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Preliminary Results

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Abstract

Many countries are considering cuts to public-sector salaries as a path to fiscal consolidation. Yet, can lowering politicians' pay incentivize corruption? This paper examines how wage reductions affect political corruption and how these effects vary with public administrators' social distributional preferences. We conduct a laboratory experiment in a developing country, simulating a public administration setting in which administrators allocate public funds. After an initial round under stable compensation, a 60% wage cut is introduced for a randomly assigned subset of participants. Holding selection constant, we find that wage cuts significantly increase rent extraction: treated administrators extract, on average, 9% more. Importantly, social distributional preferences strongly predict both baseline corruption and responsiveness to wage cuts. Administrators classified as *altruistic* extract less than those classified as *selfish*, yet both groups increase corruption following the wage cut. Beliefs about others' behavior also deteriorate, with the expected extraction by peers rising by 10%, indicating a breakdown in normative expectations. These findings suggest that austerity measures can erode ethical behavior even among intrinsically motivated officials, underscoring the need to align fiscal reforms with incentive structures and anti-corruption strategies to preserve integrity in public governance.

JEL Codes: D73, H83, C91
Keywords: Rent-seeking, Social preferences, Corruption, Wage cuts, Laboratory experiment

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1 Introduction

A widely used strategy for fiscal consolidation across countries involves reducing government expenditures, with public sector wage cuts serving as a particularly visible and politically salient tool.[1] While such measures often enjoy broad public support, particularly when framed as curbing political privilege[2]. Such measures, however, may also produce unintended consequences.[3] In particular, wage reductions may affect both the selection and behavior of public officials, potentially exacerbating corruption by weakening ethical standards, lowering the opportunity cost of misconduct, or altering the pool of individuals willing to pursue public office.

Since the canonical models of Akerlof and Yellen (1990), Becker and Stigler (1974), and Besley and McLaren (1993), this relationship between public sector remuneration and corruption has been understood to operate through two primary mechanisms. First, an *economic* channel, whereby higher wages reduce incentives for corruption by increasing the opportunity cost of misconduct (Chen and Liu, 2018; Di Tella and Schargrodsky, 2003), satisfying fairness norms (Akerlof and Yellen, 1990), or raising the reputational and legal costs of scandals (Rose-Ackerman and Palifka, 2016). Second, a *selection* channel, whereby attractive salaries help draw more competent (Besley, 2004) and honest individuals (Caselli and Morelli, 2004; Dal Bó et al., 2013), though possibly also attracting candidates with weaker public service motivation (Delfgaauw and Dur, 2007; Francois, 2000).

While prior research has explored how wage changes affect corruption, mostly using observational data and with a focus on the economic channel (An and Kweon, 2017; Demirgüç-Kunt et al., 2023; Pulejo and Querubín, 2025; Van Rijckeghem and Weder, 2001), little attention has been placed on how individuals with differing intrinsic motivations respond to wage reductions once already in office. Observational studies often face identification challenges: wage cuts are typically endogenous to political cycles or fiscal crises, and their anticipation can affect the composition of applicants (Fisman et al., 2015).

[1] Countries that have implemented or proposed wage-cut reforms include countries as diverse as Spain (2010), Brazil (2015), and India (2020). See Appendix Table A1 for a list of proposed public sector salary reduction episodes since the 2010s.

[2] Public discontent over political compensation frequently drives mass mobilizations. For example, Colombia's 2021 national protests explicitly demanded cuts to politicians' salaries (The World, 2022). Similar pressures have emerged in Argentina, spurring legislative proposals to cap political pay (Ground News, 2024), and in Peru, where salary reform initiatives have been shaped by legislative populism (Forbes, 2021).

[3] Cursory evidence shows that the number of misconducts in the U.S. Congress is negatively correlated with real salaries. During times of lower real salaries, the number of misconducts is higher. See Figure A1 in the Appendix.

As such, isolating the behavioral effect of wage cuts and holding constant honest/dishonest or motivated/not motivated politicians remains empirically difficult.

In this paper, we provide causal evidence on the effects of an exogenous wage cut reform on political corruption, with a particular focus on how intrinsic motivations shape these effects. Using a laboratory experiment in a developing country, we investigate three key dimensions: (i) the effect of reductions in politicians' salaries on rent-seeking behavior; (ii) how social distributional preferences, which capture intrinsic and extrinsic motivations, shape responses to such wage cuts, and (iii) how the wage cuts affect social acceptance of corruption. As such, we provide evidence on the role of wages on corruption, while holding selection constant, the potential independent effect of selection on corruption, and how they interact to affect social norms.

To address these questions, we implement a multi-stage experimental design that first elicits each participant's social distributional archetype and subsequently observes their behavior in a setting where opportunities for local-level corruption are embedded. Specifically, we implement a Public Collective Trust Game (PCTG), a modified version of the Public Trust Game (Cagala et al., 2019), to recreate the dynamics of public goods provision and rent extraction. In our setup, participants are randomly assigned to one of two roles: **contributors** or **administrators**. These roles remain fixed across two rounds of interaction. Contributors decide how much to allocate to fund a public good, which offers positive returns to their material payoffs. Administrators are tasked with managing the pooled resources, choosing how to divide them between funding the public good and personal appropriation.

To causally identify the impact of wage cuts, we implement a between-subjects design. In the treatment condition, administrators experience an exogenous 60% reduction in their fixed income between the first and second rounds. In the control group, administrators' wages remain constant across both rounds. This design allows us to isolate the behavioral effects of wage reductions on rent-seeking while holding constant the selection channel typically confounded in observational settings.

Moreover, our experimental design incorporates a **collective decision-making dimension** that mirrors the structure of legislative bodies (e.g., Congress or Parliament), which are typically responsible for proposing and approving wage reforms. Specifically, contributors and administrators are randomly assigned into *groups* with random re-matching across rounds. While there is group membership, all decisions are made individually and

in private, preserving the confidentiality and independence of each participant's choice.[4]

This feature serves two purposes. First, it allows us to observe administrators' rent-seeking behavior in a context where free riding is salient, replicating the decentralized accountability environment often seen in legislative settings. Second, it preserves the relevance of selection and integrity by maintaining the presence of other administrators in the system. This introduces a subtle but powerful layer of social comparison and reputational pressure, whereby socially inappropriate behavior may be rationalized or concealed under the assumption that "others would do the same."

Our findings are consistent with a large body of evidence suggesting that higher wages are associated with lower levels of corruption. In our experiment, administrators in the control group retained, on average, 71% of the contribution pool.[5] In contrast, administrators who experienced a 60% wage cut extracted 77% of the pool, reflecting a statistically significant 6 percentage point increase in rent-seeking behavior. These results carry significant economic implications: wage cuts to public officials are associated with a nearly 9% rise in political corruption.

More importantly, we find that social distributional preferences critically shape both baseline levels of rent-seeking behavior and responses to wage cuts. Administrators classified as "selfish" extracted, on average, 84% of the contribution pool. In contrast, altruistic administrators extracted 61%, and maximin types extracted 66%. These differences underscore the importance of selection: recruiting intrinsically motivated individuals into public office may serve as a powerful tool to reduce corruption.

We also find heterogeneous treatment effects across archetypes in response to the wage cut. Selfish and altruistic administrators increased their rent-seeking by 7 percentage points, while maximin administrators increased theirs by 9 percentage points. Although these level effects are similar, their economic significance diverges due to differing baselines: rent extraction increased by 7% among selfish administrators, compared to 14% for altruistic and 10% for maximin types. These results suggest that even intrinsically motivated officials may respond to wage cuts in ways that compromise public welfare.

Lastly, we find that in collective settings, where multiple individuals have the opportunity to manage public resources, administrators tend to believe that others will increase their level of rent extraction following a wage cut. This shift in belief is consistent across all

[4] Details are presented in Section 2.

[5] Observed levels of corruption are endogenous to the parameters of the game. The key consideration is the variation in corruption across wage conditions and the distribution of social preferences.

social archetypes, with the expected extraction by others increasing by 10%. These findings suggest that such reforms may weaken normative expectations about ethical behavior among peers. As a result, administrators may act strategically to avoid being exploited or "free-ridden" by others. This dynamic can further amplify rent-seeking behavior, even among those with strong pro-social preferences.

This paper contributes to several strands of the literature on the relationship between wages and political corruption.[6] First, we provide new causal evidence that lower public sector wages increase the incidence of corrupt behavior among public officials, reinforcing a key finding in the literature (Chen and Liu, 2018; Demirgüç-Kunt et al., 2023; Di Tella and Schargrodsky, 2003; Pulejo and Querubín, 2025). By implementing a controlled experiment, we strengthen the internal validity of this relationship, which is often challenging to establish in observational data due to concerns about endogeneity.

Second, our findings also contribute to the literature on the role of selection and integrity of public officials (Dal Bó and Finan, 2018). While prior studies have primarily emphasized how changes in compensation affect the composition of the applicant pool, altering the balance of competence, honesty, or motivation among prospective officials (Ashraf et al., 2020; Carnes and Hansen, 2016; Dal Bó et al., 2013; Ferraz and Finan, 2009; Fisman et al., 2015; Gagliarducci and Nannicini, 2013), our design isolates behavioral responses by holding the selection dimension constant. Specifically, we estimate the effect of wage reductions on corruption among a fixed set of administrators, thereby identifying how intrinsic motivations influence corrupt behavior once in office. This approach enables us to separate the behavioral channel from the selection channel, which is typically confounded in observational studies.

We extend this literature by showing that the relationship between wage cuts and corruption is further moderated by social distributional preferences. While motivated public servants are often assumed to respond more to non-monetary recognition than to financial incentives (Ashraf et al., 2014), our findings reveal that even administrators with strong prosocial preferences, such as altruistic or maximin types, respond to wage reductions by increasing their corrupt extraction. This result challenges the notion that intrinsic motivation alone can safeguard against unethical behavior in adverse economic environments, highlighting the need for complementary institutional safeguards when implementing fiscal austerity.

Lastly, our paper contributes to the broader literature on individual versus collective

[6]See Acemoglu and Verdier (2000); Aidt (2003); Becker and Stigler (1974); Shleifer and Vishny (1993).

decision-making in contexts of trust under economic shocks. We extend the standard trust game paradigm by implementing an experimental setting that features multiple contributors (senders) and multiple administrators (receivers), thereby introducing a collective dimension to the analysis. Prior work has shown that negative economic shocks, such as wage cuts, can reduce interpersonal trustworthiness and, in turn, hinder performance in public office (Bejarano et al., 2021), or lower contributions due to diminished expectations of trustworthiness (Aycinena and Blanco, 2022). We build on this literature by examining a context where concerns about free riding and social norms among administrators may amplify the effect of the shock. Consistent with previous findings, our results show that administrators become less trustworthy following the wage cut. Notably, this effect is exacerbated in the presence of high expected rent-seeking behavior by other administrators, suggesting a role for conditional cooperation and norm-driven behavior in shaping institutional trustworthiness.

2 Experimental Design

We conducted a series of laboratory experiments using oTree (Chen et al., 2016) involving 600 college students recruited through the Rosario Experimental and Behavioral Economics Lab (REβEL, Greiner (2015)) at Universidad del Rosario in Bogotá, Colombia. The experimental setup consisted of three different activities: an Equality Equivalence Test (Kerschbamer, 2015), a standard Trust Game (Berg et al., 1995), and a Public Collective Trust Game (PCTG), which modifies the Public Trust Game (Cagala et al., 2019).

At the beginning of the Trust Game activity, subjects were randomly assigned to one of two roles, which remained fixed throughout the entire experiment.[7] Finally, participants were informed that only one of the three activities would be compensated, with an equal chance for each activity to be selected for payment. On average, participants earned $12 USD throughout the experiment.

2.1 Equality Equivalence Test (EET)

In the first activity of the experiment, participants engage in an Equality Equivalence Test (Kerschbamer, 2015) that allows us to measure their social distributional preferences. This test employs a price-list technique to assess the participant's neutrality, benevolence, or

[7] In our experiment, participants were assigned to one of two possible neutral frame roles (Subject A or Subject B). Prior research indicates that framing effects are typically minimal in corruption games (Alekseev et al., 2017; Banerjee, 2016; Barr and Serra, 2009; Abbink and Hennig-Schmidt, 2006).

malevolence towards a passive economic agent in two domains. The first domain considers a **disadvantageous inequality** (denoted as *x-list*) where the participant's material payoff is lower than the passive agent's payoff, and a second domain, where the participant has an **advantageous inequality** (denoted as *y-list*) and his material payoff is higher than the passive agent's payoff. Following Kerschbamer (2015), the revealed choices in both domains allow us to classify each subject into one of nine social preference types. In order to capture a non-strategic measure for distributional preferences, we set the passive agent to be a non-governmental organization (NGO).[8]

We divide the EET domains into two separate panels, each with seven choices. In each choice, the participant faces two alternatives: the right alternative, which presents a symmetric reference allocation, where both the subject and the NGO receive 100 experimental points (EP)[9], and the left alternative, which presents asymmetric payoffs for both agents. Moreover, the participant's material payoff increases monotonically from one decision to the next, whereas the NGO's material payoff in the asymmetric allocation is held constant. The structure of each panel and the material payoffs for both the participant and the NGO are presented in the Appendix C.1

2.1.1 Archetypes Classification

We classify administrators into nine distinct social preference archetypes: inequality-averse (Fehr and Schmidt, 1999), altruistic (Andreoni and Miller, 2002), maximin, envious, selfish, kiss-up, spiteful, kick-down, and equality-averse. Formally, we followed the Kerschbamer (2015) procedure to compute a pair of *(x-score, y-score)* for each participant, where a higher *x-score* corresponds to a higher grade of benevolence in the domain of disadvantageous inequality, and a higher *y-score* corresponds to a higher degree of benevolence in the advantageous inequality domain. We define the *x-score* as $(4.5 - r_x)$, where r_x denotes the row number in which the individual first selects the asymmetric allocation that favors the NGO over themselves. Conversely, the *y-score* is defined as minus $(r_y - 4.5)$, where r_y the row number in which the individual first chooses the asymmetric allocation that favors themselves over the NGO.[10]

[8] Subjects had the possibility of choosing an NGO from a varied list of options, and they knew this from the beginning of the experiment. They chose at the end of the activities, just before the final questionnaire.

[9] This is equivalent to 20,000 COP (approximately 5 USD). Each experimental point (EP) was valued at a fee of $200 pesos ($0.05 USD). Participants received $12,000 pesos ($3 USD) as a show-up fee. On average, participants received a payment of $40,000 pesos ($10.8 USD). Given that the minimum wage in Colombia is $5,531 pesos/hour ($1.42 USD/hour), the earnings obtained are about 7.2 times the minimum wage.

[10] See Kerschbamer (2015) for further details on the computation of the *xy*-scores.

To formally map *xy*-scores to social distributional preferences, let (m) denote the individual's own payoff ("*my*" payoff), and (o) denote the payoff of the other party ("*other*"). In our setting, altruistic behavior (i.e., *surplus-maximizing* preferences) corresponds to agents who derive utility from improving others' payoffs (Andreoni and Miller, 2002), or who exhibit social welfare preferences (Charness and Rabin, 2002). Formally, such preferences satisfy $\frac{\partial u_i(m,o)}{\partial o} > 0$ regardless of the initial endowment distribution. Hence, altruistic agents are expected to display positive *x*- and *y*-scores.

Similarly, selfish behavior (i.e., *own-money-maximizing* preferences) characterizes agents who are indifferent to others' payoffs, such that $\frac{\partial u_i(m,o)}{\partial o} = 0$, independent of the distribution of endowments. These agents are expected to exhibit *x*- and *y*-scores close to zero. Finally, agents with maximin preferences (i.e., *Leontief*-type preferences) seek to maximize the minimum of all agents' payoffs (Fisman et al., 2007). In this case, the utility function satisfies $\frac{\partial u_i(m,o)}{\partial o} > 0$ if and only if $m > o$, that is, under conditions of *advantageous* inequality. Therefore, maximin agents are expected to display positive *y*-scores and *x*-scores that are close to zero.

2.2 Public Collective Trust Game (PCTG)

The focal point of this paper was the Public Collective Trust Game (PCTG). This game modifies the Public Trust Game (Cagala et al., 2019) by incorporating a second administrator, who also has the authority to decide what portion of the collective contributions to retain for personal use. The addition of a second administrator introduces a more realistic scenario for observing free-riding behavior, underscoring that the trustworthiness of the political and legislative system is not solely dependent on one administrator. As presented by Cagala et al. (2019), the provision of public goods in this game depends not only on the contributors' contributions but also on the extent of rent-seeking behavior by both administrators.

Regarding the experimental details, participants are assigned into groups of four people (two contributors and two administrators) that interact in two rounds $r = \{1, 2\}$. Let $i = \{1, 2\}$ denote a group of two contributors and $j = \{1, 2\}$ a group of two administrators. Contributors have an income of $I_{i,r} = 100$ EP, while administrators receive a wage for their public service $w_{j,r} = 100$ EP. Once paired, each contributor decides privately and simultaneously how much of his income he wants to contribute $\theta_{i,r} = \{0, 20, 40, 60, 80, 100\}$ to fund a public good. The sum of individual contributions is multiplied by an efficiency factor $k = 4$, resulting in a contribution pool $\Theta_r = 4 \sum_1^2 \theta_{i,r}$.

In the second stage of the game, each administrator received half of the contribution pool and decided privately and simultaneously how much to extract $\psi_{j,r} \in \left[0, \frac{\Theta_r}{2}\right]$ from the contribution pool; the remaining part is returned to contributors.[11] After administrators made their decisions, the returned amounts were totaled and equally distributed among the contributors, reflecting the value of the public good provided. It is worth noting that we employed the strategy method to capture the administrators' decisions without revealing the types of contributors with whom they were interacting.[12]

Additionally, each contributor and administrator is queried about their first-order beliefs regarding others' behaviors. Specifically, contributors were tasked with predicting the contribution of the other contributor and the average returned pool by the group of administrators. Administrators were asked to forecast the average contribution amount by contributors and the returned amount by the other administrator. These measures were designed as incentive-compatible expectations, wherein participants stood to earn 5 EP each time their predictions aligned with the decisions of another participant.[13]

For the remainder of the paper, we focus exclusively on the behavior of administrators, as it is through their actions that rent-seeking behavior is most effectively captured. Given that half of our sample was assigned to this role, our final experimental sample comprised 300 participants. The administrator's payoff in a round r is:

$$\Pi_{j,r} = w_{j,r} + 2\psi_{j,r} \sum_{i=1}^{2} \theta_{i,r} \tag{1}$$

Participants answered two control questions designed to assess their understanding of the behaviors of both contributors and administrators. Following this, they engaged in the PCTG interaction twice, with random re-matching to different subjects in each round.

Importantly, the final outcome of the first round, including the equilibrium and results, remained undisclosed until the experiment concluded. This feature in the experimental

[11] For simplicity, we assume that all administrators have equal political power, granting them control over identical shares of the contribution pool. This design mirrors a legislative setting where multiple politicians hold equivalent decision-making authority.

[12] Given that each contributor has the possibility to transfer 0, 20, 40, 60, 80 or 100 points, then the group of contributors could transfer 10%, 20%, 30%, ... , 100% of the total endowment. Notice that if only one contributor transfers 20 points, and both contributors have 100 points (200 points in total), then the contribution pool is 10% of the total endowment. The strategy method recovers all 10 possible transfers.

[13] While hedging behavior could theoretically influence our results, we do not believe it poses a significant concern in this context. Our design minimizes such effects by using incentive-compatible mechanisms and ensuring that participants' payoffs are directly tied to their decisions. Furthermore, the random re-matching of participants across rounds reduces the likelihood of strategic hedging.

design serves two crucial purposes: firstly, it eliminates the possibility of beliefs updating among participants based on prior round outcomes, ensuring the integrity of our data analysis. Secondly, by concealing the outcomes of the initial round until the experiment's conclusion, we mitigate the risk of any observed differences between the first and second rounds being attributed to the preceding round's results rather than the effects of our treatment.

2.3 Treatment

To examine the impact of wage cuts on political corruption, we implemented a between-subjects design that introduced an unexpected income cut for administrators in the second round of the Public Collective Trust Game (PCTG). Our treatment arms are detailed as follows:

Control (C) group: In this group, contributors maintained a fixed income of $I_{i,j} = 100$ EP for both rounds, and administrators maintained a fixed wage of $w_{j,r} = 100$ EP for both rounds.

Administrator's wage cut (AWC) group: In this group, contributors maintained the same fixed income of $I_{i,r} = 100$ EP across rounds. Administrators had an initial wage of $w_{j,1} = 100$, and at the beginning of the second round, all the participants in this group, regardless of their role, were informed of a wage cut that reduced each administrator's income by **60%**, lowering their wage from $w_{j,1} = 100$ EP to $w_{j,2} = 40$ EP.

2.4 Additional Details

Lastly, experimental subjects participated in a coordination game developed by Krupka and Weber (2013), which was used to elicit incentive-compatible normative expectations from both contributors and administrators during the first round of the PCTG.[14] In this task, each participant was required to rate the social appropriateness of the contributor's and administrator's behaviors. Specifically, subjects evaluated potential actions using a four-item Likert scale, with options ranging from "Very socially inappropriate" to "Very socially appropriate." Participants earned 5 EP if their responses matched those of a

[14]The coordination game was administered at the end of the experiment, with players' identities remaining anonymous. Participants were asked to recall all treatments to situate themselves in the first round, where all individuals had an equal endowment of 100 EP.

randomly selected participant.[15]

Table 1: Balance between Treatments: Control and Administrator's Wage Cut

Variable	Mean **Control (C)** (150 obs)	Mean **Administrator's Wage Cut (AWC)** (150 obs)	*p-value* for H_0 Control = AWC
Panel A: Socio-demographic variables			
Age	21.93	21.76	0.68
Gender	0.59	0.59	1.00
Siblings	1.46	1.53	0.58
Stratum	3.11	3.19	0.53
Self-perception of wealth (income stair)	5.57	5.81	0.21
ln(Weekly USD income)	3.69	3.54	0.32
Semester	4.61	5.00	0.33
Master's student	0.09	0.06	0.38
Panel B: Equality Equivalence Test (EET) variables			
x-score (Benevolence in Disadvantageous Inequality - DI)	0.86	0.84	0.90
y-score (Benevolence in Advantageous Inequality - AI)	1.84	2.10	0.21
Inconsistent subjects	0.22	0.21	0.78
Panel C: Preferences and Attitudes			
Generalized Trust Measure (0: Less - 10: More)	4.64	4.39	0.31
Generalized Risk Measure (0: Less - 10: More)	6.44	6.33	0.65
Rationality Measure	37.19	37.07	0.96
Have you participated in experiments before?	0.68	0.69	0.90
Importance of religion (1: Less - 4: More)	2.39	2.47	0.50
Medical care (0: State - 10: Patient)	3.72	3.53	0.50
Political preference (1: Right - 5: Left)	3.68	3.59	0.56
Welfare opinion (1: Less - 5: More)	3.19	3.28	0.43
Inequality opinion (1: Less - 5: More)	4.05	3.97	0.50

Note: **Self-perception of wealth**: is a categorical variable that denotes the participant's answer to the question: "Imagine a staircase with 10 steps. People with the lowest incomes are placed on step 1, and people with the highest incomes on step 10. Where would you place your family group?" **Rationality measure**: denotes the participant's answer to the beauty contest of *Guess 2/3 of the average*. **Welfare opinion** is a categorical variable that ranges from 1 = "Totally disagree" to 5 = "Totally agree" to the statement: "Each individual is responsible for their own well-being". **Inequality opinion** is a categorical variable that ranges from 1 = "Totally disagree" to 5 = "Totally agree" to the statement: "The government should implement strong policies to reduce inequality". $^{***}p < 0.01$,** $p < 0.05$,* $p < 0.1$

Upon completion of the experiment, all participants filled out a final socio-demographic questionnaire and submitted the necessary information for payment processing. Descriptive statistics and balance checks comparing administrators in the treatment and control groups are reported in Table 1.

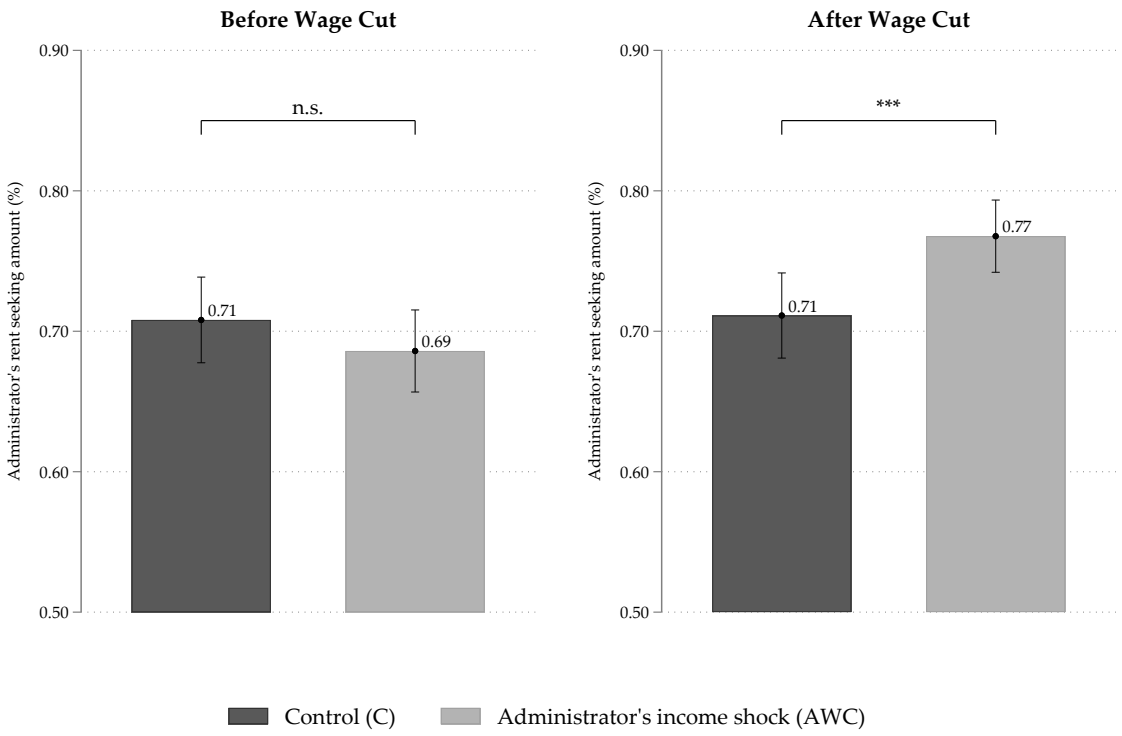
[15]We adopt the approach of matching one random participant, following Fergusson et al. (2024), as this method utilizes a coordination game to elicit shared beliefs about the social appropriateness of various actions. By incentivizing respondents to align their answers with the modal choice of others, it leverages shared normative beliefs as a focal point, ensuring that responses reflect collective social norms rather than individual preferences.

3 Results

3.1 Rent-seeking Behavior

Regarding rent-seeking behavior, and considering that we employed the strategy method to ascertain the administrators' choices, we calculated the *average rent-seeking amount* as the mean fraction retained on each of the ten possible contribution pools. Figure 1 illustrates a simple comparison of the mean average rent-seeking amount between the treatment and control groups across two rounds.

Figure 1: *Average Rent-seeking Amount* in the Public Collective Trust Game



Notes: This figure displays the average rent-seeking amount extracted by administrators, computed across all ten possible contribution pool values. Bars are segmented by treatment group: **Control** (black) and **Administrator Wage Cut (AWC)** (gray). Vertical lines represent 95% confidence intervals with standard errors clustered at the individual level. No control covariates are included in these estimates. Statistical significance is based on a fully saturated linear model where the dependent variable is the administrator's average rent-seeking amount, and treatment indicators are included as regressors. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$, n.s. $p > 0.1$.

Initially, administrators kept 70% of the contribution pool on average, with no statistically significant differences between groups prior to treatment. Following a reduction in administrators' income (refer to Figure 1, right panel), the control group's average remained steady at 71%, whereas the treatment group's average increased to 77% (p-value

= 0.001), indicating a rise in rent-seeking behavior post-wage cut.[16]

We measure the causal treatment effects on rent-seeking behavior, estimating the following model:

$$Y_j^r = \alpha_0 + \alpha_1 \mathbf{AWC}_j + x_j'\gamma + \varepsilon_j, \tag{2}$$

where Y_j^r denotes the average amount of rent sought by administrator j in round r, averaged across the ten possible contribution pools. The variable $\mathbf{AWC}_j$ is a binary indicator equal to 1 if the administrator was exposed to the income reduction treatment, and 0 otherwise. The vector x_j' includes a set of sociodemographic control variables. The error term ε_j captures idiosyncratic shocks and is estimated using heteroskedasticity-robust standard errors. Table 2 reports the OLS estimates for both experimental rounds.

Table 2: Rent-seeking Behavior: Average across Contribution Pools

Dep Var: **Average rent seeking**	Round			
	Before Wage Cut		After Wage Cut	
	(1)	(2)	(3)	(4)
Administrator's wage cut (AWC)	-0.02	-0.01	0.06***	0.06***
	(0.02)	(0.01)	(0.02)	(0.01)
Constant	0.71***	0.99***	0.71***	1.03***
	(0.02)	(0.06)	(0.02)	(0.06)
Mean Dep. Variable	0.7	0.7	0.7	0.7
Effect size (%)	-3.1	-1.5	7.9	8.9
Controls		✓		✓
Observations	300	300	300	300
Adjusted R-squared	0.00	0.62	0.03	0.55

Notes: The set of controls included in ***Controls*** are age, sex, stratum, trust measure, risk measure, and previous experience participating in experiments. The *Mean Dep. Variable* expresses the unconditional control mean of the dependent variable. The *Effect size (%)* denotes the size of the treatment effect as a percentage compared with the unconditional mean of the control group. Standard errors clustered at the individual level are presented in parentheses. $^{***}p < 0.01$,** $p < 0.05$,* $p < 0.1$

Columns (1) and (2) report estimates for the first round of the game, prior to any wage change, where no statistically significant differences across treatment groups are expected or observed. Columns (3) and (4) present estimates from the second round, following the implementation of the wage cut. Column (3) shows that a 60 percent reduction in the administrator's wage leads to a statistically significant 6 percentage point increase in

[16]This general reduction in the returned amount is motivated by an increase in the percentage of receivers that are returning between 0% and 25% of their transfer. The right panel of Figure D2 in the Appendix displays the kernel density of the average returned amount across all transfers in the round following the shock, disaggregated by treatment.

average rent-seeking behavior. In column (4), we include several controls in our analysis: participants' age, gender, socioeconomic status, risk preferences, trustworthiness measure, and prior experience in economic experiments. The inclusion of these controls does not meaningfully alter the estimated treatment effect.

Overall, these findings align with theoretical predictions and the limited empirical evidence on the relationship between compensation and corruption. Formally, from an economic perspective, the wage cut leads to a 9% increase in rent extraction relative to the unconditional control group mean, illustrating the potential unintended consequences of salary reduction reforms on the behavior of public officials.

3.2 Social Distributional Preferences

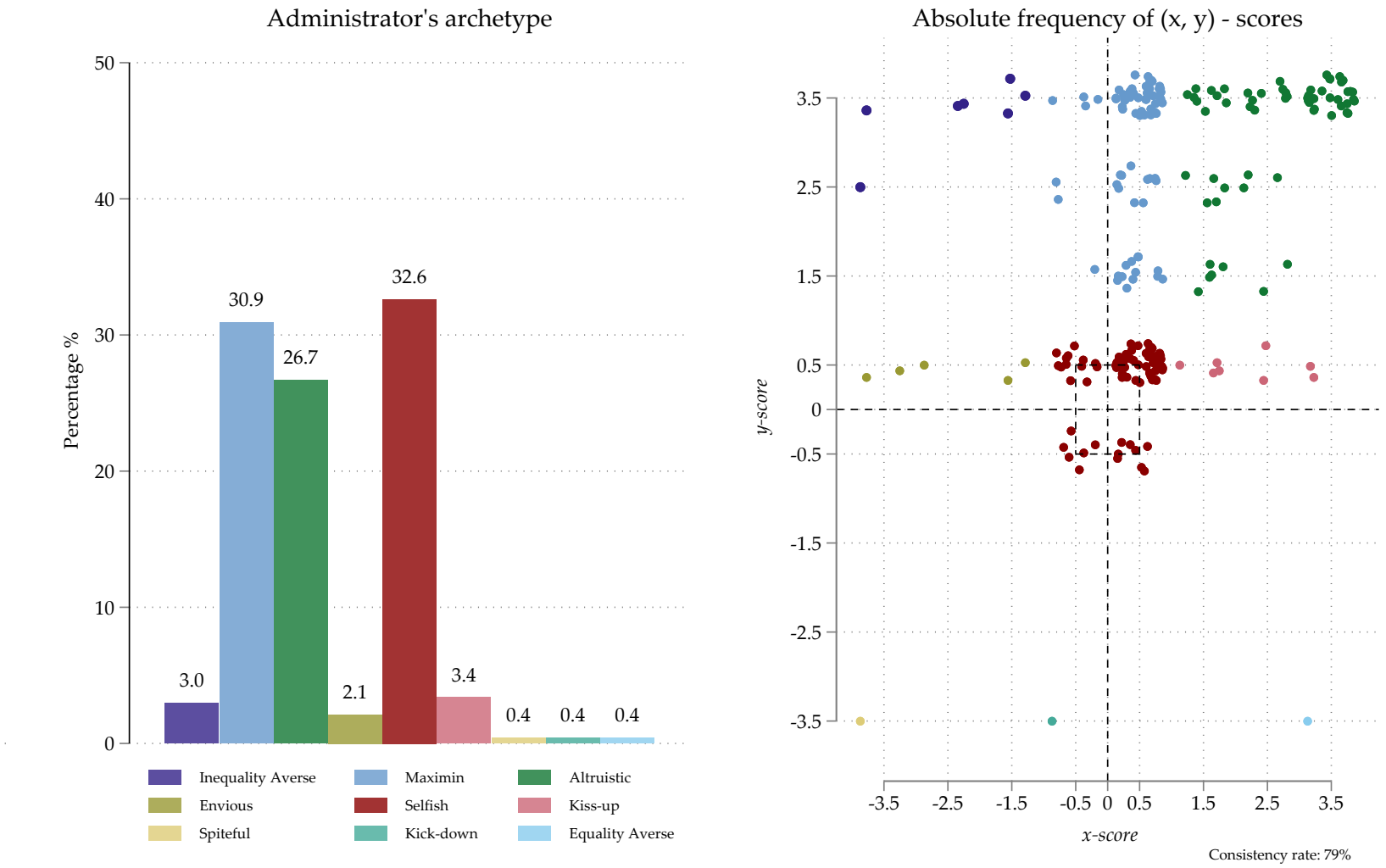
Up to this point, we have kept our analysis relatively simple by focusing on the general effect of an administrator's income reduction on rent-seeking behavior. Here, we discuss to what extent social distributional preferences may account for $i)$ higher or lower levels in rent-seeking behavior prior to the wage cut reform and $ii)$ heterogeneous treatment effects in the increment of the extracted amount after the wage cut. To this end, we classify administrators based on their individual social distributional profiles and analyze how these preferences shape both initial behavior and their responsiveness to the wage cut.

3.2.1 Administrator's Archetypes

Regarding the distribution of social archetypes among administrators (see Figure 2, left panel), approximately 31% demonstrate *Leontief*-type preferences (**maximin** archetype). In contrast, 27% exhibit *surplus-maximizing* preferences (**altruistic** type), while 32% exhibit *own-money-maximizing* preferences (classified as the **selfish** archetype). The remaining archetypes comprise less than 10% of the sample. Approximately 80% of participants display consistent behavior during the activity, allowing for reliable classification into one of the main archetypes.[17] The resulting distribution of social types is broadly consistent with prior findings in similar experimental settings (Fehr et al., 2024; Kerschbamer and Müller, 2020), particularly those involving samples composed predominantly of students or younger populations (Epper et al., 2024).

[17]This consistency rate is comparable to that reported in other studies (see Kerschbamer and Müller (2020)). Following the protocol in Kerschbamer (2015), participants who exhibited inconsistent choices, such as multiple switches in the list experiment, are excluded from the analysis.

Figure 2: Social Distributional Preferences



Notes: Less than 5% of our sample shows *inequality-averse* preferences. This is not unexpected, as older people tend to be more inequality-averse than younger people (Kerschbamer and Müller, 2020), and our sample is predominantly composed of students, which also reflects the underrepresentation of this archetype (Epper et al., 2024).

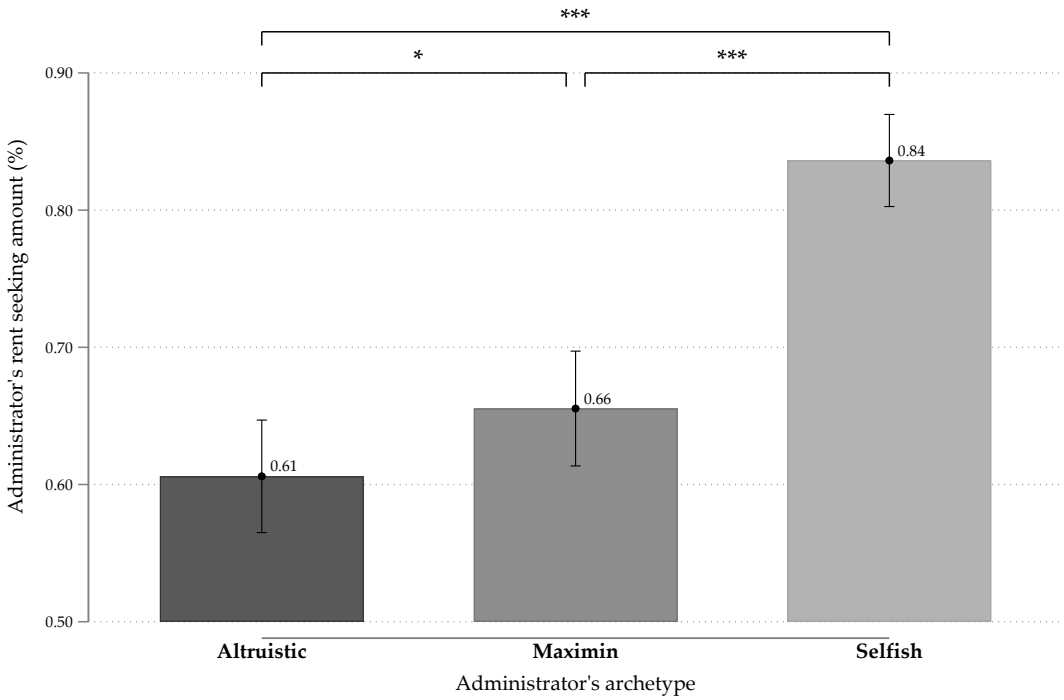
We now turn to the distribution of xy-scores (Figure 2, right panel). The scatterplot reveals three distinct clusters: one concentrated around the origin, consistent with selfish preferences; a second in the upper-center region, indicative of maximin behavior; and a third in the top-right quadrant, reflecting altruistic preferences. Notably, 91% of participants exhibit positive y-scores, suggesting widespread other-regarding preferences in contexts involving advantageous inequality.

Given the observed distribution of archetypes and xy-scores, the subsequent analysis in Section 3.3 focuses on administrators classified as **selfish**, **altruistic**, or **maximin** types.[18]

3.3 Rent-seeking Behavior across Social Archetypes

Figure 3 depicts the unconditional mean of the average rent-seeking amount across the three main social distribution archetypes in the round before the wage cut of the Public Collective Trust Game. For this analysis, we pooled all administrators, as both treatment arms were comparable before the wage cut.

Figure 3: *Average Rent-seeking Amount* in the **Round before WC** across Social Archetypes



[18] In Appendix B.1, we present robustness checks that relax the full-archetype classification assumption. Formally, we examine treatment heterogeneity by considering the y-score (Table B.1) and x-score dimensions separately (Table B.1), thereby isolating sensitivity to inequality aversion and self-interest orientation, respectively.

Notes: This figure displays the average rent-seeking amount extracted by administrators, computed across all ten possible contribution pool values. Bars are segmented by administrators' archetypes: **Altruistic** (black, left), **Maximin** (Gray, center), and **Selfish** (Light gray, right). Vertical lines represent 95% confidence intervals with standard errors clustered at the individual level. No control covariates are included in these estimates. Statistical significance is based on a fully saturated linear model where the dependent variable is the administrator's average rent-seeking amount, and distributional archetype indicators are included as regressors. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$, n.s. $p > 0.1$.

Notably, administrators exhibiting behavior consistent with the selfish archetype tend to extract 84% of the contribution pool, while those with an altruistic archetype extract 61%, and maximin administrators extract 66%. Furthermore, *own-money-maximizing* administrators extract significantly higher amounts from the contribution pool compared to maximin or altruistic administrators (both p-values < 0.001), securing gains 27% or 37% larger when in office. This suggests that administrators with a genuine focus on maximizing contributors' payoffs, such as those with maximin or altruistic preferences, are less likely to engage in rent-seeking behavior, highlighting the role of social preferences in mitigating corruption and misconduct in office.

We now formally estimate differences across social archetypes in two principal outcomes. Specifically, we estimate the following model:

$$Y_j = \beta_0 + \beta_1 \textbf{Maximin}_j + \beta_2 \textbf{Selfish}_j + \Delta_j' \gamma + \varepsilon_j, \tag{3}$$

where Y_j denotes: $i)$ the average amount of rent sought by administrator j in the round before the wage cut, and $ii)$ the expected contribution, measured by the administrator's first-order beliefs about contributors' behavior in the round before the wage cut. The variable $\textbf{Maximin}_j$ is a binary indicator for administrators classified as having *Leontief-type* preferences, while $\textbf{Selfish}_j$ indicates behavior consistent with *own-money-maximizing* preferences. The omitted (reference) category is the **Altruistic** archetype. We also include a vector of administrator-level controls, Δ_j', which accounts for age, gender, socioeconomic status, risk preferences, and prior experience in experimental studies.

Table 3 reports the OLS estimates for equation (3) in the round before the wage cut. The regression coefficients from columns (1) and (2) indicate that selfish administrators retain, on average, 17 percentage points more than maximin administrators, representing a 26% increase. In contrast, altruistic senders tend to keep 5 percentage points less than maximin administrators, although this difference is not statistically significant after controlling for sociodemographic factors. Lastly, *own-maximizing* administrators retain 21 percentage points more than altruistic ones, highlighting that public officials with lower concern for others tend to manage public resources less effectively compared to their more benevolent counterparts.

Table 3: Rent-seeking Behavior: Average across Contribution Pools)

	Before wage cut			
	Rent-seeking behavior		*Expected Contribution*	
	(1)	(2)	(3)	(4)
Maximin (β_1)	0.05*	0.04	-0.04	-0.04
	(0.03)	(0.03)	(0.04)	(0.04)
Selfish (β_2)	0.23***	0.21***	-0.13***	-0.11**
	(0.03)	(0.03)	(0.04)	(0.04)
Constant	0.61***	0.64***	0.58***	0.35*
	(0.02)	(0.13)	(0.03)	(0.19)
Mean Dep. Variable	0.61	0.61	0.58	0.58
Effect size - Maximin (%)	8.2	6.8	-7.0	-7.5
Effect size - Selfish (%)	38.0	34.8	-21.8	-19.0
Controls		✓		✓
Observations	213	213	213	213
Adjusted R-squared	0.27	0.31	0.04	0.10
p-value H_0: $\beta_1 = \beta_2$	0.000	0.000	0.050	0.126

Notes: The set of controls included in ***Controls*** are age, sex, stratum, risk measure, and previous experience participating in experiments. The *Mean Dep. Variable* expresses the unconditional control mean of the dependent variable. The *Effect size (%)* denotes the size of the treatment effect as a percentage compared with the unconditional mean of the control group. Standard errors clustered at the individual level are presented in parentheses. $^{***}p < 0.01,^{**}\ p < 0.05,^{*}\ p < 0.1$

Columns (3) and (4) present estimates of differences in the expected contributions made by citizens, as anticipated by administrators of different social archetypes. The results indicate that selfish administrators anticipate significantly lower contributions to the public good relative to administrators with more other-regarding preferences. Specifically, altruistic administrators expect 19% higher contributions compared to selfish ones. Although the difference between maximin and selfish administrators is not statistically significant, the point estimate suggests that selfish administrators tend to expect 7% less than their maximin counterparts.

Overall, these baseline findings align with a well-established literature on the role of politicians' types in shaping corruption-related behaviors.[19] Administrators who prioritize personal utility (selfish archetype) engage in higher levels of rent extraction, thereby reducing the quality of public goods provision and eroding contributor welfare even prior to any wage-reduction reforms.

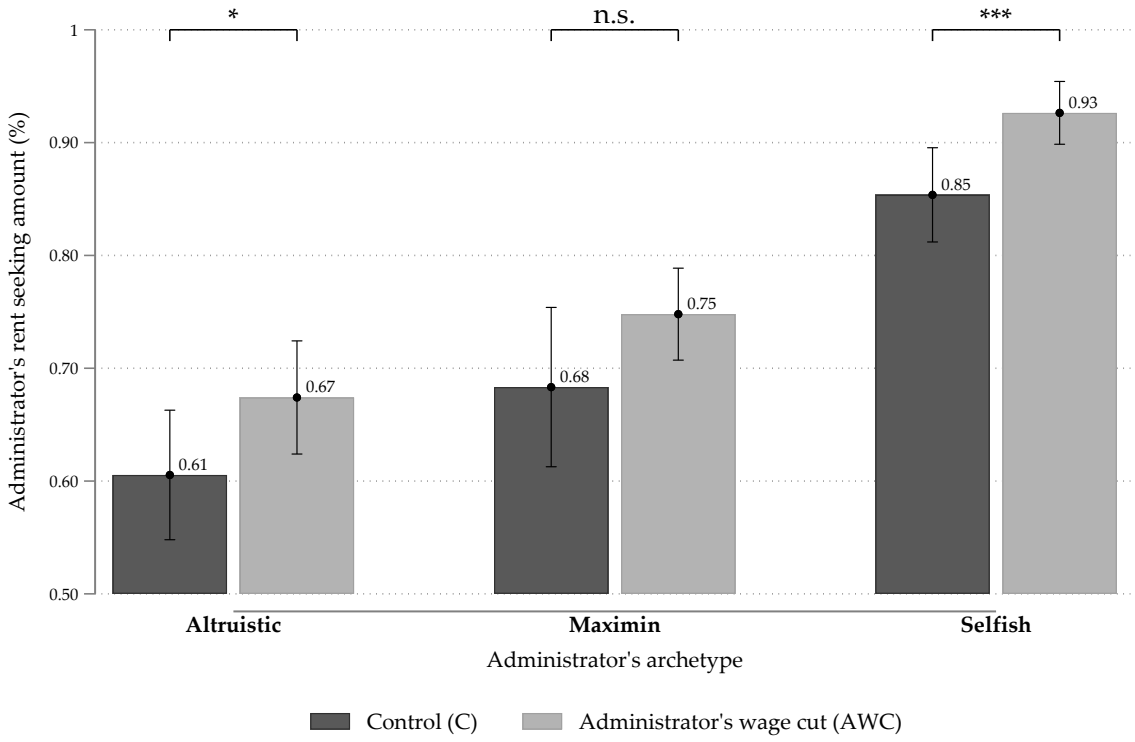
[19]For theoretical evidence, see Prendergast (2007); Dhillon et al. (2017); Martinelli (2022). For empirical and experimental evidence on the relevance of honesty types, see Hanna and Wang (2017); Asher and Novosad (2023); Barinas-Forero and Scartascini (2025).

3.4 Wage Cut Effect across Social Archetypes

We now examine the effects of a wage cut on administrators across different social distributional archetypes. Figure 4 displays the unconditional mean of the average rent-seeking amount by archetype for both treatment groups in the round after the wage cut.

In Figure 4, we observe that an income reduction leads to increased rent-seeking across all archetypes compared with their control counterparts. Specifically, selfish administrators raise rent-seeking by 8 percentage points (p-value = 0.004), while altruistic administrators increase it by 7 percentage points (p-value = 0.07). Maximin administrators also increased their rent-seeking amount by 8 percentage points, although this difference is not statistically significant at standard levels (p-value = 0.109).

Figure 4: *Average Rent-seeking Amount* by Treatment in the **Round after WC** across Archetypes



Notes: This figure displays the average rent-seeking amount extracted by administrators, computed across all ten possible contribution pool values. Bars are segmented by administrator's archetypes and treatment condition: **Altruistic** (left), **Maximin** (center), and **Selfish** (right); **Control group** (black), **Administrator's wage cut** (Gray). Vertical lines represent 95% confidence intervals with standard errors clustered at the individual level. No control covariates are included in these estimates. Statistical significance is based on a fully saturated linear model for each archetype, where the dependent variable is the administrator's average rent-seeking amount, and treatment indicators are included as regressors. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$, n.s. $p > 0.1$.

To formally assess the heterogeneous effects of the wage cut on rent-seeking behavior

across distributional archetypes, we estimate the following specification:

$$Y_j^{\text{Archetype}} = \alpha_0 + \tau\left(\mathbf{AWC}_j \times \text{Round}_j\right) + \alpha_1 \mathbf{AWC}_j + \alpha_2 \text{Round}_j + \Delta_j'\gamma + \varepsilon_j, \tag{4}$$

where $Y_j^{\text{Archetype}}$ denotes: (i) the average amount of rent extracted by administrator j belonging to a specific social archetype and (ii) the administrator's first order beliefs on the amount extracted by the other administrator measured as the average of expected extractions across the ten contribution pools. The variable $\mathbf{AWC}_j$ is a treatment indicator equal to 1 for administrators assigned to the wage-cut treatment. Round_j is a binary indicator equal to 1 for the post-treatment round and 0 otherwise. The interaction term τ is our primary coefficient of interest as it captures the differential change in rent-seeking behavior after the wage cut. The vector Δ_j includes socio-demographic controls, and ε_j is an idiosyncratic error term. Standard errors are clustered at the administrator level to account for within-subject correlation of socio-demographic covariates across rounds.

Table 4: Wage Cut Effect on Rent-seeking Behavior across Archetypes

Dep Var: **Average rent seeking**	Social archetype					
	Maximin		**Altruistic**		**Selfish**	
	(1)	(2)	(3)	(4)	(5)	(6)
AWC × Round	0.09***	0.09***	0.07***	0.07**	0.07***	0.07***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)
AWC	-0.02	-0.01	-0.01	-0.00	0.00	-0.00
	(0.04)	(0.05)	(0.05)	(0.04)	(0.03)	(0.03)
Round	-0.01	-0.01	0.02	0.02	0.02	0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)
Constant	0.62***	0.84***	0.66***	0.70***	0.84***	0.90***
	(0.03)	(0.21)	(0.04)	(0.18)	(0.02)	(0.18)
Controls		✓		✓		✓
Observations	126	126	146	146	154	154
Clusters	63	63	73	73	77	77
Adjusted R-squared	0.04	0.10	0.06	0.15	0.08	0.11

Notes: The set of controls included in ***Controls*** are age, sex, stratum, risk measure, and previous experience participating in experiments. Standard errors clustered at the individual level are presented in parentheses. $^{***}p < 0.01,^{**}p < 0.05,^{*}p < 0.1$

Table 4 reports the OLS estimates on the average rent-seeking amount disaggregated by archetype. Odd-numbered columns exclude controls, while even-numbered columns include the full set. The regression coefficients confirm the consistent and perverse effects of the wage cut reform on administrators' rent-seeking behavior. Specifically, treated selfish and altruistic administrators increase the average extracted amount by approximately 7

percentage points, while maximin administrators exhibit a 9 percentage-point increase. While the level effects are comparable, their economic significance varies: the rent-seeking of selfish administrators increases by 7%, whereas altruistic and maximin administrators show increases of 14% and 10%, respectively, relative to their lower pre-treatment baselines.

Overall, these results suggest that political reforms aimed at reducing administrators' compensation can inadvertently increase rent-seeking behavior, irrespective of their underlying distributional preferences. Although the relative effects appear larger among administrators with stronger other-regarding motives, Figure 4 reveals that their baseline levels of rent extraction are substantially lower compared to those of administrators with selfish motives. This distinction highlights a crucial policy implication: the selection of public officials with prosocial or altruistic preferences remains essential, as they demonstrate greater resistance to corrupting incentives even under adverse institutional conditions.

3.5 Effect on Empirical Expectations

Lastly, Table 5 presents the OLS estimates of the average expected extraction by other administrators. Columns (1) and (2) show that the wage cut reform leads to a 7-percentage-point increase in the amount administrators expect others to extract, an increase of nearly 10% relative to the baseline.

Table 5: Wage Cut Effect on Rent-seeking Behavior across Archetypes

Dep Var: **Belief average rent seeking**			Social archetype					
	Full Sample		**Maximin**		**Altruistic**		**Selfish**	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
AWC × Round	0.07***	0.07***	0.07**	0.07**	0.08**	0.08**	0.07**	0.07**
	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
AWC	-0.02	-0.02	-0.01	0.01	-0.01	-0.02	-0.01	-0.02
	(0.02)	(0.02)	(0.03)	(0.04)	(0.03)	(0.04)	(0.04)	(0.04)
Round	0.00	0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.00
	(0.01)	(0.01)	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)
Constant	0.69***	0.92***	0.62***	0.85***	0.67***	0.92***	0.78***	0.99***
	(0.01)	(0.08)	(0.02)	(0.13)	(0.03)	(0.15)	(0.02)	(0.17)
Controls				✓		✓		✓
Observations	600	600	126	126	146	146	154	154
Clusters	300	300	63	63	73	73	77	77
Adjusted R-squared	0.03	0.10	0.04	0.15	0.07	0.17	0.03	0.11

Notes: The set of controls included in ***Controls*** are age, sex, stratum, risk measure, and previous experience participating in experiments. Standard errors clustered at individual levels are presented in parentheses. $^{***}p < 0.01, ^{**}p < 0.05, ^{*}p < 0.1$

When disaggregating by archetype (Columns (3) to (8)), we observe a similar pattern: wage cuts raise expectations about others' rent-seeking behavior across all types. However,

there are notable differences at baseline. Maximin and altruistic administrators initially expected others to extract 62% and 67% of the pool, respectively, while selfish administrators expected others to extract 78%. These results suggest that the effects of wage cuts extend beyond individual behavior and that they actually shape empirical expectations, which may lead to an increase in political corruption (Ahloy et al., 2024). Specifically, they appear to deteriorate perceived ethical standards among administrators, regardless of their social preferences, potentially amplifying the perverse effects on public good provision.

4 Conclusions

This paper presents new causal evidence on the effects of wage cuts on political corruption by leveraging a controlled laboratory experiment conducted in a developing country. We show that a 60% reduction in public sector wages leads to a significant increase in corrupt behavior, with administrators extracting, on average, 8% more resources. These findings align with theoretical models that predict unintended consequences of fiscal austerity on wages (Akerlof and Yellen, 1990; Becker and Stigler, 1974; Besley and McLaren, 1993), highlighting the potential for wage cut reforms to backfire by eroding ethical behavior among public officials.

Crucially, we document that social distributional preferences play a central role in shaping both baseline corruption and responsiveness to wage cuts. While prior research has emphasized the effects of wage structures on the selection of candidates into public service (Fisman et al., 2015), our design isolates behavioral mechanisms by holding the selection channel constant. We find that administrators with **selfish** preferences extract substantially more resources even in the absence of financial shocks, underscoring the intrinsic heterogeneity in corruption propensities across individuals.

Moreover, although the relative increase in rent-seeking following wage cuts is larger among altruistic and maximin-type administrators, their baseline levels of corruption remain substantially lower than those of their selfish counterparts (18 and 23 percentage points lower, respectively). This pattern suggests that while wage reductions may undermine ethical behavior even among intrinsically motivated officials, their selection remains particularly important, as they exhibit markedly greater resistance to corrupt behavior in absolute terms. While previous research has documented the relevance of social distributional preferences in shaping support for political candidates (Fisman et al., 2017) and redistributive policy preferences (Fehr et al., 2024), to the best of our knowledge, we are the first to show that such preferences also play a central role in shaping actual behavior

in public office. These findings underscore the importance of recruiting and retaining intrinsically motivated individuals in public office as a crucial strategy for combating corruption.

Although laboratory experiments are often criticized for their limited external validity, there is no reason to believe that our results would be reversed in real-world settings, although their magnitude might shift, as enforcement consequences differ. The lab offers two critical advantages: it allows us to randomize a policy that cannot be randomized in the field, and it enables us to control for selection, isolating both the direct and selection-driven effects of fiscal consolidation measures on corruption.

These findings have significant implications for policy design, suggesting that anti-corruption strategies need to account not only for the compensation levels of public officials but also for their social preferences and the specific economic context. Policies aimed at reducing wages as a cost-cutting measure must be carefully balanced with robust transparency and accountability mechanisms to mitigate potential increases in corruption.

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Online Appendix

Wage cuts, Social Distributional Preferences and Political Corruption

Andres Barinas-Forero Carlos Scartascini

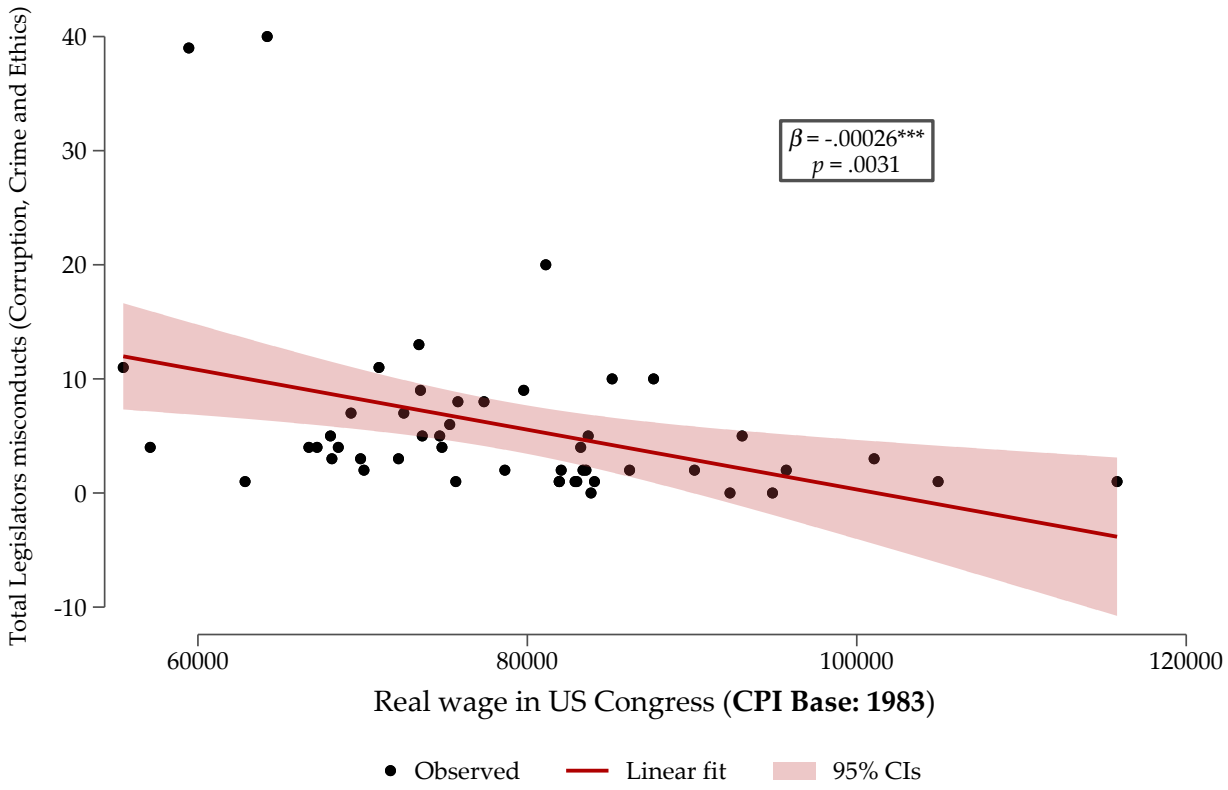
Contents

A Empirical Motivation

Table A1: Examples of Intended Reforms for Politicians Wage Cuts

Country	Year	Pay Cut Size	Region	Source
Argentina	2025	80% (Public sector)	South America	Ambito
Colombia	2025	50% (Legislators)	South America	Senate Colombia
India	2020	30% (President, PM, MPs)	Asia	LiveMint
New Zealand	2020	20% (PM and ministers)	Oceania	The Guardian
Mexico	2018	60% (President)	Latin America	The Guardian
Burkina Faso	2015	50% (Legislators)	Africa	The Washington Post
Nigeria	2015	50% (President and VP)	Africa	BBC News
Brazil	2015	10% (President)	South America	BBC News
Russia	2015	10% (President and top officials)	Europe	Time
Spain	2010	5–15% (Ministers and public sector)	Europe	France24

Figure A1: U.S. Congress Real Wage and Legislative Misconducts



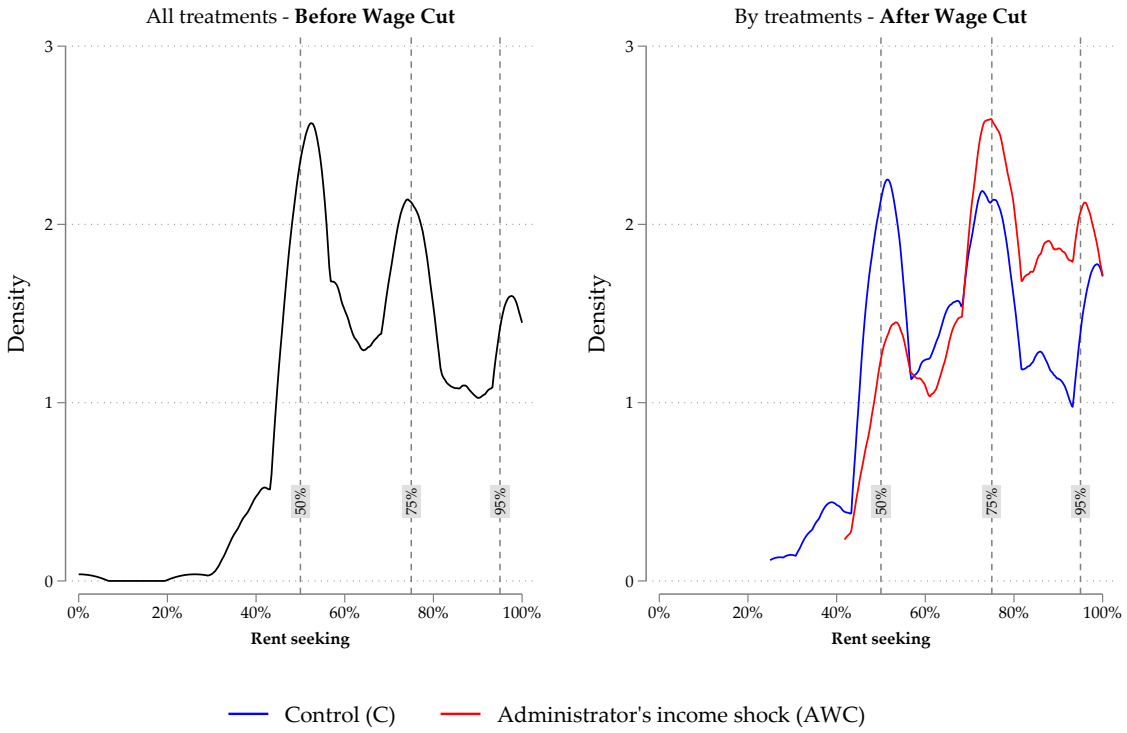
Notes: This figure illustrates the correlation between the real wage of U.S. legislators and the number of recorded misconduct cases, including corruption, criminal, and ethical violations, over the period 1969 to 2024. Data on congressional salaries are obtained from the official U.S. Senate source and adjusted to real terms using the Federal Reserve Bank of Minneapolis Consumer Price Index (CPI), with 1983 as the base year. Information on legislative misconduct is sourced from GovTrack, a civic project that tracks the behavior of members of the U.S. Congress. The misconduct data, current through 2024, is publicly available and can be accessed here. Each observation in the figure represents a legislative year. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$, n.s. $p > 0.1$.

B Additional Figures and Tables

B.1 Rent-Seeking Distribution

Figure B1 displays the full distribution of rent-seeking behavior before and after the wage cut. The left panel depicts the distribution of amounts retained by administrators in the round preceding the wage reform. The distribution is notably tri-modal, with mass points at 50%, 75%, and 95% of the contribution pool.

Figure B1: *Distribution of Rent-Seeking Amounts* in the Public Collective Trust Game



Notes: The figure displays the full distribution of rent-seeking behavior before and after the wage cut. The **black** line represents all treatment arms pooled. Post-reform distributions are shown separately for the **treatment group** (in red) and the **control group** (in blue). Mass points correspond to administrator decisions to retain specific proportions of the contribution pool.

The right panel shows the distribution across treatment and control groups in the round following the wage cut. As expected, the control group (blue line) replicates the pre-treatment distribution. In contrast, the treatment group (red line) exhibits a noticeable shift in behavior: fewer administrators retain exactly 50% of the pool, while there is a marked increase in the share of administrators extracting 75% or more. Peaks at 90% and 95% retention rates are particularly prominent, accounting for a substantial share of the aggregate treatment effect documented in Table 2.

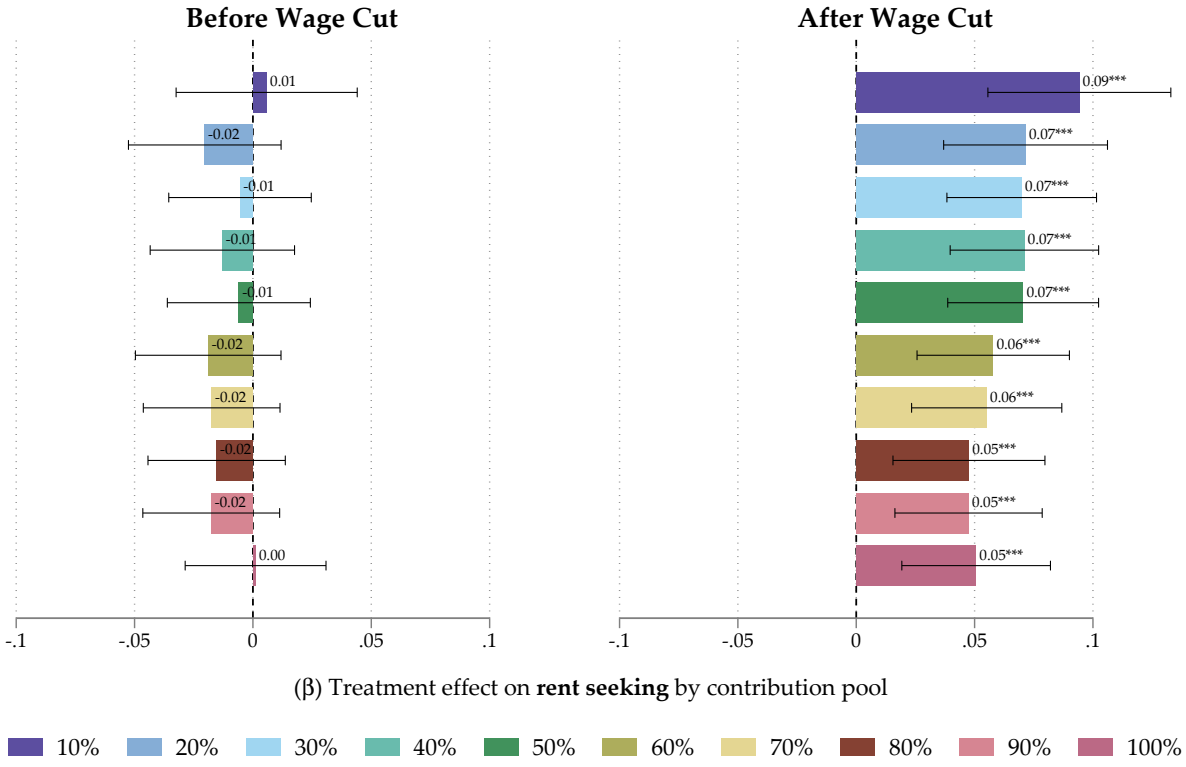
B.2 Rent-Seeking Behavior across Contribution Pools

Leveraging the strategy method embedded in our design, we estimate treatment effects on rent-seeking behavior conditional on each of the ten possible contribution pool sizes. This allows us to test whether administrators are more inclined to extract rents when the contribution pool is relatively small. Specifically, we estimate the following specification:

$$\mathrm{Y}^{c,r}j = \alpha_0 + \alpha_1 \mathbf{AWC}j + x'j\gamma + \varepsilon j, \tag{B1}$$

where $\mathrm{Y}_j^{c,r}$ denotes the amount retained by administrator j in round r when the group of contributors generates a contribution pool of size c. Figure B2 presents the OLS point estimates of Equation (B1) for each contribution pool, allowing for heterogeneous treatment effects across the distribution of available funds.

Figure B2: Returned Amount in the Public Collective Trust Game by Contribution Pool



Notes: The figure shows the average rent-seeking amount split by rounds, segmented by contribution pools. Dark lines represent 95% clustered robust confidence intervals. We include the same set of controls presented in equation 2. Reported significance levels are based on hypothesis testing from a fully saturated linear model in which the dependent variable is the average rent-seeking amount, and the regressors are dummy variables for each treatment condition. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$, n.s. $p > 0.1$.

The left panel of Figure B2 shows no statistically significant differences across treatments in the first round of the game. The right panel of Figure B2, which captures behavior

after the wage cut, reveals clear treatment effects. Formally, administrators facing lower wages extract significantly higher rents when the contribution pool is relatively small. For instance, when the pool represents only 10% of the total endowment, the wage cut increases the average rent-seeking amount by 9 percentage points. For larger pools, ranging from 50% to 100% of the total endowment, the increase is smaller, between 5 and 7 percentage points.

B.3 *xy*-scores Estimates

Table B1: Rent-seeking Behavior across *xy-scores* in the Round before the Wage Cut

Dep Var: **Average rent seeking**	Before Wage Cut			
	yscore		*xscore*	
	(1)	(2)	(1)	(2)
yscore	-0.06***	-0.05***		
	(0.01)	(0.01)		
xscore			-0.03***	-0.03***
			(0.01)	(0.01)
Constant	0.82***	0.95***	0.73***	0.93***
	(0.02)	(0.09)	(0.01)	(0.11)
Controls		✓		✓
Observations	257	257	262	262
Adjusted R-squared	0.24	0.30	0.07	0.14

Notes: The set of controls included in ***Controls*** are age, sex, stratum, risk measure, and previous experience participating in experiments. Robust standard errors are presented in parentheses. $^{***}p < 0.01,^{**}p < 0.05,^{*}p < 0.1$

C Experimental Design

C.1 Equality Equivalence Test (EET)

Panel 1: Disadvantageous inequality

Row	Left		Your choice	Right	
	Participant's payoff	**NGO's payoff**		**Participant's payoff**	**NGO's payoff**
1	70 points	140 points	Left ◯ ◯ Right	100 points	100 points
2	80 points	140 points	Left ◯ ◯ Right	100 points	100 points
3	90 points	140 points	Left ◯ ◯ Right	100 points	100 points
4	100 points	140 points	Left ◯ ◯ Right	100 points	100 points
5	110 points	140 points	Left ◯ ◯ Right	100 points	100 points
6	120 points	140 points	Left ◯ ◯ Right	100 points	100 points
7	130 points	140 points	Left ◯ ◯ Right	100 points	100 points

Panel 2: Advantageous inequality

Row	Left		Your choice	Right	
	Participant's payoff	**NGO's payoff**		**Participant's payoff**	**NGO's payoff**
8	70 points	60 points	Left ◯ ◯ Right	100 points	100 points
9	80 points	60 points	Left ◯ ◯ Right	100 points	100 points
10	90 points	60 points	Left ◯ ◯ Right	100 points	100 points
11	100 points	60 points	Left ◯ ◯ Right	100 points	100 points
12	110 points	60 points	Left ◯ ◯ Right	100 points	100 points
13	120 points	60 points	Left ◯ ◯ Right	100 points	100 points
14	130 points	60 points	Left ◯ ◯ Right	100 points	100 points

D Experimental Screens

General Instructions

If you read the following instructions carefully, you will be able—depending on your decisions and the decisions of other participants—to earn more money in addition to your initial endowment of **12,000 Colombian pesos** for participating. Therefore, it is essential that you pay close attention to the instructions. If you have any questions, please direct them to the coordinators.

Communication with other participants is strictly prohibited during the experiment. Violating this rule will result in automatic exclusion from the experiment and forfeiture of any payments.

Throughout the experiment, we will refer to experimental **points** instead of Colombian pesos. The total number of points you earn will be converted at the end of the session using the following rate:

$$1 \text{ point} = 200 \text{ Colombian pesos}$$

This activity involves **two types of participants**: participant A and participant B. Everyone in the room will be randomly assigned one of these two roles (A or B). Once assigned, you will participate in **three activities** as that type. Your role will remain the same throughout the entire experiment.

All your decisions are confidential, and your earnings will be paid anonymously at the end of the session. No other participant will know how much you earned.

If you do not wish to participate, please notify one of the activity coordinators so that you may leave the experiment.

Next, you will be presented with an informed consent form.

Informed Consent

Dear participant,

You have been invited to participate in a study about how people make decisions. At the end of the exercise, you will receive a monetary payment based on your decisions and the decisions of others. Additionally, you will receive a fixed amount simply for participating until the end. Payment will be made using the bank information you provide and will be transferred from the official payment accounts of the **Behavioral and Experimental Economics Lab (REBEL)** at Universidad del Rosario. The study is conducted by the Inter-American Development Bank and is not affiliated with Universidad del Rosario.

At the end of the activity, you will be asked some questions about the exercise. These may relate to the task you performed and/or your personal background. All information from your decisions and responses will be kept completely confidential and used solely for academic purposes. Your name or any identifying information will never be shared. No administrative or academic entity at the university will have access to this information.

Participation is entirely voluntary. Only you will know how much money you earned. You may withdraw at any time. However, if you leave before the activity ends or if no activity is detected on your part, you will not receive payment.

Risks: There are no known risks to participating in this study.

Questions: If you have any questions, you may contact us at rebel@urosario.edu.co. If you have questions about your rights as a participant, please contact the university's ethics committee at comite.etica@urosario.edu.co.

Welcome!

We are going to start this economic experiment. You are going to be a participant (X) throughout the experiment.

Activity 1 - Instructions

In this activity, you will be asked to make multiple decisions.

For each decision, you will choose the allocation of points that you prefer most between the two alternatives. These allocations will be labeled "Left" and "Right."

What is an allocation?

An allocation refers to a way of distributing experimental points between you and a non-profit organization (e.g., a foundation, charity, etc.).

Take the following image as a reference:

A continuación le presentamos un ejemplo de lo que se le presentará en la actividad:

Izquierda		Su decisión	Derecha	
Usted recibe:	La organización sin fines de lucro recibe:		Usted recibe:	La organización sin fines de lucro recibe:
35 puntos	70 puntos	○ Izquierda ○ Derecha	50 puntos	50 puntos

In the panel labeled **"Left"**, the allocation is as follows: **You receive 35 points**, and the **non-profit organization receives 70 points**.

In the panel labeled **"Right"**, the allocation is: **You receive 50 points**, and the **non-profit organization receives 50 points**.

Your task is to choose which of the two allocations you prefer.

To do so, you must mark either "Left" or "Right" in the "Your Decision" panel.

Note: Both you and the non-profit organization always receive a payment.

Returning to the previous example, if you choose "Left," you would receive 35 points, and the organization would receive 70 points. If you choose "Right," you will receive 50 points, and the organization will receive 50 points.

After completing the first row, move on to the second row and again choose between "Left" and "Right." Continue making decisions in this manner until you have completed all 14 decisions. You must make a decision for every row.

At the end of the experiment, you will be asked to select, from a list of options, the non-profit organization you wish to donate to.

This list includes a variety of non-profits with different missions. You will be able to choose the organization that interests you most.

At the end of this activity, the computer will randomly select one of your decisions to determine your payment for Activity 1. You will not know which decision is selected until the very end.

Once again, remember that both you and the non-profit organization will always receive a payment in experimental points.

Usted debe tomar **una decisión por cada fila**

Fila	Izquierda		Su decisión	Derecha	
	Usted recibe:	**La organización sin fines de lucro recibe:**		**Usted recibe:**	**La organización sin fines de lucro recibe:**
1	70 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
2	80 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
3	90 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
4	100 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
5	110 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
6	120 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
7	130 puntos	140 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos

Siguiente

Usted debe tomar **una decisión por cada fila**

Fila	Izquierda		Su decisión	Derecha	
	Usted recibe:	**La organización sin fines de lucro recibe:**		**Usted recibe:**	**La organización sin fines de lucro recibe:**
1	70 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
2	80 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
3	90 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
4	100 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
5	110 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
6	120 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos
7	130 puntos	60 puntos	○ Izquierda ○ Derecha	100 puntos	100 puntos

Siguiente

Activity 2 - Instructions

Remember: You are a Participant A

In this activity, all participants—regardless of type (A or B)—receive an initial endowment of **100 points**. Below, we describe the three stages of Activity 2:

Stage 1 – Matching

Each Participant A will be randomly paired with a Participant B.
You will **never know the identity** of the person you were matched with.

Stage 2 – Sending Decision (Only Participant A)

In this stage, **only Participant A makes a decision**.

You must decide how many of your **100 initial points** you want to send to Participant B.
You can choose to send: **0, 20, 40, 60, 80, or 100 points**.

The amount you send will be **multiplied by 4** and transferred to Participant B.

If you send 0 points	B receives 0 points
If you send 20 points	B receives 80 points
If you send 40 points	B receives 160 points
If you send 60 points	B receives 240 points
If you send 80 points	B receives 320 points
If you send 100 points	B receives 400 points

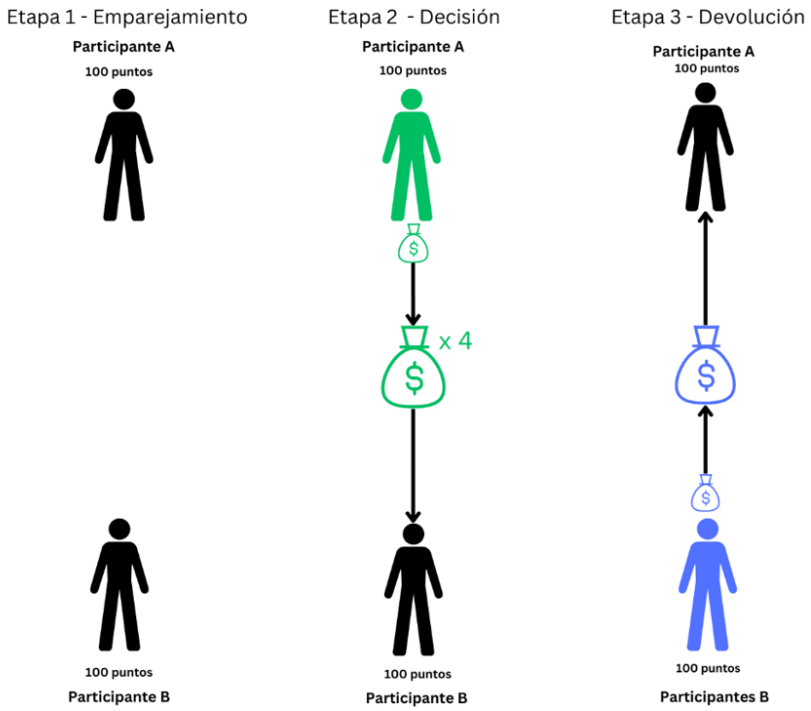
Stage 3 – Return Decision (Only Participant B)

In this stage, **only Participant B makes a decision**.

Participant B must decide, privately and individually, how many points they want to return to you (Participant A) from the total received.

Returned points are not multiplied.
That means you will receive exactly the amount that Participant B decides to return.

Participant B **cannot use their initial endowment** to return points—only the received amount.



If you have questions, please ask the experimenter.

How is the Payment for Activity 2 Calculated?

Participant A's earnings:
Initial endowment
– points sent to B
+ points returned by B

$$\text{A's Payment} = 100 - \text{Points Sent} + \text{Points Returned}$$

Participant B's earnings:
Initial endowment
+ 4 × points received from A
– points returned to A

$$\text{B's Payment} = 100 + 4 \times \text{Points Received} - \text{Points Returned}$$

Control Questions – Activity 2

Example 1

Participant: 1

Type: A
Decision: Sent 40 points

How many points were transferred to Participant B?
(Remember: the amount sent is multiplied by 4)

- 20 points
- 40 points
- **160 points**
- 100 points

Example 2

Participant: 2
Type: B
Decision: Returned 72 points

How many points did Participant A receive?
(Remember: return amounts are not multiplied)

- 36 points
- **72 points**
- 288 points
- 144 points

Participant A – Decision Screen

You are Participant A
You can give 0, 20, 40, 60, 80, or 100 points to Participant B

How many points do you want to give to Participant B?

(Your transfer will be multiplied by 4)

[_____]

Remember: Your endowment is 100 points.

Participant A – Beliefs Screen

Your Beliefs
Now, we ask you to predict how Participant B will behave.
You will receive **5 extra points** for each accurate prediction.

- If you send 20 points (B receives 80), how many will B return? *[____]* points
- If you send 40 points (B receives 160), how many will B return? *[____]* points
- If you send 60 points (B receives 240), how many will B return? *[____]* points
- If you send 80 points (B receives 320), how many will B return? *[____]* points
- If you send 100 points (B receives 400), how many will B return? *[____]* points

Participant B – Decision Screen

You are Participant B
Remember: Points transferred by A are added to your 100-point endowment.
Now, decide how many points you want to return to Participant A for each possible transfer.

- If A sent 20 (you received 80), return: *[____]* points
- If A sent 40 (you received 160), return: *[____]* points
- If A sent 60 (you received 240), return: *[____]* points
- If A sent 80 (you received 320), return: *[____]* points
- If A sent 100 (you received 400), return: *[____]* points

Participant B – Beliefs Screen

Your Beliefs
Now, we ask you to predict how many points you believe Participant A will send.

[_____ points]

Activity 3 - Instructions

Remember: You are a Participant A

In this activity, all participants—regardless of whether they are type A or B—start with an initial endowment of **100 points**.

Below, we describe the stages of Activity 3.

Stage 1 – Group Formation

Participants A are grouped in pairs (2 participants per group), and participants B are also grouped in pairs.

Each group of A participants is then matched with a group of B participants, forming a final group of **four people**. You will **never know the identity** of your group members.

Stage 2 – Sending Decision (Only Participants A)

In this stage, **only Participants A make decisions**.

Each A participant must decide how many of their **100 initial points** to send to the B group.

You can send: **0, 20, 40, 60, 80, or 100 points**.

The other A in your group will also independently and privately choose how much to send.

The two A participants' amounts are **summed**, then **multiplied by 4**, and divided equally between the two B participants.

If your group sends 0 points	B group receives 0 points
If your group sends 20 points	B group receives 80 points
If your group sends 40 points	B group receives 160 points
If your group sends 60 points	B group receives 240 points
If your group sends 80 points	B group receives 320 points
If your group sends 100 points	B group receives 400 points
If your group sends 120 points	B group receives 480 points
If your group sends 140 points	B group receives 560 points
If your group sends 160 points	B group receives 640 points
If your group sends 180 points	B group receives 720 points
If your group sends 200 points	B group receives 800 points

Note: The total received by the B group is split equally between both B participants.

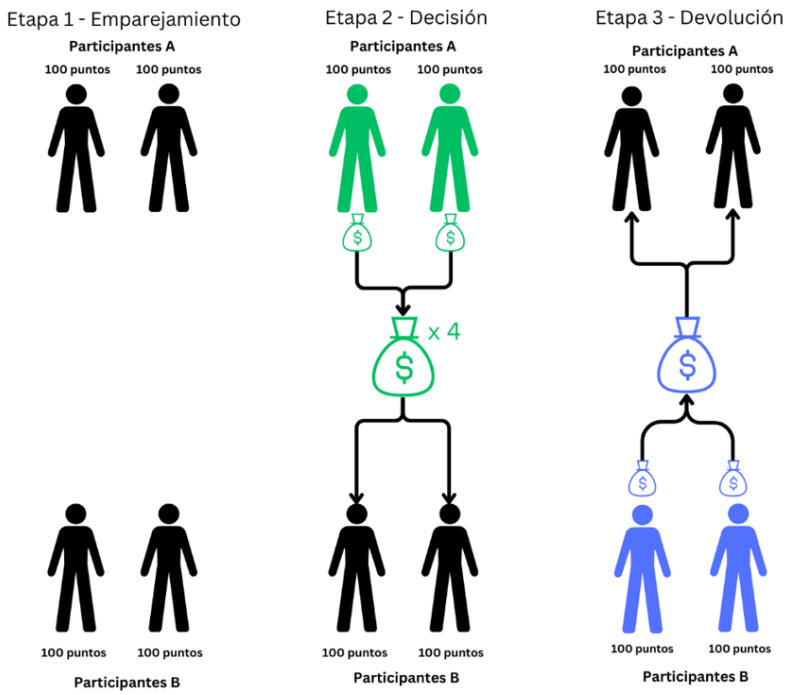
Stage 3 – Return Decision (Only Participants B)

Once each B participant receives their portion of the transfer, they must **individually and privately** decide how many points to return to the A group.

Each B decides independently.

They can return any amount between 0 and the total points received. The returned amount is **not multiplied**.

The total returned by both B participants is **summed and divided equally** between both A participants.



If you have questions, please ask the experimenter.

How is the Payment for Activity 3 Calculated?

Participant A's earnings:

$$\text{Payment} = 100 - \text{Points Sent} + \left(\frac{\text{Points Returned by B Participants}}{2}\right)$$

Participant B's earnings:

$$\text{Payment} = 100 + \left(\frac{4 \times \text{Points Sent by A Group}}{2}\right) - \text{Points Returned to A}$$

Control Questions – Activity 3

Example 1

Group Composition:
Participant 1 (A): Sends 20 points
Participant 2 (A): Sends 40 points

How many points were transferred to each Participant B?
(Remember: the total sent by A's is multiplied by 4, then divided by 2)

- 30 points

- 60 points
- **120 points**
- 180 points

Example 2

Participant 3 (B): Returns 50 points
Participant 4 (B): Returns 60 points

How many points were returned to each Participant A?
(Remember: 110 points total, split equally)

- 110 points
- **55 points**
- 40 points
- 220 points

Post-Round Instructions – Activity 3

Instructions After the First Round

Now that participants have made their decisions in this interaction, we will repeat the same process with a new group of four participants (A and B).

You will not play twice with the same group of participants.

At the end of the activity, the computer will randomly select one of these rounds, and the selected round will determine your payment for Activity 3.

You will remain the same participant type assigned at the beginning.

Specifically: You are Participant X

Treatment Screens

Control Group

No additional screen.

Treatment 1 – Negative Shock to Participants B

Please read the following instructions carefully.

New situation:

An unexpected event has occurred, and **participants B are now affected by a negative shock** that reduces their initial endowment by **60%**.

Screen for Participant A:

You are Participant A.

Because of this, each B participant's endowment will drop from 100 points to **40 points**.

However, neither you nor any other A participants were affected by the shock. Therefore, you and all A participants will keep the full **100-point endowment**.

Screen for Participant B:

You are Participant B.

Because of this, your initial endowment is now **40 points** (instead of 100), and the same applies to all B participants.

No A participants were affected by the shock, so all of them will retain their full 100-point endowment.

Social Norms Evaluation

Now that all interaction rounds have ended,

we ask you to evaluate the decisions made by other participants.

We are interested in knowing whether you think the decisions made by Participants A and B are **"socially appropriate"** or **"socially inappropriate"**.

Once all participants have answered, the computer will randomly pair your responses with those of another participant of your same type in the room.

If your answers match those of the other participant, you will receive **5 points** for each matched answer.

Thinking about the first interaction of Activity 3, when all four participants had an initial endowment of 100 points:

Please indicate how socially appropriate you consider the following decisions:

If a Participant A sends between 0 and 20 points, you believe this decision is:

○ Very socially appropriate
○ Somewhat socially appropriate
○ Somewhat socially inappropriate
○ Very socially inappropriate

If a Participant A sends between 40 and 60 points, you believe this decision is:

○ Very socially appropriate
○ Somewhat socially appropriate
○ Somewhat socially inappropriate
○ Very socially inappropriate

If a Participant A sends between 80 and 100 points, you believe this decision is:

○ Very socially appropriate
○ Somewhat socially appropriate
○ Somewhat socially inappropriate
○ Very socially inappropriate

If a Participant B returns between 0% and 20% of what they received, you believe this decision is:

○ Very socially appropriate
○ Somewhat socially appropriate
○ Somewhat socially inappropriate
○ Very socially inappropriate

If a Participant B returns between 40% and 60% of what they received, you believe this decision is:
○ Very socially appropriate
○ Somewhat socially appropriate
○ Somewhat socially inappropriate
○ Very socially inappropriate

If a Participant B returns between 80% and 100% of what they received, you believe this decision is:
○ Very socially appropriate
○ Somewhat socially appropriate
○ Somewhat socially inappropriate
○ Very socially inappropriate

1. Do you think it is socially appropriate that, after the negative shock, Participant A:
    - (a) Sends more points than they sent before the shock
    - (b) Sends the same number of points as before the shock
    - (c) Sends fewer points than they sent before the shock
2. Do you think it is socially appropriate that, after the negative shock, Participant B:
    - (a) Returns more points than they returned before the shock
    - (b) Returns the same number of points as before the shock
    - (c) Returns fewer points than they returned before the shock

Questions

1. Thinking about the last activity, what was the first feeling you experienced after the first round?
    - 1. Joy
    - 2. Hope
    - 3. Optimism
    - 4. Boldness
    - 5. Fear
    - 6. Stress
    - 7. Anger
    - 8. Sadness
    - 9. Disgust
    - 10. Pessimism

2. In your own words, what was your reasoning behind your decision after the first round of the collective game?
   Do you feel something changed between the first and second rounds?

   [Open-ended response area]

Donation to Non-Profit Organization – Activity 1

Before defining the final payment of the experiment, we would like you to indicate which non-profit organization you would prefer to receive the donation corresponding to Activity 1 (if this activity is selected for payment).

Reminder: In Activity 1, you made choices between LEFT and RIGHT allocation options, where part of the payment was intended as a donation to a non-profit organization.

Below is a list of non-governmental organizations (NGOs) active in Colombia. Please select the one you would like to support.

- **Ancestral Health** — Strengthening ancestral health among Indigenous women and their families in Bogotá.
  This project aims to support ancestral health practices in the Suba locality of Bogotá through community involvement, culturally sensitive care, education, and knowledge transmission.
- **Community Ecotourism** — Knowledge exchange to strengthen community ecotourism, conservation, and local development in the Serranía de las Quinchas, Puerto Boyacá (Middle Magdalena region).
  The project promotes collaboration between the Pico Azul Association, local farming families, and biodiversity researchers in tropical rainforest ecosystems.
- **Media Literacy** — Transmedia tools for cultural revitalization of the Wayuu people.
  This initiative uses storytelling in transmedia formats to preserve and spread the cultural narratives of the Wayuu people, with strong potential for replication through digital platforms.
- **Power Girls** — Real-world research experiences for high school girls.
  This project strengthens STEM (Science, Technology, Engineering, and Mathematics) skills among girls in their final years of secondary education.

Which organization would you like us to donate to, based on the allocation you chose in Activity 1?

[Participant marks their selected NGO here]

Final Demographic Questionnaire

Please answer the following questions. Your answers will be kept strictly confidential and used only for academic research purposes.

1. Age: *[_____]*

2. Gender: *[_____]*
3. What degree are you currently pursuing (or did you complete)? *[_____]*
4. What semester are you currently enrolled in?
   (If you have already completed your undergraduate degree, select "Graduate") *[_____]*
5. Are you currently enrolled in a graduate program? *[Yes / No]*
6. How many siblings do you have? *[_____]*
7. According to your utility bills, what is the socioeconomic stratum of your household? *[_____]*
8. Have you previously participated in economics or psychology experiments? *[Yes / No]*
9. What is your weekly income?
   (Include all sources: allowance, wages, rents, etc.) *[_____]*
10. What are your weekly expenses? *[_____]*
11. Imagine a 10-step ladder. The lowest step (1) represents households with the lowest income, and the highest step (10) represents the highest.
    Where would you place your household? *[1 – 10: _____]*
12. How important is religion in your daily life?
    - Very important
    - Important
    - Not very important
    - Not important at all
13. If someone gets sick, who should pay for their treatment?
    [Slider from "Only the individual" to "Only the government"]
14. Imagine a prize of 50,000 COP is being awarded to the winner of the following game.
    You must choose a number between 0 and 100. The winner is the participant whose number is closest to 2/3 of the average of all numbers chosen.
    What number do you choose? *[_____]*
15. Over the past two years, has a close family member (parent or sibling) experienced a negative economic shock?
    (e.g., job loss, business failure, asset seizure) *[Yes / No]*
16. On a scale from 0 to 10, where 0 means "not at all willing to take risks" and 10 means "very willing to take risks," how would you rate yourself? *[0 – 10: _____]*
17. On a scale from 0 to 10, where 0 means "one must be very cautious of others" and 10 means "people can generally be trusted,"
    do you think most people can be trusted, or that one must be careful? *[0 – 10: _____]*

18. Nowadays, many people describe their political stance as leaning left or right.
    Based on your understanding of these terms, how would you describe your political orientation?

    - Left
    - Center-left
    - Center
    - Center-right
    - Right

19. How much do you agree with the following statement?
    "Each individual is responsible for their own well-being."

    - Strongly agree
    - Agree
    - Disagree
    - Strongly disagree

20. How much do you agree with the following statement?
    "The government should implement strong policies to reduce inequality between rich and poor."

    - Strongly agree
    - Agree
    - Disagree
    - Strongly disagree