profile order effects

	Outcome
	Electoral Choice
Female	-0.003 (0.019)
Incumbent	0.058** (0.020)
Threat to non-supporters	-0.122*** (0.019)
100 RON	-0.212*** (0.024)
Social assistance	-0.061* (0.024)
Investigated	-0.178*** (0.023)
Sentenced	-0.339*** (0.024)
Renovate schools	0.039 (0.022)
Renovate schools and roads	0.071** (0.024)
High income	-0.002 (0.019)
Candidate 2	0.018 (0.046)
Female*Candidate 2	-0.010 (0.027)
Incumbent*Candidate 2	0.007 (0.014)
Threat to non-supporters*Candidate 2	-0.032 (0.026)
100 RON*Candidate 2	0.016

	(0.032)
Social assistance*Candidate 2	-0.028
	(0.032)
Investigated*Candidate 2	-0.003
	(0.032)
Sentenced*Candidate 2	0.011
	(0.032)
Renovate schools*Candidate 2	0.001
	(0.031)
Renovate schools and roads*Candidate 2	-0.009
	(0.032)
High income*Candidate 2	0.016
	(0.027)
Constant	0.709***
	(0.033)

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*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

## Appendix I: Carryover effects

	Outcome
	Electoral Choice
Female	-0.010 (0.029)
Incumbent	0.064 (0.040)
Threat to non-supporters	-0.144*** (0.030)
100 RON	-0.186*** (0.038)
Social assistance	0.005 (0.039)
Investigated	-0.146*** (0.039)
Sentenced	-0.283*** (0.037)
Renovate schools	0.028 (0.038)
Renovate schools and roads	0.066 (0.037)
High income	-0.0003 (0.031)
Pair 2	0.037 (0.068)
Pair 3	0.085 (0.069)
Pair 4	0.059 (0.069)
Pair 5	-0.016 (0.069)
Female*Pair 2	0.053 (0.040)

Female*Pair 3	-0.040 (0.042)
Female*Pair 4	0.011 (0.040)
Female*Pair 5	-0.015 (0.039)
Incumbent*Pair 2	0.006 (0.054)
Incumbent*Pair 3	-0.036 (0.055)
Incumbent*Pair 4	-0.020 (0.053)
Incumbent*Pair 5	0.043 (0.053)
Threat to non- supporters*Pair 2	-0.009 (0.041)
Threat to non- supporters*Pair 3	-0.014 (0.044)
Threat to non- supporters*Pair 4	0.022 (0.042)
Threat to non- supporters*Pair 5	0.018 (0.042)
100 RON*Pair 2	-0.006 (0.051)
Social assistance*Pair 2	-0.110* (0.052)
100 RON*Pair 3	0.023 (0.053)
Social assistance*Pair 3	-0.073 (0.056)
100 RON*Pair 4	-0.064 (0.053)
Social assistance*Pair 4	-0.100 (0.053)
100 RON*Pair 5	-0.029

	(0.049)
Social assistance*Pair 5	-0.113*
	(0.052)
Investigated*Pair 2	-0.082
	(0.053)
Sentenced*Pair 2	-0.099
	(0.051)
Investigated*Pair 3	-0.041
	(0.055)
Sentenced*Pair 3	-0.023
	(0.050)
Investigated*Pair 4	-0.036
	(0.051)
Sentenced*Pair 4	-0.048
	(0.050)
Investigated*Pair 5	-0.004
	(0.052)
Sentenced*Pair 5	-0.075
	(0.046)
Renovate schools*Pair 2	0.029
	(0.050)
Renovate schools and roads*Pair 2	-0.001
	(0.052)
Renovate schools*Pair 3	-0.008
	(0.050)
Renovate schools and roads*Pair 3	-0.023
	(0.052)
Renovate schools*Pair 4	-0.012
	(0.054)
Renovate schools and roads*Pair 4	-0.060
	(0.052)
Renovate schools*Pair 5	0.040
	(0.053)
Renovate schools and roads*Pair 5	0.075
	(0.052)

High income*Pair 2	0.017 (0.042)
High income*Pair 3	-0.017 (0.040)
High income*Pair 4	0.028 (0.042)
High income*Pair 5	0.006 (0.043)
Constant	0.684*** (0.053)

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*Note:* \*p<0.05; \*\* p<0.01; \*\*\* p<0.001

## **Appendix J: Heterogeneous Treatment Effects**

### *Heterogeneity across candidates*

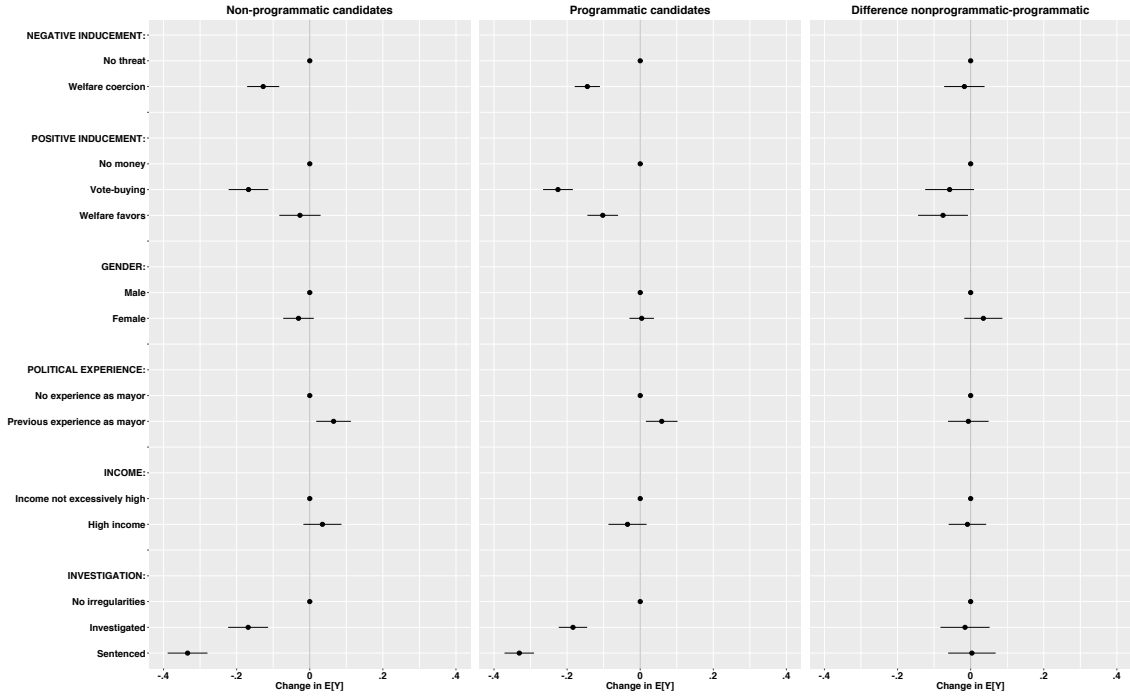
First, we turn to the heterogeneity across candidates. Do voters impose different punishments on politicians who provide public goods but commit irregularities? To address this question, we consider interactions between attributes measuring different electoral irregularities and the provision of public goods.

We examine whether programmatic promises—which in our case are promises to rebuild only schools or roads and schools—can offset punishment for different irregularities. We examine this question by interacting a binary indicator of policy commitments with the other candidate attributes.

Figure A2 provides the AMCE by subgroup (non-programmatic and programmatic candidates) and reports the differences between them. We find that there is a significant difference between both groups only on one attribute (welfare favors).



Figure A2: Results by type of candidate



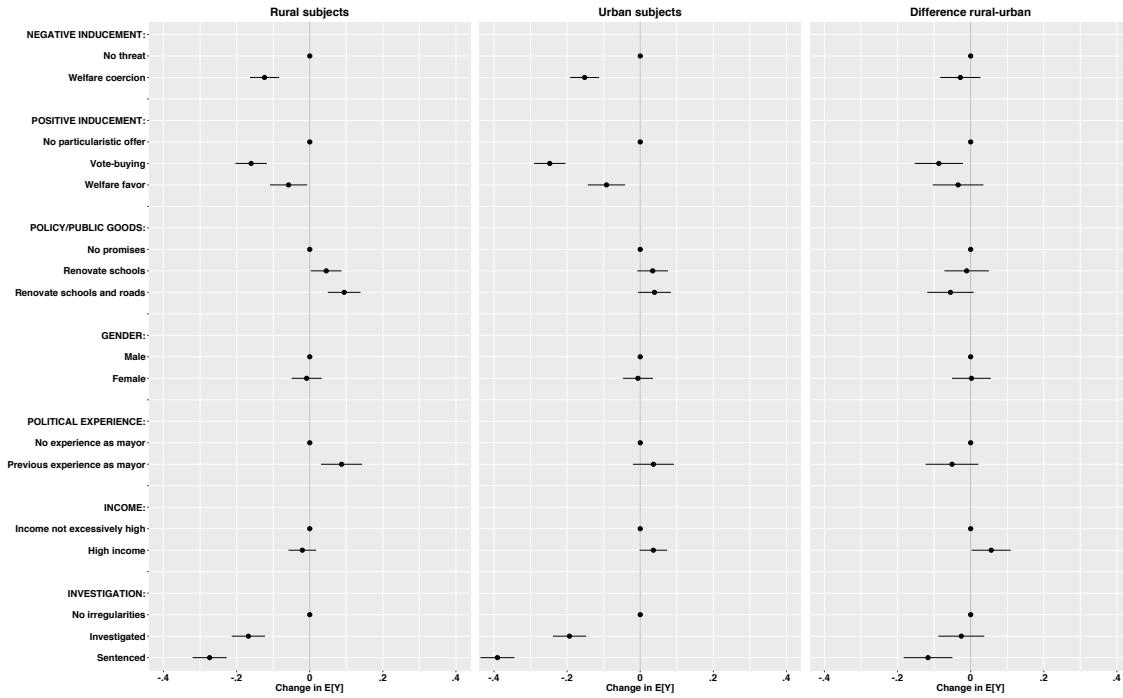
*Heterogeneity across voters*

We now examine whether the “punishment threshold” for different electoral irregularities differs across voters. Clientelistic practices are much more entrenched in rural, as compared to urban settings. The outside employment opportunities are much lower in rural communities, which increases the value of the transfers provided by mayors as part of clientelistic exchanges. As a result, one expects to find differences between rural and urban voters in their willingness to punish illicit electoral strategies. Observers of Romanian politics have invoked these differences to explain the stronger electoral performance in rural communities of candidates who ended up ultimately being indicted, such as Adrian Nastase, Romania’s prime minister, who is currently serving time in jail.

The results presented in Figure A3 report the differences in the ACME between rural and urban voters. We find that that both groups have a significant difference only in

two attributes. Rural voters are less likely to punish candidate who engage in *vote-buying* or *who have previously been sentenced* in comparison to urban voters.

Figure A3: Results by respondent characteristics



To summarize, we find that voters with different background characteristics have different punishment thresholds for different electoral irregularities. Some of our findings are consistent with the results of other studies, showing that low-income voters or voters in rural communities have a higher punishment threshold for illicit strategies (Weitz-Shapiro 2012).

## Appendix K: Regression Tables for Heterogeneous Treatment Effects

*Programmatic interaction (candidate characteristics)*

	Outcome
	Electoral Choice
Female	-0.031 (0.021)
Incumbent	0.065** (0.024)
Threat to non-supporters	-0.127*** (0.022)
100 RON	-0.168*** (0.028)
Social assistance	-0.027 (0.029)
Investigated	-0.168*** (0.028)
Sentenced	-0.334*** (0.028)
Programmatic	0.101* (0.040)
High income	0.013 (0.022)
Female*Programmatic	0.035 (0.027)
Incumbent*Programmatic	-0.006 (0.028)
Threat to non-supporters*Programmatic	-0.017 (0.028)
100 RON*Programmatic	-0.058 (0.034)
Social assistance*Programmatic	-0.076* (0.035)
Investigated*Programmatic	-0.015 (0.034)

Sentenced*Programmatic	0.003 (0.033)
High income*Programmatic	-0.009 (0.026)
Constant	0.687*** (0.034)

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Respondents	502
Observations	5020

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*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

*Urban interaction (respondent characteristics)*

	Outcome
	Electoral Choice
Female	-0.008 (0.021)
Incumbent	0.087** (0.029)
Threat to non-supporters	-0.124*** (0.020)
100 RON	-0.160*** (0.022)
Social assistance	-0.058* (0.026)
Investigated	-0.168*** (0.023)
Sentenced	-0.274*** (0.024)
Renovate schools	0.045* (0.022)
Renovate schools and roads	0.094*** (0.023)
High income	-0.020 (0.019)
Urban	0.072 (0.046)
Female*Urban	0.002 (0.027)
Incumbent*Urban	-0.051 (0.037)
Threat to non-supporters*Urban	-0.028 (0.028)
100 RON*Urban	-0.087** (0.034)
Social assistance*Urban	-0.034

	(0.035)
Investigated*Urban	-0.026
	(0.032)
Sentenced*Urban	-0.117***
	(0.034)
Renovate schools*Urban	-0.011
	(0.031)
Renovate schools and roads*Urban	-0.055
	(0.032)
High income*Urban	0.056*
	(0.027)
Constant	0.681***
	(0.033)
<hr/>	
Respondents	502
Observations	5020
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<i>Note:</i>	*p<0.05; ** p<0.01; *** p<0.001

*Income interaction (respondent characteristics)*

	Outcome
	Electoral Choice
Female	-0.0001 (0.022)
Incumbent	0.094** (0.030)
Threat to non-supporters	-0.113*** (0.022)
100 RON	-0.162*** (0.026)
Social assistance	-0.026 (0.029)
Investigated	-0.145*** (0.024)
Sentenced	-0.314*** (0.027)
Renovate schools	0.017 (0.024)
Renovate schools and roads	0.046 (0.026)
High income	-0.018 (0.023)
Less than 900 RON	0.065 (0.046)
Female*Less than 900 RON	-0.016 (0.028)
Incumbent*Less than 900 RON	-0.057 (0.038)
Threat to non-supporters*Less than 900 RON	-0.046 (0.028)
100 RON*Less than 900 RON	-0.072* (0.034)
Social assistance*Less than 900 RON	-0.083* (0.034)



	(0.036)
Investigated*Less than 900 RON	-0.059
	(0.032)
Sentenced*Less than 900 RON	-0.030
	(0.035)
Renovate schools*Less than 900 RON	0.037
	(0.032)
Renovate schools and roads*Less than 900 RON	0.033
	(0.034)
High income*Less than 900 RON	0.044
	(0.028)
Constant	0.682***
	(0.034)

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Respondents	479
Observations	4790

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*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

## Appendix L: Multiple Comparison Corrections

*P-values before and after multiple comparison correction*

Attributes	No correction	BH correction	Bonferroni correction
Female	0.5143	0.5710	1
Incumbent	0.0008	0.0010	0.0080
Threat to non-supporters	0.0000	0.0000	0.0000
100 RON	0.0000	0.0000	0.0000
Social assistance	0.0000	0.0000	0.0000
Investigated	0.0000	0.0000	0.0000
Sentenced	0.0000	0.0000	0.0000
Renovate schools	0.0102	0.0120	0.1020
Renovate schools and roads	0.0001	0.0000	0.0010
High income	0.6087	0.6090	1

## Appendix M

The interaction of normative disabilities and prosecutorial campaigns leads to six outcomes regarding the expected punishment of illicit activities.

<b>Normative disutility</b>	<b>Existence of highly visible prosecutorial campaign</b>	<b>Expected punishment by voters</b>
Low	No	Low
Medium	No	Medium
High	No	High
Low	Yes	Medium
Medium	Yes	High
High	Yes	High

Therefore, the expected punishment is first explained by the normative disutility. If the latter is high the former will also be high. However, the existence of a campaign can move punishment from low to medium or medium to high. Unfortunately, we do not have evidence to illustrate each of these six scenarios. The case of Romania helps illuminate only three of them. Nevertheless, we believe that these examples can contribute to a better understanding of the role of normative disutility and prosecutorial campaigns.