

Ajzenman, Nicolas; Ardanaz, Martin; Cruces, Guillermo; Feierherd, Germán; Lunghi, Ignacio

Working Paper

Unraveling the paradox of anticorruption messaging: Experimental evidence from a tax administration reform

IDB Working Paper Series, No. IDB-WP-1590

Provided in Cooperation with:

Inter-American Development Bank (IDB), Washington, DC

Suggested Citation: Ajzenman, Nicolas; Ardanaz, Martin; Cruces, Guillermo; Feierherd, Germán; Lunghi, Ignacio (2024) : Unraveling the paradox of anticorruption messaging: Experimental evidence from a tax administration reform, IDB Working Paper Series, No. IDB-WP-1590, Inter-American Development Bank (IDB), Washington, DC, <https://doi.org/10.18235/0012975>

This Version is available at:

<https://hdl.handle.net/10419/299420>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/3.0/igo/>

WORKING PAPER N° IDB-WP-1590

Unraveling the Paradox of Anticorruption Messaging

Experimental Evidence from a Tax Administration Reform

Nicolás Ajzenman
Martín Ardanaz
Guillermo Cruces
Germán Feierherd
Ignacio Lunghi

Inter-American Development Bank
Institutions for Development Sector
Fiscal Management Division

May, 2024



Unraveling the Paradox of Anticorruption Messaging

Experimental Evidence from a Tax Administration Reform

Nicolás Ajzenman, McGill University

Martín Ardanaz, Inter-American Development Bank

Guillermo Cruces, U. of Nottingham & CEDLAS-IIE-UNLP

Germán Feierherd, Universidad de San Andrés

Ignacio Lunghi, CEDLAS-IIE-UNLP

Inter-American Development Bank
Institutions for Development Sector
Fiscal Management Division

May, 2024



Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Unraveling the paradox of anticorruption messaging: experimental evidence from a tax administration reform / Nicolás Ajzenman, Martín Ardanaz, Guillermo Cruces, Germán Feierherd, Ignacio Lunghi.

p. cm. — (IDB Working Paper Series ; 1589)

Includes bibliographical references.

1. Tax administration and procedure-Honduras. 2. Tax evasion-Prevention-Honduras. 3. Transparency in government-Honduras. I. Ajzenman, Nicolas. II. Ardanaz, Martín. III. Cruces, Guillermo. IV. Feierherd, German. V. Lunghi, Ignacio. VI. Inter-American Development Bank. Fiscal Management Division. VII. Series.

IDB-WP-1589

JEL Codes: G34, H11, H83, L32

Keywords: state-owned enterprises, state ownership, state capitalism, corporate governance, corporate governance reform

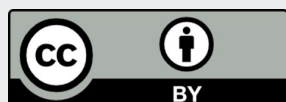
<http://www.iadb.org>

Copyright © 2024 Inter-American Development Bank ("IDB"). This work is subject to a Creative Commons license CC BY 3.0 IGO (<https://creativecommons.org/licenses/by/3.0/igo/legalcode>). The terms and conditions indicated in the URL link must be met and the respective recognition must be granted to the IDB.

Further to section 8 of the above license, any mediation relating to disputes arising under such license shall be conducted in accordance with the WIPO Mediation Rules. Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the United Nations Commission on International Trade Law (UNCITRAL) rules. The use of the IDB's name for any purpose other than for attribution and the use of the IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this license.

Note that the URL link includes terms and conditions that are an integral part of this license.

The opinions expressed in this work are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



Unraveling the Paradox of Anticorruption Messaging: Experimental Evidence from a Tax Administration Reform*

Nicolás Ajzenman, *McGill University*

Martín Ardanaz, *Inter-American Development Bank*

Guillermo Cruces, *U. of Nottingham & CEDLAS-IIE-UNLP*

Germán Feierherd, *Universidad de San Andrés*

Ignacio Lunghi, *CEDLAS-IIE-UNLP*

Abstract

Recent literature highlights a paradox in corruption prevention messaging: instead of reducing tolerance for corruption, such campaigns can inadvertently intensify it by priming the existence of corruption while failing to diminish citizens' beliefs about government misbehavior. Building on Cheeseman and Peiffer (2022), which demonstrates that messages focused on combating corruption often backfire among individuals with preexisting negative perceptions of corruption, we posit that an effective strategy to mitigate backfiring involves shifting those pessimistic perceptions before delivering the corruption eradication messages. To test our hypothesis, we conducted a randomized survey experiment within the context of a major institutional reform to reduce tax agency corruption in Honduras. Results confirm the backfiring findings of previous literature, but also show that our approach effectively mitigates perceived corruption and diminishes the propensity for tax evasion, especially among skeptics.

JEL Classification: C90, D90, H26, K42.

Keywords: corruption, tax administration, tax evasion, survey experiment.

*The findings and interpretations in this paper are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank or the governments it represents.

1. Introduction

Do anticorruption communication campaigns effectively lower citizen tolerance for corruption? Considering the political significance of public opinion and widespread efforts to influence it, this question has been the focus of several recent studies. The evidence points to a paradoxical outcome: rather than mitigating corruption, such interventions may inadvertently foster it. Peiffer (2020) and Cheeseman and Peiffer (2022, 2023) report that anticorruption messages might be ineffectual or counterproductive, increasing pessimism and the likelihood of bribe acceptance or undermining willingness to pay taxes. This surprising result aligns with other studies in the field. Chong et al. (2015), Corbacho et al. (2016), and Köbis et al. (2019) find that raising awareness about corruption increases distrust, fosters bribery, or, at best, exerts a negligible influence on attitudes towards reporting corruption.

To explain the negative reactions, Cheeseman and Peiffer (2022, 2023) suggest that such responses arise because these messages prime the issue of widespread corruption, thereby reinforcing existing beliefs. In other words, these messages increase the importance or weight of specific aspects related to corruption when presented to individuals, but they do not necessarily shift the individuals' core perceptions of the matter (Chong & Druckman, 2007). Consequently, anticorruption messages merely activate individuals' existing beliefs about corruption.

This paper explores the paradox of anticorruption messages potentially backfiring, by exploiting a major institutional reform aimed at reducing corruption within Honduras's national tax administration. We conducted a preregistered survey experiment to assess how various anticorruption messages influence perceptions of the corruption level of the tax authority, attitudes towards corruption in general, and the likelihood of tax evasion. Our experimental treatments were designed to change people's perceptions of corruption before communicating the government's anticorruption efforts. Without shifting perceptions, we hypothesize, these messages might not only fail to sway opinions but could even make the problem seem more urgent, leading to more negative attitudes.

Our results align with the findings of Cheeseman and Peiffer (2022, 2023), Peiffer (2020), and Corbacho et al. (2016), among others, indicating that anticorruption messages

can sometimes backfire. Specifically, when we informed participants about a significant overhaul of staff within the tax agency, an action taken by the government to reduce corruption (the “purge” treatment), it did not change their beliefs or attitudes towards corruption. In some instances, it even had the opposite effect, reinforcing negative views about the level of corruption and increasing the willingness to participate in corrupt practices.

However, when we presented respondents, particularly those with a more pessimistic outlook, with information that could potentially improve their views on the level of corruption, we observed a positive shift. The “perception” message, which highlighted that the average citizen in Honduras perceives corruption in the tax administration to be relatively lower than in other parts of Latin America, and the “combined” treatment, which first shared information from the “perception” message and then details from the “purge” treatment, led to significantly positive outcomes. These effects were especially pronounced among participants who started the study with highly negative views on the prevalence of corruption in the public sector, reducing both their perceptions of corruption among tax officials and their willingness to engage in tax evasion.

Our research indicates that effective communication strategies should aim not only to raise awareness but also to convince the audience, particularly skeptics, that tangible improvements are being made. This task is undoubtedly challenging, but it is an important consideration for governments in communicating their anticorruption efforts. When discussing purges within government agencies, in particular, it is crucial to strike a balance between acknowledging past corruption, which can be perceived negatively, and promoting positive messaging about the changes and improvements. Maintaining this balance is vital to avoid reinforcing the notion that corruption is an insurmountable problem.

2. Hypotheses

In assessing the effectiveness of different anticorruption messages, we integrate the concepts of framing and persuasion (Chong & Druckman, 2007; Nelson & Oxley, 1999) with established theories of persuasive campaign messaging (Broockman & Kalla, 2023; Iyengar & Valentino, 2000; Lupia & McCubbins, 1998; Sides et al., 2022). Our approach

acknowledges that, while many anticorruption messages may increase the salience of certain aspects related to corruption, they do not necessarily change underlying beliefs about the issue (Chong & Druckman, 2007). This can lead to an adverse effect in contexts where corruption is believed to be widespread (Cheeseman & Peiffer, 2022; Peiffer, 2020; Peiffer & Alvarez, 2016). In these cases, anticorruption messages might only serve to reinforce already held beliefs rather than convince or modify perceptions.

While previous research on anticorruption messaging has explicitly differentiated between priming and persuasion, these studies have not identified a significant impact of anticorruption messages on perceptions of corruption (Cheeseman & Peiffer, 2022) or its perceived prevalence in society (Peiffer, 2020). For instance, Peiffer and Alvarez (2016) and Peiffer (2020) suggest that “positive” messages, particularly those highlighting government effectiveness in combating corruption, could positively influence corruption attitudes by either providing new information or persuading citizens. However, after observing a negative influence of these and other messages on attitudes towards corruption and perceptions of government effectiveness, (Peiffer, 2020, p. 7) concludes that “if a positively toned message inadvertently primes a negative issue, the message can lead individuals to adopt more negative views about the issue.”

We hypothesize that for anticorruption messages to be effective, they must alter perceptions. Indeed, if messages can influence behavior, they may also alter how individuals perceive corruption in government or among their peers. Changing these perceptions may explain why individuals may be willing to change their behavior in the first place, after receiving a message communicating anticorruption government efforts. This perspective aligns with studies like Corbacho et al. (2016), which demonstrate that changing beliefs about corruption can significantly affect individual attitudes and behaviors. This is because “the expected return that any given actor associates with engaging in corruption increases with the expected number of other actors who do so” (Corbacho et al., 2016, p. 1079).

To address this issue, our experimental treatments were specifically designed to first manipulate perceptions of corruption before communicating the government’s anticorruption actions, aiming to persuade respondents, especially the skeptics, of improvements in the situation. A critical consideration in our design was the risk that informing individuals

about anticorruption actions in isolation could inadvertently backfire, by priming them to think more about corruption and potentially confirming the belief among pessimists or skeptics that corruption is widespread. Central to our strategy was harnessing public opinion as the primary message source, presenting factual data about public opinion perceptions of the Honduran tax authority’s relative standing compared to other regional tax administrations as measured by the Latinobarómetro. Delivered both in text and through a simple bar plot, these methods aimed not just at highlighting aspects of corruption but at modifying existing beliefs about the extent of corruption in the Honduran tax authority. The pre-analysis plan proposed the following hypotheses:

H1: Perception Treatment. Presenting information emphasizing that the average Honduran perceives corruption in tax administration to be relatively low compared to citizens in the rest of Latin America will positively influence individuals’ perceptions of the tax authority and reduce willingness to engage in tax evasion compared to a neutral message (control).

H2: Purge Treatment. Communicating government efforts to combat corruption should enhance perceptions of the Honduran tax authority and reduce attitudes toward corrupt practices relative to a neutral message (control). However, as indicated by Cheeseman and Peiffer (2022), this treatment might have a counterproductive effect, particularly among individuals with initially negative views about the extent of government corruption.

H3: Combined Treatment. The sequential combination of changing beliefs about corruption (“perception”) followed by emphasizing government actions (“purge”) could improve more effectively perceptions of the Honduran tax authority and reduce willingness to engage in corrupt behavior compared to a control group.

The impact of our messages on perceptions is expected to differ based on individuals’ initial beliefs about corruption: those who start with the belief that corruption is widespread (“pessimists”) and those who view it as relatively low (“optimists”). Optimists, who already view corruption levels as low, may find the “perception” message simply reaffirms their existing beliefs, unlikely causing a significant change in their perceptions. However, the “purge” treatment might negatively impact optimists’ views, leading them

to perceive corruption as a more critical issue than they initially thought. On the other hand, pessimists, who believe corruption is a significant problem, might experience a notable change in their views if a message indicates that corruption levels are actually lower than their expectations. For these individuals, the “purge” treatment might merely reinforce their existing beliefs about the prevalence of corruption, thus having minimal impact on altering their perceptions.

3. Case Selection: Tax Administration Reform

Honduras is a lower-middle-income country in Latin America with GDP per capita of \$6,700 PPP in 2022. It ranks 173 out of 213 countries in the World Bank’s Control of Corruption Index. Tax revenues account for 18 percent of GDP and tax collection is heavily reliant on taxes on goods and services, making up over half of the total tax burden.

Starting in 2014, the Honduran tax administration underwent a series of reforms and institutional changes aimed at strengthening the country’s tax system. These included improvements in operational management, a new billing regime, and the adoption of new technologies, among others. The key salient dimension of the reform that we exploit in our experiment was an effort to restore the tax administration’s corporate image through a new human resource policy, motivated in part by the need to address corruption inside the tax administration.

Prior to the reform, the tax administration faced challenges such as insufficient professionalization of its workforce,¹ lack of transparency and integrity in crucial areas of the organization,² inefficient tax processes, and weak information systems that hampered attempts at evasion control and contributed to poor tax collection performance (e.g., tax revenues hovered at 15 percent of GDP by the time of the reform onset). Citizen perceptions of corruption in the tax administration remained widespread: about 50 percent of Honduran citizens believed that all or almost all tax officials were involved in corrupt

¹For instance, only a third of the tax administration personnel held a college degree by the time of the reform onset. See IDB (2015).

²Prior to the reform, out of a sample of more than 800 employees who took a polygraph test, 30 percent failed it. The tax administration received, on average, 90 complaints per month related to issues of lack of transparency in job performance. See IDB (2015).

practices (Latinobarómetro 2016).

Recognizing the need for a comprehensive overhaul, between 2014 and 2019 the government implemented a major institutional reform of the tax administration, with support from multilateral organizations. The reform involved the dissolution of the existing tax administration by executive decree, including the dismissal of 1,500 employees, constituting 85 percent of existing personnel.³ Approximately 300 employees were retained to safeguard the tax base during the transition period. The recruitment and selection process of personnel was conducted under the guidelines of a new human resource policy, including: (i) a tax career path with respective job profiles, (ii) competitive salary scales and performance evaluation procedures, and (iii) promotion schemes. New hires were subject to several tests prior to selection, including polygraph evaluations. By January 2017, the new tax administration, Servicio de Administración de Rentas (SAR), started operations with around 500 workers, a combination of employees from the transition period and new hires.

The tax administration reform has contributed to expand the tax base (by tripling the number of active taxpayers), reduce compliance costs (by increasing electronic filings of major taxes from less than 50 percent to more than 95 percent of filings), and improve the quality of human resources within the tax administration (the share of personnel with a college degree has more than doubled). These changes have contributed to increase tax collection, which remained 20 percent above pre-reform levels before the COVID-19 crisis hit. Moreover, perceptions of corruption have significantly improved since then: according to recent nationally representative surveys, the Honduras tax authority is perceived to be among the least corrupt in Latin America (Latinobarómetro 2020). We exploit this fact, along with government actions to combat corruption within the tax administration, to assess the effectiveness of anticorruption messages in changing respondents' beliefs and attitudes toward the tax authority and willingness to pay taxes.

Although a priori the reform measures described above seem positive in terms of transparency, the communication of the “purge” policy to the general population is not obvious, given that the information of a personnel renewal contains two different messages

³A special commission was appointed to proceed with termination of existing contracts. Additionally, 900 employees from the customs area were transferred to the Ministry of Finance.

for the Honduran population: the existence of high initial corruption levels, which is undesirable, and the assurance that corruption has now diminished, which is desirable. Following Cheeseman and Peiffer (2022), the final effect will depend on which of these two messages predominates, even leading to a negative effect if the first message predominates.

4. The Survey Experiment

To assess how individuals react to anticorruption efforts by the tax administration, we designed a survey experiment with data collected through an online survey between October 2, 2023, and October 4, 2023. We recruited 2,372 participants (2,000 targeted), but excluded from our main sample those individuals who did not pass our attention check, who had their IP address duplicated within the sample, or who had their IP address duplicated with our pilots, resulting in our final sample of 1,411 observations. Participants were randomly selected from the general population of Honduras (with internet access).

4.1. Treatments

Respondents in our survey were assigned to different information treatments:⁴

1. The control group, which received basic information about the SAR’s role in tax collection, along with an image of the locations of the SAR offices in Honduras.
2. The “perception” treatment arm, which provides basic information about the SAR’s role in tax collection and information about the SAR’s reputation as one of the least corrupt tax authorities in Latin America, backed by a graph using survey data indicating it as the second most honest tax authority institution in the Latin American region.
3. The “purge” treatment arm, which transmits the SAR’s recognition of corruption as a significant issue and recent efforts to combat it. The message highlights the personnel renewal done by the government for the purpose of reducing corruption and includes a simple figure to illustrate the magnitude of the reform.

⁴See Appendix B for the full survey instrument and treatment layouts.

4. The “combined” treatment arm, which combines the two previous information treatments, with the “perception” message shown first, followed by the “purge” treatment.

Participants were randomly assigned to each group with equal probability (25 percent to each group). They were also informed about the anonymity of their answers. Table A3 in Appendix A presents a balance check among the treatment groups based on our pre-treatment variables. Table A4 presents the descriptive statistics for our outcomes and main pre-treatment variables (used in the heterogeneity analysis).

4.2. Outcomes

The primary focus of this study is respondents’ beliefs and perceptions regarding the tax authority and pervasive corruption. Respondents rated their beliefs on a scale from 0 (not likely at all) to 10 (very likely) on the likelihood of SAR officials engaging in corruption (*Perception of Corruption of the SAR*) and the chance that a SAR official might seek gifts or money for resolving or preventing tax-related issues (*Probability That a SAR Agent Will Accept a Bribe*). Aligning with standard practices for multiple outcome analysis, we developed the *Beliefs Index* combining these two outcomes. Since both outcomes are measured on the same scale, this index is simply the average of both outcomes.

Further, we examine secondary outcomes concerning individuals’ willingness to evade taxes. These outcomes are pivotal as they represent the main object of interest in studies that found anticorruption messages to backfire, including individuals’ inclination to engage in corruption or to reject bribery (Cheeseman & Peiffer, 2022; Corbacho et al., 2016; Köbis et al., 2019). In the context of the SAR’s reform, we were particularly interested in the willingness of individuals to evade taxes. To counter potential biases in self-reported measures of tax evasion, we employed a crosswise measure. This involved respondents reporting the truthfulness of two statements: one on their willingness to evade taxes and the other, a non-sensitive question about the birth month of their mother. With the known probability distribution of the latter, unbiased prevalence estimates on the stated willingness to evade taxes were obtained, following Jann et al. (2012). We alter

our outcome in the following way:

$$\tilde{R} = (R + p - 1)/(2p - 1) \quad (1)$$

Where p is the probability that an individual’s mother was born in November or December, which on average is $p = 2/12$, and R is a dummy variable equal to 1 if individuals have responded that both statements (the one about their willingness to evade taxes and the non-sensitive statement) are true or that both statements are false, while the dummy is equal to 0 if respondents reported only one of the statements is true.⁵⁶

Additionally, we incorporated a series of questions to probe potential mechanisms. We asked about their assessment of the SAR’s ability to collect taxes owed by taxpayers (*SAR’s Capability*), their perception of fellow citizens’ involvement in corrupt activities in their city (*Corruption of City Residents*), and included a behavioral game (*Lies in Dice Game*). The latter assesses the propensity to provide dishonest information in a virtual dice game, where participants could misrepresent their roll to enhance their lottery odds. The first question examines respondents’ perception on the capacity of the tax agency to detect tax evasion. The second and third outcomes assess whether the messages impact participants’ perceptions of corruption and their behavior more broadly, beyond just taxation issues.

5. Estimation

The analysis of our experimental data involved the estimation of the following linear regression model by Ordinary Least Squares for each of our outcomes:

$$Y_i = \alpha + \beta_1 \text{Perception}_i + \beta_2 \text{Purge}_i + \beta_3 \text{Combined}_i + \beta_4 \text{Beliefs_PreTreatment}_i + \varepsilon_i \quad (2)$$

The specifications include indicator variables for each treatment arm with the control group as the reference category. Y_i is the outcome analyzed, while $\text{Beliefs_PreTreatment}_i$ controls for pre-treatment corruption beliefs, measured using a 0–10 scale assessing re-

⁵For more information about this transformation see Jann et al. (2012).

⁶Moreover, we also evaluated respondents’ reactions to a hypothetical scenario where a store owner offers a VAT-exempt discount, probing their readiness to participate in tax evasion.

spondents’ perceptions of the likelihood of officials from the public administration in general being involved in corrupt activities. Finally, ε_i is the error term, estimated using Huber-White standard errors to account for the potential heteroskedasticity. We report the coefficients β_1 , β_2 , and β_3 for each of our regressions, while also including the mean of the control group as a comparison.

We estimate four different specifications for each of our outcomes. First, we estimate treatment effects without controls. Second, we include controls for pre-treatment corruption beliefs. Third, we analyze two subsamples separately, focusing on individuals with low corruption perceptions (the “pessimists,” defined as those with pre-treatment corruption beliefs below or equal to the median) in one regression, and those with high corruption perceptions (referred to as “optimists” with pre-treatment corruption beliefs above the median) in another. This analysis, distinguishing between pessimistic and optimistic respondents, has several advantages for evaluating the backfiring effect. Notably, we measured beliefs prior to treatment assignment, and the beliefs we measured were particularly significant in shaping perceptions about corruption within the tax agency.⁷

6. Main Results

As shown in Panel A of Table 1, the impact of the treatments on the *Beliefs Index* is nuanced. Notably, communicating the government’s recent initiative to reduce corruption within the tax agency did not significantly alter individuals’ corruption perceptions on average. In fact, for individuals with initially low perceptions of corruption, the “purge” treatment appears to have an unintended positive effect, increasing post-treatment corruption perception by 0.38 points on average. This suggests that the “purge” treatment backfired among this subgroup, in line with previous findings in the literature.

In contrast, a message emphasizing that the SAR stands among the least corrupt tax agencies in the region led to a statistically significant reduction in corruption beliefs, decreasing the *Beliefs Index* by an average of 0.63 units when controlling for pre-treatment perceptions of corruption. The effect is even more substantial for those with high initial perceptions of corruption, as the reduction averages 0.91 units. Given a a baseline belief

⁷Cheeseman and Peiffer (2022), in contrast, divide respondents using post-treatment belief measures and rely on an index that combines different domains of corruption.

of 7.3 units in the control group, the treatment effect implies a 12 percent reduction in corruption beliefs. The “combined” treatment, integrating both the “perception” and “purge” messages, also resulted in a significant decrease in the *Beliefs Index*. This treatment led to an average reduction of 0.85 units, with a more pronounced average reduction of 1.59 units among those who began with high levels of corruption perception. In particular, the latter effect implies a substantial 21 percent reduction in corruption beliefs. Table A1 displays results considering the *Beliefs Index* components separately, showing that the findings are consistent with those described previously.

Moving to Panel B of Table 1, which addresses the *Willingness to Evade Taxes* outcome, we observe that the coefficients associated with the “purge” message are positive, except for those respondents with initially pessimistic views about the tax agency. However, none of these coefficients are statistically significant at the conventional level. What’s more, the treatment seems to have moved respondents with low and high perceptions of corruption in opposite directions. Thus, raising awareness about anticorruption efforts by the government may in fact increase the willingness to evade taxes among those entering our study with more positive views, or, at best, exert a negligible influence on attitudes towards paying taxes. In turn, the “perception” treatment consistently had a negative effect on people’s willingness to evade taxes; however, again, none of the coefficients are statistically significant at the conventional level.

Combining both messages, however, had a substantial, statistically and economically significant impact, reducing individuals’ willingness to evade taxes by approximately 11 percentage points on average when pre-treatment corruption perceptions are accounted for. This effect intensifies among individuals with initially high perceptions of corruption, wherein the reduction in willingness to evade taxes is approximately 16 percentage points on average. Given a prevalence estimate of 58 percent in the control group, the treatment effect is able to reduce the share of evaders by almost 30 percent. These findings underscore the effectiveness of the “combined” treatment not only in modifying beliefs about corruption but also in influencing behavioral intentions regarding tax evasion. This overcomes the priming effect identified in previous studies and provides room for optimism, challenging earlier findings that led scholars to argue that “policy makers and activists should avoid explicitly invoking the government and the state in their campaigns” (Cheeseman

& Peiffer, 2023, p.1047).

7. Additional Results

We also pre-registered additional hypotheses and tests aimed at clarifying the interplay between corruption prevention messaging, citizens’ beliefs about government misbehavior, and the propensity for tax evasion.

Our survey included questions to assess respondents’ beliefs about the corruption of residents in their city and perceptions regarding the SAR’s capability to sanction tax evasion. Our findings on these outcomes further increase confidence in the results shown in the previous section. Panel A of Table 2 demonstrates that none of our treatments had a noticeable impact on perceptions of corruption among the city’s residents. In contrast, results from Panel B of Table 2 indicate that both the “perception” and “combined” treatments improved perceptions of the SAR’s capability to control tax evasion, with a particularly pronounced effect for the “combined” treatment and a comparatively reduced effect for the “purge” treatment. Specifically, the “combined” treatment shifts perceptions by 0.5 units among respondents with pre-treatment corruption beliefs above the median (Column 5), improving perceptions of the tax administration capability by 17 percent. This supports our findings that the “perception” and “combined” treatments lowered perceptions of corruption within the SAR or the probability of SAR agents accepting a bribe.

In addition to the *Willingness to Evade Taxes* measure previously reported, we also included a question on the likelihood that individuals would collude with a seller and accept buying without paying sales tax. Respondents were presented with a scenario in which a store owner offered a 10 percent discount in exchange for a sale without VAT during a shopping transaction. Respondents indicated whether they were willing to accept this discount, implying a willingness to evade the corresponding tax. We also included a measure related to honest behavior: a dice game where rolling a virtual die produced a random number. Participants had to report this number to receive lottery tickets, with more tickets increasing their chances of winning. Participants could lie to obtain more tickets, with the virtual dice unbalanced towards 1 to maximize the incentive for dishonest reporting. We expected our messages emphasizing the capacity of the SAR, especially

when combined with recent government efforts to purge corrupt officials, to reduce the likelihood of tax evasion, but not necessarily corrupt behavior in other domains. While we expected that changing beliefs about corruption within the tax agency would affect tax behavior, particularly the likelihood of engaging in tax evasion, we were more skeptical about our messages changing individual misbehavior more generally.

The analysis of the *Accepts Discount* question, reported in Panel A of Table A2, reveals no significant average effects from our treatments on respondents' willingness to accept a discount in lieu of VAT. Interestingly, the three messages had a positive effect on the group with low pre-treatment corruption beliefs, with stronger treatment effects across the "purge" group. By contrast, the three messages reduced the likelihood of accepting a discount among the pessimistic sample, with the "combined" treatment having the largest effect, followed by the "perception" and "purge" treatments. In particular, the treatment effect associated with the "combined" message is economically large: it reduces the share of respondents willing to evade by almost 18 percentage points, relative to a base of 47 percent in the control group. Regarding our honesty outcome, Panel B of Table A2 reveals no statistically significant effects, except for the "purge" treatment, which increased the probability of individuals being dishonest in the dice game by approximately 4 percentage points on average compared to the control group, aligning with the backfiring argument.

These findings are consistent with our observation that the treatment modified beliefs about the tax agency's relative corruption standing. Furthermore, it underscores a potential mechanism that explains shifts in tax compliance willingness. The major explanatory factors are based on tax morale considerations and the perceived likelihood of detection and punishment. Given that our intervention altered tax compliance willingness without changing beliefs about the propensity of other citizens to evade taxes, we infer that these changes are primarily related to a shift in the perceived efficacy of the SAR in detecting tax evasion.

8. Conclusions and Policy Implications

Using a survey experiment conducted in Honduras, this study evaluates the effectiveness of different anticorruption messages on corruption perceptions and willingness to pay taxes.

The findings shed light on several key aspects of this relationship.

Our study builds upon an extensive body of literature that explores the complexities of anticorruption awareness and messaging, as well as the connection between perceptions of corruption and behavioral responses. Related with this literature, Peiffer (2020) examined the impact of anticorruption messages through a survey experiment in Jakarta, Indonesia, finding that “negative” messages about corruption prevalence and “positive” messages about government successes had surprisingly similar, negative effects on perceptions of corruption and raising concerns about the efficacy of the messages. Also with negative effects, Cheeseman and Peiffer (2022) found that exposure to anticorruption messages in Lagos, Nigeria, often failed to deter bribery and, in some cases, even increased willingness to pay bribes, with efficacy tied to individuals’ preexisting perceptions of corruption prevalence.

Within the Latin American context, studies on corruption reveal varying impacts on public perception and behavior. Beesley and Hawkins (2022) find that informing both the positive and negative consequences of corruption reduces trust in political institutions. Similarly, Corbacho et al. (2016) show that increasing beliefs about corruption prevalence increased willingness of participants to engage in corrupt practices using an information experiment in Costa Rica. Duch and Torres (2023) also provide evidence from Chile that information about local corruption prompts a negative shift in beliefs, with these changed perceptions lasting more than a month. In contrast to these findings, Agerberg (2022) offers a more optimistic perspective, illustrating that informing Mexicans about the widespread rejection of corruption by the population can significantly alter their perceptions. This approach leads to increased interpersonal trust, a decreased willingness to participate in bribery, and a reduction in the perception of corruption.

Our results demonstrate that manipulating perceptions of corruption through specific messaging can indeed influence individuals’ beliefs about tax authorities and corruption levels. Notably, the “perception” and the “combined” treatments were effective in reducing corruption perceptions and inclinations for tax avoidance among the respondents, especially for those who initially held high perceptions of corruption. On the other hand, the “purge” treatment, emphasizing only government actions to reduce corruption, did not have a significant impact. Moreover, it seemed to foster more negative views among

participants with initially more optimistic perspectives. When it comes to the willingness to evade taxes, the “combined” treatment emerged as the most influential, significantly reducing the probability of individuals being willing to evade taxes, particularly for those with high initial corruption perceptions. These results highlight the potential of combining messages that address corruption perceptions before emphasizing government actions.

These results have relevant policy implications. Considering how costly it is for governments to implement successful anticorruption policies, finding the right way to communicate their actions is crucial to maximize the impact on citizens’ behavior, beliefs, and perception of social norms (Ajzenman, 2021). Our findings can be useful for policy-makers that wish to trigger a positive societal change by communicating the policy actions and outcomes of major institutional reforms. They also point to the need for careful consideration of individuals’ initial beliefs and the potential for backfire effects when designing such messages.

Our study illustrates that perceptions of corruption are both crucial and malleable through the use of varied messages. This insight offers a more hopeful perspective on the effectiveness of communication in anticorruption campaigns. Such campaigns can foster more positive views of government actions and reduce people’s tendencies to engage in corruption or evade tax responsibilities. To be effective, these campaigns must first alter people’s perceptions of corruption before communicating the government’s anticorruption measures. Hence, despite the prevalent and often negative perceptions of corruption’s extent in Latin America and elsewhere, it is vital for campaigns to avoid merely highlighting the problem of corruption without first convincingly demonstrating the progress achieved by governments to fight corruption.

References

- Agerberg, M. (2022). Messaging about corruption: The power of social norms. *Governance*, 35(3), 929–950.
- Ajzenman, N. (2021). The power of example: Corruption spurs corruption. *American Economic Journal: Applied Economics*, 13(2), 230–257.
- Beesley, C., & Hawkins, D. (2022). Corruption, institutional trust and political engagement in Peru. *World Development*, 151, 105743.
- Broockman, D. E., & Kalla, J. L. (2023). When and why are campaigns’ persuasive effects small? Evidence from the 2020 US presidential election. *American Journal of Political Science*, 67(4), 833–849.
- Cheeseman, N., & Peiffer, C. (2022). The curse of good intentions: Why anticorruption messaging can encourage bribery. *American Political Science Review*, 116(3), 1081–1095.
- Cheeseman, N., & Peiffer, C. (2023). Why efforts to fight corruption can undermine the social contract: Lessons from a survey experiment in Nigeria. *Governance*, 36(4), 1045–1061.
- Chong, De La O, A. L., Karlan, D., & Wantchekon, L. (2015). Does corruption information inspire the fight or quash the hope? A field experiment in Mexico on voter turnout, choice, and party identification. *The Journal of Politics*, 77(1), 55–71.
- Chong & Druckman, J. N. (2007). Framing theory. *Annual Review of Political Science*, 10, 103–126.
- Corbacho, A., Gingerich, D. W., Oliveros, V., & Ruiz-Vega, M. (2016). Corruption as a self-fulfilling prophecy: Evidence from a survey experiment in Costa Rica. *American Journal of Political Science*, 60(4), 1077–1092.
- Duch, R., & Torres, F. (2023). Government Audits of Municipal Corruption and Belief Updating: Experimental Evidence.
- IDB. (2015). *Tax Administration Institutional and Operational Strengthening* (tech. rep.). Inter-American Development Bank. <https://www.iadb.org/en/whats-our-impact/HO-L1108>

- Iyengar, S., & Valentino, N. A. (2000). Who Says What? Source Credibility as a Mediator of Campaign Advertising. In A. Lupia, M. D. McCubbins, & S. L. Popkin (Eds.), *Elements of reason: Cognition, choice, and the bounds of rationality* (pp. 108–129). Cambridge University Press. <https://doi.org/10.1017/CBO9780511805813.006>
- Jann, B., Jerke, J., & Krumpal, I. (2012). Asking sensitive questions using the crosswise model: An experimental survey measuring plagiarism. *Public Opinion Quarterly*, 76(1), 32–49.
- Köbis, N. C., Verschuere, B., Bereby-Meyer, Y., Rand, D., & Shalvi, S. (2019). Intuitive honesty versus dishonesty: Meta-analytic evidence. *Perspectives on Psychological Science*, 14(5), 778–796.
- Lupia, A., & McCubbins, M. D. (1998). *The democratic dilemma: Can citizens learn what they need to know?* Cambridge University Press.
- Nelson, T. E., & Oxley, Z. M. (1999). Issue framing effects on belief importance and opinion. *The Journal of Politics*, 61(4), 1040–1067.
- Peiffer, C. (2020). Message received? Experimental findings on how messages about corruption shape perceptions. *British Journal of Political Science*, 50(3), 1207–1215.
- Peiffer, C., & Alvarez, L. (2016). Who will be the “principled-principals”? Perceptions of corruption and willingness to engage in anticorruption activism. *Governance*, 29(3), 351–369.
- Sides, J., Vavreck, L., & Warshaw, C. (2022). The effect of television advertising in United States elections. *American Political Science Review*, 116(2), 702–718.

Tables

Table 1: Beliefs Index and Willingness to Evade Taxes Outcomes

Outcome	Panel A			
	Beliefs Index	Beliefs Index	Beliefs Index	Beliefs Index
Perception	-0.699*** (0.209)	-0.628*** (0.188)	-0.377 (0.238)	-0.913*** (0.3)
Purge	0.085 (0.201)	0.196 (0.174)	0.378* (0.221)	-0.046 (0.273)
Combined	-1.025*** (0.200)	-0.851*** (0.182)	-0.296 (0.217)	-1.594*** (0.311)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	6.15	6.15	5.098	7.377

Outcome	Panel B			
	Willingness to Evade Taxes	Willingness to Evade Taxes	Willingness to Evade Taxes	Willingness to Evade Taxes
Perception	-7.330 (5.654)	-7.145 (5.649)	-4.728 (7.580)	-9.739 (8.491)
Purge	1.721 (5.616)	2.011 (5.620)	10.030 (7.721)	-7.205 (8.207)
Combined	-11.631** (5.478)	-11.181** (5.478)	-7.200 (7.251)	-15.901* (8.402)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	51.4%	51.4%	45.59%	58.14%

Notes: Robust standard errors in parentheses. *Beliefs Index* outcome is the mean between the *Belief of Corruption of the SAR* outcome and the *Probability that a SAR Agent will Accept a Bribe* outcome, which vary from 0 (not likely at all) to 10 (very likely). *Willingness to Evade Taxes* outcome is a dummy variable, which was transformed according to Jann et al. (2012) in order to get the unbiased estimates of the willingness to evade taxes from the crosswise model. Column (2) shows the main estimates, column (3) shows the main estimates including the control for the pre-treatment corruption, and columns (4) and (5) show the heterogeneity of the effects below/above the median of beliefs of corruption pre-treatment. P-values: ***p<0.01, **p<0.05, *p<0.1.

Table 2: Corruption of City's Residents and SAR's Capability Outcomes

Outcome	Panel A			
	Corruption of City's Residents	Corruption of City's Residents	Corruption of City's Residents	Corruption of City's Residents
Perception	0.227 (0.203)	0.091 (0.186)	0.336 (0.244)	-0.157 (0.282)
Purge	0.128 (0.207)	0.054 (0.185)	0.057 (0.231)	0.044 (0.294)
Combined	0.256 (0.202)	0.102 (0.177)	-0.102 (0.231)	0.292 (0.271)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	717	694
Control Group Mean	5.520	5.520	4.568	6.572
Outcome	Panel B			
	SAR's Capability	SAR's Capability	SAR's Capability	SAR's Capability
Perception	0.208** (0.091)	0.196** (0.089)	0.292** (0.117)	0.064 (0.138)
Purge	0.171* (0.088)	0.152* (0.087)	0.119 (0.112)	0.185 (0.136)
Combined	0.276*** (0.087)	0.246*** (0.087)	0.064 (0.109)	0.511*** (0.138)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	3.143	3.143	3.289	2.971

Notes: Robust standard errors in parentheses. *Corruption of City's Residents* outcome is the respondent belief that individuals of his/her city are prone to corruption, which varies from 0 (not likely at all) to 10 (very likely). *SAR's Capability* outcome corresponds to the respondents' belief that the SAR has the capability to collect the amounts owed by individuals with tax obligations, which varies from 1 (not capable at all) to 5 (highly capable). Column (2) shows the main estimates, column (3) shows the main estimates including the control for the pre-treatment corruption, and columns (4) and (5) show the heterogeneity of the effects below/above the median of beliefs of corruption pre-treatment. P-values: ***p<0.01, **p<0.05, *p<0.1.

Appendix A: Tables

Table A1: Beliefs Index Components

Outcome	Panel A			
	Perception Corruption of SAR	Perception Corruption of SAR	Perception Corruption of SAR	Perception Corruption of SAR
Perception	-0.698*** (0.225)	-0.631*** (0.209)	-0.441* (0.258)	-0.838** (0.34)
Purge	0.141 (0.218)	0.246 (0.198)	0.567** (0.241)	-0.134 (0.321)
Combined	-1.157*** (0.217)	-0.994*** (0.201)	-0.501** (0.231)	-1.647*** (0.356)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	6.042	6.042	5.074	7.171

Outcome	Panel B			
	Probability SAR Agent Accepts Bribe	Probability SAR Agent Accepts Bribe	Probability SAR Agent Accepts Bribe	Probability SAR Agent Accepts Bribe
Perception	-0.701*** (0.241)	-0.625*** (0.221)	-0.313 (0.277)	-0.987*** (0.355)
Purge	0.028 (0.231)	0.146 (0.204)	0.190 (0.270)	0.042 (0.305)
Combined	-0.892*** (0.233)	-0.709*** (0.216)	-0.092 (0.263)	-1.541*** (0.362)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	6.259	6.259	5.122	7.583

Notes: Robust standard errors in parentheses. In the *Perception of Corruption of the SAR* outcome respondents rate how likely they consider it to be that Honduran SAR officials were involved in acts of corruption. In the *Probability That a SAR Agent Accepts a Bribe* outcome respondents rate how likely they consider it to be that SAR agents were willing to accept a bribe. Both outcomes vary from 0 (not likely at all) to 10 (very likely). Column (2) shows the main estimates, column (3) shows the main estimates including the control for the pre-treatment corruption, and columns (4) and (5) show the heterogeneity of the effects below/above the median of beliefs of corruption pre-treatment. P-values: ***p<0.01, **p<0.05, *p<0.1.

Table A2: Other Willingness to Pay Outcomes and Behavioral Game

Outcome	Panel A			
	Accepts Discount	Accepts Discount	Accepts Discount	Accepts Discount
Perception	-2.148 (3.525)	-1.919 (3.505)	7.352* (4.408)	-12.815** (5.509)
Purge	1.666 (3.552)	2.024 (3.538)	11.306** (4.578)	-9.357* (5.391)
Combined	-4.010 (3.397)	-3.452 (3.379)	7.981* (4.230)	-17.892*** (5.348)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption Low/High	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	33.25%	33.25%	21.57%	46.86%

Outcome	Panel B			
	Lies in Dice Game	Lies in Dice Game	Lies in Dice Game	Lies in Dice Game
Perception	1.618 (2.194)	1.509 (2.193)	1.278 (2.971)	1.929 (3.258)
Purge	3.983* (2.297)	3.813* (2.295)	4.269 (3.258)	3.250 (3.242)
Combined	0.846 (2.087)	0.582 (2.083)	2.757 (2.957)	-2.483 (2.802)
Control for Pre-Treatment Corruption	No	Yes	Yes	Yes
Pre-Treatment Corruption High/Low	-	-	Low	High
Observations	1411	1411	790	621
Control Group Mean	8.44%	8.44%	8.82%	8%

Notes: Robust standard errors in parentheses. *Accepts Discount* outcome is equal to 1 if the respondent is willing to accept buying without VAT included. *Lies in Dice Game* outcome equals to 1 if individual lied on the dice game. Column (2) shows the main estimates, column (3) shows the main estimates including the control for the pre-treatment corruption, and columns (4) and (5) show the heterogeneity of the effects below/above the median of beliefs of corruption pre-treatment. P-values: ***p<0.01, **p<0.05, *p<0.1.

Table A3: Balance Table

	Treatment Group			
	Control	Perception	Purge	Combined
<i>Dummy Variables</i>				
Men	48.5%	45.7%	45.3%	45.9%
	(50.0%)	(49.9%)	(49.8%)	(49.9%)
Age Group: 18 to 29	27.4%	26.5%	26.3%	22.4%
	(44.7%)	(44.2%)	(44.1%)	(41.8%)
Age Group: 30 to 49	45.4%	43.9%	42.9%	47.8%
	(49.9%)	(49.7%)	(49.6%)	(50.0%)
Age Group: 50 or more	27.2%	29.6%	30.8%	29.8%
	(44.5%)	(45.7%)	(46.2%)	(45.8%)
South-Western Region	15.0%	14.6%	13.6%	15.6%
	(35.8%)	(35.4%)	(34.3%)	(36.3%)
Central-Eastern Region	39.8%	41.2%	37.3%	39.1%
	(49.0%)	(49.3%)	(48.4%)	(48.9%)
North Region	45.1%	44.2%	49.1%	45.4%
	(49.8%)	(49.7%)	(50.1%)	(49.9%)
Basic Education or Less	9.0%	10.1%	8.3%	9.4%
	(28.7%)	(30.2%)	(27.7%)	(29.2%)
Common Cycle or Diversified	22.0%	20.6%	27.4%	23.4%
	(41.5%)	(40.5%)	(44.7%)	(42.4%)
Technical Studies or Tertiary Studies	22.8%	23.0%	17.3%	20.1%
	(42.0%)	(42.2%)	(37.8%)	(40.1%)
Undergraduate or Graduate Studies	46.2%	46.3%	47.0%	47.1%
	(49.9%)	(49.9%)	(50.0%)	(50.0%)
<i>Ideology</i>				
Left–Right Axis, 0 to 10	5.668	5.622	5.559	5.516
	(2.660)	(2.508)	(2.543)	(2.664)

Continued on next page

Table A3: Balance Table – *Continued from previous page*

<i>Perceptions of Corruption</i>				
<i>(0 to 10)</i>				
Corruption Public Administration in General	8.290	8.146	8.065	7.940
	(2.237)	(2.307)	(2.486)	(2.462)
Corruption Hondurans in General	6.805	7.104	6.967	7.142
	(2.798)	(2.620)	(2.717)	(2.565)
<i>Trust in Institutions</i>				
<i>(from “not at all trustworthy” to “very trustworthy,” 0 to 10)</i>				
Trust in Church	5.995	6.052	6.006	6.082
	(3.002)	(2.965)	(3.020)	(2.944)
Trust in Congress	2.776	2.811	3.107	2.997
	(2.964)	(2.846)	(3.038)	(3.060)
Trust in Executive Power	3.206	3.433	3.491	3.546
	(3.186)	(3.056)	(3.324)	(3.277)
Trust in Police	3.251	3.576	3.621	3.456
	(2.796)	(2.704)	(2.989)	(2.737)
Observations	379	328	338	366

Notes: Balance Table between treatment groups, standard errors in parenthesis.

Table A4: Descriptive Table for Outcomes and Key Pre-Treatment Variables

Variable	Description	Mean	SD	Min	Max
Pre-Treatment Perception of Corruption of Officials in Public Administration	On a scale of 0 to 10 (“not likely at all” to “very likely”), how likely do you think it is that public officials in Honduras are involved in acts of corruption?	8.112	2.375	0	10
Pre-Treatment Perception of Corruption of Hondurans in General	On a scale of 0 to 10 (“not likely at all” to “very likely”), how likely do you think it is that Hondurans in general are involved in acts of corruption?	7.001	2.679	0	10
Corruption of City’s Residents	On a scale from 0 to 10 (“not likely at all” to “very likely”), how likely do you think it is that the population of the city where you currently reside is involved in acts of corruption?	5.670	2.708	0	10
Perception of Corruption of the SAR	On a scale from 0 to 10 (“not likely at all” to “very likely”), how likely do you think it is that SAR officials are involved in acts of corruption?	5.614	3.004	0	10
Probability That a SAR Agent Will Accept a Bribe	On a scale of 0 to 10 (“not likely at all” to “very likely”), how likely do you think it is that a SAR officer will request a gift or money from taxpayers in exchange for resolving or preventing payment problems related to taxes?	5.871	3.175	0	10
Beliefs Index	Mean of <i>Perception of Corruption of the SAR</i> and <i>Probability that a SAR Agent Will Accept a Bribe</i> .	5.742	2.763	0	10
SAR’s Capability	How capable do you think the SAR is of collecting the amounts owed from those who have tax obligations? (1 not capable at all, 5 totally capable).	3.303	1.196	1	5
Willingness to Evade Taxes (dummy)	Dummy equal to 1 if the respondent is willing to evade taxes, derived using crosswise model as in Jann et al. (2012) (see Appendix B for the actual question).	47.08%	19.95%	0	1
Accepts Discount (dummy)	If you go shopping and the business owner offers to make a sale without VAT for a 10% discount, you would: accept/reject discount (dummy equal to 1 if respondent would accept).	32.10%	46.70%	0	1
Lies in Dice Game (dummy)	Dummy equal to 1 if the respondent did not report the real number that was shown to him by the survey.	9.99%	30.00%	0	1

Notes: Descriptive statistics for the treatments and for our main outcome variables are shown. Full questionnaire available in Appendix B.

Appendix B: Survey Questionnaire

This appendix presents the survey questionnaire and the different treatment messages (“perception,” “purge,” and “combined”). The sequence of questions and sections mirrors those employed in our experiment, but the format differs as we utilized QuestionPro for survey administration. In addition, the original questionnaire was in Spanish. A response to each question was mandatory except for the “Comments” question.

Comments added in red were not shown in the survey. The title of each question was not shown to respondents.

Q0. Screener.

Thank you for being part of our study!

Dear participant,

In this survey, organized by researchers from the University of Nottingham (England) and McGill University (Canada), we will ask you to answer a series of questions about trust and transparency of institutions with the aim of improving their quality for all Honduran citizens.

To ensure the quality of the survey data, your responses will be subject to statistical control methods. Your participation in this study will be confidential and your responses will not be disclosed in any way that would identify you. Additionally, your participation in this study is completely voluntary, and you can withdraw at any time if you wish.

This survey should take less than 10 minutes to complete. **By clicking the “Next” button you acknowledge that your participation in the study is voluntary, you reside in Honduras, and are at least 18 years old. If you do not meet these requirements, we ask that you please do not continue.**

Upon completion, for your time and in gratitude, you will automatically be entered into a lottery for **USD 200**.

Press “**Next**” to begin.

[Page Break]

Q1. Gender.

What is your gender? (refers to the gender assigned at birth)

- Male
- Female

Q2. Age.

How old are you?

[BOX]

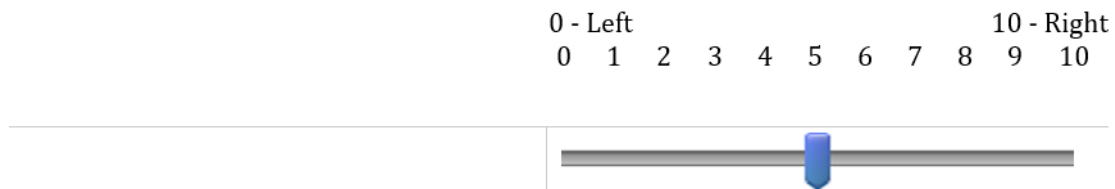
Q3. Department of Residence.

In which department do you currently live?

[*DROPDOWN, HONDURAS DEPARTMENTS*]

Q4. Political Orientation.

In politics, people sometimes talk about left and right. Considering 0 as “left,” 5 as “center,” and 10 as “right,” where would you place yourself on the following scale?



Q5. Highest Level of Education.

What is your highest level of education completed?

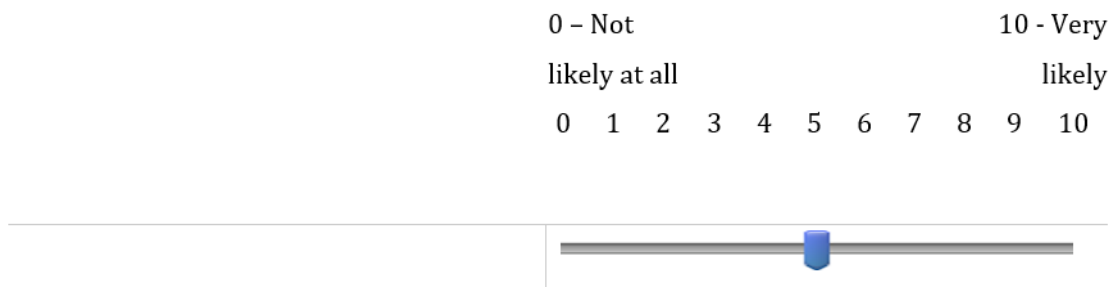
- Never attended an educational institution
- Literacy program
- Pre-primary education
- Primary education
- Common cycle

- Diversified
- Higher technical
- Non-university higher education
- University degree
- Postgraduate
- Don't know / No response

[Page Break]

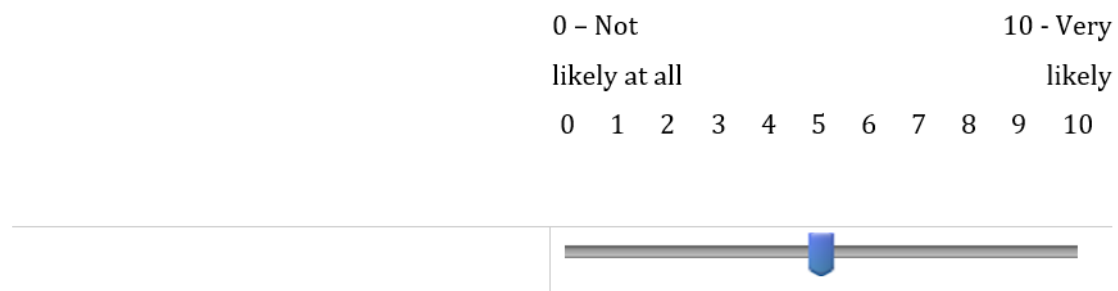
Q6. Perception of Corruption of Hondurans in General.

On a scale from 0 to 10, where 0 is “not likely at all” and 10 is “very likely,” how likely do you think it is that Hondurans in general are involved in acts of corruption?







Q7. Perception of Corruption of Officials in Public Administration.

On a scale from 0 to 10, where 0 is “not likely at all” and 10 is “very likely,” how likely do you think it is that public officials in Honduras are involved in acts of corruption?



Q8. Trust in Institutions.

On a scale from 0 to 10, for each of the groups or institutions in the following list, considering 0 as “not at all trustworthy” and 10 as “very trustworthy,” how trustworthy do you think...

	0 - Not at all trustworthy 0 1 2 3 4 5 6 7 8 9 10	10 - Very trustworthy									
Church is?											
Congress is?											
Executive Power is?											
Police is?											

[Page Break]

Q9. Attention Check.

Please, we need you to select the “Strongly agree” option in response to this question to confirm that you are not a robot. Thank you for your understanding.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

[Page Break]

Next, we will present brief information relevant to our study. Please read the messages carefully. We will contact some randomly selected participants and award additional prizes

to those who correctly answer questions about these messages.

[Page Break]

CONTROL TREATMENT

Información sobre el Servicio de Administración de Rentas (SAR) de Honduras.

El *Servicio de Administración de Rentas* de Honduras es la institución que se dedica a recaudar los impuestos que se utilizan para financiar bienes y servicios públicos.

Mapa de las oficinas del SAR
Localizaciones de las oficinas



Fuente: <https://www.sar.gob.hn/nuestras-oficinas/>

Text says:

“Information about the Revenue Administration Service (SAR) of Honduras.

The *Honduran Revenue Administration Service* is the institution in charge of collecting taxes that are used to finance public goods and services.”

Text on figure says:

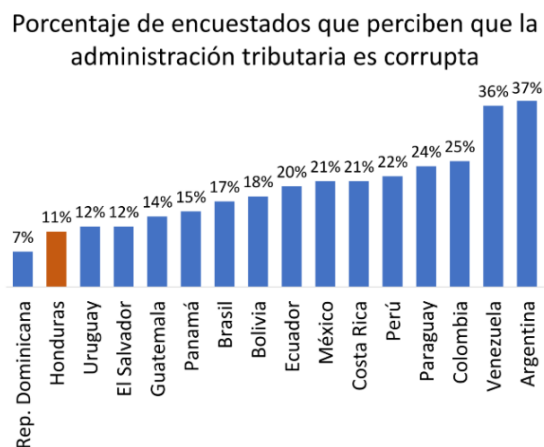
“Map of SAR’s offices. Location of offices. Source: <https://www.sar.gob.hn/nuestras-oficinas/>”

PERCEPTION TREATMENT

El Servicio de Administración de Rentas (SAR) de Honduras es de los menos corruptos de América Latina.

El *Servicio de Administración de Rentas* de Honduras es la institución que se dedica a recaudar los impuestos que se utilizan para financiar bienes y servicios públicos.

El SAR es además **una de las administraciones tributarias menos corruptas de la región**. Según datos de una encuesta reciente, la institución es percibida, por los propios hondureños, **como la segunda administración tributaria menos corrupta de América Latina**. Solo el 11% de los encuestados consideraron que los funcionarios del SAR están involucrados en actos de corrupción.



Fuente: Latinobarómetro.

Text says:

“The Revenue Administration Service (SAR) of Honduras is one of the least corrupt in Latin America.

The *Honduran Revenue Administration Service* is the institution in charge of collecting taxes that are used to finance public goods and services.

The SAR is also **one of the least corrupt tax administrations in the region**. According to data from a recent survey, the institution is perceived, by Hondurans themselves, as the **second least corrupt tax administration in Latin America**. **Only 11% of those surveyed considered that SAR officials are involved in acts of corruption.**”

Text on figure says:

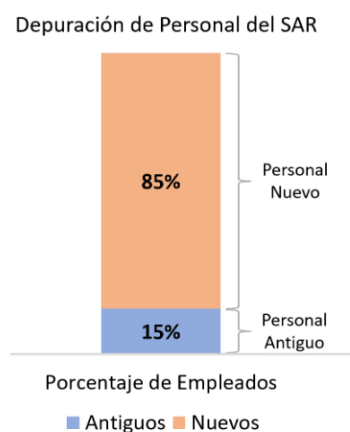
“Percentage of respondents who perceive that the tax administration is corrupt. Source: Latinobarómetro.”

PURGE TREATMENT

El Servicio de Administración de Rentas (SAR) de Honduras reconoce que la corrupción es un problema grave y realizó una fuerte depuración de su personal

El *Servicio de Administración de Rentas* de Honduras es la institución que se dedica a recaudar los impuestos que se utilizan para financiar bienes y servicios públicos.

Además, el SAR reconoce que la corrupción es un problema grave, por lo que recientemente **decidió realizar una fuerte depuración de su personal**. En los últimos años el SAR implementó una reforma administrativa importante en la que **renovó el 85% de sus empleados** y seleccionó cuidadosa y rigurosamente a sus nuevos funcionarios, en un proceso que incluyó someter **a los nuevos empleados a un detector de mentiras** para comprobar su honestidad.



Text says:

“The Revenue Administration Service (SAR) of Honduras recognizes that corruption is a serious problem and carried out a strong purge of its personnel.

The *Honduran Revenue Administration Service* is the institution in charge of collecting taxes that are used to finance public goods and services.

In addition, the SAR recognizes that corruption is a serious problem, which is why it recently **decided to carry out a strong purge of its personnel**. In recent years, the SAR implemented an important administrative reform in which **it replaced 85% of its employees** and carefully and rigorously selected its new officials, in a process that included subjecting **new employees to a lie detector** to check their honesty.”

Text on figure says:

“Purge of personnel of SAR. Percentage of Employees.” *Orange color represents the percentage of new employees, blue color represents the percentage of old employees.*

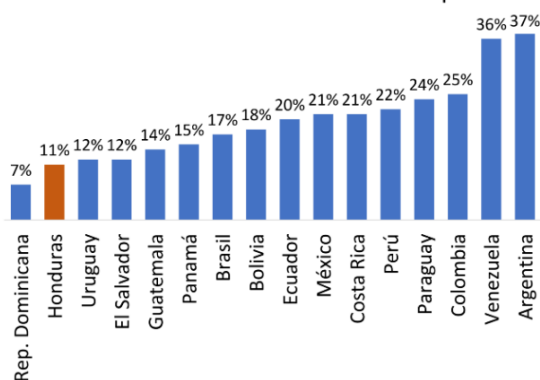
COMBINED TREATMENT

El Servicio de Administración de Rentas (SAR) de Honduras es de los menos corruptos de América Latina.

El *Servicio de Administración de Rentas* de Honduras es la institución que se dedica a recaudar los impuestos que se utilizan para financiar bienes y servicios públicos.

El SAR es además **una de las administraciones tributarias menos corruptas de la región**. Según datos de una encuesta reciente, la institución es percibida, por los propios hondureños, **como la segunda administración tributaria menos corrupta de América Latina**. Solo el 11% de los encuestados consideraron que los funcionarios del SAR están involucrados en actos de corrupción.

Porcentaje de encuestados que perciben que la administración tributaria es corrupta



Fuente: Latinobarómetro.

Text says:

“The Revenue Administration Service (SAR) of Honduras is one of the least corrupt in Latin America.

The *Honduran Revenue Administration Service* is the institution in charge of collecting taxes that are used to finance public goods and services.

The SAR is also **one of the least corrupt tax administrations in the region**. According to data from a recent survey, the institution is perceived, by Hondurans themselves, as the **second least corrupt tax administration in Latin America**. **Only 11% of those surveyed considered that SAR officials are involved in acts of corruption.**”

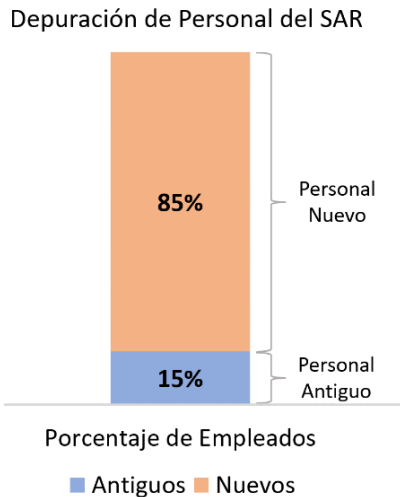
Text on figure says:

“Percentage of respondents who perceive that the tax administration is corrupt. Source: Latinobarómetro.”

CONTINUATION OF COMBINED TREATMENT

El Servicio de Administración de Rentas (SAR) de Honduras reconoce que la corrupción es un problema grave y realizó una fuerte depuración de su personal

El SAR reconoce que la corrupción es un problema grave, por lo que recientemente **decidió realizar una fuerte depuración de su personal**. En los últimos años el SAR implementó una reforma administrativa importante en la que **renovó el 85% de sus empleados** y seleccionó cuidadosa y rigurosamente a sus nuevos funcionarios, en un proceso que incluyó someter **a los nuevos empleados a un detector de mentiras** para comprobar su honestidad.



Text says:

“The Revenue Administration Service (SAR) of Honduras recognizes that corruption is a serious problem and carried out a strong purge of its personnel.

SAR recognizes that corruption is a serious problem, which is why it recently **decided to carry out a strong purge of its personnel**. In recent years, the SAR implemented an important administrative reform in which **it replaced 85% of its employees** and carefully and rigorously selected its new officials, in a process that included subjecting **new employees to a lie detector** to check their honesty.”

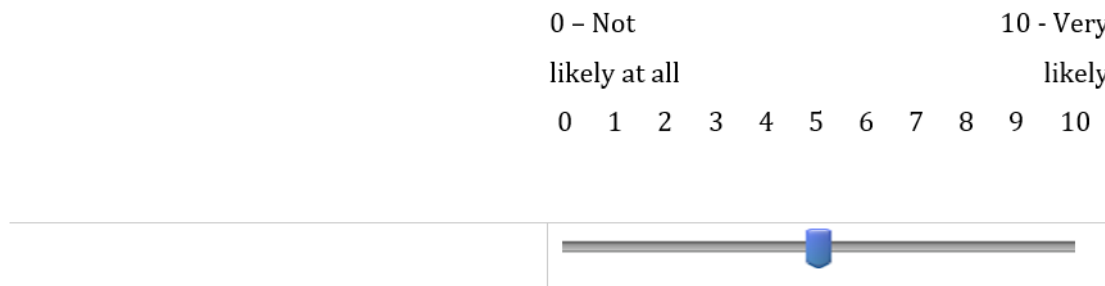
Text on figure says:

“Purge of personnel of SAR. Percentage of Employees.” *Orange color represents the percentage of new employees, blue color represents the percentage of old employees.*

[Page Break]

Q10. Perception of Corruption of the SAR.

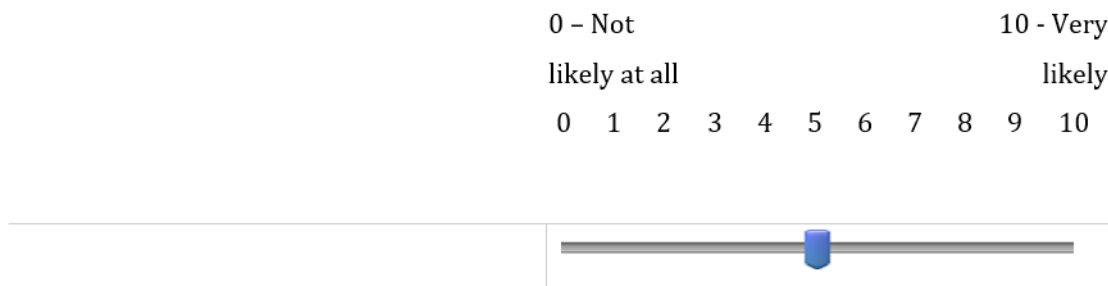
On a scale from 0 to 10, where 0 is “not likely at all” and 10 is “very likely,” how likely do you think it is that SAR officials are involved in acts of corruption?



[Page Break]

Q11. Corruption of City’s Residents.

On a scale from 0 to 10, where 0 is “not likely at all” and 10 is “very likely”, how likely do you think it is that the population of the city where you currently reside is involved in acts of corruption?



[Page Break]

Q12. Accepts Discount.

If you go shopping and the business owner offers to make a sale without VAT for a 10% discount, you would:

- Accept the discount.
- Reject the discount.

Q13. Willingness to Evade Taxes.

Please, we need you to indicate how many statements from the following list are true for you. We won't ask you to name what those specific statements are, just the total number of true statements.

- My mother was born in November or December.
- I would be willing to evade taxes if I had the opportunity.

Remember that your mother's date of birth is unknown to us, which guarantees the privacy of your response.

Response Options:

- Both statements are true or both are false.
- Only one statement is true.

[Page Break]

Q14. Probability That a SAR Agent Will Accept a Bribe.

On a scale from 0 to 10, where 0 is "not at all likely" and 10 is "very likely," how likely do you think it is that a SAR officer will request a gift or money from taxpayers in exchange for resolving or preventing payment problems related to taxes? (For example, to accept that a taxpayer evades taxes, or to avoid penalties, or to complete a procedure more quickly.)

	0 - Not likely at all	10 - Very likely									
	0	1	2	3	4	5	6	7	8	9	10
	<div><div></div></div>										

Q15. SAR's Capability.

How capable do you think the SAR is of collecting the amounts owed from those who have tax obligations?

- Not at all capable
- Slightly capable
- Moderately capable
- Capable
- Very capable

[Page Break]

Q16. Dice Game Explanation.

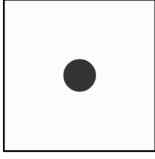
At the end of this study we will hold an additional lottery for a **prize of 2,500 (two thousand five hundred) lempiras**. Here is a game where you **can win tickets to this additional lottery**. The game is simple:

1. When you click “Next” the system **will throw a virtual “die” one time and present the result**, a random number.
2. You **must report** the number you rolled on the die. **You will get a number of tickets according to the result you report** (1 ticket if your reported value is 1, 2 tickets if your reported value is 2, etc.). **Your chances of winning depend on the number of tickets you report**. The more tickets, the greater your chances of winning. For example, if you report a 2 you will have twice the chance of winning than if you report a 1.

[Page Break]

Q17. Dice Result 1 (*Die roll equal to 1*)

The result of the die roll is the following:



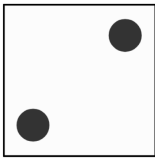
Please, report below the result you have obtained:

[BOX]

[Page Break]

Q18. Dice Result 2 (*Die roll equal to 2*)

The result of the die roll is the following:



Please, report below the result you have obtained:

[BOX]

[Page Break]

Congratulations! You have obtained [REPORTED NUMBER] ticket(s). We will inform you of the result of this additional lottery later.

[Page Break]

Q19. Comments. (*Answering this question was optional*)

Finally, if you have any comments regarding the study, you can share them in the following box:

[BOX]

Q20. Survey Rating.

On a scale from 1 to 5 stars, how would you rate this survey?

- 1 star
- 2 stars
- 3 stars
- 4 stars
- 5 stars