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## The political cost of lockdown's enforcement

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# The political cost of lockdown's enforcement

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## Abstract

We study how the political cost of enforcing a lockdown in response to the COVID-19 outbreak relates to citizens' propensity for altruistic punishment in Italy, the early epicenter of the pandemic. Approval for the government's management of the crisis decreases with the amount of the penalties that individuals would like to see enforced for lockdown violations. People supporting stronger punishment are more likely to consider the government's reaction to the pandemic as insufficient. However, after the establishment of tougher sanctions for risky behaviors, we observe a sudden flip in support for government. Higher amounts of the desired fines become associated with a higher probability of considering the government's policy response as too extreme, lower trust in government, and lower confidence in the truthfulness of the officially provided information. Lockdowns entail a political cost that helps explain why democracies may adopt epidemiologically suboptimal policies.

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# The political cost of lockdown's enforcement\*

Andrea Fazio<sup>†</sup>, Tommaso Reggiani<sup>‡</sup>, Fabio Sabatini<sup>§</sup>

January 9, 2021

## Abstract

We study how the political cost of enforcing a lockdown in response to the COVID-19 outbreak relates to citizens' propensity for altruistic punishment in Italy, the early epicenter of the pandemic. Approval for the government's management of the crisis decreases with the amount of the penalties that individuals would like to see enforced for lockdown violations. People supporting stronger punishment are more likely to consider the government's reaction to the pandemic as insufficient. However, after the establishment of tougher sanctions for risky behaviors, we observe a sudden flip in support for government. Higher amounts of the desired fines become associated with a higher probability of considering the government's policy response as too extreme, lower trust in government, and lower confidence in the truthfulness of the officially provided information. Lockdowns entail a political cost that helps explain why democracies may adopt epidemiologically suboptimal policies.

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# 1 Introduction

In early March 2020, Italy was the first Western democracy to impose a national lockdown, requiring the confinement of the population at home. Authorities closed parks, restaurants, and non-essential shops, and banned any outdoor activity, including walking far from home. Citizens could only leave their houses for a handful of reasons—for example, to go to the supermarket or the pharmacy—and needed to carry a document stating why they were outside. Police officers were allowed a discretionary power to assess the residents’ statements and fine 200€ (228\$) for potential violations of lockdown rules. Despite these measures, Italy rapidly surpassed China as the country with the highest death toll from the novel coronavirus (SARS-CoV-2) disease, becoming the epicenter of a shifting pandemic. On March 21, the government further tightened the lockdown by shutting down all non-necessary businesses and industries. Though widely approved by public opinion, confinement measures were *de facto* the most substantial suppression of constitutional rights in the history of the Republic.

Lockdowns are an effective policy response to stages of exponential growth of SARS-CoV-2 contagion (Amuedo-Dorantes et al., 2020; Dehning et al., 2020; Di Porto et al., 2020; Flaxman et al., 2020). However, they come at the cost of tremendous economic losses (Coibion et al., 2020), jeopardize civil liberties (Amat et al., 2020) and threaten incumbent governments’ popularity (Pulejo and Querubín, 2020). The pandemic forces policymakers to face difficult trade-offs, not only in economic and public health terms but also regarding consensus. The political sustainability of lockdowns ultimately relies on the approval of the public.

We study how citizens’ support for the government relates to the tightening of confinement measures in Italy, the country that first navigated the uncharted territory of lockdowns in the Western world. We use a survey that Fetzner et al. (2020a) conducted across 58 countries to explore beliefs about citizens’ and government’s response to the COVID-19 pandemic. The survey asked respondents the amount of the fines they would have liked to see enforced for lockdown violations. These penalties are a form of altruistic punishment, as they potentially concern any law-abiding citizen that usually follows the rules, bring severe individual costs,

imply a voluntary deprivation of personal liberties aimed at the common good, and yield no tangible individual benefits other than public health (Fehr and Gächter, 2002). To study the political cost of enforcement, we exploit the fact that the survey was fortuitously fielded throughout the same week in which the Italian government dramatically hiked lockdown fines. Given that over the previous two weeks, authorities had caught more than 100,000 people outside for no good reason, or lying on their forms, in the evening of March 24 the Italian Prime Minister announced an increase in the fines for violating lockdown rules up to 3,000€ (3,400\$). We first show that trust in government and confidence in the truthfulness of officially-provided information about the outbreak significantly increase with the amount of the fines that respondents would like to see enforced for risky behaviors. Despite that, the likelihood of considering the government’s reaction to the outbreak as insufficient increases with the fines’ amount. Comparing the opinions of respondents who filled in the questionnaire right before the hike in sanctions (until 6.30 p.m. of March 24) and those who did right after, we find that altruistic punishment relates to support for the government in a seemingly counterintuitive way. Right before the hike in sanctions, the degree of approval for the crisis’ management is significantly decreasing with the amount of the suggested punishment. The higher the suggested fines, the higher the probability of considering the policy response to the outbreak as insufficient. The chosen amount also has a positive and weakly significant correlation with confidence in the officially-provided information and a positive though not statistically significant association with trust in government. The day after the Prime Minister announced the hike in sanctions, instead, we observe that higher amounts of the preferred fine become significantly associated with a higher probability of considering the government’s reaction as too extreme, lower trust in government, and lower confidence in the truthfulness of the official information. The flip in the sign of the measures of support for the government is striking and suggests that the new sanctions could have altered how altruistic punishers perceive the management of the crisis.

Our analysis connects to several strands of literature. Previous studies have shown that

the electoral outcomes of disastrous events substantially depend on how the incumbent manages the crisis (Betchel and Hainmueller, 2011). Ashworth et al. (2018) suggest that adverse shocks provide voters with the opportunity to learn new information about incumbents. In recent months, new work has assessed how the policy response to the pandemic affects political consensus (Bol et al., 2020; Daniele et al., 2020; De Vries et al., 2020; Hargreaves Heap et al., 2020). Pulejo and Querubín (2020) highlight the role of incumbents’ electoral concerns by documenting that leaders who can run for re-election have implemented less stringent restrictions when the election is closer in time. Aksoy et al. (2020) consistently find that weak governments took longer to introduce a policy response to the COVID-19 outbreak. The authors also show that exposure to epidemics in “impressionable years” has a persistent negative effect on trust in political leaders and institutions. Sebhatu et al. (2020) show that strong democracies are reluctant to initiate restrictive policies and more likely follow the policies of nearby countries. We add to these studies by documenting how support for government changes with the individual willingness to punish risky behaviors right after the establishment of heavy sanctions for non-compliers. Our results suggest that the tightness of law enforcement may impact the political sustainability of lockdown measures.

Trust in government and support for its policies are crucial drivers of compliance behavior (van Dijke and Verboon, 2010; Hallsworth et al., 2017). Our results could contribute to the understanding of compliance with social distancing measures that has been addressed by several authors since the beginning of the outbreak (Bargain and Aminjonov, 2020; Barrios et al., 2020; Battiston et al.; Briscese et al., 2020; Egorov et al., 2020; Galasso et al., 2020).

We also relate to the event studies exploring the effect of leaders’ speeches on citizens’ attitudes and behaviors (e.g., Bassi and Rasul, 2017). Ajzenman et al. (2020) and Allcott et al. (2020) show that when leaders downplay the gravity of the pandemic in public discourses, their supporters feel encouraged not to comply with social distancing measures. Simonov et al. (2020) show that lower compliance is also linked to the exposure to TV channels biased in favor of leaders who minimize contagion risk. We add to this field by documenting how

the attitude towards the government changes with the willingness to altruistically punish non-compliant behaviors after the announcement of a tightening in lockdown’s enforcement.

The rest of the paper is organized as follows: Section 2 describes the data and provides some background. In Section 3, we present the empirical analysis and briefly discuss its results in light of the related literature. Section 4 concludes.

## 2 Data

We use individual data that Fetzer et al. (2020a) collected to study how beliefs about the gravity of the pandemic and approval of the government policy response affected mental well-being across 58 countries. The questionnaire developed by Fetzer et al. (2020a) asked respondents “Which fines should be enforced for the following risky behaviors? I) Participation at social gatherings; II) Going out despite exhibiting symptoms of coronavirus”. We use the logarithm of sum of the two amounts to value the punishment that individuals would like to see enforced for lockdown violations<sup>1</sup>. Following the literature, we consider this amount a measure of altruistic punishment (Fehr and Gächter, 2002). The altruism lies in the fact that sanctions entail a voluntary deprivation of personal liberties for the common good, and any respondent could potentially bear their cost. On the other hand, respondents would not personally benefit from the fines other than for a potential improvement of public health in the long run. As we report in Table 4 in the Appendix, a higher amount of the suggested fine is significantly associated with self-reported avoidance of any risky behavior. More specifically, people who declared they stayed at home, did not join social gatherings, kept a distance of at least two meters from other people, and washed their hands more frequently than before also supported higher penalties. The amount of the fines is also increasing with first order beliefs about the necessity of a curfew and the importance of avoiding social gatherings. Second order beliefs about curfew and gatherings, instead, are not significantly associated with the

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<sup>1</sup>When respondents do not endorse any punishment, the value of the fine is posed equal to zero. Results do not change if we consider the two measures separately. Coefficients are reported in Tables 6 and 7 in the Appendix.

suggested amount. To measure support for the government, we use three distinct questions: I) “Do you think the reaction of your country’s government to the current coronavirus outbreak is appropriate, too extreme, or not sufficient?”, with answers captured in a five-point Likert scale ranging from “Much too extreme” (value 1) to “Not at all sufficient” (value 5). II) “How much do you trust your country’s government to take care of its citizens?”, with answers captured in a five-point Likert scale ranging from “Strongly distrust” (value 1) to “Strongly trust” (value 5) . III) “How factually truthful do you think your country’s government has been about the coronavirus outbreak?”, captured in a five-point Likert scale ranging from “Very untruthful” (value 1) to “Very truthful” (value 5).

Starting on March 11, Italy established the most stringent lockdown measures in the Western world to halt the spreading of the SARS-CoV-2 contagion. Citizens were substantially confined at home except for a few reasons subject to the discretionary assessment of the police. Despite stay-at-home orders, 102,316 people were caught outside for no good reason and were accordingly fined from March 11 to 23<sup>2</sup>. On the evening of March 24, the Italian Prime Minister announced a dramatic hike in sanctions for lockdown violations in a live-streamed address given via Facebook. Fines for violations of containment measures increased from 206€ (228\$) to between 400€ (457\$) and 3,000€ (3,400\$). In addition, anyone who violated the quarantine after testing positive for COVID-19 could face a prison sentence between one to five years. The hike in sanctions made the headlines in the evening news broadcasts and the newspapers front pages on March 25<sup>3</sup>. Figures 1 and 2 illustrate online searches for the “coronavirus penalties”( *sanzioni coronavirus*) and for the the decree of the President of the Council of Ministers (*Decreto del Presidente del Consiglio dei Ministri*, DPCM) establishing the new fines (*multe*). Searches spiked on March 24 and 25, suggesting that the sanctions were a particularly salient topic on those days.

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<sup>2</sup>Source: Italian Minister of Interior, retrieved at <https://www.interno.gov.it/it/notizie/coronavirus-23-marzo-controllate-oltre-228mila-persone-e-87mila-esercizi-commerciali>.

<sup>3</sup>See for example the front page of *Corriere della Sera*, the most widely circulated Italian newspaper, reported in Figure 4 in the Appendix.

Figure 1: Online searches for coronavirus fines in March 2020

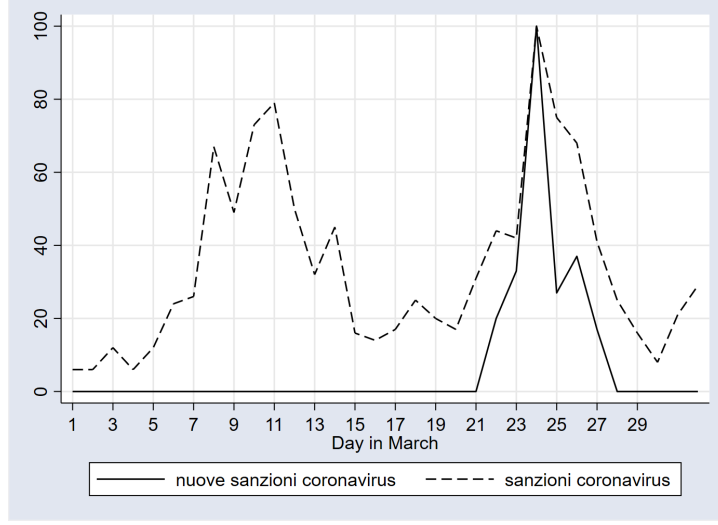
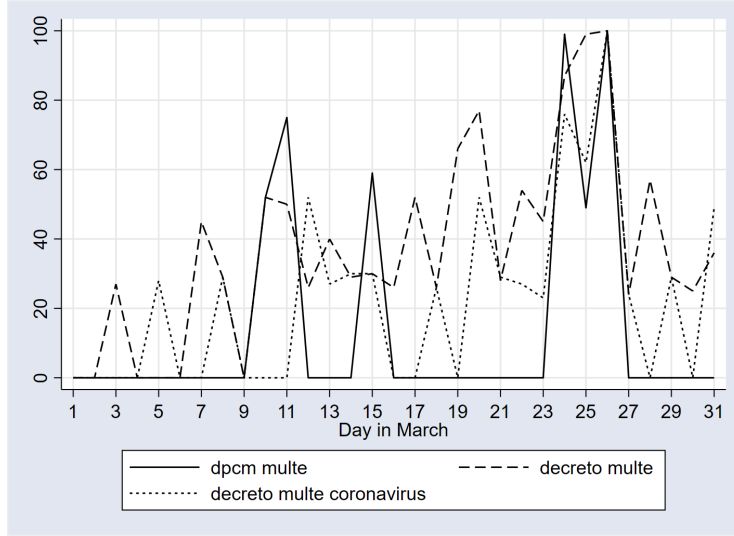


Figure 2: Online searches for the fines Decree (*decreto multe*) in March 2020



We take advantage of the fact that almost the totality of the Italian sample surveyed by Fetzner et al. (2020a) filled in the questionnaire during the week between March 20 and 27. There was no deadline for filling the questionnaire and the system provided a unique ID for any individual survey attempt.

To assess how approval for the government's action has changed with the announcement of the new, stricter, rules, we build two specific temporal dummy variables. The first one,

denominated *March 24*, takes value one if the respondent filled the survey on March 24 before the announcement of the hike in sanctions, from 0.00 a.m until 6.30 p.m. (when the Italian Prime Minister closed his speech). The second one, denominated *March 25*, takes value one if the respondent filled the survey from 6.31 p.m. of March 24 to 11.59 p.m. of March 25.<sup>4</sup> We then regress our measures of support for the government on the interaction terms between the two temporal dummies and the amount that individuals would like to see enforced for punishing noncompliance with lockdown rules. We re-weight the observations to make them representative at the country level, based on respondents' gender, age, income, and education in all regressions (Fetzer et al., 2020b, Section F, p.32). Summary statistics are reported in Table 3 in the Appendix. The high value of the fines suggested by some respondents is in line with the criminal relevance of quarantine violations. According to the Italian law, people leaving their home despite COVID-19 symptoms, or after having tested positive at the nasal swab, are subject to incarceration from one to five years and can face charges of personal injuries, manslaughter, and even unintentional slaughter.

### 3 Results

In this section, we first show our results on the relationship between the hike in sanctions and our set of measures capturing the degree of citizen's approval of the crisis' management (Section 3.1). We then perform a series of robustness and placebo tests to corroborate our main analysis (Section 3.2).

#### 3.1 Main results

Table 1 presents the results of our baseline regressions. Dependent variables are the measure of approval for the government's response to the pandemic (Column 1), trust in government

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<sup>4</sup>We thank Fetzer et al. (2020a) for sharing this supplementary time variable with us. Only 3 respondents took the survey on March 24 between 6.31 p.m. and 11.59 p.m.

(Column 2), and confidence in the truthfulness of the official information about the outbreak (Column 3). The variable *punishment* is the logarithm of the sum of the two fines that individuals would like to see enforced for lockdown violations. We focus the interpretation of results on the interaction terms between the amount of the punishment and the dummy variables indicating the day in which the questionnaire was filled. In all regressions, we include a set of controls capturing socio-economic and demographic characteristics such as gender, age, marital status, education, and income, a set of dummies to control for day fixed effects, and the self-reported health of respondents. We also control for the daily number of COVID-19 ascertained cases and deaths.

Table 1: Suggested fines and support for government

	(1) Perceived Reaction	(2) Trust	(3) Truthfulness
Punishment	0.023 (0.016)	0.043** (0.021)	0.044** (0.022)
March 24 x Punishment	0.231** (0.093)	0.046 (0.112)	0.170* (0.094)
March 25 x Punishment	-0.160*** (0.060)	-0.200*** (0.059)	-0.123* (0.066)
Constant	3.853*** (0.315)	2.209*** (0.511)	3.178*** (0.596)
Day FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes
R-squared	0.210	0.234	0.221
Observations	1,797	1,797	1,797

*Notes:* OLS estimates. Standard errors (in parentheses) are corrected for heteroskedasticity.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Variables/controls description in Table 12.

Outcome (1): perceived reaction of the government, 1=Much too extreme [...] 5=Not at all sufficient.

Outcome (2): trust in government, 1=Strongly distrust [...] 5=Strongly trust.

Outcome (3): truthfulness of the government, 1=Very untruthful [...] 5=Very truthful.

Results in column (1) need to be understood in light of the outcome variable's coding, with the lowest, central, and highest value meaning that respondents view the government's reaction as too extreme, adequate, or too weak, respectively. To correctly interpret the

coefficients, we rely on ordered logit estimates showing the marginal effect for each category of the dependent variable, as reported in Table 9 in the Appendix. In column (1), we see that the desired punishment for lockdown breakers is positively associated with the measure capturing respondents' approval for the government's reaction. Given the ordered logit estimates, this result means that people supporting higher fines are more likely to consider the crisis' management too weak. Higher desired fines are also positively and significantly associated with trust in government (Column 2) and confidence in the reliability of the institutional information about the outbreak (Column 3).

The coefficients of the interaction term between the suggested punishment and the dummy variable for March 24 are in line with this evidence. The association is positive and statistically significant ( $p < 0.05$ ) for the measure capturing approval for the government's reaction, with categorical marginal effects suggesting that the policy response to the outbreak was being considered as too weak. On March 24, the punishment variable also exhibits a positive but not significant association with trust in government and a positive and weakly significant association with confidence in official information's reliability. The following day, our main coefficient of interest suddenly flips its sign. The interaction of the punishment with the dummy variable for March 25 reveals a negative and highly statistically significant ( $p < 0.01$ ) correlation with the measure of approval, with ordered logit estimates suggesting that the new policy response to the outbreak was now more likely to be considered as too extreme. The magnitude of the correlation is significant and sizable. After the hike in sanctions, one standard deviation increase in the desired punishment's intensity makes respondents more likely to consider the crisis management as too extreme by 5.1 percent.

Trust in government follows a similar pattern. On average, the coefficient of the desired punishment is positive and significant at the 5 percent level. The interaction term with the dummy for March 24 is also positive, though not statistically significant. On March 25, the coefficient flips sign and strengthens its statistical significance, suggesting that the hike in sanctions also altered respondents' trust in government. The correlation with confidence in

the official information’s reliability also turns negative though weakly statistically significant ( $p < 0.10$ ).

### 3.2 Robustness and placebo tests

To rule out the possibility that the effect is driven by citizens reshaping their beliefs about the appropriate fines after the hike in sanctions, we first regress the desired penalties on two temporal dummies for March 24 and 25. We report the results in Table 2. In Column (1), the outcome variable is our measure of altruistic punishment, i.e., the sum of the fines that respondents would like to see inflicted on people participating in social gatherings. Column (2) focuses on penalties to punish for social gatherings while Column (3) refers to the desired fines to people going out despite COVID-19 symptoms. There is no significant correlation between the dummies and the outcome variables, suggesting that respondents’ opinions about the most appropriate punishment did not change after the hike in sanctions.

We then non-parametrically assess whether the distribution of penalties proposed by respondents who filled the questionnaire on March 25 systematically differs from the distribution of the penalties suggested in the other days. In Table 3, we report the results from a battery of Kolmogorov-Smirnov tests of the equality of distributions. The first three rows show whether the distribution of the fines suggested on March 25 differs from the distribution of fines in the rest of the sample. The remaining rows refer to the difference between the distribution of the fines suggested on March 25 and March 24. The distributions are never statistically different, suggesting that beliefs about the appropriate penalties were not affected by the hike in fines established by the Italian government on the evening of March 24. Figure 3 in the Appendix plots the Kernel distribution of preferred sanctions across the three main groups, highlighting the lack of statistically significant differences and that the new fines did not serve as an anchor for determining the desired magnitude of the punishment.

Table 2: Day effect on Punishment

	(1) Punishment	(2) Punishment for social gatherings	(3) Punishment for quarantine violation
March 24 vs other days	-0.836 (1.033)	-0.463 (1.034)	-0.394 (1.046)
March 25 vs other days	0.058 (0.557)	1.009 (0.642)	-0.736 (0.509)
Constant	5.474 (6.081)	7.553 (5.557)	4.438 (6.055)
Demographics	Yes	Yes	Yes
R-squared	0.039	0.074	0.074
Observations	1,797	1,797	1,797

Notes: OLS estimates. Standard errors (in parentheses) are corrected for heteroskedasticity.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table 3: Kolmogrov-Smirnov test of the equality of distributions

	Group	$D$	$p$ -value
Punishment	March 25 vs Other days	0.150	0.342
Punishment Risky Behaviors	March 25 vs Other days	0.174	0.188
Punishment Going Out	March 25 vs Other days	0.120	0.621
Punishment	March 25 vs March 24	0.224	0.157
Punishment Risky Behaviors	March 25 vs March 24	0.152	0.604
Punishment Going Out	March 25 vs March 24	0.194	0.297

$D$ : difference between the distribution functions. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Beliefs about the appropriate penalties for risky behaviors may have also changed due to respondents' self-selection after the hike in sanctions, thereby biasing our results. For example, tightening the lockdown may have induced respondents to self-select along personality traits, risk aversion, or other unobservable characteristics. To rule out the possibility that self-selection drove respondents' opinions after the hike in sanctions, we first control for the possibility that unobservable characteristics biased our results by including additional controls to our main specification. Table 4 shows that results hold after controlling for the the

'Big Five' psychological traits (John et al., 1999), an indicator of mental distress (the PHQ-9 index), a misperception index capturing respondents' beliefs about prevailing compliance behaviors in their country (Fetzer et al., 2020a) and a "worries index" capturing respondents' concern about the gravity of the pandemic (Fetzer et al., 2020a)<sup>5</sup>. The Big Five helps us control for specific unobservables that may generate respondents' self-selection after the hike in sanctions, such as risk and time preferences (Jagelka, 2020). For the sake of robustness, we also interact individual demographic characteristics with the temporal dummies for March 24 and 25. Unfortunately, the lack of precise information on respondents' geolocation in the survey does not allow us to control for area of residence indicators.

Then, we perform a balance test of the main observable characteristics of our sample. Table 5 shows that the characteristics of those who filled the questionnaire on March 25 are never statistically different from the rest of the sample (Panel A) and from the group that filled the questionnaire on the evening of March 24 (Panel B), except for a few minor and non-systematic exceptions.  $\Delta$  balance tests in Table 5 are performed according to Chiapello (2018)  $p$ -values corrected for multiple testing.

Given the consistency of our setting concerning the balancedness of groups' characteristics across periods (Table 5) and the stability of individual beliefs about the appropriate penalties pre- and post- the hike in sanctions (Tables 2 and 3, and Figure 3), we can run a further confirmatory 'reduced-form' non-parametric assessment by comparing the average level of the desired punishment and the degree of approval for the government's policy response in the two periods. As expected, the desired fines reported before the hike in the official sanctions are, on average, not statistically different from the those observed on March 25 (MWU-test,  $p$ -value = 0.286). The degree of approval for the government's policy response, instead, significantly turns towards the 'too extreme' direction on March 25 (MWU-test,  $p$ -value = 0.011).

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<sup>5</sup>The worries index summarizes responses to the questions: "I am nervous when I think about current circumstances" and "I am worried about my health" (Fetzer et al., 2020a).

Table 4: Additional Controls and Interactions

	(1)	(2)	(3)	(4)	(5)	(6)
	Perceived Reaction	Trust	Truthfulness	Perceived Reaction	Trust	Truthfulness
Punishment	0.023 (0.015)	0.043** (0.021)	0.044** (0.022)	0.021* (0.013)	0.044** (0.020)	0.040** (0.020)
March 24 x Punishment	0.222** (0.010)	-0.089 (0.068)	0.047 (0.060)	0.183** (0.076)	-0.010 (0.076)	0.200* (0.109)
March 25 x Punishment	-0.160*** (0.052)	-0.223*** (0.063)	-0.156** (0.068)	-0.140** (0.057)	-0.177*** (0.061)	-0.075 (0.081)
Constant	3.858*** (0.300)	2.428*** (0.518)	3.546*** (0.582)	3.736*** (0.510)	1.550** (0.765)	3.436*** (0.796)
Day FE	Yes	Yes	Yes	Yes	Yes	Yes
Demographics	Yes	Yes	Yes	Yes	Yes	Yes
March 24 x Demographics	Yes	Yes	Yes			
March 25 x Demographics	Yes	Yes	Yes			
Big Five, PHQ-9 and Worries Index				Yes	Yes	Yes
R-squared	0.229	0.265	0.258	0.286	0.297	0.338
Observations	1,797	1,797	1,797	1,797	1,797	1,797

Notes: Standard errors (in parentheses) are corrected for heteroskedasticity. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table 5: Balance Tests

	Panel A			Panel B		
	Other days	March 25	$\Delta$	March 24	March 25	$\Delta$
Punishment	7.821 (3.097)	8.319 (2.018)	-0.498 (0.846)	6.696 (3.035)	8.319 (2.018)	-1.624 (0.926)
Punishment Risky Behaviors	6.182 (3.015)	7.409 (1.955)	-1.227 (0.824)	5.525 (2.851)	7.409 (1.955)	-1.884 (0.871)
Punishment Going Out	7.356 (3.191)	7.416 (1.915)	-0.059 (0.872)	6.269 (3.084)	7.416 (1.915)	-1.146 (0.938)
Marital Status	0.444 (0.497)	0.602 (0.496)	-0.157 (0.136)	0.420 (0.497)	0.602 (0.496)	-0.182 (0.156)
Gender	1.576 (0.503)	1.573 (0.633)	0.002 (0.138)	1.658 (0.491)	1.573 (0.633)	0.084 (0.160)
Age	48.807 (17.276)	37.823 (10.283)	10.983 (4.721)	47.347 (16.494)	37.823 (10.283)	9.524 (5.018)
Education	2.384 (0.639)	2.759 (0.522)	-0.374 (0.175)	2.029 (0.685)	2.759 (0.522)	-0.729** (0.210)
Income (log)	7.138 (2.598)	8.507 (0.764)	-1.369 (0.709)	7.632 (1.595)	8.507 (0.764)	-0.875 (0.481)
Own Health	2.998 (0.673)	3.207 (0.434)	-0.209 (0.184)	2.572 (0.874)	3.207 (0.434)	-0.635 (0.264)
Worries Index	-0.151 (0.842)	-0.388 (1.112)	0.237 (0.231)	0.264 (0.737)	-0.388 (1.112)	0.652 (0.246)
PHQ-9 Index	0.038 (0.928)	0.528 (1.145)	-0.490 (0.255)	0.183 (0.958)	0.528 (1.145)	-0.344 (0.308)
Misperception Index	-0.309 (0.791)	-0.524 (0.509)	0.215 (0.216)	-0.037 (1.169)	-0.524 (0.509)	0.487 (0.352)
Extraverted, Enthusiastic	4.408 (1.581)	4.358 (1.518)	0.049 (0.433)	3.766 (2.116)	4.358 (1.518)	-0.593 (0.648)
Critical, Quarrelsome	3.375 (1.648)	3.734 (1.404)	-0.358 (0.451)	3.164 (1.906)	3.734 (1.404)	-0.569 (0.585)
Dependable, Self-Disciplined	5.600 (1.092)	5.547 (0.793)	0.052 (0.298)	5.721 (1.433)	5.547 (0.793)	0.173 (0.434)
Anxious, Easily Upset	3.358 (1.739)	3.761 (1.389)	-0.403 (0.476)	5.139 (1.776)	3.761 (1.389)	1.378 (0.547)
Open to new experiences, complex	5.420 (1.336)	5.244 (1.161)	0.176 (0.366)	4.574 (2.080)	5.244 (1.161)	-0.670 (0.630)
Reserved, Quiet	4.454 (1.655)	4.228 (1.386)	0.226 (0.453)	3.791 (2.045)	4.228 (1.386)	-0.438 (0.624)
Sympathetic, Warm	5.204 (1.423)	4.904 (0.894)	0.300 (0.389)	6.107 (1.188)	4.904 (0.894)	1.202** (0.365)
Disorganized, Careless	3.138 (1.562)	3.052 (1.882)	0.086 (0.429)	2.974 (1.677)	3.052 (1.882)	0.078 (0.534)
Calm, Emotionally Stable	4.847 (1.398)	3.380 (1.683)	1.467*** (0.384)	4.525 (1.815)	3.380 (1.683)	1.145 (0.566)
Conventional, Uncreative	4.067 (1.532)	3.832 (1.451)	0.234 (0.420)	4.777 (1.676)	3.832 (1.451)	0.944 (0.520)

Notes: Average values with correspondent standard deviations (in parentheses). \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Finally, Table 6 presents the results of some placebo tests. In the first three columns, we assess how approval for the policy response (Column 1), trust in government (Column 2), and confidence in official information (Column 3) relate to the interactions between the punishment and dummies for March 22 and 23, days before the hike in sanctions. Coefficients are systematically statistically insignificant.

The same holds when we shift the estimate to the days following the hike in sanctions. The coefficients of the interaction terms between the punishment and the two dummy variables are mostly negative and always statistically insignificant. This latter result may suggest that the potential impact of the hike in sanctions disappears as the news became less salient.

## 4 Discussion

The combination of the OLS reported in Table 1 and the categorical logit estimates in Table 9 in the Appendix imply that the likelihood of considering the government’s reaction to the pandemic as insufficient increases with the punishment magnitude, both on average and right before the hike in sanctions on March 24. Right after, instead, higher amounts of the desired punishment are significantly associated with a higher probability of considering the government’s reaction as too extreme. Trust in government follows a similar pattern, with a flip in sign after the establishment of the tougher penalties. The sudden flip in the measures of support for the government is striking and suggests that the hike in sanctions could have altered how altruistic punishers perceive the policy response to the pandemic. Right before the announcement of the new penalties, news about the repeated lockdown violations widely circulated in the media provoking a wave of resentment towards lockdown breakers<sup>6</sup>. Individuals desiring more intense punishment were more likely to consider the

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<sup>6</sup>On March 23 and 24, Italian media gave exceptional coverage to a release by the Ministry of the Interior, reporting that more than 100,000 people were caught outside their home for no good reason. The news provoked a wave of anger towards rule breakers, to the point that many people confined at home started harassing those on sidewalks from their balconies—with no regard for the possibility that some may have been essential workers. Local administrators often fed suspects and anger by scolding people they caught outside

Table 6: Placebo Tests

	(1)	(2)	(3)	(4)	(5)	(6)
	Perceived Reaction	Trust	Truthfulness	Perceived Reaction	Trust	Truthfulness
Punishment	0.011 (0.018)	0.085*** (0.025)	0.088*** (0.027)	0.023 (0.015)	0.042** (0.021)	0.045** (0.022)
March 22 x Punishment	0.030 (0.029)	-0.066 (0.041)	-0.065 (0.047)			
March 23 x Punishment	-0.012 (0.030)	-0.069 (0.056)	-0.078 (0.051)			
March 26 x Punishment				0.008 (0.100)	0.096 (0.082)	-0.039 (0.061)
March 27 x Punishment				-0.069 (0.097)	-0.360 (0.272)	-0.280 (0.233)
Constant	4.211*** (0.322)	2.312*** (0.503)	3.262*** (0.597)	4.120*** (0.292)	2.541*** (0.493)	3.533*** (0.614)
Day FE	Yes	Yes	Yes	Yes	Yes	Yes
Demographics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.175	0.240	0.192	0.169	0.235	0.185
Observations	1,688	1,688	1,688	1,688	1,688	1,688

Notes: Standard errors (in parentheses) are corrected for heteroskedasticity. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

government's reaction to the outbreak as inappropriate and insufficient. Still, they also exhibited a higher trust in government and the officially provided information. Right after, people supporting stiffer punishment were more likely to judge the COVID-19 policy response as too extreme and exhibited a significantly lower trust in government and significantly lower confidence in the official information about the outbreak. This result suggest that, when confronted with the actual possibility of being fined high amounts, those declaring themselves in favor of higher fines could rethink their opinion on the most appropriate COVID-19 policy response. In light of the extant literature on cooperation and punishment, this reaction looks less counterintuitive than it may seem. Behavioral studies show that altruistic punishers are generally more compliant and more confident in third party punishment (Fehr and Gächter, 2002, Falk et al., 2005, Fowler et al., 2005, Sun et al., 2015), as they perceive a higher likelihood of receiving an audit than non-punishers and non-compliers (Boyd et al., 2003, Spitzer et al., 2007, Coricelli et al., 2010, Gordon and Lea, 2016). After the government announced the hike in sanctions, the altruistic punishers in our sample - who, consistently with previous literature, were also the most compliant with lockdown rules - may have feared a more substantial likelihood of being sanctioned the new amounts, thereby developing the belief that the government's reaction was unfair. This shift in opinions may have diminished trust in institutions, ultimately weakening the social contract between citizens (altruistic punishers in particular) and the state.

Previous work suggests that the altruistic punishment exerted in controlled environments may diverge from the one that would spontaneously emerge in the field (Balafoutas et al., 2016). COVID-19 lockdowns offer an unprecedented chance of understanding to what degree potential altruistic punishers can bear limitations of their liberty and the risk of incurring tough penalties for the common good.

The flip in the sign of the interaction term between the amount of the punishment and promising tougher sanctions than those enforced by national authorities. In a now-famous speech, the Governor of the Campania Region, Vincenzo De Luca, declared: "I'm getting word that someone is having a graduation party. I will send in the police. With flamethrowers."

the day dummies in the estimates of the other two dependent variables also offers interesting insights. The initially positive correlation between the amount of the desired fines and trust in government supports the view that people trust political institutions to the extent to which they feel represented by them. Trust in government before the hike in sanctions may thus be linked to the electoral support of the incumbent parties (Rothstein and Stolle, 2003; Kumlin and Rothstein, 2005) and the advocacy for tighter law enforcement shared by government parties' followers (Di Maggio and Perrone, 2019). The procedural justice literature suggests that citizens trust institutions to the extent to which they perceive the outcomes of public policy as efficient and fair, as if a sort of psychological contract with authorities was in force (Feld and Frey, 2007). There is ample evidence that citizens' evaluation of the performance and fairness of government institutions influences their confidence in them, especially when it comes to issues related to law enforcement (Tyler, 2003). In light of this literature, the result about trust in government may be explained by the fact that, when institutions are viewed as unfair, people tend not to trust them independently of their political orientation (Rothstein and Stolle, 2003; 2008; Kumlin and Rothstein, 2005). Unfortunately, the survey lacks information about political orientation, preventing us from studying this possible driver of respondents' opinions about the appropriate sanctions.

Overall, the exceptional amount of the new fines (from 400€ up to 3,000€), the discretionary power of police officers to assess citizens' reasons for not staying at home, and the difficulty in discriminating between free-riders and those having urgent reasons to go outside could have led altruistic punishers to perceive the new measures as unfair <sup>7</sup>. Finally, our results seem overall consistent with studies on the impact electoral concerns of policymakers on the management of the outbreak. The flip in the measures of support for government associated with the hike in sanctions reminds that enforcing a lockdown is not only economically but also politically costly, as suggested by the evidence that weaker or less stable

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<sup>7</sup>According to several commentators, the strong emphasis of the official communication on the need to punish risky behaviors also gave the impression that the government wanted to shift the responsibility of the crisis on citizens. See, for example, [https://www.corriere.it/esteri/20\\_marzo\\_31/coronavirus-futuro-prossimo-non-puo-restare-enigma-9f0eff7a-7382-11ea-bc49-338bb9c7b205.shtml](https://www.corriere.it/esteri/20_marzo_31/coronavirus-futuro-prossimo-non-puo-restare-enigma-9f0eff7a-7382-11ea-bc49-338bb9c7b205.shtml).

governments have hesitated more in implementing restrictive measures against the spreading of the COVID-19 disease (Aksoy et al., 2020; Pulejo and Querubín, 2020).

## 5 Conclusions

In this paper we explored citizens’ support for the government in the wake of one of the strictest lockdowns implemented in the Western world in response to the COVID-19 pandemic. Italy offers a unique case for studying how people who want strong altruistic punishment may react to restrictions on personal liberties and a dramatic hike in sanctions aimed at improving public health. Our evidence suggests that even those more concerned with the pandemic and more inclined to bear a costly punishment for the common good significantly altered their view of the government’s management of the crisis after the tightening of lockdown’s enforcement. In coronavirus times, policymakers face difficult trade-offs. Restrictive measures aimed at halting contagion not only cause economic losses. They can also threaten citizens’ support for the government and undermine trust in institutions, perhaps weakening the effectiveness of the policy response to the crisis.

Our empirical analysis has some limitations that suggest handling results with caution. Data were collected through one wave of self-report questionnaires. Though the specific timing of the data collection was fortunate, as it occurred the same week in which the government announced the hike in sanctions, the cross-sectional nature of the analysis inhibits any intention to establish causal relationships. We could not control for several possibly relevant aspects of individuals’ personality, biases, and behavior that may confound the relationship between the wish for tougher sanctions and the approval for government’s action. In addition, even though our sample size was adequate, it was far from being representative of the population. We re-weighted observations to make them representative at the country level based on respondents’ gender, age, income, and education, but we cannot exclude that selection bias affected our results. The COVID-19 pandemic is a new phenomenon. Providing real-time evidence on its economic and societal impact also entails the use of often provisional

and incomplete data. Despite these limitations, our analysis highlights the need to study lockdown surveillance and communication strategies to slacken some aspects of the trade-offs that policymakers face in contrasting the pandemic, to design effective and sustainable countermeasures.

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## Appendix

Table 7: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.
Fine Risky Behaviors [ $\Psi$ ]	2,290.924	6,393.363	0	50,000
Fine Going out [ $\Omega$ ]	21,515.093	109,251.843	0	1,000,000
Punishment [ $=\log(\Omega+\Psi)$ ]	7.842	3.350	0	14.55
Trust	3.325	1.098	1	5
Truthfulness	3.781	1.028	1	5
Perceived Reaction	3.29	0.641	1	5

*Notes:* The first row reports the fine that respondents would like to see enforced for participation at social gatherings.

The second row reports the desired fines for those going out despite exhibiting symptoms of coronavirus.

Categories of the perceived reaction are as follows: 1 = much too extreme; 2 = somewhat extreme;

3 = appropriate; 4 = somewhat insufficient; 5 = not at all sufficient.

Table 8: Drivers of desired financial punishment

	(1) Fine (sum)	(2) Fine social gatherings	(3) Fine quarantine violations
PHQ-9 index	-0.204 (0.200)	0.055 (0.195)	-0.210 (0.199)
Misperception index	-0.542 (0.590)	-0.522 (0.566)	-0.346 (0.617)
Behavioral index	0.540** (0.261)	0.540** (0.255)	0.440 (0.290)
FOB social gatherings	1.254 (0.912)	2.019** (0.897)	1.173 (0.925)
SOB social gatherings	-0.031* (0.018)	-0.030* (0.016)	-0.019 (0.020)
FOB curfew	2.478** (1.064)	1.317 (0.911)	2.458** (1.113)
SOB curfew	-0.019 (0.017)	-0.010 (0.016)	-0.012 (0.018)
Constant	5.353** (2.601)	2.960 (2.378)	2.624 (3.276)
Day FE	Yes	Yes	Yes
Demographics	Yes	Yes	Yes
R-squared	0.128	0.156	0.141
Observations	1,797	1,797	1,797

*Notes:*

*Behavioral index* measures how much individuals complied with behaviors that reduce the spread of the virus.

*FOB social gatherings* measures respondents' first order beliefs about the need to avoid social gatherings.

*FOB curfew* measures respondents' first order beliefs about the need of a national curfew.

*SOB social gatherings* measures second order beliefs about the share of people believing that social gatherings should be avoided.

*SOB curfew* measures second order beliefs about the share of people believing that a national curfew would be needed.

*Misperception index* measures the difference between FOB and SOB.

*The PHQ-9 index* measures mental distress.

OLS estimates. Standard errors (in parentheses) are corrected for heteroskedasticity.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 9: Opinion on government's reaction (Ordered Logit)

outcome: Reaction	Predict Probability
<i>Too much Extreme</i>	
Other days x Punishment	-0.001 (0.001)
March 24 x Punishment	-0.127*** (0.030)
March 25 x Punishment	0.075*** (0.011)
<i>Somewhat Extreme</i>	
Other days x Punishment	-0.002 (0.002)
March 24 x Punishment	0.018 (0.087)
March 25 x Punishment	-0.019 (0.021)
<i>Appropriate</i>	
Other days x Punishment	-0.009 (0.006)
24th x Punishment	0.091 (0.068)
25th x Punishment	-0.042** (0.018)
<i>Somewhat Insufficient</i>	
Other days x Punishment	0.009 (0.006)
March 24 x Punishment	0.013 (0.025)
March 25 x Punishment	-0.008 (0.006)
<i>Not at all sufficient</i>	
Other days x Punishment	0.003 (0.002)
March 24 x Punishment	0.005 (0.005)
March 25 x Punishment	-0.006 (0.004)
Day FE	Yes
Demographics	Yes
Observations	1,797

*Notes:* The table reports the categorical marginal effects of the interaction between the day of the interview and the desired fine on respondents' opinions about the government's reaction to the outbreak. Ordered logit model.

Standard errors (in parentheses) are corrected for heteroskedasticity.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 10: Main specification (Punishment social gatherings)

	(1) Reaction	(2) Trust	(3) Truthfulness
<i>Punishment</i> social gatherings	0.032** (0.016)	0.016 (0.025)	0.008 (0.025)
March 24 x <i>Punishment</i> social gatherings	0.217* (0.111)	0.054 (0.127)	0.240** (0.095)
March 25 x <i>Punishment</i> social gatherings	-0.150** (0.073)	-0.187** (0.079)	-0.107 (0.075)
Constant	3.847*** (0.315)	2.378*** (0.525)	3.398*** (0.585)
Day FE	Yes	Yes	Yes
Demographics	Yes	Yes	Yes
R-squared	0.208	0.222	0.213
Observations	1,797	1,797	1,797

Notes: OLS estimates. Standard errors (in parentheses) are corrected for heteroskedasticity.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table 11: Main specification (Punishment going out)

	(1) Reaction	(2) Trust	(3) Truthfulness
<i>Punishment</i> Going Out	0.013 (0.016)	0.046** (0.020)	0.040* (0.023)
March 24 x <i>Punishment</i> Going Out	0.247*** (0.088)	0.054 (0.109)	0.174* (0.092)
March 25 x <i>Punishment</i> Going Out	-0.153** (0.064)	-0.211*** (0.077)	-0.116 (0.100)
Constant	3.950*** (0.314)	2.266*** (0.503)	3.270*** (0.604)
Day FE	Yes	Yes	Yes
Demographics	Yes	Yes	Yes
R-squared	0.208	0.238	0.219
Observations	1,797	1,797	1,797

Notes: OLS estimates. Standard errors (in parentheses) are corrected for heteroskedasticity.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table 12: Variables Description

Variable	Description	Mean	Min.	Max.
<i>Dependent Variables</i>				
Opinion on govt.'s reaction	Categorical	3.29	1 (Too extreme)	5 (Not at all sufficient)
Trust in government	Categorical	3.325	1 (Strongly distrust)	5 (Strongly trust)
Information's truthfulness	Categorical	3.781	1 (Very untruthful)	5 (Very truthful)
<i>Desired punishment</i>				
Punishment	Continuous	7.842	0	14.557
Fine social gatherings	Continuous	2290.924	0	50000
Fine Going out	Continuous	21515.093	0	1000000
<i>Socio-demographics</i>				
Marital status	Categorical	0.468	0 (Divorced/Single)	1 (In a relationship)
Gender	Categorical	1.485	1 (Male)	3 (Other)
Age	Categorical	39.329	18	99
Education	Categorical	2.955	1 (Middle School)	4 (Post-Grad school)
Income (log)	Continuous	8.936	0	12.899
Own Health	Categorical	3.231	1 (Poor)	4 (Excellent)
<i>Mental health and pandemic perceptions</i>				
Worries index	Continuous	-0.168	-3.353	2.267
PHQ-9 index	Continuous	0.096	-1.118	3.561
Misperception index	Continuous	-0.393	-1.539	3.179
<i>Big-Five Personality Traits</i>				
Extraverted, enthusiastic	Categorical	4.183	1 (Strongly disagree)	7 (Strongly agree)
Critical, quarrelsome	Categorical	3.413	1 (Strongly disagree)	7 (Strongly agree)
Dependable, self-disciplined	Categorical	5.533	1 (Strongly disagree)	7 (Strongly agree)
Anxious, easily upset	Categorical	3.511	1 (Strongly disagree)	7 (Strongly agree)
Open to new experiences, complex	Categorical	5.457	1 (Strongly disagree)	7 (Strongly agree)
Reserved, quiet	Categorical	4.431	1 (Strongly disagree)	7 (Strongly agree)
Sympathetic, warm	Categorical	5.366	1 (Strongly disagree)	7 (Strongly agree)
Disorganized, careless	Categorical	3.182	1 (Strongly disagree)	7 (Strongly agree)
Calm, emotionally stable	Categorical	4.877	1 (Strongly disagree)	7 (Strongly agree)
Conventional, uncreative	Categorical	4.06	1 (Strongly disagree)	7 (Strongly agree)

Notes: Source/dataset Fetzer et al. (2020a)

Figure 3: Kernel Density of the desired fines across the three groups

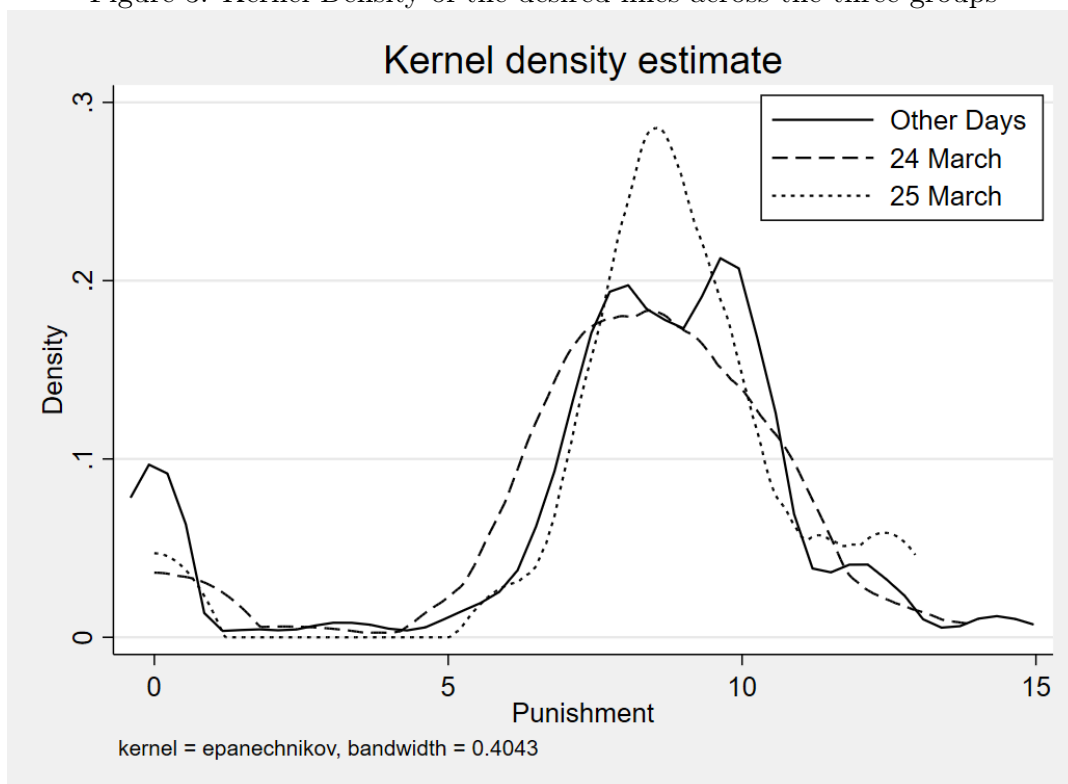


Figure 4: *Corriere della Sera*'s front page on March 25, 2020.



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