Supplementary Appendix

Money and Time in Access to Public Services:
How do Citizens Evaluate Different Forms of Bureaucratic Corruption?

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Appendix A: Sample Design

Offerwise fielded the survey experiment between July 13 and August 29, 2021. It emailed 6,556 invitations to Paraguayans aged 18 and over; 4,042 responded to the invitation and 3,107 successfully completed the survey. Offerwise's proprietary consumer panel in Paraguay is built and maintained using social media and TV ads. The e-mail invitations detailed how long the survey would take and how many points respondents would earn from completing the survey; these points can be converted into local currency. After giving their consent, respondents were directed to the online survey, and they responded to demographic and public opinion questions before participating in our conjoint experiment. This study did not use deception, and the identities of all participants were kept anonymous. All procedures were reviewed and approved by the Institutional Review Boards of the authors' respective institutions.

Appendix B: Survey Sample Representativeness

Table A1 shows the comparison of the sample and population distributions of available data on age, gender, and education. We evaluate the representativeness of our sample against two population benchmarks: the nationally representative in-person sample of the 2018 Paraguayan Household Survey (2018 Encuesta Permanente de Hogares) and the nationally representative survey of the 2021 AmericasBarometer conducted via telephone (2021 Latin American Public Opinion Project). While the gender makeup of our sample is similar to that of the national population, our respondents are slightly younger than those in the 2018 EPH and 2021 LAPOP. Our sample differs most from the national population with respect to education: it overrepresents respondents with a secondary education or more, and underrepresents those with only a primary education.

Table A1. Comparison of Sample and Population Distributions of Age, Sex, and Education

Demographic	Subgroup	EPH	LAPOP	Sample
Age	18–24 years	0.20	0.22	0.39
	25–34 years	0.23	0.24	0.36
	35–44 years	0.21	0.19	0.16
	45–54 years	0.15	0.15	0.06
	55 years and over	0.21	0.19	0.02
Sex	Female	0.50	0.50	0.50
	Male	0.50	0.50	0.50
Education	None	0.01	0.03	0.00
	Primary	0.41	0.31	0.06
	Secondary	0.33	0.46	0.48
	Post-secondary or more	0.25	0.20	0.46

Appendix C: Perception of Inefficiency (Direct Question)

<u>Design</u>

We used a pre-registered direct question to capture perceptions of inefficiency before the priming and conjoint experiment as a robustness check to the priming experiment presented in the paper. However, exploring heterogenous treatment effects based on observed covariates presents challenges. Since the covariate used in the interaction (i.e., perceptions of inefficiency) was not randomized, we cannot make causal claims because this characteristic could indicate pretreatment differences among subjects rather than the reason why they exhibit different responses to the treatment (Gerber and Green 2012). When we compare the group of respondents with efficient and inefficient perceptions, we found imbalances between both groups in terms of their age, gender, and education. To mitigate the consequences of this problem, we use cardinality matching to generate a group of respondents with efficiency and inefficiency perceptions with a similar distribution of gender, age, and education (Zubizarreta, Paredes, and Rosenbaum 2014; Visconti and Zubizarreta 2018).[4] This matching procedure decreases the (observed) differences between these two groups, making them as comparable as possible (Stuart 2010; Rosenbaum 2010). After this statistical adjustment, we know that any heterogenous effect we observe cannot be explained by differences in age, gender, or education (see Appendix H for details). We acknowledge that matching is not an identification strategy (Sekhon 2009), and that hidden biases can still be present after addressing overt biases (Rosenbaum, 2010).
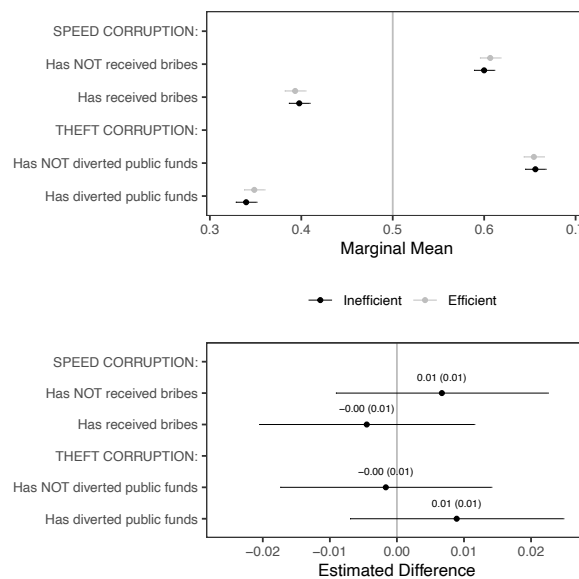
<u>Results</u>

Figure A1. Conditional Marginal Means for Perceptions of Efficiency
(Normative Outcome: Promotion). Full results are reported in Appendix D.

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[4] We use matching to address an unanticipated problem; therefore, this is a deviation from the pre-analysis plan. See Appendix K for more details.
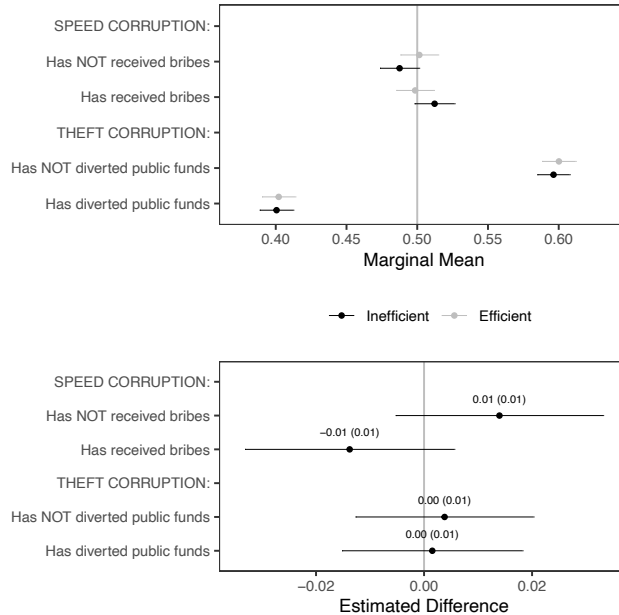
Figure A2. Conditional Marginal Means for Perceptions of Efficiency (Strategic Outcome: Assistance). Full results are reported in Appendix D.

References

Gerber, Alan S., and Donald P. Green. 2012. *Field Experiments: Design, Analysis, and Interpretation*. New York: W.W. Norton.

Rosenbaum, Paul R. 2010. *Design of Observational Studies*. New York: Springer.

Sekhon, Jasjeet S. 2009. "Opiates for the Matches: Matching Methods for Causal Inference." *Annual Review of Political Science* 12 (1):487-508.

Stuart, Elizabeth A. 2010. "Matching Methods for Causal Inference: A Review and a Look Forward." *Statistical Science* 25 (1):1-21.

Visconti, Giancarlo, and José Zubizarreta. 2018. "Handling Limited Overlap in Observational Studies with Cardinality Matching." *Observational Studies* 4 (1):217-249.

Zubizarreta, José R., Ricardo D. Paredes, and Paul R. Rosenbaum. 2014. "Matching for balance, pairing for heterogeneity in an observational study of the effectiveness of for-profit and not-for-profit high schools in Chile." *The Annals of Applied Statistics* 8 (1):204-231.

Appendix D: Marginal Means Results

Tables A2 and A3 report the main results from the paper when using MMs in table format by including estimates, standard errors, and 95% confidence intervals for all the attribute levels included in the conjoint analysis.

Table A2. Probability of Being Preferred (Normative Outcome: Promotion)

Feature	Level	Estimate	Std. Error	95% CI
Speed Corruption	Has received bribes	0.40	0.00	[0.39-0.41]
Speed Corruption	Has NOT received bribes	0.60	0.00	[0.59-0.61]
Theft Corruption	Has diverted public funds	0.34	0.00	[0.33-0.35]
Theft Corruption	Has NOT diverted public funds	0.66	0.00	[0.65-0.67]
Gender	Woman	0.52	0.00	[0.51-0.52]
Gender	Man	0.48	0.00	[0.48-0.49]
Partisanship	No party affiliation	0.54	0.00	[0.53-0.55]
Partisanship	Radical Auténtico Party	0.47	0.00	[0.46-0.48]
Partisanship	Colorado Party	0.48	0.00	[0.47-0.49]
Age	50 years old	0.49	0.00	[0.48-0.50]
Age	40 years old	0.50	0.00	[0.49-0.51]
Age	30 years old	0.51	0.00	[0.50-0.52]
Education	Primary education	0.45	0.00	[0.44-0.46]
Education	Secondary education	0.50	0.00	[0.49-0.51]
Education	College education	0.55	0.00	[0.54-0.56]

Note: 31,070 observations. Expansion of results reported in Figure 2.

Table A3. Probability of Being Preferred (Strategic Outcome: Assistance)

Feature	Level	Estimate	Std. Error	95% CI
Speed Corruption	Has received bribes	0.51	0.00	[0.51,0.52]
Speed Corruption	Has NOT received bribes	0.49	0.00	[0.48,0.50]
Theft Corruption	Has diverted public funds	0.40	0.00	[0.39,0.41]
Theft Corruption	Has NOT diverted public funds	0.60	0.00	[0.59,0.61]
Gender	Woman	0.51	0.00	[0.51,0.52]
Gender	Man	0.49	0.00	[0.48,0.49]
Partisanship	No party affiliation	0.52	0.00	[0.52,0.53]
Partisanship	Radical Auténtico Party	0.48	0.00	[0.47,0.49]
Partisanship	Colorado Party	0.49	0.00	[0.48,0.50]
Age	50 years old	0.49	0.00	[0.48,0.50]
Age	40 years old	0.51	0.00	[0.50,0.52]
Age	30 years old	0.51	0.00	[0.50,0.51]
Education	Primary education	0.46	0.00	[0.45,0.47]
Education	Secondary education	0.50	0.00	[0.49,0.51]
Education	College education	0.54	0.00	[0.53,0.55]

Note: 31,070 observations. Expansion of results reported in Figure 3.

Table A4. Conditional Marginal Means for Priming Experiment
(Normative Outcome: Promotion).

Result	Feature	Level	Estimate	Std.error	95% CI
Control	Speed Corruption	Has received bribes	0.40	0.00	(0.39, 0.41)
Control	Speed Corruption	Has NOT received bribes	0.60	0.00	(0.59, 0.60)
Control	Theft Corruption	Has diverted public funds	0.34	0.00	(0.33, 0.35)
Control	Theft Corruption	Has NOT diverted public funds	0.66	0.00	(0.65, 0.67)
Control	Gender	Woman	0.51	0.00	(0.51, 0.52)
Control	Gender	Man	0.49	0.00	(0.48, 0.50)
Control	Partisanship	No party affiliation	0.53	0.01	(0.52, 0.54)
Control	Partisanship	Liberal Radical Auténtico party	0.47	0.01	(0.46, 0.49)
Control	Partisanship	Colorado party	0.48	0.00	(0.47, 0.49)
Control	Age	50 years old	0.49	0.00	(0.48, 0.50]
Control	Age	40 years old	0.50	0.01	(0.49, 0.51)
Control	Age	30 years old	0.51	0.00	(0.50, 0.52)
Control	Education	Primary education	0.45	0.00	(0.44, 0.46)
Control	Education	Secondary education	0.50	0.01	(0.49, 0.52)
Control	Education	College education	0.55	0.01	(0.54, 0.56)
Treatment	Speed Corruption	Has received bribes	0.40	0.00	(0.39, 0.41)
Treatment	Speed Corruption	Has NOT received bribes	0.60	0.00	(0.59, 0.61)
Treatment	Theft Corruption	Has diverted public funds	0.34	0.00	(0.33, 0.35)
Treatment	Theft Corruption	Has NOT diverted public funds	0.66	0.00	(0.65, 0.67)
Treatment	Gender	Woman	0.52	0.00	(0.51, 0.53)
Treatment	Gender	Man	0.48	0.00	(0.47, 0.49)
Treatment	Partisanship	No party affiliation	0.55	0.01	(0.53, 0.56)
Treatment	Partisanship	Liberal Radical Auténtico party	0.46	0.01	(0.45, 0.48)
Treatment	Partisanship	Colorado party	0.48	0.00	(0.47, 0.49)
Treatment	Age	50 years old	0.49	0.01	(0.48, 0.50)
Treatment	Age	40 years old	0.50	0.01	(0.49, 0.51)
Treatment	Age	30 years old	0.51	0.00	(0.50, 0.52)
Treatment	Education	Primary education	0.45	0.00	(0.44, 0.46)
Treatment	Education	Secondary education	0.50	0.01	(0.49, 0.51)
Treatment	Education	College education	0.55	0.01	(0.54, 0.56)
Treatment - Control	Speed Corruption	Has received bribes	-0.01	0.01	(-0.02, 0.01)
Treatment - Control	Speed Corruption	Has NOT received bribes	0.01	0.01	(-0.01, 0.02)
Treatment - Control	Theft Corruption	Has diverted public funds	0.00	0.01	(-0.01, 0.01)
Treatment - Control	Theft Corruption	Has NOT diverted public funds	0.00	0.01	(-0.01, 0.02)
Treatment - Control	Gender	Woman	0.01	0.01	(-0.01, 0.02)

	Feature	Level			
Treatment - Control	Gender	Man	-0.01	0.01	(-0.02, 0.01)
Treatment - Control	Partisanship	No party affiliation	0.01	0.01	(0.00, 0.02)
Treatment - Control	Partisanship	Liberal Radical Auténtico party	-0.01	0.01	(-0.03, 0.01)
Treatment - Control	Partisanship	Colorado party	0.00	0.01	(-0.02, 0.01)
Treatment - Control	Age	50 years old	0.00	0.01	(-0.01, 0.02)
Treatment - Control	Age	40 years old	0.00	0.01	(-0.02, 0.02)
Treatment - Control	Age	30 years old	0.00	0.01	(-0.02, 0.01)
Treatment - Control	Education	Primary education	0.01	0.01	(-0.01, 0.02)
Treatment - Control	Education	Secondary education	0.00	0.01	(-0.02, 0.02)
Treatment - Control	Education	College education	0.00	0.01	(-0.02, 0.01)

Note: 31,070 observations (Control: 15430 and Treatment: 15640). Expansion of results reported in Figure 4.

Table A5. Conditional Marginal Means for Priming Experiment
(Strategic Outcome: Assistance)

Result	Feature	Level	Estimate	Std.error	95% CI
Control	Speed Corruption	Has received bribes	0.51	0.01	(0.50, 0.52)
Control	Speed Corruption	Has NOT received bribes	0.49	0.01	(0.48, 0.50)
Control	Theft Corruption	Has diverted public funds	0.40	0.00	(0.39, 0.41)
Control	Theft Corruption	Has NOT diverted public funds	0.60	0.00	(0.59, 0.60)
Control	Gender	Woman	0.51	0.00	(0.50, 0.52)
Control	Gender	Man	0.49	0.00	(0.48, 0.50)
Control	Partisanship	No party affiliation	0.52	0.01	(0.51, 0.53)
Control	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.47, 0.50)
Control	Partisanship	Colorado party	0.49	0.00	(0.48, 0.50)
Control	Age	50 years old	0.49	0.01	(0.48, 0.50)
Control	Age	40 years old	0.51	0.01	(0.49, 0.52)
Control	Age	30 years old	0.51	0.00	(0.50, 0.51)
Control	Education	Primary education	0.45	0.00	(0.44, 0.46)
Control	Education	Secondary education	0.51	0.01	(0.49, 0.52)
Control	Education	College education	0.54	0.01	(0.53, 0.55)
Treatment	Speed Corruption	Has received bribes	0.51	0.01	(0.50, 0.52)
Treatment	Speed Corruption	Has NOT received bribes	0.49	0.01	(0.48, 0.50)
Treatment	Theft Corruption	Has diverted public funds	0.40	0.00	(0.39, 0.41)
Treatment	Theft Corruption	Has NOT diverted public funds	0.60	0.00	(0.59, 0.61)
Treatment	Gender	Woman	0.51	0.00	(0.50, 0.52)
Treatment	Gender	Man	0.49	0.00	(0.48, 0.50)
Treatment	Partisanship	No party affiliation	0.52	0.01	(0.51, 0.53)
Treatment	Partisanship	Liberal Radical Auténtico party	0.47	0.01	(0.46, 0.48)
Treatment	Partisanship	Colorado party	0.49	0.00	(0.49, 0.50)

Treatment	Age	50 years old	0.49	0.01	(0.48, 0.50)
Treatment	Age	40 years old	0.51	0.01	0.49, 0.52)
Treatment	Age	30 years old	0.51	0.00	(0.50, 0.52)
Treatment	Education	Primary education	0.47	0.00	(0.46, 0.48)
Treatment	Education	Secondary education	0.49	0.01	(0.48, 0.51)
Treatment	Education	College education	0.54	0.01	(0.53, 0.55)
Treatment - Control	Speed Corruption	Has received bribes	0.00	0.01	(-0.01, 0.02)
Treatment - Control	Speed Corruption	Has NOT received bribes	0.00	0.01	(-0.02, 001)
Treatment - Control	Theft Corruption	Has diverted public funds	0.00	0.01	(-0.02, 0.01)
Treatment - Control	Theft Corruption	Has NOT diverted public funds	0.01	0.01	(-0.01, 0.02)
Treatment - Control	Gender	Woman	0.00	0.01	(-0.01, 0.01)
Treatment - Control	Gender	Man	0.00	0.01	(-0.01, 0.01)
Treatment - Control	Partisanship	No party affiliation	0.00	0.01	(-0.01, 0.02)
Treatment - Control	Partisanship	Liberal Radical Auténtico party	-0.01	0.01	(-0.03, 0.01)
Treatment - Control	Partisanship	Colorado party	0.01	0.01	(-0.01, 0.02)
Treatment - Control	Age	50 years old	0.00	0.01	(-0.01, 0.01)
Treatment - Control	Age	40 years old	0.00	0.01	(-0.02, 0.02)
Treatment - Control	Age	30 years old	0.00	0.01	(-0.01, 0.01)
Treatment - Control	Education	Primary education	0.02	0.01	(0.00, 0.03)
Treatment - Control	Education	Secondary education	-0.01	0.01	(-0.03, 0.00)
Treatment - Control	Education	College education	-0.01	0.01	(-0.02, 0.01)

Note: 31,070 observations (Control: 15430 and Treatment: 15640). Expansion of results reported in Figure 5.

Table A6. Conditional Marginal Means for Perceptions of Efficiency
(Normative Outcome: Promotion)

Result	Feature	Level	Estimate	Std.error	95% CI
Inefficient	Speed Corruption	Has received bribes	0.40	0.01	(0.39, 0.41)
Inefficient	Speed Corruption	Has NOT received bribes	0.60	0.01	(0.59, 0.61)
Inefficient	Theft Corruption	Has diverted public funds	0.34	0.01	(0.33, 0.35)
Inefficient	Theft Corruption	Has NOT diverted public funds	0.66	0.01	(0.64, 0.67)
Inefficient	Gender	Woman	0.52	0.01	(0.51, 0.53)
Inefficient	Gender	Man	0.48	0.01	(0.47, 0.49)
Inefficient	Partisanship	No party affiliation	0.55	0.01	(0.53, 0.56)
Inefficient	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.46, 0.49)
Inefficient	Partisanship	Colorado party	0.47	0.01	(0.46, 0.48)
Inefficient	Age	50 years old	0.49	0.01	(0.47, 0.50)
Inefficient	Age	40 years old	0.50	0.01	(0.49, 0.52)
Inefficient	Age	30 years old	0.51	0.01	(0.50, 0.52)
Inefficient	Education	Primary education	0.45	0.01	(0.44, 0.46)
Inefficient	Education	Secondary education	0.50	0.01	(0.48, 0.52)
Inefficient	Education	College education	0.55	0.01	(0.54, 0.57)
Efficient	Speed Corruption	Has received bribes	0.39	0.01	(0.38, 0.40)
Efficient	Speed Corruption	Has NOT received bribes	0.61	0.01	(0.60, 0.62)
Efficient	Theft Corruption	Has diverted public funds	0.35	0.01	(0.34, 0.36)
Efficient	Theft Corruption	Has NOT diverted public funds	0.65	0.01	(0.64, 0.67)
Efficient	Gender	Woman	0.52	0.01	(0.51, 0.53)
Efficient	Gender	Man	0.48	0.01	(0.47, 0.49)
Efficient	Partisanship	No party affiliation	0.54	0.01	(0.53, 0.55)
Efficient	Partisanship	Liberal Radical Auténtico party	0.46	0.01	(0.44, 0.48)
Efficient	Partisanship	Colorado party	0.49	0.01	(0.48, 0.50)
Efficient	Age	50 years old	0.49	0.01	(0.48, 0.50)
Efficient	Age	40 years old	0.50	0.01	(0.48, 0.52)
Efficient	Age	30 years old	0.51	0.01	(0.50, 0.52)
Efficient	Education	Primary education	0.44	0.01	(0.43, 0.45)
Efficient	Education	Secondary education	0.50	0.01	(0.49, 0.52)
Efficient	Education	College education	0.56	0.01	(0.55, 0.57)
Eff - Ineff	Speed Corruption	Has received bribes	0.00	0.01	(-0.02, 0.01)
Eff - Ineff	Speed Corruption	Has NOT received bribes	0.01	0.01	(-0.01, 0.02)
Eff - Ineff	Theft Corruption	Has diverted public funds	0.01	0.01	(-0.01, 0.02)
Eff - Ineff	Theft Corruption	Has NOT diverted public funds	0.00	0.01	(-0.02, 0.01)
Eff - Ineff	Gender	Woman	0.00	0.01	(-0.02, 0.01)
Eff - Ineff	Gender	Man	0.00	0.01	(-0.01, 0.02)

Result	Feature	Level	Estimate	Std.error	95% CI
Eff - Ineff	Partisanship	No party affiliation	-0.01	0.01	(-0.03, 0.01)
Eff - Ineff	Partisanship	Liberal Radical Auténtico party	-0.02	0.01	(-0.04, 0.01)
Eff - Ineff	Partisanship	Colorado party	0.02	0.01	(0.00, 0.04)
Eff - Ineff	Age	50 years old	0.00	0.01	(-0.02, 0.02)
Eff - Ineff	Age	40 years old	-0.01	0.01	(-0.03, 0.02)
Eff - Ineff	Age	30 years old	0.00	0.01	(-0.02, 0.02)
Eff - Ineff	Education	Primary education	-0.01	0.01	(-0.03, 0.01)
Eff - Ineff	Education	Secondary education	0.00	0.01	(-0.02, 0.03)
Eff - Ineff	Education	College education	0.01	0.01	(-0.01, 0.03)

Note: 17,452 observations (Matched Efficiency: 8,726 and Matched Inefficiency: 8,726). Expansion of results reported in Figure A1.

Table A7. Conditional Marginal Means for Perceptions of Efficiency
(Strategic Outcome: Assistance)

Result	Feature	Level	Estimate	Std.error	95% CI
Inefficient	Speed Corruption	Has received bribes	0.51	0.01	(0.50, 0.53)
Inefficient	Speed Corruption	Has NOT received bribes	0.49	0.01	(0.47, 0.50)
Inefficient	Theft Corruption	Has diverted public funds	0.40	0.01	(0.39, 0.41)
Inefficient	Theft Corruption	Has NOT diverted public funds	0.60	0.01	(0.58, 0.61)
Inefficient	Gender	Woman	0.51	0.01	(0.50, 0.52)
Inefficient	Gender	Man	0.49	0.01	(0.48, 0.50)
Inefficient	Partisanship	No party affiliation	0.53	0.01	(0.51, 0.54)
Inefficient	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.46, 0.50)
Inefficient	Partisanship	Colorado party	0.48	0.01	(0.47, 0.50)
Inefficient	Age	50 years old	0.49	0.01	(0.48, 0.51)
Inefficient	Age	40 years old	0.51	0.01	(0.49, 0.53)
Inefficient	Age	30 years old	0.50	0.01	(0.49, 0.51)
Inefficient	Education	Primary education	0.47	0.01	(0.45, 0.48)
Inefficient	Education	Secondary education	0.50	0.01	(0.48, 0.52)
Inefficient	Education	College education	0.54	0.01	(0.52, 0.55)
Efficient	Speed Corruption	Has received bribes	0.50	0.01	(0.49, 0.51)
Efficient	Speed Corruption	Has NOT received bribes	0.50	0.01	(0.49, 0.51)
Efficient	Theft Corruption	Has diverted public funds	0.40	0.01	(0.39, 0.41)
Efficient	Theft Corruption	Has NOT diverted public funds	0.60	0.01	(0.59, 0.61)
Efficient	Gender	Woman	0.52	0.01	(0.51, 0.53)
Efficient	Gender	Man	0.48	0.01	(0.47, 0.49)
Efficient	Partisanship	No party affiliation	0.52	0.01	(0.51, 0.54)
Efficient	Partisanship	Liberal Radical Auténtico party	0.47	0.01	(0.45, 0.49)
Efficient	Partisanship	Colorado party	0.50	0.01	(0.48, 0.51)
Efficient	Age	50 years old	0.48	0.01	(0.47, 0.,49)

Efficient	Age	40 years old	0.52	0.01	(0.50, 0.54)
Efficient	Age	30 years old	0.51	0.01	(0.50, 0.52)
Efficient	Education	Primary education	0.46	0.01	(0.44, 0.47)
Efficient	Education	Secondary education	0.50	0.01	(0.48, 0.51)
Efficient	Education	College education	0.55	0.01	(0.53, 0.56)
Eff - Ineff	Speed Corruption	Has received bribes	-0.01	0.01	(-0.03, 0.01)
Eff - Ineff	Speed Corruption	Has NOT received bribes	0.01	0.01	(-0.01, 0.03)
Eff - Ineff	Theft Corruption	Has diverted public funds	0.00	0.01	(-0.02, 0.02)
Eff - Ineff	Theft Corruption	Has NOT diverted public funds	0.00	0.01	(-0.01, 0.02)
Eff - Ineff	Gender	Woman	0.01	0.01	(0.00, 0.03)
Eff - Ineff	Gender	Man	-0.01	0.01	(-0.03, 0.00)
Eff - Ineff	Partisanship	No party affiliation	0.00	0.01	(-0.02, 0.02)
Eff - Ineff	Partisanship	Liberal Radical Auténtico party	-0.01	0.01	(-0.04, 0.02)
Eff - Ineff	Partisanship	Colorado party	0.01	0.01	(-0.01, 0.03)
Eff - Ineff	Age	50 years old	-0.01	0.01	(-0.03, 0.01)
Eff - Ineff	Age	40 years old	0.01	0.01	(-0.02, 0.03)
Eff - Ineff	Age	30 years old	0.01	0.01	(-0.01, 0.02)
Eff - Ineff	Education	Primary education	-0.01	0.01	(-0.03, 0.01)
Eff - Ineff	Education	Secondary education	0.00	0.01	(-0.03, 0.02)
Eff - Ineff	Education	College education	0.01	0.01	(-0.01, 0.03)

Note: 17,452 observations (Matched Efficiency: 8,726 and Matched Inefficiency: 8,726). Expansion of results reported in Figure A2.

Appendix E: AMCE Results

Tables A8 and A9 report the results when using the AMCE in table format by including estimates, standard errors, and 95% confidence intervals for all the attribute levels included in the conjoint analysis.

Table A8. Probability of Being Preferred (Normative Outcome: Promotion), Average Marginal Component Effect

Feature	Level	Estimate	Std. Error	95% CI
Speed Corruption	Has received bribes	0.00	NA	NA
Speed Corruption	Has NOT received bribes	0.20	0.01	[0.18, 0.21]
Theft Corruption	Has diverted public funds	0.00	NA	NA
Theft Corruption	Has NOT diverted public funds	0.32	0.01	[0.31, 0.33]
Gender	Woman	0.00	NA	NA
Gender	Man	-0.04	0.01	[-0.05, -0.02]
Partisanship	No party affiliation	0.00	NA	NA
Partisanship	Radical Auténtico Party	-0.06	0.01	[-0.08, -0.05]
Partisanship	Colorado Party	-0.06	0.01	[-0.07, -0.05]
Age	50 years old	0.00	NA	NA
Age	40 years old	0.01	0.01	[-0.00, 0.02]
Age	30 years old	0.02	0.01	[0.01, 0.03]
Education	Primary education	0.00	NA	NA
Education	Secondary education	0.06	0.01	[0.05, 0.07]
Education	College education	0.10	0.01	[0.09, 0.12]

Note: 31,070 observations.

Table A9. Probability of Being Preferred (Strategic Outcome: Assistance), Average Marginal Component Effect

Feature	Level	Estimate	Std. Error	95% CI
Speed Corruption	Has received bribes	0.00	NA	NA
Speed Corruption	Has NOT received bribes	-0.02	0.01	[-0.04, -0.01]
Theft Corruption	Has diverted public funds	0.00	NA	NA
Theft Corruption	Has NOT diverted public funds	0.20	0.01	[0.19, 0.21]
Gender	Woman	0.00	NA	NA
Gender	Man	-0.03	0.01	[-0.04, -0.02]
Partisanship	No party affiliation	0.00	NA	NA
Partisanship	Radical Auténtico Party	-0.05	0.01	[-0.06, -0.03]
Partisanship	Colorado Party	-0.03	0.01	[-0.05, -0.02]
Age	50 years old	0.00	NA	NA
Age	40 years old	0.02	0.01	[0.00, 0.03]
Age	30 years old	0.02	0.01	[0.00, 0.03]
Education	Primary education	0.00	NA	NA
Education	Secondary education	0.04	0.01	[0.03, 0.06]
Education	College education	0.08	0.01	[0.07, 0.09]

Note: 31,070 observations.

Appendix F: Conjoint Diagnostics

In this section we provide the diagnostics for the conjoint experiment. To give us more flexibility when implementing this analysis, we do not use the Cregg package. Instead, we directly implement a linear regression with clustered standard errors at the responded level. Since we use the AMCE for these analyses, benchmark attributes are not reported. Table A10 checks the randomization of attributes by regressing respondents' age on the public official's attributes. As expected, we find no evidence that any of the randomized attributes explain the survey respondents' age.

Table A10. Balance Test (Age)

	Outcome
	Age
Speed Corruption: Has received bribes	-0.113
	(0.106)
Theft Corruption: Has diverted public funds	0.026
	(0.104)
Gender: Woman	0.088
	(0.110)
Partisanship: Radical Autentico Party	-0.013
	(0.155)
Partisanship: Colorado Party	-0.018
	(0.126)
Age: 40 years old	-0.212
	(0.158)
Age: 50 years old	-0.115
	(0.130)
Education: Secondary education	-0.029
	(0.161)
Education: College education	0.051
	(0.127)

Note: $^{*}p<0.05;$ $^{**}p<0.01;$ $^{***}p<0.001$
31,070 observations.

Table A11 provides the results when including an interaction for the pair analyzed (of a total of five pairs per respondent). We only report the results for the interaction and the attributes of interest. The interaction captures the differential effects of the randomized attributes on being chosen when comparing the first pair (which we use as the benchmark) to the four other pairs. As expected, there is no systematic distinction for the attributes of interest. In other words, being in

the first or fifth pair is not important for survey respondents when stating their preferences about public officials.

Table A11. Pair Order Effects

Speed Corruption: Has received bribes* Pair 2	-0.001
	(0.016)
Speed Corruption: Has received bribes* Pair 3	-0.013
	(0.016)
Speed Corruption: Has received bribes* Pair 4	0.001
	(0.016)
Speed Corruption: Has received bribes* Pair 5	0.028
	(0.016)
Theft Corruption: Has diverted public funds* Pair 2	0.004
	(0.015)
Theft Corruption: Has diverted public funds* Pair 3	-0.002
	(0.016)
Theft Corruption: Has diverted public funds* Pair 4	0.005
	(0.016)
Theft Corruption: Has diverted public funds* Pair 5	-0.031
	(0.017)

Note: $^{*}p<0.05; ^{**}p<0.01; ^{***}p<0.001$

31,070 observations.

Table A12 provides the results when including an interaction for the order of the public official in the pair of candidates evaluated in the conjoint analysis. We only report the results for the interaction and the attributes of interest. The interaction captures the differential effects of the randomized attributes on being chosen when comparing the first and second profiles within a pair. As expected, there is no systematic distinction for the attributes of interest (first profile used as a benchmark). In other words, being in the first or second profile is not important for survey respondents when stating their preferences about public officials.

Table A12. Profile Order Effects

Speed Corruption: Has NOT received bribes* Public Official 2	-0.015
	(0.011)

Theft Corruption: Has NOT diverted public funds* Public Official 2	0.018
	(0.010)

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

31,070 observations.

Appendix G: Multiple Comparisons

Multiple comparison problems are common in conjoint experiments when numerous hypotheses are tested. For example, when using an AMCE for the normative and strategic outcomes, the p-values for both speed and money corruption are smaller than $2 * 10^{-16}$. No multiple comparison corrections would make these p-values nonsignificant (e.g., Bonferroni, Holm, or Benjamini-Hochberg) even in the strictest scenario, in which we considered each conjoint attribute to be a hypothesis regardless of whether it was pre-registered. As a result, our findings are robust to adjusting for a multiple comparison problem.

Appendix H: Cardinality Matching

We use the matching for efficiency perceptions to explain the procedure, but it is the same regardless of the variable used in the process. Before matching, we have 19,300 units in the control group and 8,980 in the treated group. After matching, we have 8,726 units in each group. We use cardinality matching since it allows us to find covariate balance by design rather than after multiple iterations. Additionally, the matched sample can be constrained to look similar to the unmatched or entire sample, which improves the external validity of the analysis. Table A13 shows that people with perceptions of efficiency (i.e., treated group), perceptions of inefficiency (i.e., control group), and the entire sample have similar distributions of observed characteristics (i.e., education, female, age, and income).

Table A13. Covariate Balance after Matching

Covariate	Mean entire sample	Mean treated group	Mean control group
Education	0.44	0.43	0.43
Female	0.52	0.53	0.53
Age	29.47	29.24	29.24
Income	0.48	0.48	0.50

Note: Before matching: 19,300 observations. After matching: 17,452 (8,726 in each group).

Appendix I: Representative Matching

As reported above, our sample is different from nationally representative samples in Paraguay, particularly regarding the educational characteristics of the respondents. To address this concern, when using matching to evaluate the differences between people with efficient and inefficient perceptions, we use the 2018 nationally representative household survey conducted in Paraguay

as a template. Therefore, the matched sample will look similar to a nationally representative sample on some key observed characteristics.

As reported in Table A14, 25% of respondents have more than high school instruction, 50% are female, and the average age is 28 when using a nationally representative sample. After matching with these constraints, the efficient and inefficient groups look like each other but also look similar to the nationally representative sample. After matching, we have 7,103 units in each group.

Table A14. Covariate Balance after Representative Matching

Covariate	Mean representative sample	Mean treated group	Mean control group
Education (More than high school)	0.25	0.26	0.26
Female	0.50	0.51	0.51
Age	28	29	29

Note: Before matching: 19,300 observations. After matching: 14,206 (7,103 in each group).

Figures A3 and A4 replicate the analysis from Figures A1 and A2 using a matched sample that looks similar to a nationally representative sample regarding education, gender, and age. The findings are not conditional on the sample used for the analysis: perceptions of inefficiency are not important to understanding preferences for theft or speed corruption.
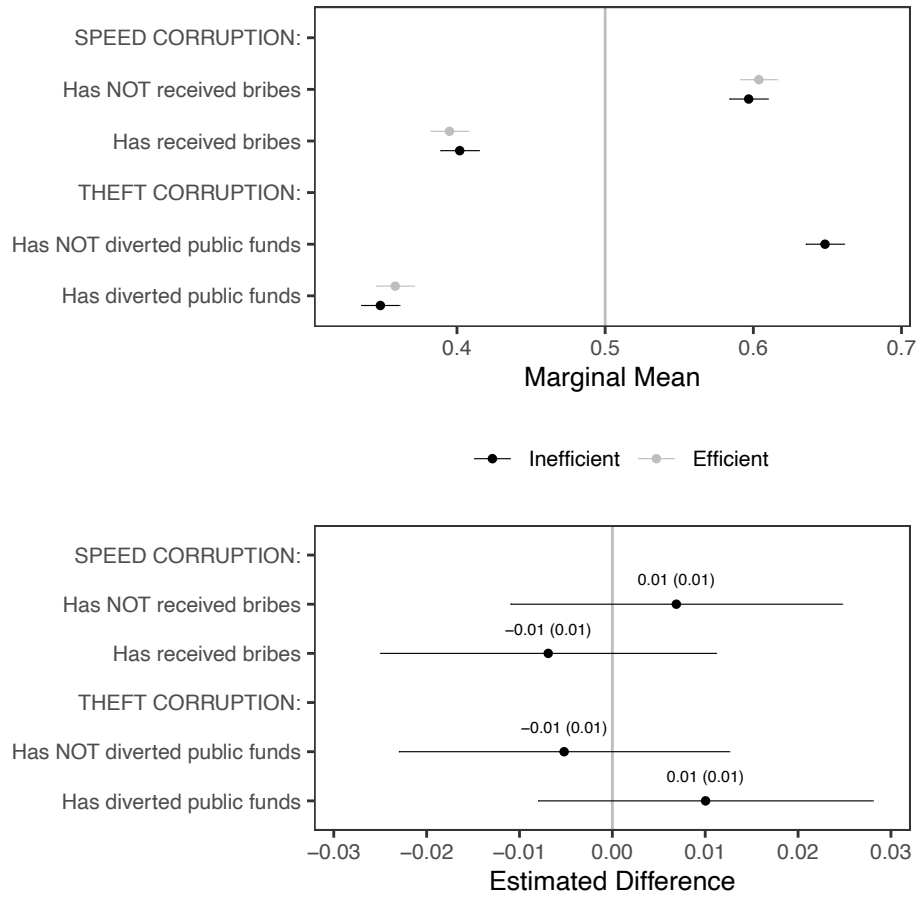
Figure A3. Conditional Marginal Means for Perceptions of Efficiency (Normative Outcome: Promotion), Sample Matching
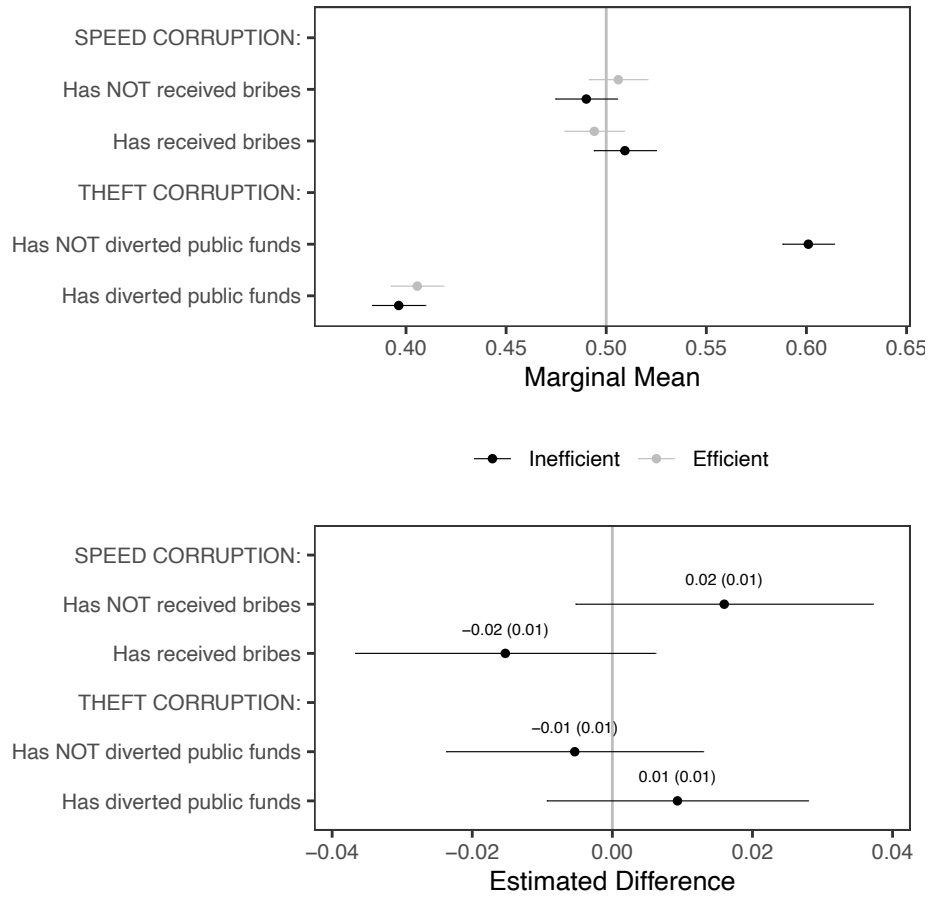
Figure A4. Conditional Marginal Means for Perceptions of Efficiency (Strategic Outcome: Assistance), Sample Matching

Appendix J: Marginal Means for Income and Education

Table A15. Conditional Marginal Means and Estimated Differences for Income (Normative Outcome: Promotion)

Result	Feature	Level	Estimate	Std.error	95% CI
Below Median Income	Speed Corruption	Has received bribes	0.40	0.00	(0.39, 0.41)
Below Median Income	Speed Corruption	Has NOT received bribes	0.60	0.00	(0.59, 0.61)
Below Median Income	Theft Corruption	Has diverted public funds	0.36	0.01	(0.35, 0.37)
Below Median Income	Theft Corruption	Has NOT diverted public funds	0.63	0.00	(0.62, 0.64)
Below Median Income	Gender	Woman	0.52	0.00	(0.51, 0.53)
Below Median Income	Gender	Man	0.48	0.00	(0.47, 0.49)
Below Median Income	Partisanship	No party affiliation	0.53	0.01	(0.52, 0.54)
Below Median Income	Partisanship	Liberal Radical Auténtico party	0.47	0.01	(0.45, 0.48)
Below Median Income	Partisanship	Colorado party	0.49	0.01	(0.48, 0.50)
Below Median Income	Age	50 years old	0.49	0.01	(0.47, 0.50)
Below Median Income	Age	40 years old	0.51	0.01	(0.49, 0.52)
Below Median Income	Age	30 years old	0.51	0.01	(0.50, 0.52)
Below Median Income	Education	Primary education	0.44	0.01	(0.43, 0.45)
Below Median Income	Education	Secondary education	0.52	0.01	(0.50, 0.53)
Below Median Income	Education	College education	0.55	0.01	(0.54, 0.56)
Above Median Income	Speed Corruption	Has received bribes	0.40	0.01	(0.39, 0.41)
Above Median Income	Speed Corruption	Has NOT received bribes	0.60	0.01	(0.59, 0.61)
Above Median Income	Theft Corruption	Has diverted public funds	0.31	0.00	(0.30, 0.32)
Above Median Income	Theft Corruption	Has NOT diverted public funds	0.69	0.00	(0.68, 0.70)
Above Median Income	Gender	Woman	0.52	0.00	(0.51, 0.53)
Above Median Income	Gender	Man	0.48	0.00	(0.47, 0.49)
Above Median Income	Partisanship	No party affiliation	0.55	0.01	(0.54, 0.56)
Above Median Income	Partisanship	Liberal Radical Auténtico party	0.47	0.01	(0.45, 0.49)
Above Median Income	Partisanship	Colorado party	0.47	0.01	(0.46, 0.48)
Above Median Income	Age	50 years old	0.49	0.01	(0.48, 0.50)
Above Median Income	Age	40 years old	0.50	0.01	(0.48, 0.51)
Above Median Income	Age	30 years old	0.51	0.01	(0.50, 0.52)
Above Median Income	Education	Primary education	0.45	0.01	(0.43, 0.46)
Above Median Income	Education	Secondary education	0.50	0.01	(0.48, 0.51)
Above Median Income	Education	College education	0.56	0.01	(0.55, 0.57)
Above - Below	Speed Corruption	Has received bribes	0.00	0.01	(-0.02, 0.01)
Above - Below	Speed Corruption	Has NOT received bribes	0.00	0.01	(-0.01, 0.02)
Above - Below	Theft Corruption	Has diverted public funds	-0.05	0.01	(-0.07, -0.04)
Above - Below	Theft Corruption	Has NOT diverted public funds	0.05	0.01	(0.04, 0.07)

Result	Feature	Level	Estimate	Std.error	95% CI
Above - Below	Gender	Woman	0.00	0.01	(-0.01, 0.01)
Above - Below	Gender	Man	0.00	0.01	(-0.01, 0.01)
Above - Below	Partisanship	No party affiliation	0.02	0.01	(0.00, 0.04)
Above - Below	Partisanship	Liberal Radical Auténtico party	0.00	0.01	(-0.02, 0.03)
Above - Below	Partisanship	Colorado party	-0.02	0.01	(-0.04, 0.00)
Above - Below	Age	50 years old	0.00	0.01	(-0.01, 0.02)
Above - Below	Age	40 years old	-0.01	0.01	(-0.03, 0.01)
Above - Below	Age	30 years old	0.00	0.01	(-0.01, 0.02)
Above - Below	Education	Primary education	0.00	0.01	(-0.01, 0.02)
Above - Below	Education	Secondary education	-0.02	0.01	(-0.04, 0.00)
Above - Below	Education	College education	0.01	0.01	(-0.01, 0.03)

Note: 22,708 observations (Matched Below Median Income: 11,354 and
Matched Above Median Income: 11,354). Expansion of results reported in Figure 6.

Table A16. Conditional Marginal Means and Estimated Differences for Income (Strategic
Outcome: Assistance)

Result	Feature	Level	Estimate	Std.error	95% CI
Below Median Income	Speed Corruption	Has received bribes	0.49	0.01	(0.48, 0.50)
Below Median Income	Speed Corruption	Has NOT received bribes	0.51	0.01	(0.50, 0.52)
Below Median Income	Theft Corruption	Has diverted public funds	0.41	0.01	(0.40, 0.42)
Below Median Income	Theft Corruption	Has NOT diverted public funds	0.59	0.01	(0.58, 0.60)
Below Median Income	Gender	Woman	0.52	0.00	(0.51, 0.53)
Below Median Income	Gender	Man	0.48	0.00	(0.47, 0.49)
Below Median Income	Partisanship	No party affiliation	0.52	0.01	(0.51, 0.53)
Below Median Income	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.46, 0.50)
Below Median Income	Partisanship	Colorado party	0.49	0.01	(0.48, 0.50)
Below Median Income	Age	50 years old	0.50	0.01	(0.48, 0.51)
Below Median Income	Age	40 years old	0.50	0.01	(0.49, 0.52)
Below Median Income	Age	30 years old	0.50	0.01	(0.49, 0.51)
Below Median Income	Education	Primary education	0.47	0.01	(0.46, 0.48_
Below Median Income	Education	Secondary education	0.50	0.01	(0.49, 0.52)
Below Median Income	Education	College education	0.53	0.01	(0.52, 0.54)
Above Median Income	Speed Corruption	Has received bribes	0.53	0.01	(0.52, 0.54)
Above Median Income	Speed Corruption	Has NOT received bribes	0.47	0.01	(0.46, 0.48)
Above Median Income	Theft Corruption	Has diverted public funds	0.40	0.01	(0.38, 0.41)
Above Median Income	Theft Corruption	Has NOT diverted public funds	0.61	0.01	(0.59, 0.62)
Above Median Income	Gender	Woman	0.51	0.00	(0.50, 0.52)

Result	Feature	Level	Estimate	Std.error	95% CI
Above Median Income	Gender	Man	0.49	0.00	(0.48, 0.50)
Above Median Income	Partisanship	No party affiliation	0.53	0.01	(0.51, 0.54)
Above Median Income	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.46, 0.49)
Above Median Income	Partisanship	Colorado party	0.49	0.01	(0.48, 0.50)
Above Median Income	Age	50 years old	0.49	0.01	(0.48, 0.50)
Above Median Income	Age	40 years old	0.51	0.01	(0.49, 0.52)
Above Median Income	Age	30 years old	0.51	0.01	(0.50, 0.52)
Above Median Income	Education	Primary education	0.46	0.01	(0.45, 0.47)
Above Median Income	Education	Secondary education	0.49	0.01	(0.48, 0.51)
Above Median Income	Education	College education	0.55	0.01	(0.54, 0.56)
Above - Below	Speed Corruption	Has received bribes	0.04	0.01	(0.02, 0.06)
Above - Below	Speed Corruption	Has NOT received bribes	-0.04	0.01	(-0.06, -0.02)
Above - Below	Theft Corruption	Has diverted public funds	-0.01	0.01	(-0.03, 0.00)
Above - Below	Theft Corruption	Has NOT diverted public funds	0.02	0.01	(0.00, 0.03)
Above - Below	Gender	Woman	0.00	0.01	(-0.02, 0.01)
Above - Below	Gender	Man	0.00	0.01	(-0.01, 0.02)
Above - Below	Partisanship	No party affiliation	0.00	0.01	(-0.01, 0.02)
Above - Below	Partisanship	Liberal Radical Auténtico party	0.00	0.01	(-0.03, 0.02)
Above - Below	Partisanship	Colorado party	0.00	0.01	(-0.02, 0.01)
Above - Below	Age	50 years old	-0.01	0.01	(-0.02, 0.01)
Above - Below	Age	40 years old	0.01	0.01	(-0.02, 0.03)
Above - Below	Age	30 years old	0.00	0.01	(-0.01, 0.02)
Above - Below	Education	Primary education	-0.01	0.01	(-0.03, 0.01)
Above - Below	Education	Secondary education	-0.01	0.01	(-0.03, 0.01)
Above - Below	Education	College education	0.02	0.01	(0.00, 0.03)

Note: 22,708 observations (Matched Below Median Income: 11,354 and Matched Above Median Income: 11,354). Expansion of results reported in Figure 7.

Table A17. Conditional Marginal Means and Estimated Differences for Education (Normative Outcome: Promotion)

Result	Feature	Level	Estimate	Std.error	95% CI
High School or Less	Speed Corruption	Has received bribes	0.40	0.01	(0.39, 0.41)
High School or Less	Speed Corruption	Has NOT received bribes	0.60	0.01	(0.59, 0.61)
High School or Less	Theft Corruption	Has diverted public funds	0.36	0.01	(0.35, 0.37)
High School or Less	Theft Corruption	Has NOT diverted public funds	0.64	0.01	(0.63, 0.65)
High School or Less	Gender	Woman	0.52	0.01	(0.51, 0.53)
High School or Less	Gender	Man	0.48	0.00	(0.47, 0.49)
High School or Less	Partisanship	No party affiliation	0.54	0.01	(0.52, 0.55)
High School or Less	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.46, 0.50)

High School or Less	Partisanship	Colorado party	0.48	0.01	(0.46, 0.49)
High School or Less	Age	50 years old	0.48	0.01	(0.47, 0.49)
High School or Less	Age	40 years old	0.49	0.01	(0.48, 0.51)
High School or Less	Age	30 years old	0.52	0.01	(0.51, 0.53)
High School or Less	Education	Primary education	0.45	0.01	(0.44, 0.46)
High School or Less	Education	Secondary education	0.51	0.01	(0.49, 0.52)
High School or Less	Education	College education	0.55	0.01	(0.54, 0.56)
More than High School	Speed Corruption	Has received bribes	0.40	0.01	(0.39, 0.41)
More than High School	Speed Corruption	Has NOT received bribes	0.60	0.01	(0.59, 0.61)
More than High School	Theft Corruption	Has diverted public funds	0.33	0.01	(0.32, 0.34)
More than High School	Theft Corruption	Has NOT diverted public funds	0.67	0.01	(0.66, 0.69)
More than High School	Gender	Woman	0.52	0.00	(0.51, 0.53)
More than High School	Gender	Man	0.48	0.00	(0.47, 0.49)
More than High School	Partisanship	No party affiliation	0.55	0.01	(0.54, 0.56)
More than High School	Partisanship	Liberal Radical Auténtico party	0.45	0.01	(0.44, 0.47)
More than High School	Partisanship	Colorado party	0.48	0.01	(0.47, 0.49)
More than High School	Age	50 years old	0.50	0.01	(0.49, 0.51)
More than High School	Age	40 years old	0.50	0.01	(0.48, 0.52)
More than High School	Age	30 years old	0.50	0.01	(0.49, 0.51)
More than High School	Education	Primary education	0.45	0.01	(0.44, 0.46)
More than High School	Education	Secondary education	0.50	0.01	(0.48, 0.52)
More than High School	Education	College education	0.55	0.01	(0.54, 0.57)
Less - More	Speed Corruption	Has received bribes	0.00	0.01	(-0.01, 0.02)
Less - More	Speed Corruption	Has NOT received bribes	0.00	0.01	(-0.01, 0.01)
Less - More	Theft Corruption	Has diverted public funds	-0.03	0.01	(-0.05, 0.02)
Less - More	Theft Corruption	Has NOT diverted public funds	0.04	0.01	(0.02, 0.05)
Less - More	Gender	Woman	0.00	0.01	(-0.01, 0.01)
Less - More	Gender	Man	0.00	0.01	(-0.01, 0.01)
Less - More	Partisanship	No party affiliation	0.01	0.01	(0.00, 0.03)
Less - More	Partisanship	Liberal Radical Auténtico party	-0.03	0.01	(-0.05, 0.00)
Less - More	Partisanship	Colorado party	0.01	0.01	(-0.01, 0.02)
Less - More	Age	50 years old	0.01	0.01	(0.00, 0.03)
Less - More	Age	40 years old	0.01	0.01	(-0.02, 0.03)
Less - More	Age	30 years old	-0.02	0.01	(-0.03, 0.00)
Less - More	Education	Primary education	0.00	0.01	(-0.02, 0.01)
Less - More	Education	Secondary education	-0.01	0.01	(-0.03, 0.01)
Less - More	Education	College education	0.01	0.01	(-0.01, 0.02)

Note: 19,838 observations (Matched High School or Less: 9,919
and Matched More than High School: 9,919). Expansion of results reported in Figure 6.

Table A18. Conditional Marginal Means and Estimated Differences for Education (Strategic Outcome: Assistance)

Result	Feature	Level	Estimate	Std.error	95% CI
High School or Less	Speed Corruption	Has received bribes	0.50	0.01	(0.48, 0.51)
High School or Less	Speed Corruption	Has NOT received bribes	0.50	0.01	(0.49, 0.52)
High School or Less	Theft Corruption	Has diverted public funds	0.41	0.01	(0.40, 0.42)
High School or Less	Theft Corruption	Has NOT diverted public funds	0.59	0.01	(0.58, 0.60)
High School or Less	Gender	Woman	0.52	0.01	(0.51, 0.53)
High School or Less	Gender	Man	0.48	0.01	(0.47, 0.49)
High School or Less	Partisanship	No party affiliation	0.53	0.01	(0.52, 0.55)
High School or Less	Partisanship	Liberal Radical Auténtico party	0.48	0.01	(0.46, 0.49)
High School or Less	Partisanship	Colorado party	0.48	0.01	(0.47, 0.49)
High School or Less	Age	50 years old	0.48	0.01	(0.47, 0.50)
High School or Less	Age	40 years old	0.50	0.01	(0.48, 0.52)
High School or Less	Age	30 years old	0.52	0.01	(0.50, 0.53)
High School or Less	Education	Primary education	0.46	0.01	(0.45, 0.48)
High School or Less	Education	Secondary education	0.51	0.01	(0.49, 0.53)
High School or Less	Education	College education	0.53	0.01	(0.52, 0.55)
More than High School	Speed Corruption	Has received bribes	0.52	0.01	(0.51, 0.53)
More than High School	Speed Corruption	Has NOT received bribes	0.48	0.01	(0.47, 0.49)
More than High School	Theft Corruption	Has diverted public funds	0.40	0.01	(0.39, 0.41)
More than High School	Theft Corruption	Has NOT diverted public funds	0.60	0.01	(0.59, 0.61)
More than High School	Gender	Woman	0.51	0.01	(0.50, 0.52)
More than High School	Gender	Man	0.49	0.01	(0.48, 0.50)
More than High School	Partisanship	No party affiliation	0.52	0.01	(0.51, 0.54)
More than High School	Partisanship	Liberal Radical Auténtico party	0.47	0.01	(0.46, 0.49)
More than High School	Partisanship	Colorado party	0.49	0.01	(0.48, 0.51)
More than High School	Age	50 years old	0.50	0.01	(0.48, 0.51)
More than High School	Age	40 years old	0.51	0.01	(0.49, 0.52)
More than High School	Age	30 years old	0.50	0.01	(0.49, 0.51)
More than High School	Education	Primary education	0.46	0.01	(0.45, 0.47)
More than High School	Education	Secondary education	0.49	0.01	(0.48, 0.51)
More than High School	Education	College education	0.54	0.01	(0.53, 0.56)
Less -More	Speed Corruption	Has received bribes	0.03	0.01	(0.01, 0.04)
Less -More	Speed Corruption	Has NOT received bribes	-0.03	0.01	(-0.04, -0.01)
Less -More	Theft Corruption	Has diverted public funds	-0.01	0.01	(-0.02, 0.01)
Less -More	Theft Corruption	Has NOT diverted public funds	0.01	0.01	(-0.01, 0.02)
Less -More	Gender	Woman	-0.01	0.01	(-0.03, 0.00)
Less -More	Gender	Man	0.01	0.01	(0.00, 0.02)

Less -More	Partisanship	No party affiliation	-0.01	0.01	(-0.03, 0.01)
Less -More	Partisanship	Liberal Radical Auténtico party	0.00	0.01	(-0.03, 0.02)
Less -More	Partisanship	Colorado party	0.01	0.01	(0.00, 0.03)
Less -More	Age	50 years old	0.01	0.01	(-0.01, 0.03)
Less -More	Age	40 years old	0.01	0.01	(-0.02, 0.03)
Less -More	Age	30 years old	-0.02	0.01	(-0.03, 0.00)
Less -More	Education	Primary education	0.00	0.01	(-0.02, 0.01)
Less -More	Education	Secondary education	-0.02	0.01	(-0.04, 0.01)
Less -More	Education	College education	0.01	0.01	(-0.01, 0.03)

Note: 19,838 observations (Matched High School or Less: 9,919 and Matched More than High School: 9,919). Expansion of results reported in Figure 7.

Appendix K: Pre-analysis Plan

Summary of the Pre-analysis Plan

The pre-analysis plan (PAP) was registered with Evidence in Governance and Politics on July 13, 2021 before the data collection concluded on August 29, 2021. An anonymized version of the pre-analysis plan can be found at the end of this appendix and also here: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/GNSYLN.

- We preregistered the structure of the conjoint experiment (attributes and levels).
- We preregistered the outcome questions (normative and strategic).
- We preregistered the analysis of the conjoint experiment.
- Equation 1: We regress the outcome on the public officials' attributes, and cluster standard errors at the respondent level.
- Equation 2: We regress the outcome on the public officials' attributes, the priming experiment, and the interaction between the priming experiment and the attributes, and cluster standard errors at the respondent level.
- Equation 3: We regress the outcome on the public officials' attributes, perceptions of efficiency, and the interaction between perceptions of efficiency and the attributes, and cluster standard errors at the respondent level.

Deviations from the Pre-analysis Plan

We pre-registered four outcomes to capture citizens' normative and strategic evaluations of bureaucrats. In the manuscript, we report the results from two of the four preregistered outcomes—a strategic and a normative outcome. The other two outcomes are reported in this section of the appendix.

Some issues with one of the outcomes became evident after pre-registration. While we pre-specified the question "Which of these public officials do you prefer to see when you visit the Civil Registry?" as a strategic outcome, we think respondents answered it with an ideal bureaucrat in mind. Responses based on a socially defined standard of a bureaucrat cannot be interpreted as a

measure of strategic preferences. Moreover, this question elicits an opinion based on the *overall quality* of the bureaucrat rather than the personal benefit the respondent could accrue from interacting with this official (e.g., obtaining a certificate in less time). Since this question does not adequately capture the personal benefit, we opted to relegate it to the Appendix. For the sake of symmetry, we also chose to report the normative outcome "Which of these public officials should represent Paraguay in an international conference of public officials?" in the Appendix. These results corroborate our findings for the normative outcome. This change does not significantly affect the paper's conclusions. The analyses using these two other outcomes can be found at the end of this section.

Other minor amendments are:

- We split Hypothesis 1 from the PAP into two hypotheses in the manuscript (Hypotheses 1 and 2) to better connect them with the theory.
- The quantity of interest used in the paper was the marginal means (MMs) (Leeper at al 2020). The PAP does not discuss MMs. In Appendix E, we also provide the results when using the Average Marginal Component Effect (AMCE), which is the traditional estimand used in conjoint analyses (Hainmueller et al. 2013). The results are not conditional on the quantity of interest used for the analysis.
- We use matching to generate groups of survey participants with different perceptions of inefficiency but similar observed characteristics. We explain the reasons behind this decision in the main text.
- The analysis of preferences by income and education was not pre-registered, which is why that discussion is more tentative and less conclusive than the other analyses in the paper.

Table A19. Probability of Being Preferred (Outcome: International Conference)

Feature	Level	Estimate	Std. Error	95% CI
Speed Corruption	Has received bribes	0.40	0.00	(0.40, 0.41)
Speed Corruption	Has NOT received bribes	0.60	0.00	(0.59, 0.60)
Theft Corruption	Has diverted public funds	0.35	0.00	(0.34, 0.35)
Theft Corruption	Has NOT diverted public funds	0.66	0.00	(0.65, 0.66)
Gender	Woman	0.51	0.00	(0.51, 0.52)
Gender	Man	0.49	0.00	(0.48, 0.49)
Partisanship	No party affiliation	0.54	0.00	(0.53, 0.55)
Partisanship	Radical Auténtico Party	0.46	0.00	(0.45, 0.47)
Partisanship	Colorado Party	0.48	0.00	(0.48, 0.49)
Age	50 years old	0.50	0.00	(0.49, 0.50)
Age	40 years old	0.50	0.00	(0.49, 0.51)
Age	30 years old	0.50	0.00	(0.50, 0.51)
Education	Primary education	0.42	0.00	(0.42, 0.43)
Education	Secondary education	0.50	0.00	(0.49, 0.51)
Education	College education	0.58	0.00	(0.58, 0.59)

Note: 31,070 observations.

Table A20. Probability of Being Preferred (Outcome: Visit Civil Registry)

Feature	Level	Estimate	Std. Error	95% CI
Speed Corruption	Has received bribes	0.40	0.00	(0.40, 0.41)
Speed Corruption	Has NOT received bribes	0.60	0.00	(0.59, 0.60)
Theft Corruption	Has diverted public funds	0.34	0.00	(0.34, 0.35)
Theft Corruption	Has NOT diverted public funds	0.66	0.00	(0.65, 0.66)
Gender	Woman	0.52	0.00	(0,.51, 0.53)
Gender	Man	0.48	0.00	(0.47, 0.49)
Partisanship	No party affiliation	0.54	0.00	(0.53, 0.55)
Partisanship	Radical Auténtico Party	0.47	0.00	(0.46, 0.48)
Partisanship	Colorado Party	0.48	0.00	(0.47, 0.49)
Age	50 years old	0.49	0.00	(0.48, 0.49)
Age	40 years old	0.50	0.00	(0.49, 0.51)
Age	30 years old	0.51	0.00	(0.51, 0.52)
Education	Primary education	0.45	0.00	(0.45, 0.46)
Education	Secondary education	0.50	0.00	(0.49, 0.51)
Education	College education	0.55	0.00	(0.54, 0.56)

Note: 31,070 observations.