

Pre-analysis plan

Project title: Political Collusion and Civic Resistance to Organized Crime

Massimo Pulejo – Roma Tre University and BAFFI, Bocconi University

1. Introduction

Across the globe, collusion with public officials is one of the key survival strategies of organized criminal groups (OCGs). Although the threat of physical violence remains an important tool for criminals (Dal Bó and Di Tella, 2003; Daniele and Dipoppa, 2017; Alesina, Piccolo and Pinotti, 2019), public officials are captured most frequently through bribes (Kugler, Verdier and Zenou, 2005; Gamba, Immordino and Piccolo, 2018). Besides distorting the allocation of public resources and reducing aggregate welfare, corruption has been shown to be particularly detrimental to the trust of citizens in politicians and bureaucrats (Daniele, Aassve and Le Moglie, 2023). This creates a vicious circle, as weaker institutions become an even easier target of criminal appetites.

In addition to electing honest representatives who do not give in to criminal interests, citizens can use their own actions and resources to contrast OCGs. Direct opposition – e.g., through mobilization campaigns or reporting of criminal activities to law enforcement agencies – is indeed a major obstacle to criminals in many contexts (Ley, Mattiace and Trejo, 2019; Lipari and Andriguetto, 2021; Dipoppa, 2024). By way of contrast, a passive civil society creates fertile ground for OCGs to grow. In fact, it allows criminals to extract rents from the population – e.g., through extortion – and get coverage against the state's crackdown attempts. But are there any nexus linking the actions of public officials to those of ordinary citizens when it comes to fighting organized criminal groups? This pre-analysis plan describes a survey experiment aimed at answering this important question.

The first goal of the survey experiment is examining whether and how learning about public officials' collusion with criminal groups has a causal effect on citizens' willingness to support civil society organizations fighting organized crime. I posit that information on public officials' collusion induces Italian citizens to become more supportive of NGOs fighting the mafia. This hypothesis draws from extant work in public economics and from my own observational findings from a set of difference-in-differences analyses. Various studies have shown how citizens turn to the non-profit sector to compensate for the state's failure or lack of intervention on issues they care about (see, e.g., Roberts, 1984; Hungerman, 2005; Gruber and Hungerman, 2007; Andreoni et al., 2011; Pulejo, 2025). In line with these studies, my own observational analyses of the relationship between collusion episodes and citizens' participation in the activities of Italian anti-mafia NGOs shows that such participation increases significantly after links between public officials and criminals are revealed to the public. The results of these observational analyses will be published alongside the results of the experiment as a single working paper.

The second goal of this survey experiment is to uncover the psychological mechanisms inducing higher support of anti-mafia NGOs as a reaction to information about collusion. Here, I hypothesize that learning about public officials' collusion increases citizens' concerns about OCGs

and affects their relative evaluation of the state and civil society associations as effective organizations in the fight against OCGs. Namely, learning about collusion will lead citizens to reduce their perception of the state as an effective institution to obstacle OCGs, making them turn to anti-mafia NGOs as an alternative.

To investigate these effects, the respondents to the survey are randomly assigned to one of three groups. The members of the Collusion Priming Group (T1) are primed about the existence of an official report about collusion episodes between politicians and public officials and OCGs. The members of the Collusion Priming + Information Group (T2), after being primed about the report, are given three pieces of information drawn from the report. Finally, the members of the Control Group (T0) do not get any priming or information on collusion. A set of questions measuring the outcomes of interest are then posed in the same exact way to the members of each of the three groups.

Therefore, the analysis will make two main comparisons. First, by comparing the answers of T2 and T0, it will gauge the compound effect of being primed to think about collusion and of being informed about collusion. Next, by comparing T2 and T1, it will isolate the pure effects of information about collusion on each of the outcomes of interest.

2. Experimental design

The survey flow consists of the following:

- Informed consent to the participation and disclaimers in accordance with the GDPR regulations and requirements of the Research Ethics Committee of Bocconi University.
- Screening demographic questions ensuring representativity of the sample.
- Questions on social and political attitudes at baseline, ensuring representativity of the sample and to be used for heterogeneity and robustness checks.
- Experimental condition delivery. Each subject is randomized into one of three experimental conditions exposing them to:
 - I. **Collusion Priming (T1)**. Asking the respondents whether they are aware of the existence of a recent report by the Italian Anti-Corruption Authority (ANAC) concerning collusion episodes between public officials and mafia groups.
 - II. **Collusion Priming + Information (T2)**. Asking whether they are aware of the ANAC report and subsequently providing the following pieces of information drawn from the report (here translated into English by the PI): *"The report shows how these episodes of collusion with mafia groups are very frequent and spread from North to South. Between 2016 and 2019, on average, the frequency was of one documented episode per week. Furthermore, the report points out that some politicians and public servants are corrupted by mafias with relatively small amounts of money, averaging between 2000 and 3000 euros. In the most serious instances, these collusion episodes have led to the dissolution of the administration for mafia"*

infiltration, as happened on 393 occasions.”

III. **Control (T0):** Baseline condition providing no priming and no information.

- Behavioral outcome elicitation of revealed preference for support to governmental (*ISPRA*) or non-governmental (*Legambiente* and *Libera*) organizations in the form of donation of experimental (windfall) money.
- Outcome elicitation of trust in eight institutions (European Union, Italian government, Italian parliament, Italian President of the Republic, Italian judiciary, Italian law enforcement agencies, regional administrations and municipal administrations).
- Outcome elicitation of three most important issues, to be chosen from a list of six options (mafias, economic inequality, environmental pollution, irregular immigration, school dropout, fiscal evasion).
- Outcome elicitation of public officials' and civil society organizations' efficacy in addressing three issues (environmental pollution, mafias and economic inequality).
- Outcome elicitation of voting intentions in the next general election and in the next municipal election.
- Delivery of T2 treatment condition to check for immediate recall ability (T0 only).
- Question asking to recall the information provided from the ANAC report (T0 and T2 only).
- Open-ended questions about reasons for participating in civil society organizations (for those who state participation at the beginning of the survey).
- Questions on perception of the survey and debriefing.

I screen respondents according to their performance in three attention checkers. The first, just before the set of questions on social and political attitudes, asks them to select the number “3” from a list of ten numbers. The second, just before the delivery of the experimental condition, asks them to select “bread” from a list of seven foods. The third, just before the questions on attitudinal outcomes, asks them to select “Mexico” from a list of six countries. The survey ends as soon as a respondent fails two attention checkers. Respondents who fail two attention checkers are not paid any of their experimental compensations, and their responses are excluded from the analysis. I test the robustness of all the main results to the exclusion of responses from subjects who fail any one of the attention checkers.

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

Sample selection

The administration of the questionnaire is outsourced to the professional survey company Bilendi srl¹. I survey a sample of 6000 individuals from Bilendi's panel, representative of the Italian adult population along the age, gender, and geography dimensions (macro-regions: Northwest, Northeast, Center, South and Major Islands). Furthermore, I source from the panel an additional

¹ <https://www.bilendi.it/>

2000 individuals who reside in one of the three main regions of origin of Italian OCGs: Calabria, Campania and Sicily. This additional sample is representative of these regions' adult population in terms of age and gender. I outsource the programming of the questionnaire and the distribution of the link to the survey to the panel provider Bilendi. Should a completion time problem present itself, I will exclude the slowest and fastest 5% of the responses from the analyses.

3. Hypotheses

- **H1 (Priming Effects):** I expect a significant effect of the Collusion Priming Treatment (T1) on: (i) Donations to Libera, (ii) Concerns about OCGs, (iii) Perceived efficacy of politicians and public officials in fighting OCGs. (iv) Perceived efficacy of civil society organizations in fighting OCGs. All the effects are gauged by comparing the respondents in T1 with the respondents in T0. Effects on (i), (ii) and (iv) are expected to be positive, effects on (iii) are expected to be negative.
- **H2 (Information Effects):** I expect a significant effect of the Collusion Priming + Information Treatment (T2) on: (i) Donations to Libera, (ii) Concerns about OCGs, (iii) Perceived efficacy of politicians and public officials in fighting OCGs. (iv) Perceived efficacy of civil society organizations in fighting OCGs. All the effects are gauged by comparing the respondents in T2 with the respondents in T1 and T0. Effects on (i), (ii) and (iv) are expected to be positive, effects on (iii) are expected to be negative.

4. Analysis

I perform nonparametric (e.g. tests of proportions, distribution equality) and parametric tests of the hypotheses on the outcome variables of interest (listed below). In addition to individual background characteristics, the analyses will control for geographic local background and regional/province fixed effects (depending on the availability of a sufficient number of respondents for each province). The standard errors will be clustered at the NUTS3 level (corresponding to the 107 Italian provinces).

Outcome variables

Behavioral outcomes:

- Donation to public or private organizations (ISPRA vs. Libera/Legambiente) and to organizations devoted to fighting OCGs vs. protecting the environment (Libera vs. ISPRA/Legambiente).

Attitudinal outcomes:

These outcome variables serve the purpose of further investigating the mechanisms behind the effects observed on donations:

- Trust in institutions
- Concerns about selected issues (mafias, economic inequality, environmental pollution, irregular immigration, school dropout, fiscal evasion)

- Efficacy of public officials in solving selected issues (mafias, economic inequality, environmental pollution, irregular immigration, school dropout, fiscal evasion)
- Efficacy of civil society organizations in solving selected issues (mafias, economic inequality, environmental pollution, irregular immigration, school dropout, fiscal evasion)
- Voting intentions

I will investigate potential heterogeneities with respect to gender, age, location of birth and of residence, education, political preferences (measured pre-treatment), participation into one or more civil society organizations.

References

Alesina, Alberto, Salvatore Piccolo and Paolo Pinotti. 2019. "Organized Crime, Violence, and Politics." *The Review of Economic Studies* 86(2):457–499.

Andreoni, James and Payne, A Abigail (2011). Is crowding out due entirely to fundraising? Evidence from a panel of charities. *Journal of Public Economics*, 95(5-6):334–343.

Dal Bó, Ernesto and Rafael Di Tella. 2003. "Capture by Threat." *Journal of Political Economy* 111(5):1123–1154.

Daniele, Gianmarco, Arnstein Aassve and Marco Le Moglie. 2023. "Never Forget the First Time: The Persistent Effects of Corruption and the Rise of Populism in Italy." *The Journal of Politics* 85(2):468–483.

Daniele, Gianmarco and Gemma Dipoppa. 2017. "Mafia, elections and violence against politicians." *Journal of Public Economics* 154:10–33.

Dipoppa, Gemma. 2025. "When Migrants Mobilize against Labor Exploitation: Evidence from the Italian Farmlands." *American Political Science Review* 119(3):1479–1496.

Gamba, Astrid, Giovanni Immordino and Salvatore Piccolo. 2018. "Corruption, organized crime and the bright side of subversion of law." *Journal of Public Economics* 159:79–88.

Gruber, Jonathan and Hungerman, Daniel M (2007). Faith-based charity and crowd-out during the great depression. *Journal of Public Economics*, 91(5-6):1043–1069.

Hungerman, Daniel M (2005). Are church and state substitutes? Evidence from the 1996 welfare reform. *Journal of Public Economics*, 89(11-12):2245–2267.

Kugler, Maurice, Thierry Verdier and Yves Zenou. 2005. "Organized crime, corruption and punishment." *Journal of Public Economics* 89(9-10):1639–1663.

Ley, Sandra, Shannan Mattiace and Guillermo Trejo. 2019. "Indigenous Resistance to Criminal Governance: Why Regional Ethnic Autonomy Institutions Protect Communities from Narco Rule in Mexico." *Latin American Research Review* 54(1):181–200.

Lipari, Francesca and Giulia Andrijetho. 2021. "The Change in Social Norms in the Mafia's Territories: The Anti-Racket Movement of Addiopizzo." *Journal of Institutional Economics* 17(2):227–242.

Massimo Pulejo. 2025. "Private Response to Exclusionary Welfare Policy: Evidence from Italian Municipalities". *Journal of Public Economics*, 248(August 2025): 105425.

Roberts, Russell D (1984). "A Positive Model of Private Charity and Public Transfers." *Journal of Political Economy*, 92(1):136–148.