

Pre-analysis plan

Project title: (Organised) Crime Vs the State

Gian Maria Campedelli – University of Trento

Gianmarco Daniele – Università di Milano, Università Bocconi

Andrea FM Martinangeli – Burgundy School of Business, LESSAC

Paolo Pinotti – Università Bocconi

Introduction

A vast amount of literature demonstrates that organized crime has a substantial role in impacting the economy, politics, and the well-being of societies in several regions of the world (Shelley, 1995; Levenstein & Suslow, 2004; Pinotti, 2015b; Gutiérrez-Romero & Oviedo, 2018; Khanna et al., 2019). Although organized crime groups are characterized by different levels of sophistication, resources, and ability to infiltrate political institutions and legal markets, they all, to some extent, seek to exert control on institutional and economic mechanisms in order to increase their power, influence, and return.

Within the heterogeneous patchwork of organized crime groups spread all over the world, Italy has been the focus of extensive research in the field of economics of crime (V. Daniele & Marani, 2011; Acconcia et al., 2014; Buonanno et al., 2015; Pinotti, 2015a; G. Daniele & Geys, 2015; G. Daniele & Dipoppa, 2017; Acemoglu et al., 2020; Baraldi et al., 2022). In fact, Italy has been infamously affected by mafia presence for decades.

Since the emergence of the Sicilian mafia during the nineteenth century, mafias have played an essential role in the country's recent economic and political history (Lupo, 2009). While traditionally mafias emerged in southern regions, i.e., Sicily, Calabria, Campania, Apulia, and Basilicata, during the second half of the twentieth century they were able to expand across territories and provinces, settling also in northern regions and provinces (Dugato et al., 2020). Accounts of this expansion date back to the 1960s and 1970s, but their presence has been reported with more frequency in the last two decades. Not only mafias spread across the entire country, but also migrated to other European countries (Calderoni et al., 2016). Furthermore, exploiting connections with foreign organized crime groups, Italian mafias were able to construct a transnational partnership network that turned out to be decisive in the supply of illegal drugs, among other goods, which represent a core component of their criminal activities.

Throughout the decades, mafias were capable of infiltrating the legal economy, and in particular specific sectors such as the construction and the entertainment ones (Riccardi & Soriani, 2016), as well as forming connections with political institutions and representatives, reinforcing

corruption and collusion issues that significantly affected the quality and accountability of democratic institutions in the country (Pinotti, 2015b; Alesina et al., 2019).

The complex ramifications characterizing the role and influence of mafias in the country today are the result of different strategies that followed one another over the years and considerably marked the country's recent history. Between the late 1940s and the mid-1990s, mafias – and in particular the Sicilian mafia – employed aggressive and violent tactics to achieve a number of different goals, such as the control of specific criminal activities, the obstructionism to legislative efforts to counter their diffusion and power, the increasing collusion with political actors, the ability to influence the institutional decision-making process and the need to rule out potential criminal competitors and opponents.

Over the course of the decades, mafias murdered dozens of local politicians, activists, journalists, judges, and prosecutors to preserve their interests. Yet, the escalation of the conflict between the State and mafias led to more stringent laws and heavier policing operations that resulted in important trials and weakened the strength of criminal organizations at the beginning of the 1990s. The project revolves around the use of a survey experiment (see for instance Daniele et al., 2020; Fuster & Zafar, 2022; Haaland et al., 2020) in which the sample is exposed to journalistic images criminal violence with the aim of uncovering the causal effects of violent crime salience on their perceptions of crime itself and of the political and administrative institutions.

From a theoretical standpoint, the present work will leverage different traditions in the study of the societal impact of organized crime that emerged from various social science disciplines, such as economics, political science, and criminology.

Our hypotheses depart from scholarship on weak states (see (Acemoglu et al., 2020)), the idea that Italian democratic institutions were ineffective (or perceived as so) in countering the mafia phenomenon in the last decades which has in turn corroded trust in democratic and political institutions. Rather, we investigate the reverse causal nexus, hypothesising that once present on the territory, organised crime weakens the institutions.

We investigate these effects by randomly priming respondents with images of organised crime violence in comparison with respondents who did not receive the prime. To investigate the impact of corrective information about State effectiveness, we randomly inform a subset of the primed respondents about the decline in mafia-related homicides over the past 20 years. Further, to distinguish the impact of organised crime from that of general criminality, a further subset of the respondents receives analogous primes on “general” homicides, and a further subset update information about the decline in “general” homicides over the past 20 years.

Experimental design

Our survey flow consists of the following:

- Informed consent to the participation and disclaimers in accordance to the GDPR regulations and requirements of the Research Ethics Committee of the Burgundy School of Business
- Screening demographic questions ensuring representativity of the sample
- Questions on news consumption also serving the purpose of obfuscating the survey's purpose
- Experimental condition delivery: each subject is randomised into one of six experimental conditions exposing them to
 - I. **Crime:** A priming condition exposing the respondents to journalistic images of criminal violence (murders) and eliciting (incentivised) prior beliefs about its trend over the past two decades (2000-2020; observed: -63%).
 - II. **Crime + update:** Adds information about the decreasing trend in homicide rates observed over the past 20 years (Approx 65%).
 - III. **Mafia crime:** A priming condition exposing the respondents to journalistic images of criminal violence emphasising its origin in *organised* crime and eliciting (incentivised) prior beliefs about its trend over the past two decades (2002-2020; observed: -69%)
 - IV. **Mafia crime + update:** Adds information about the decreasing trend in homicide rates linked to organised crime observed over the past 20 years (Approx 65%).
 - V. **Crime control:** A priming condition exposing the respondents to journalistic images of criminal violence without adding references to its nature or trends,
 - VI. **Control:** a baseline condition exposing the respondents to journalistic images without any reference to criminal activities or trends

We classify the respondents according to their performance in an attention checker asking them to write the number of images they are shown.

We elicit the respondents' degree of uncertainty on the stated belief about the percentage change in murders over the past 20 years.

- Behavioural outcome elicitation of revealed preference for support to governmental (Civil Protection) or private (Red Cross) socially beneficial institutions in the form of donation of experimental (windfall) money
- Outcome elicitation of attitudes and perceptions including target questions on generalised social trust, institutional trust (specified below in section "Outcome variables"), and a number of further outcomes intended to test and tease out mechanisms
- Further background demographics
- Posterior beliefs elicitation: We elicit the respondents' incentivised perception of the effectiveness of the Italian state in fighting criminality via their beliefs about the total clearance rate (proportion of homicide investigations resulting in the identification of the culprit). Their

beliefs are incentivised according to the latest clearance rate estimate (76% in 2019). We next elicit the degree to which the respondents who received updated information about the trend in homicides or mafia related homicides found the information credible. We moreover ask the respondents to re-state the information they received.

- Debriefing questions including perception of the survey, direct or indirect exposure to organised crime, exposure to news about criminal activities.

A full transcription of the survey can be found in attachment to this pre-analysis plan.

Belief incentivisation:

We incentivise prior beliefs about the trend in homicides (both mafia and general) as follows:

- 0.15€ if the answer differs by at most 3 percentage points (above or below) the true value (by murder type), or
- 0.10€ if the answer differs by at most 5 percentage points (above or below) the true value (by murder type), or
- 0.05€ if the answer differs by at most 10 percentage points (above or below) the true value (by murder type)

The same incentivisation scheme is used to incentivise posterior beliefs about the total clearance rate.

Sample selection

We survey a random sample of 6000 individuals representative of the Italian adult population along the age, gender, income and geography dimensions, though we oversample from the southern regions. We outsource the distribution of the link to our survey (programmed in Qualtrics) to the panel provider Demetra.¹

If necessary, we will retain only data points successfully passing the attention checkers.

Should a completion time problem present itself, we will moreover exclude the slowest and fastest 5% of the responses from our analyses.

Hypotheses

H1: we expect a negative effect of the treatment Crime and Mafia Crime on trust in institutions and generally State legitimacy (e.g. tax evasion or donations to the State Vs NGO).

H1B: H1 negative effect is increasing in misperceptions: higher misperceptions of violence might further decrease trust in institutions. In turn, individuals might see the State as incapable and unfit to fight crime.

¹ <https://www.demetra.com/en/>

H1C: H1 negative effect is stronger for Mafia Crime than Crime. This is due to the multifaceted role of organized crime in the Italian society. Mafia homicides are seen as linked to criminal organizations which systematically challenge the State in both legal and illegal markets. Conversely, general homicides might just foster a general feeling of insecurity. We expect this effect to depend on personal experience and exposure to organized crime.

H2: The above-mentioned negative effects are reduced after the update beliefs in Crime + Update and Mafia Crime + Update. This relies on the assumption that at least part of the negative effects are driven by misperceptions of violence.

Analysis

We perform nonparametric (e.g. tests of proportions, distribution equality) and parametric tests of our hypotheses on our outcome variables of interest. Namely proportions of individuals donating their money to public or private organisations and stated institutional trust. Our analyses will control, in addition to individual background characteristics, for geographic local background and regional fixed effects. Our standard errors will be clustered at the lowest available geographic area of reference (province, NUTS3).

Outcome variable:

- Behavioural outcome: Donation to public or private organisations

Additional outcomes:

these outcome variables serve the purpose of further investigating the mechanisms behind the effects observed on our behavioural outcome

- Stated trust in the institutions
- Demand for safety and state protection
- Perceived tax burden
- Attitudes towards crime and prosecution
- Stated generalised social trust

Instrumental variable analysis of behavioural trust in institutions using posterior beliefs about state effectiveness in combating organised crime

We rely on the prior and posterior beliefs to investigate whether exposure to (mafia) homicides and information about their trend in the recent decades influences perceptions of state effectiveness in fighting crime, and how the latter mediates trust in institutions. To do so, we run an instrumental

variable regression (Fuster & Zafar, 2022) in which posterior beliefs about the effectiveness of the state in fighting criminality are investigated in:

$$post = \beta_0 + \beta_1 * I(Condition = c) + \beta_2 * (prior - info) + \\ + \beta_3 * I(Condition = c) * (prior - info) + \beta * X + \varepsilon$$

where $Condition \in \{0,1,2,3,4,5\}$ denotes the experimental condition under which the respondent participated, $(prior - info)$ denotes the respondent's perception gap, i.e. the respondents' prior belief about the change in the number of homicides over the previous 20 years.

We then use the predicted values of the posterior beliefs, \widehat{post} , to investigate how perceived state effectiveness mediates our outcome of interest:

$$y = \gamma_0 + \gamma_1 * \widehat{post} + \gamma * X + \varepsilon$$

We control for the respondents' degree of uncertainty in their stated prior beliefs.

We will investigate potential heterogeneities with respect to income, education, location of residence (north/south), age.

References

- Daniele, G., Martinangeli, A. F., Passarelli, F., Sas, W., & Windsteiger, L. (2020). When Economic and Health Crises Collide – The Effect of Covid-19 on Political Attitudes. *Working Paper of the Max Planck Institute for Tax Law and Public Finance No. 2020-18*. <https://papers.ssrn.com/abstract=3750181>
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- Haaland, I., Roth, C., & Wohlfart, J. (2020). *Designing Information Provision Experiments* (SSRN Scholarly Paper ID 3644820). Social Science Research Network. <https://doi.org/10.2139/ssrn.3644820>