

Scartascini, Carlos G.; Cafferata, Fernando G.; Gingerich, Daniel W.

Working Paper

Tempering the taste for vengeance: Information about prisoners and policy choices in Chile

IDB Working Paper Series, No. IDB-WP-1128

Provided in Cooperation with:

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

Suggested Citation: Scartascini, Carlos G.; Cafferata, Fernando G.; Gingerich, Daniel W. (2020) : Tempering the taste for vengeance: Information about prisoners and policy choices in Chile, IDB Working Paper Series, No. IDB-WP-1128, Inter-American Development Bank (IDB), Washington, DC, <https://doi.org/10.18235/0002575>

This Version is available at:

<https://hdl.handle.net/10419/234701>

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-nc-nd/3.0/igo/legalcode>

IDB WORKING PAPER SERIES N° IDB-WP-1128

Tempering the Taste for Vengeance:

Information about Prisoners and Policy Choices in Chile

Carlos Scartascini
Fernando G. Cafferata
Daniel W. Gingerich

Inter-American Development Bank
Department of Research and Chief Economist

August 2020

Tempering the Taste for Vengeance:

Information about Prisoners and Policy Choices in Chile

Carlos Scartascini*

Fernando G. Cafferata**

Daniel W. Gingerich***

* Inter-American Development Bank

** Universidad Nacional de Tres de Febrero and Universidad de San Andrés

*** University of Virginia

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

Scartascini, Carlos G., 1971-

Tempering the taste for vengeance: information about prisoners and policy choices in Chile / Carlos Scartascini, Fernando G. Cafferata, Daniel W. Gingerich.

p. cm. — (IDB Working Paper Series ; 1128)

Includes bibliographic references.

1. Criminal justice, Administration of-Chile-Econometric models. 2. Prisoners-Chile-Econometric models. 3. Imprisonment-Chile-Econometric models. 4. Prisons-Overcrowding-Chile-Econometric models. I. Cafferata, Fernando Gabriel. II. Gingerich, Daniel W., 1977- III. Inter-American Development Bank. Department of Research and Chief Economist. IV. Title. V. Series.
IDB-WP-1128

<http://www.iadb.org>

Copyright © 2020 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose, as provided below. No derivative work is allowed.

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 UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of 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 CC-IGO license.

Following a peer review process, and with previous written consent by the Inter-American Development Bank (IDB), a revised version of this work may also be reproduced in any academic journal, including those indexed by the American Economic Association's EconLit, provided that the IDB is credited and that the author(s) receive no income from the publication. Therefore, the restriction to receive income from such publication shall only extend to the publication's author(s). With regard to such restriction, in case of any inconsistency between the Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives license and these statements, the latter shall prevail.

Note that link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication 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.



Abstract

Punitive anti-crime policies in the Americas have contributed to steadily increasing rates of incarceration. This creates prison overcrowding and can lead to recidivism. Harsh penalties are often demanded by citizens, making them politically attractive for politicians. Yet the contextual determinants of participation in crime are rarely understood by the public. In this paper, we employ a survey experiment conducted in Chile in order to examine how the provision of information about the prison population shapes tastes for punitive anti-crime policies. Respondents in the treatment group received information about the low educational attainment of prisoners. This information led to substantial changes in policy preferences. Tasked with allocating resources to anti-crime policies using a fixed budget, treated respondents assigned between 20% to 50% more to socially oriented anti-crime policies (relative to punitive policies) than respondents in the control group, and they reduced their support for “*iron fist*” policing. This indicates that providing information to citizens might change the policy equilibrium in the Americas.

Keywords: Survey experiments, Information, Beliefs, Crime, Public Policy

JEL: D91, D78, H42, K14

The authors are grateful to LAPOP for helping us design and bring to the field the intervention, and to the Citizen Security Fund (CSF) of the Inter-American Development Bank for their financial support. The opinions presented herein are those of the authors and thus do not necessarily represent the official position of the institutions they belong to. IRB#170215 (Vanderbilt University).

1 Introduction

Latin America suffers an imprisonment crisis. Approximately 1.4 million people (including both pre-trial detainees and convicts) are held in penal institutions in the region, representing 12.6% of the world's detainees (Vilalta and Fondevila, 2019).¹ Out of every 100,000 inhabitants in the region, 241 are in prison (about twice the level in the European Union). To a large extent, this situation reflects recent trends: on average, the level of incarceration in the region has increased by 76% in the last ten years. The growth in incarceration has been driven by increased admissions, longer sentences (particularly for violent crimes), and a substantial increase in the use of pre-trial detention for extended periods of time. Approximately 41% of those in custody have not yet received a sentence (Serrano, 2018).² The high number of prisoners creates serious problems of overcrowding (Vilalta and Fondevila, 2019; UNDP, 2013). The poor living conditions of inmates cause environmental strain and fuel misconduct, often leading to prison riots, parole violations, and recidivism (Vilalta and Fondevila, 2019). Communicable diseases also run rampant in these conditions, threatening the lives of both prisoners and the general population (Dolan et al., 2007). The connection between overcrowding and communicable diseases has become particularly salient during the COVID-19 pandemic. Many countries have opted for commuting sentences, pardoning inmates, or moving inmates out of prisons. This has fueled discontent among many citizens without addressing potential failures in the underlying policies.

Some authors have linked increasing incarceration rates to the rise of punitive attitudes and hence citizen demand for punitive policies in Latin America (Chevigny, 2003; Müller, 2012; Dammert and Salazar, 2009; Otamendi, 2015; Stippel and Moreno, 2018). Societies where public opinion favors harsh penalties tend to embrace politicians willing to enact them, as was the case in the United States during the 1970s (Gottlieb, 2017). Once enacted, such policies are subject to "ratchet effects." In spite of a prodigious and sustained decrease in crime in the United States since the early 1990s, punitive anti-crime policies have persisted to the present day,

¹ For reference, Latin America's population represents about 8% of the world's total population.

² This change in policies has proven costly: regional spending on incarceration (adjusted for purchasing power) surpassed 10 billion dollars in 2014 (Serrano 2018).

contributing to the world’s highest incarceration rate.

The internalization of information about crime seems to be an important driver of public policy demand for harsher sentences, even if that information is not factually accurate (Gingerich and Scartascini, 2018).³ Crime salience, fear of crime, and general concern about crime are all factors influencing punitive attitudes (Spiranovic et al., 2012 Price et al., 2019). Perhaps surprisingly, such attitudes are not necessarily correlated with actual levels of crime.⁴ The public’s perceptions about prison and the prison population are also at play (Wozniak, 2016). Many citizens believe that prison conditions are overly lenient and accommodating to inmates (Roberts and Hough, 2005). Social prejudice about criminals is also a significant determinant of citizens’ crime attitudes (Bobo and Johnson, 2004).

Given this context, it is important to ask whether there is information that could weaken public demand for punitive policies and transform it into support for strategies that are more effective in combating crime in the long run.⁵ In other words, can information about the prison population change the types of public policies citizens demand, shifting preferences away from harsher sentences and towards policies that emphasize higher detection and social inclusion? The average citizen has little direct experience with the criminal justice system and develops her priors mainly from the media (Frost, 2010).⁶ Consequently, informational interventions may be effective in encouraging individuals to reassess their priors and reconsider the efficacy of incarceration as a policy for reducing crime. This change in priors may also lead to changes in attitudes towards police abuse.

In order to evaluate the role of information on demand for punitive policies, this paper analyzes the results of a unique survey experiment designed and embedded in

³ It is important to separate public attitudes towards public policy following an information shock, as evaluated by Gingerich and Scartascini (2018), and beliefs about crime, as evaluated by Esberg and Mummolo (2018).

⁴ Gallup polls consistently reveal that since the 1990s a majority of respondents in the United States believe there was a year-on-year increase in crime. This is wholly at odds with actual crime trends during the period.

⁵ In the case of the US, evidence suggests that if the punitive attitudes among the public had stopped rising in the mid-1970s, there would have been approximately 20% fewer incarcerations (Enns, 2014).

⁶ The widespread protests in 2020 following the killing of George Floyd in Minneapolis show the power that information can have on changing attitudes.

the 2017 round of the Americas Barometer Survey conducted by the Latin American Public Opinion Project (LAPOP) at Vanderbilt University. Respondents in the treatment group were presented with an infographic describing the extremely low levels of education attained by individuals imprisoned in Chile. Individuals in the control group received no such infographic. Subsequently, both respondents in the treatment and control groups were asked to allocate a fixed budget among sets of specific public policies designed to reduce crime. They were also asked about their acceptance of iron fist tactics by the police.

Our empirical findings show that preferences for anti-crime policy vary substantially according to the information received. Those individuals treated with information about the educational characteristics of the imprisoned population in Chile assigned a lower budget to penalties compared to deterrence or social policies. They were also less likely to accept the use of unrestricted force by the police.

Our work builds upon a recent experimental literature on how information shapes policy-relevant beliefs.⁷ We specifically build upon and extend the work of [Ardanaz et al. \(2014\)](#), who employ an information experiment on crime in Bogota, Colombia. These authors find that information about decreasing crime rates leads citizens to feel more secure and exhibit greater confidence in the police. Similar results are found by [Mastorocco and Minale \(2018\)](#) for Italy, where lower exposure to crime-related news reduced concerns about crime. However, the public policy consequences of information about crime are not explored in those papers. [Gingerich and Scartascini \(2018\)](#) explore how information about recent trends in crime affects public policy decisions. The authors find that citizens' demand for punitive policies increase with information about higher crime, but they are not replaced by demand for social policy or other alternatives when individuals face information about decreasing crime. Consequently, their results imply that anti-crime policy is subject to a policy ratchet effect: punitive policies are adopted during bad times and remain in place during good times. The findings of the current paper, in contrast, suggest that providing information about the characteristics of the prison population instead of information about crime trends is an area where the potential scope for public policy

⁷ There is also an extensive literature that evaluates the role of victimization on support and satisfaction with democracy ([Ceobanu et al., 2011](#); [Cruz, 2008](#)) and victimization and trust ([Corbacho et al., 2012](#); [Malone, 2010](#))

improvements is ample.

Our results are in line with [Cullen et al. \(2000\)](#) and [Applegate et al. \(1996\)](#), which show that respondents tend to express less punitive sentencing preferences when they are given detailed information about the nature of the offender and the criminal offense. Providing detailed information about felons (offender’s record, offender’s intent, victim characteristics and behavior, and the gravity of the crime) reduces the likelihood that citizens would recommend the death penalty, according to survey results in Florida ([Durham et al., 1996](#)).

The results in the paper have ample relevance when policy changes are required, such as during a pandemic when it is necessary to change the conditions of the prison population rapidly to avoid massive deaths. They are also relevant in moments of major police reform, as public support for changes in police procedures and tactics may rest on a larger shift in societal preferences away from iron fist policing.

2 Information about Prisoners and Policy Preferences: Expectations

Why would information about the education levels of inmates affect the demand for public policy? There are four reasons why citizens’ preferences for anti-crime policy might be altered by such information: efficacy updating, fairness concerns, ideological consistency, and empathetic identification.

Efficacy updating refers to the fact that new information might lead to a change in beliefs about the relative effectiveness of different kinds of anti-crime policies. Consistent with the theoretical framework of [Gingerich and Scartascini \(2018\)](#), which builds on [Becker \(1968\)](#), some citizens’ preferences for different crime policies may reflect assessments about the marginal returns of those policies in reducing the overall crime rate. For these efficacy-minded citizens, policy preferences are not driven by underlying moral or ideological commitments: they simply reflect beliefs about which policies work best in reducing crime.

Information about education levels among inmates can contribute to beliefs about policy effectiveness because educational attainment strongly shapes decisions about

whether or not to engage in crime ([Lochner and Moretti, 2014](#); [Lochner, 2020](#)). To the degree that the educational attainment of inmates reflects that of the larger pool of potential criminals in a society, information about inmate education can provide insight into the opportunity cost calculations that generate criminal activity. This insight, in turn, can inform judgments of policy effectiveness.

Concretely, if efficacy-minded citizens find out that educational attainment among inmates is lower than they expected, preferences regarding anti-crime policies are likely to shift away from tougher sanctions (such as longer jail sentences) and towards social policy solutions and improved detection of crime. This is so for the following reasons.

First, if education among inmates is revealed to be low, then this implies that the wages inmates would be making if they were not in jail would also be relatively low. Consequently, the marginal cost of spending an additional year in prison will be smaller for those individuals than for individuals for whom the level of educational attainment is high. Assuming again that the educational attainment of inmates is reflective of that of would-be criminals, this in turn implies that the deterrent effect of increasing prison terms will be smaller than the efficacy-minded citizen might have initially believed. Such a citizen would then rationally prefer to allocate greater sums of government resources to social policies that enhance human capital (thereby increasing wages from non-criminal employment).

Second, the revelation that education is low among inmates holds implications for the marginal returns to investment in the detection of crime. If practitioners of crime are overwhelmingly individuals with low levels of education, then this potentially speaks to the nature of criminal activity itself: it is likely characterized by short-term goals, high-risk behavior, and relatively unsophisticated methods. In short, most crime is likely to be what criminologists refer to as “street crime” ([Hallsworth, 2005](#)). Criminal activity of this type is relatively easy to detect, implying that allocating additional resources to monitoring crime would permit authorities to catch many more criminals in the act. Given these circumstances, upon finding out that the level of education among practitioners of crime is lower than initially believed, efficacy-minded citizen would rationally prefer to allocate greater sums of government resources to the monitoring of crime.

An alternative perspective on why information may alter anti-crime policy preferences is based on the notion that certain citizens treat punishment as a private good, one that provides them with greater or lesser amounts of utility depending on the context (Ouss and Peysakhovich, 2015). As opposed to gravitating towards policies due to their relative effectiveness in reducing crime, this account holds that citizens' affective motivations will determine their anti-crime policy preferences. One of the most relevant such motivations is a desire for fairness. Fairness can be defined both in terms of the proportionality of the punishment to the harm caused by the crime (Miceli, 2018; Mitchell Polinsky and Shavell, 2000) and in terms of the responsibility the offender holds for the crime itself (Hart, 1968). For a fairness-minded citizen, harsh punishments can only be justifiably meted out to individuals who: i) committed an offense entailing serious harm and ii) realistically had the capacity to refrain from engaging in the prohibited conduct in the first place.

It is on the second count that information about inmate education will be relevant to the fairness-minded citizen. If such a citizen discovers that inmates have lower educational attainment than she previously believed, then she may revise her assessment of the capacity of potential criminals to support themselves by pursuing legitimate employment. If she comes to the assessment that many individuals engage in criminal activities due to a lack of viable alternatives, she may conclude that the responsibility for criminal activity rests more with society at large and less with individuals prone to moral failures. As such, imposing draconian punishments on criminals will be judged as being unfair and ipso facto inappropriate, irrespective of whether or not such measures would be effective in reducing crime. Consequently, a fairness-minded citizen would likely react to the aforementioned information by demanding a reallocation of resources away from harsh punishments to other anti-crime policies.

A third reason novel information about education levels among inmates might change policy preferences is a desire for ideological consistency. A large body of evidence suggests that many citizens base their public policy preferences on their ideological or partisan commitments, employing motivated reasoning to ensure that the latter match up with the former (Bolsen et al., 2014; Hart and Nisbet, 2012; Kraft et al., 2015; Slothuus and De Vreese, 2010). Such cognitive processes are

particularly relevant in highly polarized political systems, such as Chile’s, where Left-Right differences are clearly defined and contribute to larger social identities (Fábrega et al., 2018; Roberts, 2016). Seen from this perspective, information about the educational attainment of inmates provides information about the distributional consequences of anti-crime policy, since it indicates which social groups suffer most under a policy of harsh sanctions for crime. The revelation of low education among inmates may lead some citizens to increasingly view a sanctions-based anti-crime policy as one that primarily punishes the poor. For those who view themselves as pro-poor in their ideological outlook, this new interpretation of the distributional consequences of the sanctioning-based approach may lead them to favor alternatives that emphasize human capital formation (social policy) and detection.

Finally, information about the educational attainment of inmates may shift policy preferences because it encourages empathetic identification. As developed by Unnever and Cullen (2009), the concept of empathetic identification refers to the capacity of citizens to imagine themselves in the economic, social and psychological circumstances of offenders. Unnever and Cullen (2009) argue empathetic identification reduces the taste for punitive anti-crime policies, since it prompts citizens to contextualize the behavior of offenders and leads them to internalize the suffering that harsh penalties might cause. Consistent with this view, both experimental and observational studies indicate that greater empathy is associated with a tendency to eschew harsh punishments in favor of alternatives (Johnson et al., 2002; Unnever et al., 2005). Seen from this vantage point, receiving information about inmates’ educational attainment is likely to cause citizens to more fully empathize with inmates, since they have a better understanding of the (dire) circumstances in which crimes were committed. This should in turn lead to a reduction in demand for punitive policies relative to alternatives.

3 The Survey Experiment

3.1 Background

Chile has one of the highest rates of imprisonment in the world: 216 prisoners per 100,000 inhabitants in 2018 (Gendarmeria de Chile, 2018). This high level of

imprisonment is very costly: spending on the penal system comprises 0.33% of GDP, more than double the regional average of approximately 0.15% of GDP (Jaitman et al., 2017). The prison population has been on the rise since the 1980s, with a rate of growth that exceeds that of the total population of the country (Bulnes et al., 2017; Alcaíno Arellano, 2018; Salinero Echeverría, 2012). The rapid growth of the prison population in recent years is due primarily to three factors, some of which resulted from changes instituted in the country’s “Penal Procedural Reform”: i) an increase in the number of convictions, ii) an increase in the use of pre-trial detention, and iii) an increase in the severity of penalties for certain crimes (as reflected in “Emilia’s Law”) (Bulnes et al., 2017). The lack of instruments for reducing prison time reinforces this trend (Salinero Echeverría, 2012).

Inmates come from particularly disadvantaged groups in the population. The typical inmate has a level of education and employment that is well below the country average (Bulnes et al., 2017). Inmates are overwhelmingly male (88%), mostly under the age of 35, and tend to have an early track record of criminal activities and incarceration. In addition, a significant number had been placed in a children’s home as minors (Bulnes et al., 2017). The data thus clearly suggest that prison reinforces social exclusion in Chile (Jiménez, 2007).

Most Chilean citizens are not privy to this reality. They have little direct experience with the criminal justice system, have little knowledge of the environment or inner workings of prisons, and have no direct contact with correctional institutions (Hough and Roberts, 2005; Frost, 2010). Citizens’ priors are largely formed by the information presented by the media, which tend to focus on the crimes and not on the backgrounds of the criminals (Dammert and Malone, 2003).

3.2 Experimental Design

The experiment was included in the 2017 wave of the Americas Barometer Survey (carried out by the Latin American Public Opinion Project at Vanderbilt University), with a sample size of 1,625 respondents. These respondents constitute a nationally representative stratified sample of all adult Chileans. Within the sample, each respondent was randomly assigned to one of three different experimental conditions, two treatments and a control. Randomization of individuals across experi-

mental conditions was executed by LAPOP using “*Survey to Go*” software, based on a pre-programmed script in the interviewer’s tablet. The two treatments are orthogonal to each other. One of the treatments is part of a different project: it provides respondents with information about judicial procedures in Chile, Uruguay, and Bolivia. As such, while we include respondents in this group in the empirical analysis for completeness, we will not evaluate the effects of said treatment here.⁸ Table 1 shows that treatment and control groups are balanced in observable characteristics.

Respondents in the relevant treatment group received the infographic presented in Figure 1. The infographic was developed by the authors in conjunction with a professional graphic designer. The text provided in the infographic was as follows: “*Did you now that almost all of those who committed a crime in Chile did not complete 12 years of schooling and half did not finish primary school?*”. The infographic includes a bar chart showing that 84% of Chilean inmates had less than 12 years of schooling, 60% had less than 9 years of schooling and 40% had not even finished primary school. The data came from an independent source, the United Nations Development Program’s (UNDP) comparative study of imprisoned populations, published in 2013. An illustration contained in the infographic depicted the figure of an inmate sitting on a bed holding his head and, next to him, a typical school desk (referencing schooling). The combination of text and illustrations was designed to make the information as clear and salient as possible.

Our outcome of interest is a citizen’s relative preference for different anti-crime policies. To tap into relative preferences, we incorporated into the survey a question prompting respondents to indicate how they would distribute a fixed amount of resources to four different policies. The respondents were first presented with a card displaying ten coins, which represented the total budget to be distributed among the policies. They were also given the following text:

“Governments can adopt many measures to combat crime, but they have limited resources to do so. Suppose that the government has a total budget of ten coins to distribute among four measures to reduce crime. I will describe the measures to you

⁸ Of course, we include a treatment variable for them in the regressions but do not present the results. As such, our estimates compare respondents in the relevant treatment against the pure control group.

and ask that you distribute the ten coins found on the top of your card among the four possible measures as you see fit. You can assign as many coins as you wish to each of the measures. You must use the ten coins. These are the four possible measures:

- a. Increase the punishments given to criminals
- b. Offer subsidies/help to people to buy security systems and other forms of self-protection
- c. Implement preventive measures, such as vocational training and rehabilitation programs
- d. Invest more money in anti-poverty programs”

After that, the respondents were asked to physically assign the coins to each answer, as shown in Figure 2. Using coin assignment to capture relative policy preferences has several important advantages: it reduces the possibility of computational mistakes, it provides a physical representation of the choices being made across options, and it permits respondents to choose their overall allocation before indicating their preferences for particular policies.

Since the third and fourth categories described above both reflect types of social policy investments, we collapsed the coin allocations for these categories into a single social policy category. Thus, we consider the role of information in shaping the policy preferences of citizens across three broad families of anti-crime policies: i) punitive policies, ii) social policies, and iii) policies designed to enhance the detection of crime.

Individuals were also asked the extent to which they agreed or disagreed (using a seven-point scale) with the notion that it was acceptable for police officers to ignore the law and punish criminals themselves (1-strongly disagree, 7-strongly agree).⁹ Figure A1 shows the distribution of responses for the control group. As shown in the figure, on average individuals tend to distribute their coins similarly between punishment and social policies, with lower preference for detection policies. Acceptance of *iron fist* is relatively high - the majority of people agrees with its existence.

⁹ The actual question in Spanish was *¿Hasta qué punto está usted de acuerdo con que a veces es aceptable que los oficiales de policía ignoren la ley y castiguen a los delincuentes ellos mismos? 1 representa “muy en desacuerdo” y el número 7 representa “muy de acuerdo”.*

Figure A2 provides the first set of evidence that the distribution of coins changes with the treatment. As can be observed in the top part of the figure, there is a movement of mass from high allocations of coins to lower allocations in the case of punishment. In the treatment group more people choose 0 to 3 coins compared to the control group and fewer selection 7 or more. The reverse is true regarding social policies. In the treatment group there are more people choosing higher allocations than in the control group -lower panel in the figure.

4 Empirical Analysis

We utilize ordinary least squares (OLS) to analyze our data. The general model we estimate is as follows:

$$Y_i^v = \alpha + \beta T_i + X_i \Delta + \mu_i, \quad (1)$$

where Y_i^v represents one of three outcome variables ($v \in a, b, c$). The first two outcome variables consist of the pairwise difference in coins allocated to stronger penalties versus the alternative strategies: social policy and detection (security systems). Thus, these outcomes capture the relative preference of respondents for one policy strategy versus another.¹⁰ The third outcome variable goes from 1 to 7, with 7 indicating higher agreement that it is acceptable for police officers to use iron fist tactics against criminals. X_i is a vector of characteristics of individual i that has been shown to be relevant in the literature (sex, education, income, ethnicity, employment, crime salience, and more specifically, victimization status, opinion of crime importance, fear of crime, ideology, level of information). T_i is an indicator that takes the value of one for the respondents assigned to the infographic described above, and zero otherwise. μ_i is an unobserved random term. The coefficient β measures the causal effect of assignment to the infographic.

Table 2 presents the results. Each column presents a different specification. In addition to baseline specifications that do not include controls, we include a spec-

¹⁰ This is the most natural way of looking at the data given the hypotheses, but results do not change if we look instead at absolute numbers of coins or shares of coins, as we show later.

ification that controls for socio-demographic characteristics, experiences with and perceptions of crime, ideological self-placement and crime salience, news consumption and experiences with police corruption, and region fixed effects.¹¹ We also vary the computation of standard errors from robust to clustering at the randomization level (what LAPOP calls cluster). Columns 1-3 present the specifications analyzing the difference in coins allocated to penalties versus social policy, columns 4-6 present the specifications analyzing the difference in coins allocated to penalties versus detection, and columns 7 to 9 present the results for support for iron fist tactics.

As the table shows, respondents in the treatment group assigned relatively fewer coins to harsh penalties compared to detection or social policies (they moved coins from the penalty category to the other two). The results are statistically and substantively significant. Specifically, individuals in the treated group increase the difference in the number of coins assigned to social policy compared to harsher penalties by about 50%. They also increase the coins assigned to detection compared to harsher penalties by about 20%. Finally, they reduce their support for iron fist tactics by about 6%. Taken together, the findings demonstrate that providing information to citizens about the levels of educational attainment of incarcerated persons changes preferences regarding crime policy, weakening preferences for punitive policies relative to other anti-crime strategies. Table A1 shows the results for each individual policy. Results show a reduction of about 10% in the number of coins assigned to punishment, which is transferred to a higher allocation for social policies and detection.

These results offer forceful evidence that providing citizens with information about inmates' characteristics can weaken the tendency to embrace punitiveness as a strategy for dealing with crime. Although history has shown that the imposition of punitive crime policies can be very difficult to reverse, the persistence of such policies is not inevitable. Information can in certain settings temper the taste for vengeance that such policies often represent. Specifically, informational interventions that provide a multi-dimensional depiction of offenders may prompt

¹¹ We have run every regression multiple times, changing the sets of covariates in each regression. The results are not affected in the least by the changes in the covariate set.

citizens to give more serious consideration to non-punitive policy alternatives than they otherwise would have. They also prompt citizens to reduce their support for excessive and unlawful use of force by the police.

5 Conclusion

Punitive anti-crime policy—characterized by high rates of incarceration and long prison sentences—has become increasingly common in the Americas. This shift towards punitiveness has generated alarming levels of prison overcrowding, exposing both prisoners and the public to high risks of disease and increasing the power of organized crime groups that use prisons as recruiting grounds (Lessing, 2016; Simpson et al., 2019). Serious punishments for crime are certainly a necessary element of crime deterrence. However, single-minded anti-crime strategies that maximize the severity of punishment but ignore the social factors that contribute to crime are unlikely to be effective in the long term. There is plenty of evidence that increasing penalties is not the most effective police for reducing crime. In the Latin American context, harsh penalties generate bottlenecks in the judiciary (more than 2/3 of prisoners in Chile do not have a definite sentence). Additionally, higher penalties may lead to lower rates of conviction (Andreoni, 1991; Bjerk, 2005).

Punitive anti-crime policies have emerged and persisted in the Americas for the simple reason that large segments of the public demand them. For many citizens, the desire to impose harsh justice on perpetrators of common (and commonly egregious) crimes is an emotive response to the failure of state authorities to adequately establish the rule of law (Malone, 2012; Visconti, 2019). Politicians respond in kind. Since actually establishing the rule of law requires a decades-long commitment to addressing social inequities and reforming dysfunctional criminal justice systems, it is much more expedient for politicians—with their eyes on the electoral calendar—to promise that an iron fist approach will sort everything out in short order (Holland, 2013).

Thankfully, the policy preferences of citizens are not carved in stone. Informational interventions can lead to appreciable changes in relative preferences for anti-crime policies, at least over the time horizons captured via survey experiments. Not

all such changes are necessarily positive. Providing information to citizens about crime trends may change beliefs (Esberg and Mummolo, 2018) but not necessarily the demand for public policy (Gingerich and Scartascini (2018)). Yet we show here that providing information about the prison population may be a promising alternative. In particular, we show that providing information about the educational attainment of the prison population leads citizens to demand detection and social policies in lieu of penalties.

Two important lessons follow from these findings. First, preferences regarding law-and-order issues are malleable, even in societies with high levels of polarization around policing. Chile is a country for which one might not have expected an informational intervention to have a significant effect, since beliefs about the police and the criminal justice system are heavily influenced by the experience of repression under the Pinochet dictatorship (Bonner, 2013). The fact that information about prisoners shifted policy preferences in this setting suggests it is likely to do so in others as well.

Second, our results point to the potential importance of personalizing communication about policies. Citizens may not always have a complete or accurate view of the individuals who are the objects of policies. In providing information that permits citizens to have a better sense of the real people whose lives, well-being, and freedoms are at stake in policy decisions, it may be possible to induce more thoughtful deliberation about how public resources should be used to solve important social problems.

Shifting preferences away from punitive policies to policies that are more effective for reducing crime in the medium and long term has clear benefits. Doing so not only reduces strain on the criminal justice system but also reduces inequities. The COVID-19 pandemic and the 2020 protests against police brutality underline the importance of making advances in these areas. Lowering levels of overcrowding may reduce the likelihood that prisons will serve as venues for the transmission of diseases. Lowering inequities and brutality in policing may help reconcile marginalized populations with their police forces, thereby making the police more effective in rooting out crime.

References

- Alcaíno Arellano, E. (2018). Derechos humanos de los privados de libertad: las cárceles en Chile: ¿avances o mantenimiento del status quo?
- Andreoni, J. (1991). Reasonable Doubt and the Optimal Magnitude of Fines: Should the Penalty fit the Crime? *Rand Journal of Economics* 22(3), 385—395.
- Applegate, B. K., F. T. Cullen, M. G. Turner, and J. L. Sundt (1996). Assessing public support for three-strikes-and-you’re-out laws: Global versus specific attitudes. *Crime & Delinquency* 42(4), 517–534.
- Ardanaz, M., A. Corbacho, and M. Ruiz-Vega (2014). Mind the gap.
- Becker, G. (1968). Crime and punishment: An economic approach. *Journal of Political Economy* 76(2), 169–217.
- Bjerk, D. (2005). Making the Crime Fit the Penalty: The Role of Prosecutorial Discretion under Mandatory Minimum Sentencing. *Journal of Law and Economics* 48(2), 591–625.
- Bobo, L. D. and D. Johnson (2004). A taste for punishment: Black and white americans’ views on the death penalty and the war on drugs. *Du Bois Review: Social Science Research on Race* 1(1), 151–180.
- Bolsen, T., J. Druckman, and F. Cook (2014). The influence of partisan motivated reasoning on public opinion. *Political Behavior* 36(2), 235–262.
- Bonner, M. (2013). The politics of police image in Chile. *Journal of Latin American Studies* 45(4), 669–694.
- Bulnes, F., C. Collarte, H. Frühling, C. Mardonez, A. Ramm, L. Roblero, and P. Vial (2017). Sistema carcelario en Chile: Propuestas para avanzar hacia una mayor efectividad y reinserción. *Temas de la Agenda Pública* 12(93), 1–19.
- Ceobanu, A. M., C. H. Wood, and L. Ribeiro (2011). Crime Victimization and Public Support for Democracy: Evidence from Latin America. *International Journal of Public Opinion Research* 23(1), 56—78.

- Chevigny, P. (2003). The populism of fear: Politics of crime in the americas. *Punishment & Society* 5(1), 77–96.
- Corbacho, A., J. Philipp, and M. Ruiz-Vega (2012). Crime and Erosion of Trust: Evidence for Latin America. *World Development* 70, 400—415.
- Cruz, J. M. (2008). Violence and insecurity as challenges for democratic political culture in Latin America. Working paper, Vanderbilt University.
- Cullen, F. T., B. S. Fisher, and B. K. Applegate (2000). Public opinion about punishment and corrections. *Crime and justice* 27, 1–79.
- Dammert, L. and M. F. Malone (2003). Fear of crime or fear of life?: Public insecurities in chile. *Bulletin of Latin American Research* 22(1), 79–101.
- Dammert, L. and F. Salazar (2009). ¿duros con el delito. *Populismo e inseguridad en América Latina, Santiago de Chile, Flacso*.
- Dolan, K., E. M. Khoei, C. Brentari, and A. Stevens (2007). Prisons and drugs: A global review of incarceration, drug use and drug services. report 12.
- Durham, A. M., H. P. Elrod, and P. T. Kinkade (1996). Public support for the death penalty: Beyond gallup. *Justice Quarterly* 13(4), 705–736.
- Enns, P. K. (2014). The public’s increasing punitiveness and its influence on mass incarceration in the united states. *American Journal of Political Science* 58(4), 857–872.
- Esberg, J. and J. Mummolo (2018). Explaining Misperceptions of Crime. Working paper, Stanford University.
- Frost, N. A. (2010). Beyond public opinion polls: Punitive public sentiment & criminal justice policy. *Sociology Compass* 4(3), 156–168.
- Fábrega, J., J. González, and J. Lindh (2018). Polarization and electoral incentives: The end of the chilean consensus democracy, 1990–2014. *Latin American Politics and Society* 60(4), 49–68.
- Gendarmeria de Chile, G. N. (2018). Compendio estadístico penitenciario.

- Gingerich, D. W. and C. G. Scartascini (2018). A heavy hand or a helping hand? information provision and citizen preferences for anti-crime policies. Technical report, IDB Working Paper Series.
- Gottlieb, A. (2017). The effect of message frames on public attitudes toward criminal justice reform for nonviolent offenses. *Crime & Delinquency* 63(5), 636–656.
- Hallsworth, S. (2005). *Street Crime*. Routledge.
- Hart, H. L. A. (1968). *Punishment and Responsibility: Essays in the Philosophy of Law*. Oxford University Press.
- Hart, P. S. and E. Nisbet (2012). Boomerang effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Communication Research* 39(6), 701–723.
- Holland, A. (2013). Right on crime?: Conservative party politics and ‘mano dura’ policies in el salvador. *Latin American Research Review* 48(1), 44–67.
- Hough, M. and J. Roberts (2005). *Understanding public attitudes to criminal justice*. McGraw-Hill Education (UK).
- Jaitman, L., D. Capriolo, R. Granguillhome Ochoa, P. Keefer, T. Leggett, J. A. Lewis, J. A. Mejía-Guerra, M. Mello, H. Sutton, and I. Torre (2017). *The costs of crime and violence: New evidence and insights in Latin America and the Caribbean*. Inter-American Development Bank Washington, DC.
- Jiménez, G. (2007). El funcionamiento de la cárcel como exclusión en chile. *Santiago, Chile: Centro de Estudios del Ministerio de Educación*.
- Johnson, J., C. Simmons, A. Jordav, L. Maclean, J. Taddei, D. Thomas, J. Dovidio, and W. Reed (2002). Rodney king and oj revisited: The impact of race and defendant empathy induction on judicial decisions. *Journal of Applied Social Psychology* 32(6), 1208–1223.
- Kraft, P., M. Lodge, and C. Taber (2015). Why people “don’t trust the evidence”: Motivated reasoning and scientific beliefs. *ANNALS of the American Academy of Political and Social Science* 658(1), 121–133.

- Lessing, B. (2016). Inside out: The challenge of prison-based criminal organizations. *Brookings Local Orders Paper Series*.
- Lochner, L. (2020). Education and Crime. In S. Bradley and C. Green (Eds.), *The Economics of Education: A Comprehensive Overview* (2 ed.), Chapter 9. Washington, DC, USA: Academic Press.
- Lochner, L. and E. Moretti (2014). The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. *American Economic Review* 94(1), 155–189.
- Malone, M. F. (2010). The Impact of Crime on Public Trust in Central American Justice Systems. *Journal of Politics in Latin America* 2(3), 99–128.
- Malone, M. F. (2012). *The rule of law in Central America: Citizens' reactions to crime and punishment*. Continuum.
- Mastrorocco, N. and L. Minale (2018). News media and crime perceptions: Evidence from a natural experiment. *Journal of Public Economics* 165, 230–255.
- Miceli, T. (2018). On proportionality of punishments and the economic theory of crime. *European Journal of Law and Economics* 46(3), 303–314.
- Mitchell Polinsky, A. and S. Shavell (2000). The fairness of sanctions: Some implications for optimal enforcement policy. *American Law and Economics Review* 2(2), 223–237.
- Müller, M.-M. (2012). The rise of the penal state in latin america. *Contemporary Justice Review* 15(1), 57–76.
- Otamendi, M. A. (2015). Las actitudes punitivas de los residentes del amba (2001-2007) desde una perspectiva de clase:¿ dominación, resentimiento o vulnerabilidad?
- Ouss, A. and A. Peysakhovich (2015). When punishment doesn't pay: Cold glow and decisions to punish. *Journal of Law and Economics* 58(3), 625–655.

- Price, S., S. Sechopoulos, and J. Whitty (2019). Support for harsher criminal punishment is greater among the young, the insecure, victims, and those with low trust in the police. *Insights Series* (140).
- Roberts, J. V. and M. Hough (2005). The state of the prisons: Exploring public knowledge and opinion. *The Howard Journal of Criminal Justice* 44(3), 286–306.
- Roberts, K. (2016). (re) politicizing inequalities: Movements, parties, and social citizenship in chile. *Journal of Politics in Latin America* 8(3), 125–154.
- Salinero Echeverría, S. (2012). ¿ por qué aumenta la población penal en chile?: Un estudio criminológico longitudinal. *Ius et Praxis* 18(1), 113–150.
- Serrano, R. (2018). Capitulo 7: El gasto inteligente en seguridad ciudadana: Más allá del crimen y el castigo. *Mejor Gasto Para Mejores Vidas*.
- Simpson, P., M. Simpson, A. Adily, L. Grant, and T. Butler (2019). Prison cell spatial density and infectious and communicable diseases: A systematic review. *BMJ Open* 9(7).
- Slothuus, R. and C. De Vreese (2010). Political parties, motivated reasoning, and issue framing effects. *Journal of Politics* 72(3), 630–645.
- Spiranovic, C. A., L. D. Roberts, and D. Indermaur (2012). What predicts punitiveness? an examination of predictors of punitive attitudes towards offenders in australia. *Psychiatry, Psychology and Law* 19(2), 249–261.
- Stippel, J. and J. S. Moreno (2018). Explanations for the punitive turn of crime policy in bolivia, 2006-2016. *International Journal for Crime, Justice and Social Democracy* 7(4), 33.
- UNDP (2013). Seguridad ciudadana con rostro humano: diagnóstico y propuestas para américa latina.
- Unnever, J. and F. Cullen (2009). Empathetic identification and punitiveness: A middle-range theory of individual differences. *Theoretical Criminology* 13(3), 283–312.

- Unnever, J., F. Cullen, and B. Fisher (2005). Empathy and public support for capital punishment. *Journal of Crime and Justice* 28(1), 1–34.
- Vilalta, C. and G. Fondevila (2019). Populismo penal na américa latina.
- Visconti, G. (2019). Policy preferences after crime victimization: Panel and survey evidence from latin america. *Forthcoming in the British Journal of Political Science*.
- Wozniak, K. H. (2016). Perceptions of prison and punitive attitudes: A test of the penal escalation hypothesis. *Criminal Justice Review* 41(3), 352–371.

6 Tables and Figures

Figure 1: Treatment



Figure 2: Physical coin assignment

Tarjeta Y

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Distribuya las 10 monedas de arriba entre las 4 medidas de combate a la delincuencia, según lo que usted considere mejor.

Aumentar los castigos a los delincuentes

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Ofrecer subsidios para autoprotección

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Implementar medidas de prevención

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

**Invertir más dinero en programas
contra la pobreza**

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Table 1: Balancing of observable variables between treatment and control groups

	Mean untreated	Mean treated	<i>P-value</i>
Sex (Male=1)	0.49	0.49	0.98
Age (Years)	42.22	42.08	0.87
Ethnicity (White)	0.50	0.49	0.82
Ethnicity (Mestizo)	0.37	0.39	0.48
Ethnicity (Indigenous)	0.07	0.06	0.42
Ethnicity (Black)	0.01	0.01	0.87
Ethnicity (Mulatto)	0.01	0.01	0.99
Ethnicity (Other)	0.03	0.03	0.82
Education (Years of schooling)	11.10	10.87	0.23
Employed (Yes=1)	0.52	0.51	0.74
Crime victim (Yes=1)	0.22	0.22	0.91
Is your neighbourhood unsafe? (Yes=1)	0.35	0.36	0.45
Re-coded ideology (Left=1)	0.55	0.55	0.88
Country main problem: crime and violence (Yes=1)	0.25	0.25	1.00
Watches news several times a week/month (Yes=1)	0.90	0.89	0.68
Police asked you for a bribe - last 12 months- (Yes=1)	0.03	0.02	0.23
	N=557	N= 544	

Table 2: Impact of Information about Prisoner's Education on Policy Preferences
(OLS Regressions)

	Punishment - Social Policy			Punishment - Detection			Accept <i>Mano Dura</i>		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treatment	-0.545** (0.272)	-0.668** (0.278)	-0.668** (0.285)	-0.344* (0.185)	-0.446** (0.193)	-0.446** (0.199)	-0.168 (0.135)	-0.248* (0.140)	-0.248* (0.131)
Constant	-1.223*** (0.191)	1.131*** (0.822)	1.131*** (0.790)	2.355*** (0.131)	2.200*** (0.618)	2.200*** (0.604)	3.989*** (0.096)	4.698*** (0.561)	4.698*** (0.441)
Observations	1,620	1,532	1,532	1,619	1,531	1,531	1,613	1,525	1,525
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Standard errors	Robust	Robust	Cluster	Robust	Robust	Cluster	Robust	Robust	Cluster
Control mean	-1.22	-1.22	-1.22	2.35	2.35	2.35	3.99	3.99	3.99

Notes: Table displays the estimate of OLS regression models when outcome Y of individual i is regressed on the treatment and a set of covariates. Each column in the table corresponds to a different specification. First column in each set has no controls. Second and third columns include the following controls: Sex, Ethnicity, Age, Education, Employment, Victimization, Perception of neighborhood insecurity, Left ideology, Crime, violence and security as the main social problem, A police officer asked for a bribe in the last 12 months, Individual watches news very frequently, and fixed effects at the level of sample stratification. Third columns show clustered standard errors at the level of stratification of the survey. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

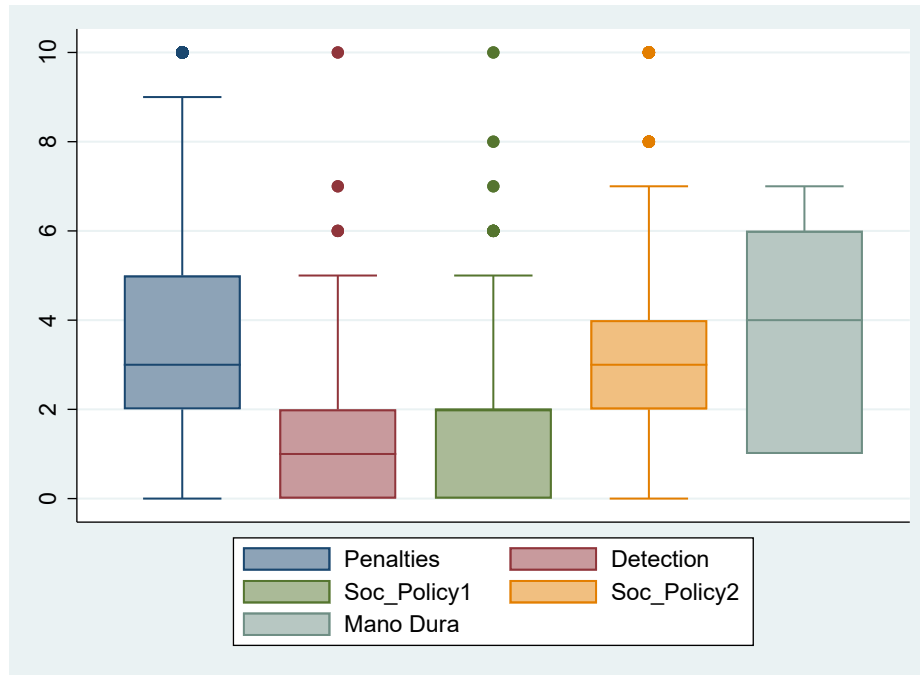
A Appendix

Table A1: Impact of Information about Prisoner's Education on Policy Preferences
(OLS Regressions)

	Punishment			Detection			Social Policies		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treatment	-0.295** (0.142)	-0.370** (0.147)	-0.370** (0.152)	0.047 (0.084)	0.074 (0.086)	0.074 (0.087)	0.251* (0.142)	0.298** (0.144)	0.298** (0.146)
Constant	3.711*** (0.101)	4.441*** (0.440)	4.441*** (0.434)	1.355*** (0.056)	2.244*** (0.305)	2.244*** (0.272)	4.934*** (0.098)	3.310*** (0.437)	3.310*** (0.401)
Observations	1,620	1,532	1,532	1,619	1,531	1,531	1,613	1,525	1,525
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Standard errors	Robust	Robust	Cluster	Robust	Robust	Cluster	Robust	Robust	Cluster
Control mean	3.711	3.711	3.711	1.355	1.355	1.355	4.934	4.934	4.934

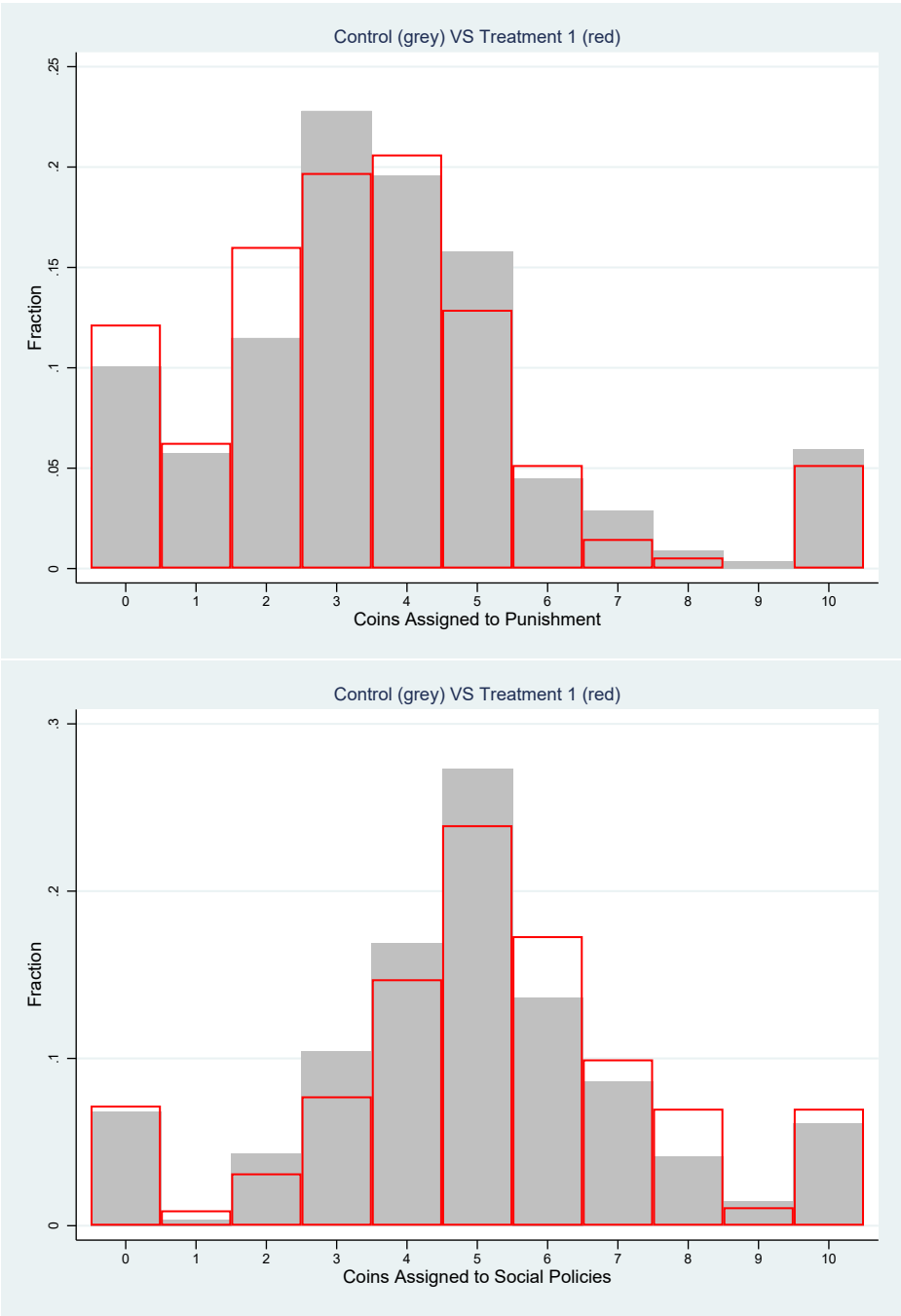
Notes: Table displays the estimate of OLS regression models when outcome Y of individual i is regressed on the treatment and a set of covariates. Each column in the table corresponds to a different specification. First column in each set has no controls. Second and third columns include the following controls: Sex, Ethnicity, Age, Education, Employment, Victimization, Perception of neighborhood insecurity, Left ideology, Crime, violence and security as the main social problem, A police officer asked for a bribe in the last 12 months, Individual watches news very frequently, and fixed effects at the level of sample stratification. Third columns show clustered standard errors at the level of stratification of the survey. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Figure A1: Distribution of coins - control group



Note: Distribution of coins to the different public policies in the control group. The range for coins allocation is from 0 to 10. The range of answers for *mano dura* is from 1 (disagrees) to 7 (agrees).

Figure A2: Distribution of coins - Treatment vs Control Group



Note: Distribution of coins to punishment and to social policies in the control and treatment groups.