PNAS
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Supplementary Information for

Eliciting preferences for truth-telling in a survey of politicians

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This PDF file includes:

www.pnas.org/cgi/doi/10.1073/pnas.2008144117

Selection Bias

In order to study selection in our sample, we compare the characteristics of mayors who completed our survey to the characteristics of the whole population of mayors (all Spanish municipalities with more than 2,000 citizens). We focus on characteristics that are known for the vast majority of mayors included in the sample, such as their gender, their party membership and their education level. Table S1 reports the results of the comparison. T-tests for differences in means between the samples show that our sample is similar to the population for most characteristics. The exceptions are age and the average population size. Mayors who responded to the survey were on average two years younger than the average mayor across Spain. While statistically significant, a two year age difference should not be of concern. For municipality size, we find that the size of respondents' municipalities is on average smaller by 6,451 people. This difference is statistically significant. This is largely driven by the fact that the mayors of the largest municipalities in Spain, such as Madrid and Barcelona, did not reply to our survey.

Table S1. Characteristics of mayors who answered our survey compared to the whole population

	Survey sample	All municipalities >2,000
Total nr of observations	816	2,282
Personal characteristics		
Female	20.10%	22.13%
Average age	48.57***	50.47
Education		
University degree	66.05%	64.15%
Party membership		
PP or PSOE	57.60%	56.57%
Parties at national level	70.83%	69.64%
Municipal characteristics		
Avg. population size	12,441***	18,892
Log. population size	8.77***	8.92
Avg. turnout	69.51%	69.31%

Note: T-tests examine whether the sample means significantly deviate from the population means.
Stars indicate significant deviation with $p < 0.1*, p < 0.05**, p < 0.01***$.

In addition to examining differences in these variables, we also conducted an out-of-sample prediction exercise. Here, we fitted a model of reported heads to the characteristics listed in Table S1 of those mayors who responded to the survey. We did this both based on a linear probability and a logistic regression model. Then, we predicted for each mayor who did not respond to our survey with what probability they would have reported heads or tails. We find that on average, 68.09% (both for the linear probability and the logistic regressions) are predicted to report heads. For both models, this percentage is not statistically different from the actual percentage of reported heads (the 816 mayors who completed the survey). This implies that the sample is not biased with respect to the characteristics listed here and that it should not be of great concern that larger municipalities were less likely to respond.

Table S2. Actual and predicted % of reported heads in- and out-of-sample

	Actual % heads for mayors who participated	Predicted % heads for mayors who did not participate	Difference
Linear probability	68.015%	68.0859%	0.071
Logit model	68.015%	68.0862%	0.071

Robustness

Alternative time cutoff points. In order to examine whether our results are robust to using alternative rules for excluding mayors who took a long time answering the coin flipping question, suggesting that they did not perform this task attentively, we reran our regression analyses using different cutoff points. Specifically, we used alternative cutoffs at 85 seconds (5 seconds less than in the main paper) and 95 seconds (5 seconds more) as well as removing the cutoff entirely. Our results are robust to these changes. Model (1) in Table S3 excludes all mayors who spent more than 85 seconds on the question, model (2) excludes those who spent more than 95 seconds and model (3) presents results when no upper cutoff is used.

Comparing models (1), (2) and (3) to Table 1 in the main text of the paper shows that the results are robust both with respect to size and statistical significance.

Table S3. Linear probability regressions for robustness with reported heads as dependent variable

	(1) Rep. Heads Excl. >85 seconds	(2) Rep. Heads Excl. >95 seconds	(3) Rep. Heads No upper limit
Interest Report	0.33***	0.33***	0.32***
	(0.05)	(0.05)	(0.05)
Gender	-0.00	-0.00	0.01
	(0.04)	(0.04)	(0.04)
Major Party	0.07**	0.08**	0.08**
	(0.03)	(0.03)	(0.03)
Population size, log	-0.02	-0.02	-0.03
	(0.02)	(0.02)	(0.02)
Age	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)
Margin 2015	-0.13	-0.16	-0.17
	(0.11)	(0.11)	(0.11)
Constant	0.62***	0.62***	0.67***
	(0.20)	(0.19)	(0.19)
Observations	695	704	738

Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

We repeat this robustness check for the reelection analysis. We use the same regression model as model (3) of Table 2 in the main text. The results are of similar size and significance as the results from Table 2 in the main text. Overall, all results are robust to varying the cutoffs.

Table S4. Reelection regressions for robustness with reelection success as dependent variable

	(1) Reelected Excl. >85 seconds	(2) Reelected Excl. >95 seconds	(3) Reelected No upper limit
Reported Heads	0.09*	0.08*	0.08*
	(0.05)	(0.05)	(0.04)
Ran for Reelection	0.77***	0.77***	0.77***
	(0.04)	(0.04)	(0.03)
Margin 2015	0.53***	0.51***	0.52***
	(0.15)	(0.15)	(0.15)
Gender	-0.02	-0.02	-0.02
	(0.03)	(0.03)	(0.03)
Population size, log	-0.00	-0.00	0.00
	(0.01)	(0.01)	(0.01)
Reported Heads × Margin 2015	-0.18	-0.17	-0.18
	(0.18)	(0.18)	(0.18)
Constant	-0.03	-0.02	-0.06
	(0.14)	(0.14)	(0.14)
Party Dummies	Yes	Yes	Yes
Observations	749	758	796

Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Alternative standard error specification. In order to examine whether our results are robust to the standard error specification that we use, we also provide the results with heteroskedasticity consistent standard errors. We find that the relationships that we study are robust to such changes as the coefficients continue to be statistically significant at the same levels.

Table S5. Gender and major party regressions for robustness with robust standard errors

	(1)	(2)	(3)	(4)	(5)
	Rep. Heads	Rep. Heads	Rep. Heads	Rep. Heads	Rep. Heads
Interest Report	0.31***	0.33***	0.31***	0.33***	0.33***
	(0.05)	(0.06)	(0.05)	(0.06)	(0.06)
Gender	0.00	0.00			-0.00
	(0.04)	(0.04)			(0.04)
Major Party			0.08**	0.08**	0.08**
			(0.03)	(0.03)	(0.03)
Population size, log		-0.02		-0.02	-0.02
		(0.02)		(0.02)	(0.02)
Age		-0.00		-0.00	-0.00
		(0.00)		(0.00)	(0.00)
Margin 2015		-0.12		-0.14	-0.14
		(0.12)		(0.12)	(0.12)
Constant	0.41***	0.67***	0.37***	0.63***	0.63***
	(0.05)	(0.19)	(0.05)	(0.19)	(0.20)
Observations	759	700	759	700	700

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

Table S6. Reelection regressions for robustness with robust standard errors

	(1) Reelected	(2) Reelected	(3) Reelected	(4) Reelected
Reported Heads	0.08**	0.05*	0.08*	0.10*
	(0.04)	(0.03)	(0.05)	(0.06)
Ran for Reelection		0.77***	0.77***	
		(0.02)	(0.02)	
Margin 2015		0.40***	0.52***	0.66***
		(0.07)	(0.14)	(0.17)
Gender		-0.02	-0.02	-0.04
		(0.03)	(0.03)	(0.04)
Population size, log		-0.00	-0.00	-0.00
		(0.01)	(0.01)	(0.02)
Reported Heads × Margin 2015			-0.17	-0.26
			(0.16)	(0.20)
Constant	0.59***	0.01	-0.02	0.72***
	(0.03)	(0.14)	(0.14)	(0.17)
Party Dummies	No	Yes	Yes	Yes
Observations	758	754	754	624

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

Linear Probability Model

Fitted values. Linear probability models can suffer from unbounded predicted probabilities. This means that some predicted probabilities could, in theory, be smaller than 0 or larger than 1. As this makes the interpretation of the results difficult, we test whether unboundedness is an issue for our regressions.

Figure S1 shows the pooled fitted values for all regressions included in the paper (both for reported heads and reelection as dependent variables). The figure shows that the majority of the fitted values lies between 0.6 and 0.9, very few values are below 0 or above 1. This suggests that the linear probability model is suited for this setting and that unboundedness is not a pressing issue, here.

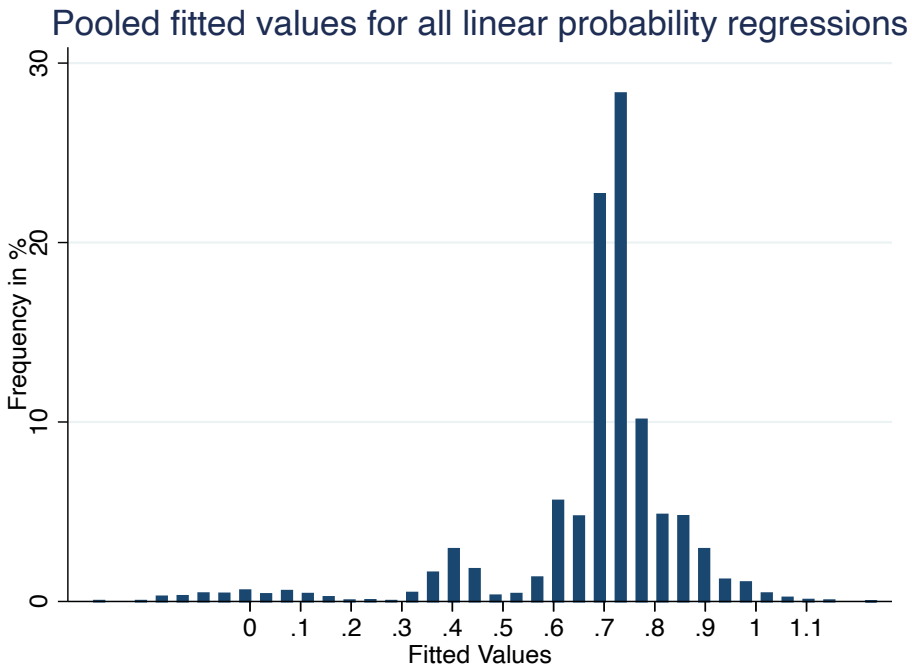

Fig. S1. Histogram of the pooled fitted values of all regressions included in the paper.

Survey

This section contains a translated excerpt of the text of the original survey that was sent to Spanish mayors. The formatting does not reflect how mayors saw the survey.

Thank you very much for participating in this survey!

It is necessary that the survey is answered by the mayor and no one else. Answering the questionnaire will take less than 15 minutes. The survey is about the mayors' opinions and political attitudes, was designed by professors at various universities and is financed through a project of the Ministerio de Economía y Hacienda (CSO2016-79569-P). The data will only be used for academic purposes and in no case for commercial or political reasons.

In conformity with the content of Art. 5 of the Ley Orgánica December 15/1999 of the Protección de Datos de Carácter Personal (Protection of Personal Data), through which the right of information about the use of collected data is regulated, we inform you that:

- Personal data that is supplied by completing this survey or in any other communication with you will be registered and treated with confidentiality under the responsibility of the professor of political science of the Instituto Barcelona de Estudios Internacionales Aina Gallego.
- The goal of the survey is to obtain data for an academic study. Only the members of the research team will have access to the data and they will not share it with third parties without full anonymisation. You have the right to exercise the corresponding rights of access, rectification, cancelation and opposition in conformity with the content of Ley 15/1999. The mentioned rights can be exercised through the following channels: through email to: agallego@ibei.org; and through standard mail to the following address: Edificio Mercè Rodoreda, Institut de Barcelona d'Estudis Internacionals, Calle de Ramón Trias Fargas, 25, 08005 Barcelona.

In case of any concern, you can contact the responsible researcher at the following telephone number: 935423036.

Do you agree to participate in this study?

- ○ Yes
- ○ No

To thank you for participating in this study, we can offer some mayors a personalised report with the results. It will be sent after the field work has been completed. Would you be interested in receiving a personalised report?

- ○ Very interested
- ○ Quite interested
- ○ Hardly interested
- ○ Not at all interested

Some people think that public services and social benefits should be improved, even if this requires paying higher taxes. Others think that it is more important to pay fewer taxes, even if this implies a reduction in public services and social benefits.
Please think about the taxes that you are paying and the services that you are using. Where would you place your opinion?

- ○ 0 Increase public services even if it requires paying more taxes
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10 Reduce taxes even if it requires reducing public services

There exist different opinions on what the government can do for the economy. Please indicate if you are in favour or against the following actions:

	Very in favor	Somewhat in favor	Neither in favor nor opposed	Somewhat opposed	Very opposed
Support industries to develop new products and technologies	○	○	○	○	○
Support industries in decline to protect jobs	○	○	○	○	○
Reduce regulation of businesses	○	○	○	○	○
Give public financial support to projects that create employment	○	○	○	○	○

Have you ever been unemployed for more than three months?

	Yes	No
At some point in your life	○	○
In the last 5 years (since 2013)	○	○

Think of your three best friends of working age.
Has one of them been unemployed for more than three months in the last five years (since 2013)?

- ○ Yes
- ○ No

Please think of three family members of working age (partner, children, parents, siblings).
Has one of them been unemployed for more than three months in the last five years (since 2013)?

- ○ Yes
- ○ No

Are you in favour of or against increasing public spending on unemployment benefits knowing that this can imply paying higher taxes?

- ○ 0 Very opposed to increasing spending
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10 Very supportive of increasing spending

What do you think primarily influences the economic position that people obtain in Spain?

- ○ 0 Effort, education, professional accomplishments
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10 Family origins, contacts, luck

Generally, are you prone to take risks or to try to avoid risks?

- 0 Not at all prone to take risks
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Very prone to take risks

When one speaks of politics, the expressions “left” and “right” are used. Where do you position yourself?

- ○ 0 Extreme left
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10 Extreme right

Would you consider yourself a religious person?

- ○ Very religious
- ○ Somewhat religious
- ○ A little bit religious
- ○ Not at all religious

In which professional situation were you before becoming mayor?

- ○ Self-employed
- ○ Employed in the private sector
- ○ Employed in the public sector (not as party official)
- ○ Party official
- ○ Student
- ○ Retired or pensioner
- ○ Unemployed
- ○ Other

And what was your previous occupation?

_____

Do you have a full-time political position?

- ○ Yes
- ○ No

If you were to decide to leave politics at the end of the legislature, what would you do?

- ○ Go back to my previous job
- ○ Find a new job
- ○ Retire
- ○ Other

Do you think the new jobs you could get would have a salary, commitment and satisfaction greater or lower than that of being mayor?

	A lot less	Somewhat lower	Same	Somewhat higher	A lot higher
Salary	○	○	○	○	○
Commitment in hours	○	○	○	○	○
Satisfaction	○	○	○	○	○

Would you like to run for office again at the next municipal elections when the legislature ends?

- ○ Definitely yes
- ○ Probably yes
- ○ Probably not
- ○ Definitely nor

If you could choose, where would you like to work in X years?

- ○ Continue working at the municipal council
- ○ In the national or autonomous parliament or government
- ○ In EU institutions or international affairs
- ○ For the party but not in public office
- ○ Outside of politics (private, public or service sector)
- ○ Retirement
- ○ I don't know

Which job did your parents have when you were a child?

- ○ Your father was: _____
- ○ Your mother was: _____

What is the highest degree that you have completed?

- ○ None
- ○ Unfinished primary
- ○ Completed primary (EGB or ESO)
- ○ Completed secondary (Bachiller, BUP etc.)
- ○ Professional education or similar
- ○ Undergraduate degree (diplomatura or licenciatura)
- ○ Master degree
- ○ Doctorate degree

If mayor answered with completed undergraduate degree, Master or Doctorate degree:

Which degree did you study for?

_____

Do you have children?

- ○ None
- ○ 1
- ○ 2
- ○ 3
- ○ 4 or more

At the moment, how much net income do all members of your household jointly generate per month? We do not ask for the exact quantity but that you indicate the income bracket.

- ○ Less or equal to 600 €
- ○ Between 601 and 1.200 €
- ○ Between 1201 and 1800 €
- ○ Between 1801 and 2400 €
- ○ Between 2401 and 3000 €
- ○ Between 3001 and 4500 €
- ○ Between 4501 and 6000 €
- ○ More than 6000 €
- ○ Prefer not to say

Are you a member of one of the following organisations or associations?

	Yes	No
Labor union	○	○
Business association	○	○
Other	○	○

What was the approximate average unemployment rate in your municipality in the last year?

_____

We mentioned above that we offer a personalised report with the results of this survey to participants when the field work has been completed.

Who receives this report is decided by a coin flip, without us being able to learn the outcome. (If you do not have a coin at hand, you can flip a virtual coin at https://caraocruz.es/.)

Please, flip the coin. What was the outcome?

- ○ Heads – receive the personalised report
- ○ Tails – do not receive the personalised report