Hosting to skim: organized crime and the reception of asylum seekers in Italy

Davide Luca & Paola Proietti

View supplementary material

Published online: 08 Apr 2022.

Submit your article to this journal

Article views: 779

View related articles

View Crossmark data

Hosting to skim: organized crime and the reception of asylum seekers in Italy

Davide Luca[a] and Paola Proietti[b]

ABSTRACT

The paper investigates the link between organized crime and Italy's publicly funded asylum seekers' reception facilities. We gather detailed municipal-level data on the location of mafia activities and Protection System for Asylum Seekers and Refugees (SPRAR)-type reception centres, and provide evidence of how the local presence of mafia increases the likelihood of hosting reception facilities. Statistical evidence and in-depth expert interviews suggest that organized crime correlates with less transparent tendering procedures in the set-up of such centres, while hosting activities increase after local governments are infiltrated by mafias. Overall, results underscore the importance of measures aimed at contrasting organized crime, especially at times of 'crises' when public policy is subject to 'states of exception'.

KEYWORDS

organized crime; asylum seekers; reception centres; mafia infiltration; public procurement

INTRODUCTION

In recent years, the world has witnessed an astounding rise in the number of asylum seekers. A growing amount of economic research has assessed the effects of such inflows on receiving countries, exploring their impacts on labour markets, social cohesion and natives' voting behaviours (inter alia, see Dustmann et al., 2016; Organisation for Economic Co-operation and Development (OECD), 2018). This paper offers a complementary perspective and asks if organized crime exploits the influx of migrants as a 'business opportunity'. More precisely, we focus on Italy and explore the influence of mafia-type organizations on the geography of Protection System for Asylum Seekers and Refugees (SPRAR)-type asylum seekers' reception centres (ASRCs) for which detailed municipal-level data are available.

Plausible cases of infiltration by organized crime in the set-up and management of Italian ASRCs have made international headlines (e.g., *Financial Times*, 2015; *The Guardian*, 2018; *The New York Times*, 2017). While judicial investigations are still ongoing, cases reported in the Italian Parliament speak of centres being opened with the involvement of mafia organizations, forcing asylum applicants to live in environments 'uninhabitable and harmful to human rights and dignity' (Italian Parliament, 2017a, p. 74) to allow organized crime to skim the highest margins from the public resources devoted to reception activities. Yet, except for contributions focusing on single case studies (Lunaria, 2015; Martone, 2017; Mete & Sciarrone, 2016), no academic research has systematically explored the local-level link between mafia-like organizations and the reception of asylum seekers.

This paper aims to fill this gap by exploiting a novel dataset on the detailed location of asylum seekers hosted in SPRAR-type reception centres and on the presence of mafia across Italy's municipalities. We proxy organized crime intensity adopting the novel Index of Mafia Presence developed by Crime&Tech.[1]

We provide evidence of how the municipal presence of mafia is correlated to an increase in the likelihood of hosting a SPRAR centre. To test the robustness of our baseline results, we first adopt a Mahalanobis distance-matching estimator. We then narrow down our geographical focus

CONTACT

[a] (Corresponding author) dl622@cam.ac.uk
Department of Land Economy, University of Cambridge, Cambridge, UK; International Inequalities Institute, London School of Economics and Political Science (LSE), London, UK; and Department of Social Sciences, Gran Sasso Science Institute, L'Aquila, Italy.
[b] paola.proietti@gssi.it
Department of Social Sciences, Gran Sasso Science Institute, L'Aquila, Italy.
 Supplemental data for this article can be accessed at https://doi.org/10.1080/00343404.2022.2039386.

to Sicily and explore the origins of the Sicilian Mafia. We exploit historical exogenous variation at municipality level to instrument contemporary mafia intensity and confirm our extensive-margin baseline estimates.

To provide evidence on the mechanisms underlying our main findings, we compile a novel dataset of Italy's public procurement contracts awarded for the management of SPRARs. Regression results and in-depth interviews with key informants suggest that the presence of organized crime is correlated to the use of less transparent tendering procedures. While this is not a definitive proof of wrongdoing, a higher-than-average use of direct-award procedures over open-bidding ones is frequently a sign of a deliberate attempt to limit competition and hide irregularities (ANAC, 2016). Furthermore, we adopt a difference-in-differences (DiD) estimator to show that, in regions characterized by a strong mafia presence, the link between organized crime and hosting activities becomes significant only after the infiltration of criminal groups into local governments.

Our results speak to three main strands of literature. First, we relate to the literature on the negative effects of 'perverse institutions', such as organized crime, for local and regional development (Gertler, 2010; Rodríguez-Pose, 2013). Mafia organizations affect a significant proportion of global economic activity, and play a relevant role in shaping the development of many localities and regions around the world. Yet, organized crime has traditionally received limited attention from regional studies scholars, partly because of the difficulties in obtaining timely, reliable and disaggregated data (Hall, 2010; Hudson, 2014). We contribute to this literature by building on a recent number of empirical studies exploring the spatial dimension of criminal organizations (cf. Chiodelli, 2018; Ganau & Rodríguez-Pose, 2018). We do so by connecting to the body of work carried out by economists on the effects of criminal organizations. Research in this strand of literature has focused on the distortive impacts of mafia-like organizations on gross domestic product growth (Pinotti, 2015), foreign direct investment inflows (Daniele & Marani, 2011), industrial policies (Barone & Narciso, 2015), local public finance (Di Cataldo & Mastrorocco, 2021) and public procurement practices (Albanese et al., 2016). Our paper adds to this body of research by suggesting that mafia organizations may have also altered the geography of ASRCs and exploited the migration crisis in Italy as a new source of illicit profits. Relatedly, our work adds to the qualitative contributions that focus on single case studies of mafia infiltration in the Italian reception system (Martone, 2017; Mete & Sciarrone, 2016) by providing a framework in which those pieces of work can be contextualized. Our findings can contribute to informing our broader knowledge on how criminal organizations around the world may exploit the global peak in asylum seekers' flow for particularistic gains (cf. Gammeltoft-Hansen & Sorensen, 2013).

Second, results contribute to the literature on the geographies of refugees and asylum seekers. The effects of asylum seekers and refugees into hosting societies' labour markets, social cohesion and natives' voting behaviours have been increasingly analysed by economists and political scientists (inter alia, see Dustmann et al., 2016; OECD, 2018). Yet, the attention of regional studies scholars to the phenomenon has been modest. There is of course abundant research on the economic effects of migrants on local and regional development (inter alia, see Lissoni, 2018; Parrilli et al., 2019). However, this literature generally tends to explore migration in general, paying less attention to the specific issue of asylum seekers and refugees (in part because of the lack of reliable and disaggregated statistics).

Finally, we relate to the body of work in regional and urban studies that investigates public decision-making in 'times of crisis', or following 'special regimes' (Agamben, 2005). For instance, after the significant growth of migrant inflows that followed the Arab uprisings, across many European countries hosting activities have been managed under emergency procedures. A 'state of exception' and 'special practices' might have contributed to weakening anti-mafia control procedures (Schultz & Søreide, 2008). Our findings preliminarily support this hypothesis and suggest that, in Italy, the persistent emergency management of the asylum seekers reception system might have facilitated the episodes of mafia infiltration into hosting activities.

The remainder of the paper is organized as follows. The following section provides background information on reception centres and organized crime in Italy. We then introduce the empirical framework and data sources. The following sections present the results and a list of robustness checks. We then discuss some exploratory evidence on the potential mechanisms driving the results. A final section concludes the paper.

INSTITUTIONAL BACKGROUND

The reception system in Italy

In 2016, a year of high migration inflows into the European Union, approximately 94% of those who reached Europe did so by crossing the Mediterranean Sea. In the same year, Italy received most of the inflows (International Organization for Migration (IOM), 2017). During the period 2013–16, Italy has indeed been among the top five receiving European countries.[2] In the country, asylum seekers have the right to receive material reception from the moment of their arrival until the decision on their protection status is made (Proietti & Veneri, 2021). To cope with the increase in the number of arrivals (Figure 1), the Italian reception system has consistently increased its capacity, in terms of both the places available and the minimum standards of services offered. The regulation has indeed become increasingly detailed on issues such as the accessibility of reception centres and the minimum services to be provided (Servizio Centrale, 2015).

The Italian asylum system was, during the period analysed in this paper (i.e., up to 2016),[3] structured in three phases, each related to different typologies of centres. The first phase involved first rescue, assistance and identification
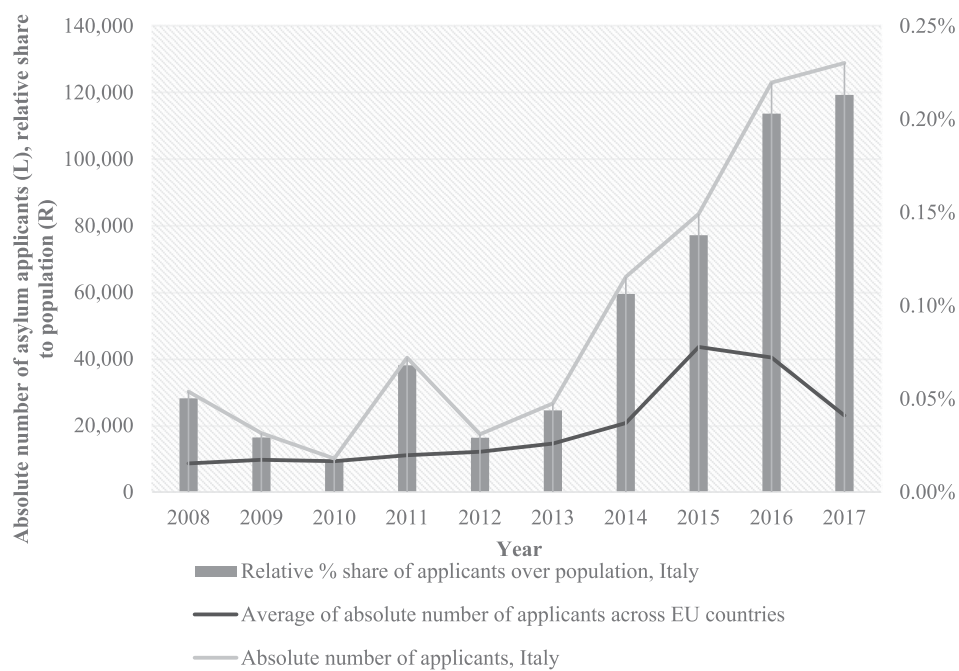
Figure 1. Absolute number of asylum applicants in Italy and average across European countries (left), and relative share of Italy's asylum applicants over the country population (right).
Source: Authors' elaborations on Eurostat data.

activities. These were performed in hotspots and in Centres for First Aid and Assistance (CPSA), which were mainly located in the South and Sicily, where most arrivals occurred. Migrants applying for international protection were then distributed to regional hubs and Reception Centres for Asylum Seekers (CARA). Here applicants waited to be offered a place in a centre for the secondary hosting. The secondary hosting is where asylum seekers remained until they receive an answer to their protection request (and for another six months if they obtain a positive answer). The secondary hosting was delivered through ordinary centres called Protection System for Asylum Seekers and Refugees (SPRAR). If there were no available places in regional hubs, CARA or SPRAR, asylum seekers were also hosted in Emergency Reception Centres (CAS). This paper focuses on the secondary hosting, which involved the centres in which asylum seekers spent most of the time waiting for an answer to their request for international protection. Among different types of centres delivering the secondary hosting, we focus on the SPRAR system.

The focus on SPRARs may constitute a limitation because during the peak of the 'migration crisis' these centres would host only a subset of the total number of asylum seekers: in 2016, for example, SPRAR centres hosted only 26,012 beneficiaries, that is, 21.05% of the total 123,600 asylum applicants.[4] Yet, it is extremely difficult to compile a reliable dataset on the number of people hosted in CAS centres across the years and for the whole of Italy. In the absence of data on 'emergency centres' such as CAS, we believe that our analysis can provide an important first step in exploring the links between organized crime and ASRCs.[5]

To set up SPRAR centres, the Ministry of Interior – which was in charge of overall coordination – periodically

issued open calls-for-proposals addressed to local authorities.[6] If interested, the latter were responsible for identifying local non-governmental organizations (NGOs) able to provide reception and integration activities. The identification of NGOs was realized in different ways, not always through publicly advertised calls. Once project proposals (involving a partnership between a local authority and NGOs) were ready, they were submitted for ministerial evaluation.[7]

The numbers of asylum seekers hosted in SPRARs was the result of a decisional process involving the local authorities willing to provide the reception, and the central government (Fratesi et al., 2018). The Ministry of Interior usually selected the proposals that offered the highest quality of services at the lowest price, while also actively attempting to distribute asylum seekers homogeneously across the country. During the period of analysis, however, the government was under pressure to find available places and selected most of the municipalities which stepped forward.

Up to 2016, the central government would cover 80% of the reception costs, with the remaining 20% being covered by local administrations, either in cash or in kind (e.g., by providing personnel, real-estate facilities and services). Since 2016 the share covered by the central government increased to 95%. Municipalities then 'subcontracted' hosting activities to selected NGOs. NGOs were periodically paid by municipalities, which, in turn, received resources from the central government. Hence, municipalities had economic incentives to participate in the reception system[8] because centres could be a non-trivial source of income and jobs for the local economy, especially in small municipalities. As an example, during the period 2014–16, each SPRAR project involved an average of around 22 jobs (Cittalia, 2016).

Organized crime and the reception system

The United Nations Convention against Transnational Organized Crime defines organized criminal groups as structured organizations of more than two people that are not formed for the immediate commission of a crime. These groups commit crimes aimed at obtaining directly or indirectly financial or other material advantages (Lavorgna & Sergi, 2014). The Italian legislator internalizes such a definition and extends it to identify mafia-type organized criminal groups. According to article 416-*bis* of the Italian Penal Code:

> a criminal organization is of Mafia-type when it is stable and its members use the intimidating power granted by the membership in this association to take advantage of the conditions of subjugation and silence of others (the so called 'omertà') to commit crimes, or manage or control, either directly or indirectly, economic activities, concessions, authorizations and public contracts.[9]

Recent parliamentary and judicial investigations have uncovered several attempts of mafia infiltration in the management of the asylum reception system.[10] The following excerpt is taken from a report of the Italian Anti-Mafia Investigative Directorate (DIA):

> The distinctive element of this mafia group is the ability to create stable networks between different actors: criminal groups but also economic and institutional figures through intimidation and corruption. The investigation unveiled how this networked criminal system aimed at obtaining public procurements and the management of services for the community, including the reception of asylum seekers.
> (DIA, 2015a, p. 157)

In line with the excerpt, our hypothesis is that in municipalities where mafia presence is strong, mobsters may have been able to infiltrate municipal councils and influence their decision-making process, shifting upwards a mayor's willingness to apply to host SPRARs and/or rigging the procurement procedures used by the municipality to select the providers of ASRC-related services, while also limiting controls or sanctions in the running of the reception activities. The following excerpt comes from an investigation in Sicily:[11]

> Relatives of the public officials that were entitled to control [the reception activity] were hired in the cooperatives and associations managing the reception centres creating a mixture between those who should have been monitored and those monitoring. [In exchange,] public officials favoured the procedures for these associations, gave early notice about the possibility of controls and inspections in the centres and avoided to implement sanctions.

To conclude, there is strong anecdotal evidence of potential links between organized crime and asylum seekers' reception activities. The remainder of the paper will empirically test the statistical strength of such a relationship.

EMPIRICAL ANALYSIS

Methodology

The following section defines the empirical framework and outlines our baseline identification strategy, which is based on a sequential two-steps model. First, equation (1) explores via probit if a higher presence of mafia correlates with a higher municipal likelihood of being involved in the SPRAR system (extensive margin). Equation (2) then identifies via a zero-truncated Poisson estimator the link between organized crime and the number of asylum seekers accommodated in those municipalities involved in SPRAR centres (intensive margin):

$$P_r(H)_i = (\alpha + \beta m_i + X_i') \qquad (1)$$

$$AS_i = \alpha + \beta m_i + X_i' + \varepsilon_i \quad \text{if} \quad (H)_i = 1 \qquad (2)$$

where P_r is a dummy variable taking the value 1 if municipality i were involved in the SPRAR system $(H)_i$, and 0 otherwise. By contrast, AS_i is the number of asylum seekers hosted in each municipality. In our main specifications, we measure our dependent variables in 2016. This is done because we want to analyse a year characterized by a high influx of migrants (Figure 1). Besides, our mafia measure refers to the period 2000–15 and measuring the outcomes in a subsequent year helps to mitigate the risks of reverse causality. m_i is our key variable of interest and measures the intensity of mafia activities at the municipal level. X_i' is a vector of controls included to account for heterogeneity across municipalities. We first account for key geographical characteristics. Along with NUTS-2 regional fixed effects (FEs), we include: municipal population, because it is likely to affect the local capacity to host migrants; a dummy variable indicating if the municipality hosts a port, since most asylum seekers reach Italy by boat. Socioeconomic disparities may also drive the local propensity to host. Hence, we include: unemployment share, as opening a reception centre for asylum seekers might create job opportunities in the local labour market; the share of people employed in agriculture, as this sector might both be a possible threat to the integration of asylum seekers offering them the possibility to earn money working in a low-skilled grey market which might exploit their precarious situation or, on the contrary, might guarantee an opportunity to promote sustainable integration forms for refugees and asylum seekers even in rural municipalities (Leogrande, 2016; Perlik & Membretti, 2018); average per capita income, since economic disparities may influence the local propensity to host; the share of people aged 70 and older, population growth between 2001 and 2011, and the share of people with foreign nationality, because the extent to which local communities are ageing, shrinking, or already exposed to foreigners might influence the attitude towards asylum seekers (Aldén et al., 2015; Proietti, 2014). Finally, we control for social capital, since recent research has shown its strong link with reception activities (Fratesi et al., 2018).

The variable is proxied by voter turnout in national elections. Equally, we add a categorical variable identifying the political party of the ruling mayor, assuming that left-wing parties may be more prone to host immigrants. ε is the error term.

Data sources

There are inherent difficulties in measuring the presence of organized crime. Early papers have proxied criminal organization penetration at the local level with violent crimes (Daniele & Marani, 2011; Pinotti, 2015). Scholars have further exploited information on mafia-type associations identified by Italy's military police (De Feo & De Luca, 2017) or by judiciary investigations (Barone & Narciso, 2015). More recent studies have acknowledged how mafias have evolved from systems primarily based on 'crude' violence to more sophisticated 'extortive' business structures deeply infiltrated into the regular economy. This is particularly true in areas of new expansion beyond their traditional strongholds, for example, Central and Northern Italy, and Europe.

We combine these previous approaches and exploit the novel Index of Mafia Presence developed by Crime&-Tech, which has the advantage of providing detailed local-level information for all Italy's nearly 8000 municipalities. The index, which ranges from 0 to 100, is constructed considering (cf. Calderoni, 2011; Dugato et al., 2020; Transcrime, 2013): real estate properties and companies confiscated from organized crime; city councils dissolved for mafia infiltration; mafia murders; 'Article 416-bis' mafia crimes; and, finally, the presence of mafia groups reported by Italy's Anti-Mafia Investigative Directorate (DIA) and National Anti-Mafia and Counter-Terrorism Directorate (DNA).

By contrast, the dataset on the geographical distribution of asylum seekers hosted in SPRAR centres was assembled from data released by Cittalia (2010) and the Associazione Nazionale Comuni Italiani (ANCI) et al. (2014, 2015, 2016). We limit the analysis to SPRAR centres opened under the initiative of individual municipalities, excluding those opened under the leadership of provinces and intermunicipal cooperation bodies, since it was not possible to attribute them univocally to individual municipalities.[12]

Finally, data on covariates derive from Italy's ministries of Interior and of Economy and Finance, OpenRegio, and the Italian Institute for Statistics (ISTAT). Tables A1 and A2 in the supplemental data online provide, respectively, a detailed description of the variables used in the analysis, and key summary statistics. Our final sample corresponds to the almost 6400 municipalities for which we have all the covariates. Figure 2 shows the geographical distribution of the Mafia Index, as well as the municipalities involved in the SPRAR system in 2016.

RESULTS

Table 1 presents the main results. Models (1–4) report the probit outputs on the link between mafia and the likelihood of hosting SPRARs, while models (5–8) report the zero-truncated Poisson results on the intensive margins, that is, the number of people hosted in municipalities involved in the SPRAR system. All standard errors are robust and clustered at the level of Italy's 110 provinces.

Columns (1) and (5) present the baseline specifications while, in columns (2) and (6) we add our sets of geographical controls. Finally, in columns (3) and (7) we also include political, demographic and economic controls (columns 4 and 8 report the covariates without the mafia variable). Our preferred specifications are columns (3) and (7). As expected, conditioning on covariates reduces the magnitude of the mafia coefficient. Yet, Table 1 provides evidence of a robust and statistically significant cross-sectional link between organized crime intensity and hosting activities. The Mafia Index is always significant and positive. (Figure B1 in the supplemental data online shows the predicted outcomes from models (3) and (7) calculated for different mafia levels holding other variables constant at their means.)[13]

Robustness analysis

In this section we test the robustness of our estimates. As a first check, we add municipal debt as an additional control.[14] Municipalities with higher debt might be less prone to host asylum seekers because financing constraints may impede them to co-finance reception activities. Yet, the results (see Table A3 in the supplemental data online) show that municipal debt is never significant, and that the coefficients for mafia remain stable when adding this additional control.

Second, while we argue that measuring mafia presence before the outcome mitigates any risk of reverse causality, there may be concerns that SPRAR presence may be serially correlated, and hence hosting activities before 2016 may have driven up mafia presence. We hence re-estimate the models of Table 1 replacing our 2016 dependent variables with the number of SPRARs/number of people hosted in 2010,[15] the earliest year for which we managed to find data. The results (see Table A4 in the supplemental data online) suggest that, controlling for covariates, the Mafia Index coefficient reduces in magnitude and becomes statistically insignificant, suggesting that before the start of the migration crisis there were no systematic links between mafia presence and hosting activities.[16]

Third, the measure of mafia intensity may suffer from omitted-variable bias, or from measurement errors.[17] To minimize the risks posed by these potential sources of endogeneity, we first adopt a Mahalanobis-distance matching estimator (MDM). (Section A5 in the supplemental data online provides more technical details about the estimator.) The results (see Table A6 online) confirm the main outputs of Table 1. (MDM balancing diagnostics are reported in Sections A7 and A8 online.)

A potential weakness of MDM estimates is that the matching can only be based on observable covariates. Hence, we also exploit an alternative approach and instrument current mafia intensity. To do so, we restrict our focus to Sicily, for which we have robust exogenous historical predictors of mafia intensity. Buonanno et al.
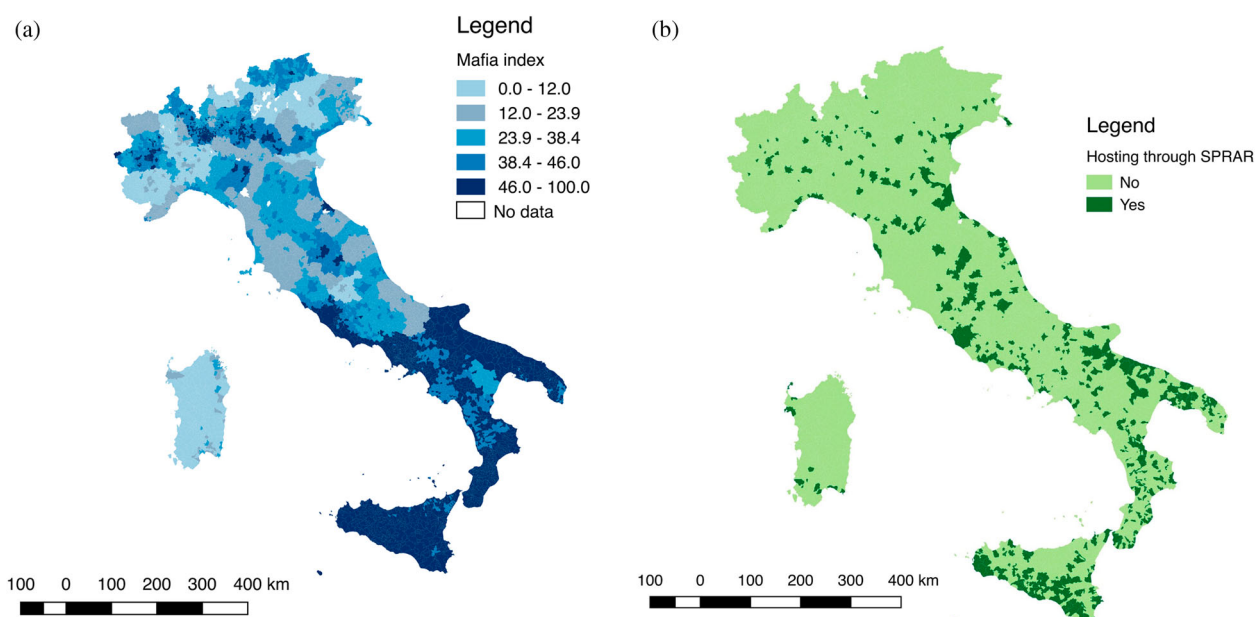
Figure 2. Index of the presence of mafia across Italian municipalities (a); and municipalities involved in SPRAR reception centres (b). Sources: Authors' elaborations on Crime&Tech data (a); and Cittalia (b).

(2015) and Dimico et al. (2017), respectively, show that sulphur mines and soil suitability for citrus production are significant predictors of the origins of mafia. Following their footpath, we exploit 19th-century data on the presence of sulphur mines and on the climate/soil suitability for the cultivation of citrus fruits[18] to instrument contemporary mafia presence. (For detailed explanation of our identification strategy, see Section A9 in the supplemental data online.) Table 2 presents the results.

Columns (9–11) estimate the extensive margin outputs, while models (12–14) estimate the intensive margin outputs.[19] The instruments are weak in columns (12–14), and the intensive margin results should be interpreted with care. Nevertheless, Table 2 confirms how local mafia intensity is a robust predictor of the likelihood of being involved in asylum reception activities. As expected, and in line with the results of Barone and Narciso (2015) in a similar setting, coefficients from columns (9) to (11) show a large upward revision compared with baseline estimates.[20]

INTERPRETING THE RESULTS

This section presents further insights into the interpretation of our main results, which may be explained according to two competing stories.

Two competing stories

According to the first scenario, the cross-sectional link between mafia levels and reception centres may be explained not by mafia infiltration into municipalities – as we argue – but by an active policy of the central government to allocate more centres (and send more migrants) in places where mafia is more present.

For example, the central government may intentionally select mafia-ridden municipalities because it may aim to combat criminal organizations by boosting local employment opportunities. Yet, in most cases centres were opened under an extreme urgency to find available places for incoming asylum seekers. The Ministry of Interior did not really select among alternative locations, but allocated centres to most of the municipalities that stepped forward.

Furthermore, the presence of mafia has stimulated, especially since the 1990s, the birth and diffusion of NGOs meant to fight criminal organizations, which, in turn, may have become involved in hosting activities. This may be particularly relevant vis-à-vis a policy implemented since 2010 by the national government according to which private properties confiscated by the judiciary for mafia-related crimes are reassigned for social purposes. To this aim, we re-estimate our baseline models additionally controlling for the number of NGOs and for properties seized to mafia groups and reallocated to NGOs. We are able to distinguish between seized properties reallocated for any type of purpose and those exclusively reallocated for social purposes such as hosting activities. We aim at understanding if introducing these covariates affects the Mafia Index coefficient.

Results shows that this is not the case: the Mafia Index is hardly influenced by the additional controls, both when replicating the baseline analysis in Table 3 and when replicating the instrumental variables (IV) strategy (the results are reported in Section A11 in the supplemental data online).

Potential mechanisms

In this section we discuss the second, alternative scenario, and provide exploratory evidence on the mechanisms

Table 1. Mafia intensity and the likelihood of hosting Protection System for Asylum Seekers and Refugees (SPRAR) centres (models 1–4) or the number of asylum seekers hosted in municipalities involved in reception activities (models 5–8): robust probit and zero-truncated Poisson estimates.

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Likelihood	of hosting SPRARs			No. of people	hosted	
		Probit				Zero-truncated Poisson		
Mafia	0.0257***	0.0079**	0.0091**		0.0171**	0.0084***	0.0067**	
	(0.0026)	(0.0033)	(0.0037)		(0.0080)	(0.0028)	(0.0032)	
Ports		−0.5842	−0.5565	−0.5918		0.1166	−0.1001	−0.0940
		(0.7790)	(0.7760)	(0.7694)		(0.1575)	(0.1677)	(0.1726)
Population		0.0307***	0.0265***	0.0280***		0.0017***	0.0015***	0.0016***
		(0.0023)	(0.0024)	(0.0024)		(0.0001)	(0.0001)	(0.0001)
Ruggedness		−0.0097	−0.0267	−0.0296		−0.0933*	−0.0265	−0.0323
		(0.0433)	(0.0501)	(0.0511)		(0.0536)	(0.0581)	(0.0585)
Unemployment			0.3592	0.4401			0.6007	0.8169
			(0.9807)	(1.0065)			(0.8484)	(0.8449)
Avg. income			0.0191	0.0225			0.0140	0.0207
			(0.0141)	(0.0138)			(0.0271)	(0.0252)
Foreigners			1.5502	1.4585			3.8360**	3.9888***
			(1.0181)	(0.9539)			(1.4910)	(1.4599)
Pop. growth			−0.8200*	−0.8214**			−0.4774	−0.5518
			(0.4305)	(0.4181)			(0.7390)	(0.7417)
Over 70			1.1768	0.3686			1.0144	0.2840
			(1.2225)	(1.1022)			(1.1121)	(1.0618)
Agric. empl.			−0.2119	−0.2111			−0.4902	−0.4176
			(0.4058)	(0.4050)			(0.6898)	(0.6392)
Voter turnout			0.8371	0.5766			0.0837	−0.1034
			(0.7195)	(0.7233)			(0.9142)	(0.9275)
Left-wing coal.			0.3623***	0.3680***			0.0561	0.0664
			(0.1304)	(0.1301)			(0.1140)	(0.1178)
Other coalition			−0.0021	−0.0152			−0.2838**	−0.2877**
			(0.1162)	(0.1152)			(0.1276)	(0.1275)
Observations	6378	6378	6378	6378	403	403	403	403
Regional fixed effects	No	Yes	Yes	Yes	No	Yes	Yes	Yes

Note: Robust standard errors are shown in parentheses ***$p < 0.01$; **$p < 0.05$, *$p < 0.1$. Constant and fixed effects are not reported. Errors are clustered at the provincial level.

Table 2. Mafia intensity and the likelihood of hosting Protection System for Asylum Seekers and Refugees (SPRAR) centres (models 9–11) or the number of asylum seekers hosted in municipalities involved in reception activities (models 12–14): robust instrumental variables (IV) probit and IV Poisson estimates from Sicily.

Dependent variable:	(9)	(10)	(11)	(12)	(13)	(14)
	Likelihood of hosting SPRARs			No. of people hosted		
	IV probit			IV Poisson		
Mafia	0.0975***	0.0961***	0.0973***	0.0264	0.0431	0.0165
	(0.0155)	(0.0261)	(0.0172)	(0.0265)	(0.0496)	(0.0281)
First stage						
Citrus	0.2162*	0.2616**		0.4815*	0.4777*	
	(0.1173)	(0.1208)		(0.2558)	(0.2725)	
Sulphur caves	5.2845***		5.7415***	6.1289**		6.0960**
	(1.5216)		(1.4987)	(2.3393)		(2.3515)
Observations	221	221	221	53	53	53
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Instruments	Both	Citrus	Sulphur	Both	Citrus	Sulphur
First-stage K-P F	9.326	4.520	14.677	5.730	0.059	6.721
Hansen J p-value	0.795	–	–	0.539	–	–

Note: Robust standard errors are shown in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$. Constant and controls not reported. Controls include: ruggedness index, population, unemployment, average income, foreigners, population growth, over 70, agricultural employment, voter turnout, left-wing and other coalition dummies (we do not include the port dummy as it perfectly predicts PR = 1 in four observations and hence make them drop). Models (9–11) are estimated via maximum likelihood (ML) (with Stata's *ivprobit* command), while models (12–14) are estimated with a control-function estimator (with Stata's *ivpoisson cfunction* command). The instrumental variables (IV) approach focuses exclusively on Sicily, for which we have historical information to construct the instruments (the excluded instruments are citrus suitability and sulphur caves). The number of respective observations hence drops to 221 in columns (9–11) (these are the Sicilian municipalities for which we have all variables), and to 53 in columns (12–14).

through which mafia organizations may have influenced the reception system.

If the robust cross-sectional link between organized crime and hosting activities is truly explained by criminal influence on local decision-making, we would expect such a link to primarily strengthen in cases of confirmed mafia infiltrations into local government. To test this hypothesis, we follow the DiD approach of Di Cataldo and Mastrorocco (2021). In particular, we exploit variation caused by the judicial enforcement of national Law 164/1991 on the forced dissolution of municipal governments upon evidence of collusion between mafia and local elected officials. We exploit the time/geographically heterogeneous effect of the law to detect cases of criminal infiltration, and compare municipalities with/without infiltration before/after such infiltration occurs. We focus on the four Southern regions of Campania, Calabria, Apulia and Sicily, which, during the period 2010–16 covered by the analysis, accounted for 92.4% of all dissolutions (73 out of 79 total cases). Section A12 in the supplemental data online describes in detail our DiD design and the estimating equation. Table 4 presents the results and confirms how only after the infiltration municipalities become significantly more likely to be involved in hosting activities, while also experiencing a significant increase in the average number of individuals hosted.

The pretreatment parallel-trend assumption is tested via an event study approach, whose results are reported in Figure 3. The two graphs plot the year dummy variables for the years before and after the presumed infiltration, that is, the election of a local government which is then dissolved. Prior to election years treated and control units experience very similar trends. By contrast, after the election, infiltrated municipalities start experiencing an increase in the involvement in hosting activities. As expected, the effects are particularly visible in the later years of infiltrated political mandates: time is needed to bid for project and to then set up centres, and any effect on hosting activities attributable to criminal infiltration may require some years to materialize.

To further explore the possible link between organized crime and reception activities, we conducted seven in-depth elite interviews with key national stakeholders. These were conducted between March and September 2018 and lasted on average 45 min. Three interviewees preferred to remain anonymous. Section A13 in the supplemental data online lists the experts who accepted to disclose their identity, and whose quotations will be used in the analysis.

Interviewee 4 highlights how when 'there is an infiltration of criminal organizations in the reception system, [this] is linked to the procurement system'. This may be done to attract public resources. As anticipated, cases reported in the Italian Parliament speak of centres being opened with the involvement of mafia organizations, forcing asylum applicants to live in environments 'uninhabitable and harmful to human rights and dignity' (Italian Parliament, 2017a, p. 74) to allow organized crime to skim the highest margins from the public resources devoted to reception activities, for example, by 'overbilling food items while proving poor products' (DIA, 2018, p. 54).

The OECD indeed identifies public procurements as one of the activities most vulnerable to corruption and

Table 3. Mafia intensity and the municipal likelihood of hosting Protection System for Asylum Seekers and Refugees (SPRAR) centres (columns 15–17) or the number of asylum seekers hosted (columns 18–20): robust probit and zero-truncated Poisson estimates controlling for non-governmental organizations (NGOs) and for confiscated and reallocated real estate properties.

Dependent variable:	(15)	(16)	(17)	(18)	(19)	(20)
	Likelihood of hosting SPRARs			No. of people hosted		
	Probit			Truncated Poisson		
Mafia	0.0091**	0.0099***	0.0096**	0.0067**	0.0066**	0.0066**
	(0.0037)	(0.0037)	(0.0038)	(0.0032)	(0.0031)	(0.0031)
NGOs per capita		0.0234	0.0238		0.0356**	0.0357**
		(0.0195)	(0.0196)		(0.0175)	(0.0176)
Reallocated properties (all)		−0.0113***			−0.0004**	
		(0.0014)			(0.0002)	
Reallocated properties (for social purposes only)			−0.0071			−0.0024*
			(0.0054)			(0.0012)
Observations	6360	6360	6360	402	402	402
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Regional fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Note: Robust standard errors are shown in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$. Constant controls and fixed effects are not reported. Controls include all the covariates from Table 1, that is: regional fixed effects, port dummies, ruggedness index, population, unemployment, average income, foreigners, population growth, over 70, agricultural employment, voter turnout, left-wing and other coalition dummies. Errors are clustered at provincial level. Columns (15) and (18) respectively report the results of models 3 and 7 from Table 1, while in the other columns we control for the number of real estate properties confiscated by the state to the mafias and reallocated to public or civil society organizations for any type of social purpose (models 16 and 19) or reallocated for social purposes (models 17 and 20). NGOs per capita is not available for the whole sample of municipalities included in the main analysis. The number of observations hence drops from 6378 to 6360 in columns (15–17), and from 403 to 402 in columns (18–20).

criminal infiltration (OECD, 2016). Infiltration may occur at any step of the procurement process: during the pre-tendering phase, during the contractors' selection and after the award of the contract (Dorn et al., 2008; OECD, 2016). To shed light on these issues (and on the first phase in particular), we explore the cross-sectional relationship between local mafia intensity and different types of procurement procedures adopted by local governments to award reception contracts. The ANAC, Italy's National Authority Against Corruption, underlines how a higher-than-average use of direct award procedures over open tenders frequently suggests the deliberate limitation of competition and potential irregularities in public tendering (Prime Ministry & ANAC, 2014). The same authority has further underlined irregularities in the asylum reception system:

> We highlight several critical issues that have emerged during the institutional activity of supervision of the reception system. For instance, contracts for the reception of asylum seekers have been often granted … through procedures characterized by inadequate publicity and failure to comply with the deadlines for the submission of tenders. … Furthermore, it has emerged that tenders didn't respect their obligations in term of transparency.
> (ANAC, 2017)

As the following excerpt suggests for the case of Sicily:

> Cosa Nostra [the Sicilian Mafia] can do that [the infiltration into procurement] with a cooperative managed by its own

network of acquaintances. For example, in a small town when there is a tender for SPRAR, they might advise their brother-in-law to participate, as they have good chances of obtaining the procurement because a person – that is the part of the family – is also a counsellor for the municipality. (interviewee 4)

Another interviewee suggests how:

> exceptions might have been registered, for example, for the assignments of reception contracts to social cooperatives. … We must be very careful to judge this phenomenon, because there are so many forms of cooperation, obviously both virtuous cooperation and non-virtuous cooperation, [yet] these exceptions might have been the key for infiltration […, e.g.] the use of alternative mechanisms to assign public procurement contracts.
> (interviewee 1)

In detail, the migration 'crisis' made controls less stringent because of the urgency to find available places. Indeed, 'every municipality that participated in SPRAR tenders, more or less won it, so everybody tried to engage with this SPRAR' (interviewee 4). As the following excerpt suggests, not all of them were competent and prepared:

> you can find centres in which there are competent workers involved, these centres might also have some difficulties, but you understand that they know the sector in which they are working. On the contrary, there are providers that improvised their activity, for various reasons, for

Table 4. Municipal councils' dissolution for mafia infiltration and the likelihood of hosting Protection System for Asylum Seekers and Refugees (SPRAR) centres (columns 21–23) or the number of asylum seekers hosted (columns 24–26): robust difference-in-differences (DiD) results for the regions of Campania, Calabria, Apulia and Sicily.

	(21)	(22)	(23)	(24)	(25)	(26)
Dependent variable:	Likelihood of hosting SPRARs			No. of people hosted		
Infiltrated elect. mand.	0.085**	0.089**	0.089**	3.014**	3.178**	3.265**
	(0.042)	(0.042)	(0.042)	(1.434)	(1.423)	(1.392)
Groups	1247	1247	1247	1247	1247	1247
Observations	7482	7482	7482	7482	7482	7482
Controls	No	No	Yes	No	No	Yes
Municipal fixed effects	No	Yes	Yes	No	Yes	Yes

Note: Robust standard errors are shown in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$. Constant controls and fixed effects are not reported. All models are estimated via a two-way fixed-effect estimator. Time-varying controls include: population, unemployment, average income, foreigners, population growth, over 70, agricultural employment, voter turnout, left-wing and other coalition dummies. The analysis covers the four southern Italian regions of Campania, Calabria, Apulia and Sicily, which combined account for 92.4% of all dissolutions over the period 2010–16. We have data for 1247 individual municipalities, each observed six times (in 2010, and then between 2012 and 2016). Errors are clustered at the municipal level.

humanitarian ones but also for third reasons. These centres are the most critical, because among them you can find those who need information – and you can help them to improve – but you can also find those who have seen the business. (interviewee 2)

One of the interviewees further suggests how:

[the] SPRAR [system] is characterized by low numbers of people per reception centre, as a consequence these centres might more easily escape the control of anti-Mafia authorities as the centres' managers might be ordinary citizens, or small entrepreneurs, while the speculative presence of organized crime might be just behind them and might guarantee the 'social peace in these contexts', avoiding the presence of migrants to create problems. (interviewee 1)

Following these insights, we assess the correlation between mafia infiltration and the use of direct-award procurement

over the total number of tenders. While this indicator is not a definitive proof of an illegitimate procedure, our hypothesis is that criminal organizations may be able to distort the process towards closed-bidding procedures, where rigging is less noticeable than in open-bidding tenders (ANAC, 2016). Hence, we exploit a unique dataset on public procurement assembled by Openpolis[21] on information from ANAC. The dataset includes all the contracts issued by Italian municipalities and regarding ASRCs of an amount greater than €40,000.[22] We estimate the following equation:

$$P_r(TP) = (\alpha + \beta m_i + X_i')$$ (3)

where $P_r(TP)$ is a dummy variable taking the value 1 if, during the 2012–16 period,[23] municipality i made a higher-than-average use of direct-award procurement to establish reception initiatives, and 0 otherwise. Alternatively, we also run the analysis considering tenders awarded via open procedures. (There are nine different
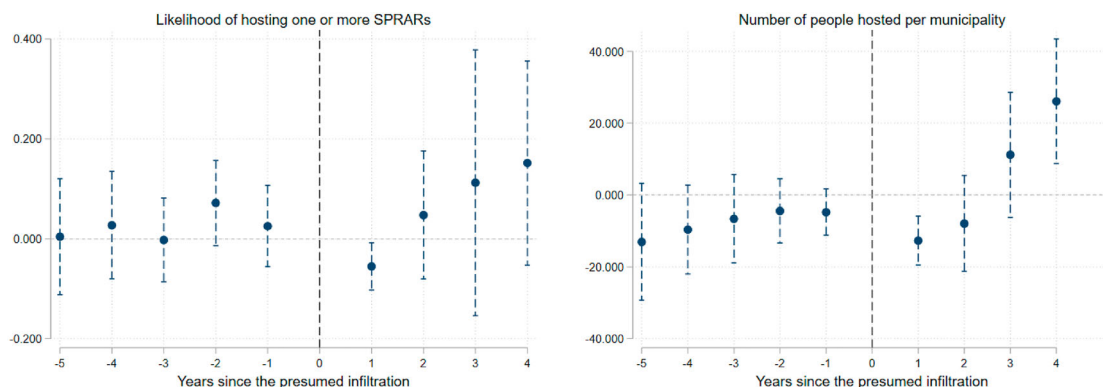

Figure 3. Event study plots (dynamic panel estimates) of the extensive and intensive difference-in-differences (DiD) results. Note: The graph plots year dummy variables from a two-way fixed effect model for the years before and after the election of the infiltrated government (the reference category, marked by a dashed vertical line). All years after the dissolution of the infiltrated governments are excluded (hence, coefficients for the years after the infiltration refer to the infiltrated mandate, that is, the years between the election when the infiltration allegedly occurred and the judicial dissolution). Estimates include year and municipality fixed effects, as well as all the time-varying sociodemographic controls included in Table 4. Standard errors are clustered at the municipal level.

Table 5. Municipal probability of using direct awards/open procurement procedures more than the national average: robust probit estimates distinguishing between different types of tenders.

	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
	Direct award				Open tender			
	Any object		Mentioning 'SPRAR'		Any object		Mentioning 'SPRAR'	
	All	> €750,000	All	> €750,000	All	> €750,000	All	> €750,000
Mafia	0.0181**	0.0199*	0.0165**	0.0270**	−0.0083	−0.0034	−0.0236***	−0.0175*
	(0.0073)	(0.0115)	(0.0083)	(0.0136)	(0.0056)	(0.0081)	(0.0079)	(0.0100)
Observations	298	126	163	104	298	126	163	104
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Robust standard errors are shown in parentheses ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$. Constant controls and fixed effects are not reported. Controls include: population, population density, number of NGOs, political orientation of the mayor and the average amount of resources involved in the procurements in that municipality. Reported are results for two main different samples. The first (columns 27, 28, 31 and 32) includes all the procurement contracts issued by municipalities on any type of asylum seeker reception activities. The second (columns 29, 30, 33 and 34) only includes the contracts specifically mentioning the word 'SPRAR' (Protection System for Asylum Seekers and Refugees) in the object of the procedure. While the first sample may overestimate the number of contracts related to SPRARs – for example, also including agreements linked to emergency centres – the second sample provides an underestimation. For instance, all the procurement procedures concerning the reception of unaccompanied minors do not mention the word 'SPRAR' in the object, even when those persons are hosted in such centres. Within each of the two samples, we also distinguish between two subsamples: all procurement procedures (odd numbered columns) or only those whose money amount exceeds the €750,000 threshold (even numbered columns).

types of procedures, so direct awards and open tenders are not mutually exclusive.) m_i is our measure of mafia activities at the municipal level. X_i' is a vector of controls, which includes: the population and population density of each municipality, the number of not-for-profit organizations, the political orientation of the mayor and the average amount of resources involved in the procurements in that municipality. The first variables are proxies for municipal size and capacity. These variables are expected to be inversely related with the frequency of direct awards (Glock & Broens, 2013). The number of NGOs over the total population represents the number of potential competitors in the context of open procedures (Fazekas et al., 2016). The money amount involved in the procurement is a relevant predictor of the procedure adopted (ANAC, 2016). The political orientation of the local council has a less straightforward effect. However, the literature has demonstrated that some political party might have a lower incentive to fight mafias than others (De Feo & De Luca, 2017). We also include macro-regional FEs. We estimate regression (3) via robust probit.

The outputs presented in Table 5 provide clear and robust evidence of how mafia presence is positively correlated with a higher use of direct awards and, conversely, negatively linked to the use of open tender procedures. Furthermore, not-for-profit organizations (social cooperatives in particular) can have access to a simplified procurement discipline and can be directly awarded tenders whose amount is below €750,000. If this threshold is overcome, public authorities have the obligation to use open tenders and to give public visibility to the procedures (ANAC, 2017). Interestingly, coefficients are also significant when considering the subsamples of tenders whose amount is above €750,000, to which open-bidding procedures should be strictly applied (even-numbered columns).

We do not have enough observations to restrict the samples to Sicily and exploit the IV strategy used above. Hence, caution is needed in interpreting these results in a causal way. Nevertheless, Table 5 provides at least robust exploratory evidence of how, in municipalities plagued by higher mafia intensity, reception contracts are significantly more likely to be assigned through direct awards, while the opposite is true for open procedures. For example, results from the most stringent samples (columns 30 and 34), respectively, suggest how a 1 point increase in the Mafia Index is correlated to an increase of 2.74% in the odds of using direct-award procedures and a decrease of 1.74% in the odds of adopting open-bidding procedures. (Figure B3 in the supplemental data online plots the predicted outcomes from models (30) and (34) calculated for different mafia levels holding other variables constant at their means.)

CONCLUSIONS

This paper explores the link between mafia organizations and ASRCs in Italy focusing, in particular, on SPRAR centres for which detailed municipal-level data are available. To minimize issues of endogeneity, we complement the baseline probit and Poisson estimates with matching and IV estimators. (Our identification strategies minimize the likely risks of endogeneity, but we encourage future studies to address this potentially relevant issue with further empirical approaches.) Overall, we find that higher local mafia presence is strongly correlated to the municipal likelihood of being involved in hosting at least a centre. Intensive margin results on the link between organized crime and number of people hosted suggest a similar pattern, but outputs are not always robust.

We then exploit the variation caused by the enforcement of national Law 164/1991 on the forced dissolution

of municipal governments upon evidence of mafia infiltration into local government and compare with a DiD setting municipalities with/without infiltration before/after the alleged collusion between criminal groups and elected officials occurs. The results highlight statistically significant patterns of increased extensive and intensive involvement in hosting activities only after infiltration.

Furthermore, we analyse a novel dataset on Italy's public procurement contracts awarded for the management of asylum seekers' centres. Exploratory, cross-sectional evidence suggests that the presence of organized crime is robustly correlated to the use of direct awards over open tender procedures. Such robust correlations are not a definitive proof of illegitimate procedures. Yet, a higher-than-average use of direct awards might suggest attempts to limit competition and hide irregularities. These findings are confirmed by in-depth, elite interviews with key informants.

Our findings contribute to the growing literature interested in understanding the geographies of organized crime (Hall, 2010; Hudson, 2014) and its socioeconomic effects (Chiodelli, 2018; Ganau & Rodríguez-Pose, 2018). The results provide a few potential areas for future work, which may explore the institutional conditions and micro-mechanisms that allow criminal infiltration to happen. This could be achieved through the selection of qualitative, more in-depth methods. Alternatively, future research could investigate the links between mafias and other types of reception centres, or between organized crime and immigration beyond Italy, for example, in contexts such as Mexico and the United States.

Overall, the results have direct implications for the current policy debate on how to combat mafia organizations. In Italy, public authorities are, on the one hand, increasingly aware of the risk of infiltration by organized crime into the reception system and are trying to limit it.[24] On the other hand, the former Italian government and Minister of Interior introduced in 2018 legislative changes directed towards increasing the threshold under which it is possible to directly award public contracts by waiving measures from the public procurement code.[25] This was done against the negative opinion expressed by many experts involved in combatting organized crime.[26] While our analysis on public tenders is exploratory and future work should validate it with more advanced causal inference tools, our results preliminarily suggest that such policy change may be significantly detrimental to combatting potential mafia infiltrations into the current reception system. More broadly, our findings underscore the importance of maintaining an active public policy stance to fight organized crime, especially when policy decisions are taken in a 'state of emergency'. While this paper relates to the case of Italy, its implications are potentially broader, as mafia organizations have reached a global scale and affect a significant proportion of the world economic activity.

NOTES

1. See www.crimetec.it/.

2. See https://ec.europa.eu/eurostat/web/asylum-and-managed-migration/data/database (accessed June 2020).
3. The Italian Ministry of Interior's Decree dated 10 August 2016 introduced some relevant changes in the procurement strategy.
4. See https://www.sprar.it/pubblicazioni/atlante-sprar-2016 (accessed on 3 December 2019).
5. It is important to stress that SPRAR and CAS centres operate in very different ways. For instance, while the availability to host a SPRAR comes bottom up from municipalities, the location of CAS centres is decided in a more top-down fashion by the central government and its decentred provincial branches. Besides, while SPRARs can only be run by non-governmental organizations (NGOs), CAS can also see the involvement of for-profit counterparts. Hence, possible cases of mafia infiltration into the CAS system would plausibly follow significantly different channels than those explored in this paper. For example, the criminal infiltration may occur not at the municipal level, as we claim here, but during the procurement procedures issued by provinces.
6. Cittalia cooperates with ANCI in the management of Servizio Centrale for the improvement of the information system concerning the SPRAR system especially in the period 2014–16.
7. Municipalities could also select – or replace – NGOs after projects had been allocated by the ministry.
8. Municipalities joining the SPRAR system are also potentially exempted from hosting other types of ASRCs which central government prefects may otherwise impose upon them.
9. See http://www.camera.it/_bicamerali/leg15/commbicantimafia/files/pdf/Art_416bis.pdf (accessed on 18 December 2018). While historically rooted in the South – notably in the regions of Sicily, Calabria, Campania and Puglia – after the Second World War mafias have significantly spread to other parts of Italy and Europe.
10. It is important to stress that these investigations involved CAS rather than SPRAR centres. These cases are mentioned by: the minute of the parliamentary commission on mafia and other criminal organizations (Italian Parliament, 2017b); the reports of the parliamentary commission on asylum seekers' reception, identification and expulsion system (Italian Parliament, 2016, 2017a); the 2015 report by Cittalia (ANCI et al., 2015); the Minute of the parliamentary hearing of the president of the National Authority Against Corruption (ANAC, 2017; Italian Parliament, 2015) and many DIA reports (e.g., DIA, 2015a, 2015b).
11. OCC n. 8847/17 RGNR e 2288/18 RG GIP (DIA, 2018, p. 110).
12. In so doing, we are able to retain 88.4% of SPRAR projects (source: Cittalia, 2016).
13. Results also suggest that the propensity to host asylum seekers is positively linked to population size, while municipalities experiencing demographic shrinking also tend to host more frequently. This is coherent with a situation where the municipalities most prone to host are either big and diverse cities, which have higher capacity, or shrinking places that need to mitigate depopulation, ageing and the

decline in the working-age population (Perlik & Membretti, 2018). Similarly, compared with right-wing administrations (the reference category), which are historically less positive about immigration, left-wing ones tend to be more involved in providing shelter. The latter variables are insignificant in the Poisson results, which, nevertheless, provide robust evidence of a link between mafia intensity and the number of asylum seekers hosted.

14.   The variable is only available for a subset of municipalities, and for this reason it is excluded from the main analysis.

15.   Precisely, the data refer to the period 2009/10, as we are unable to distinguish between the two years.

16.   In fact, before 2014, the influx of asylum seekers reaching Italy was very modest, while reception centres were much less geographically spread than today.

17.   Underreporting may, for example, be significantly higher in mafia-ridden municipalities. Similarly, while we hypothesize that mafia presence in municipality i affects the local likelihood of hosting ASRCs in the same municipality, it is also plausible that criminal groups may infiltrate adjacent municipalities where their presence is not measured. While in the first case the direction of the bias is unclear, potential measurement errors would imply that our estimates are downward biased.

18.   FAO-GAEZ dataset; see http://www.fao.org/nr/gaez/en/ (accessed September 2020).

19.   The lower part of Table 2 reports the Kleibergen–Paap F-statistic, as well as the Hansen J-test of overidentifying restrictions. The J-test does not reject the validity of the excluded instruments. The robust Kleibergen-Paap F-tests for models (9–11) suggest that the excluded instruments are satisfactorily significant, while models (12–14) are weakly identified. Even in models (9–11), however, first-stage F-tests are rather low. As a robustness check, we replicate the outputs of Table 2 adopting alternative instrumental variables (IV) estimators less sensitive to weak instruments. For results, see Section A10 in the supplemental data online.

20.   It is important to stress that results from Table 2 reports *local* average treatment effects (LATE) for Sicily, one of Italy's regions most plagued by mafia. Hence, while their internal validity is stronger compared with outputs in Table 1, like any LATE their external validity vis-à-vis the rest of the country may be more limited.

21.   See https://www.openpolis.it/.

22.   The dataset includes all the contracts of an amount of resources greater than €40,000, because for smaller amounts, the legislation always allows public administrations to directly award contracts if the contractors is both profit or not for profit. Excluding tenders of less than €40,000 should not reasonably induce biases. The cost of the reception service is €35 per person per day, with contracts lasting a minimum of 730 days (until 2016, SPRAR tenders were in fact pluri-annual), that is, at least €25,550 per person. It is not reasonable to think that municipalities organize SPRAR tenders to host fewer than two people – whose amount would already be €51,000, that is, above the €40,000 threshold.

23.   We extend our time span as, otherwise, there would be insufficient observations to run the statistical analysis.

24.   Examples of risk-reduction initiatives are the publication by ANAC of guidelines for the tendering of reception centres. Similarly, procurement tenders are increasingly divided in contract lots, where activities are divided per typology and each is assigned through a specific tender. Another initiative promoted by the Ministry of Interior (through the project MIRECO) is the realization of guidelines for the monitoring and accreditation of the whole first and second reception systems, also taking into account the feedback by migrants hosted.

25.   Budget Law (*Legge di Bilancio*) 2019, Article 1, comma 912.

26.   These include ANAC and members of the Italian parliamentary commission on mafia and other criminal organizations.

ACKNOWLEDGMENTS

DATA AVAILABILITY

The data that support the findings of this study are partly available on request, and partly subject to commercial

third-party restrictions. In particular, data on asylum seekers' reception centres, on mafia infiltrations and on all controls are available from the corresponding author upon request. By contrast, data on the Index of Mafia Presence is subject to commercial restrictions by Crime&Tech. The authors are available to share regression codes and to arrange a Zoom call to replicate the results in real time.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

ORCID

Davide Luca http://orcid.org/0000-0002-1156-9740
Paola Proietti http://orcid.org/0000-0001-5806-577X

REFERENCES

Agamben, G. (2005). *State of exception* (Vol. 2). University of Chicago Press.

Albanese, G., Russo, F. A., & Zampino, R. (2016). Criminalità e scelte degli amministratori locali in tema di procedure di acquisto. *Economia pubblica*, 2, 131–167. https://doi.org/10.3280/EP2016-002005

Aldén, L., Hammarstedt, M., & Neuman, E. (2015). Ethnic segregation, tipping behavior, and native residential mobility. *International Migration Review*, 49(1), 36–69. https://doi.org/10.1111/imre.12066

Associazione Nazionale Comuni Italiani (ANCI), Caritas Italiana, Cittalia, Fondazione Migrantes, Ministero dell'Interno, & United Nations High Commissioner for Refugees (UNHCR). (2014). *Rapporto sulla protezione internazionale in Italia 2014*. Digitalia Lab.

Associazione Nazionale Comuni Italiani (ANCI), Caritas Italiana, Cittalia, Fondazione Migrantes, & Servizio Centrale dello SPRAR. (2015). *Rapporto Sulla Protezione Internazionale in Italia 2015*. Digitalia Lab.

Associazione Nazionale Comuni Italiani (ANCI), Caritas Italiana, Cittalia, Fondazione Migrantes, & Servizio Centrale dello SPRAR. (2016). *Rapporto Sulla Protezione Internazionale in Italia 2016*. Digitalia Lab.

Autorità Nazionale Anticorruzione ANAC. (2016, January 20). Determinazione linee guida per l'affidamento di servizi e enti del terzo settore e alle cooperative sociali. Delibera n.32.

Autorità Nazionale Anticorruzione ANAC. (2017). Richiesta parere da parte del Consiglio di Stato in merito alla normativa applicabile agli affidamenti di servizi sociali alla luce delle disposizioni del decreto legislativo 18 aprile 2016, n. 50, modificato dal decreto legislativo 19 aprile 2017 n. 56, e del decreto legislativo 3 luglio 2017, n. 117.

Barone, G., & Narciso, G. (2015). Organized crime and business subsidies: Where does the money go? *Journal of Urban Economics*, 86, 98–110. https://doi.org/10.1016/j.jue.2015.01.002

Buonanno, P., Durante, R., Prarolo, G., & Vanin, P. (2015). Poor institutions, rich mines: Resource curse in the origins of the Sicilian Mafia. *The Economic Journal*, 125(586), F175–F202. https://doi.org/10.1111/ecoj.12236

Calderoni, F. (2011). Where is the mafia in Italy? Measuring the presence of the mafia across Italian provinces. *Global Crime*, 12(1), 41–69. https://doi.org/10.1080/17440572.2011.548962

Chiodelli, F. (2018). The illicit side of urban development: Corruption and organized crime in the field of urban planning. *Urban Studies*, 1–17. https://doi.org/10.1177/0042098018768498

Cittalia. (2010). *Rapporto annuale del sistema di protezione per richiedenti asilo e rifugiati. Anno 2009–2010*. Grafiche Giorgetti.

Cittalia. (2016). *Rapporto annuale del sistema di protezione per richiedenti asilo e rifugiati. Anno 2016*. Grafiche Giorgetti.

Daniele, V., & Marani, U. (2011). Organized crime, the quality of local institutions and FDI in Italy: A panel data analysis. *European Journal of Political Economy*, 27(1), 132–142. https://doi.org/10.1016/j.ejpoleco.2010.04.003

De Feo, G., & De Luca, G. D. (2017). Mafia in the ballot box. *American Economic Journal: Economic Policy*, 9(3), 134–167. https://doi.org/10.1257/pol.20150551

Di Cataldo, M., & Mastrorocco, N. (2021). Organized crime, captured politicians, and the allocation of public resources. *The Journal of Law, Economics, & Organization*. https://doi.org/10.1093/jleo/ewab015

DIA. (2015a). *Relazione del Ministro dell'Interno al Parlamento sull'attività svolta e sui risultati conseguiti dalla Direzione Investigativa Antimafia. Secondo Semestre 2015*.

DIA. (2015b). *Relazione del Ministro dell'Interno al Parlamento sull'attività svolta e sui risultati conseguiti dalla Direzione Investigativa Antimafia. Primo Semestre 2015*.

DIA. (2018). *Relazione del Ministro dell'Interno al Parlamento sull'attività svolta e sui risultati conseguiti dalla Direzione Investigativa Antimafia. Secondo Semestre 2018*.

Dimico, A., Isopi, A., & Olsson, O. (2017). Origins of the Sicilian Mafia: The market for lemons. *The Journal of Economic History*, 77(4), 1083–1115. https://doi.org/10.1017/S002205071700078X

Dorn, N., Levi, M., & White, S. (2008). Do European procurement rules generate or prevent crime? *Journal of Financial Crime*, 15(3), 243–260. https://doi.org/10.1108/13590790810882847

Dugato, M., Calderoni, F., & Campedelli, G. M. (2020). Measuring organised crime presence at the municipal level. *Social Indicators Research*, 147(1), 237–261. https://doi.org/10.1007/s11205-019-02151-7

Dustmann, C., Vasiljeva, K., & Damm, A. P. (2016). *Refugee migration and electoral outcomes* (Discussion Paper Series No. 1619). Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London.

Fazekas, M., Tóth, I. J., & King, L. P. (2016). An objective corruption risk index using public procurement data. *European Journal on Criminal Policy and Research*, 22(3), 369–397. https://doi.org/10.1007/s10610-016-9308-z

Financial Times. (2015, July 24). Italy's mafia learns to profit from the migration crisis. *Financial Times*. https://www.ft.com/content/0d0371d0-31f4-11e5-8873-775ba7c2ea3d

Fratesi, U., Percoco, M., & Proietti, P. (2018). Who welcomes them? Determinants of the spatial distribution of asylum seekers in Italy. *Regional Studies*, 53(1), 118–130. https://doi.org/10.1080/00343404.2018.1525487

Gammeltoft-Hansen, T., & Sorensen, N. (2013). *The migration industry and the commercialization of international migration*. Routledge.

Ganau, R., & Rodríguez-Pose, A. (2018). Industrial clusters, organized crime, and productivity growth in Italian SMEs. *Journal of Regional Science*, 58(2), 363–385. https://doi.org/10.1111/jors.12354

Gertler, M. C. (2010). Rules of the game: The place for institutions in regional economic change. *Regional Studies*, 44(1), 1–15. https://doi.org/10.1080/00343400903389979

Glock, C. H., & Broens, M. G. (2013). Size and structure in the purchasing function: Evidence from German municipalities. *Journal of Public Procurement*, 13(1), 1–38. https://doi.org/10.1108/JOPP-13-01-2013-B001

Hall, T. (2010). Economic geography and organized crime: A critical review. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, *41*(6), 841–845. https://doi.org/10.1016/j.geoforum.2010.06.004

Hudson, R. (2014). Thinking through the relationships between legal and illegal activities and economies: Spaces, flows and pathways. *Journal of Economic Geography*, *14*(4), 775–795. https://doi.org/10.1093/jeg/lbt017

International Organization for Migration (IOM). (2017). Migration flows to Europe. *The Mediterranean Digest*. https://migration.iom.int/reports/europe-––-mixed-migration-flows-europe-mediterranean-digest-january-––-december-2016?close=true

Italian Parliament. (2015). *Commissione Parlamentare di inchiesta sul Sistema di accoglienza, di identificazione ed espulsione, nonché sulle condizioni di trattenimento dei migranti nei centri di accoglienza per richiedenti asilo e nei centri di identificazione ed espulsione (2015). Audizione del Presidente dell'Autorità Nazionale Anticorruzione. 29, Martedì 10 Novembre 2015*.

Italian Parliament. (2016). *Commissione Parlamentare di inchiesta sul Sistema di accoglienza, di identificazione ed espulsione, nonché sulle condizioni di trattenimento dei migranti e sulle risorse pubbliche impregnate (2016). Doc. XXII-bis N.6 – 23 Marzo*.

Italian Parliament. (2017a). *Commissione Parlamentare di inchiesta sul Sistema di accoglienza, di identificazione ed espulsione, nonché sulle condizioni di trattenimento dei migranti e sulle risorse pubbliche impregnate (2017). Relazione sulle vicende concernenti il centro di accoglienza (EX CARA) di Mineo (CT)*.

Italian Parliament. (2017b). *Commissione Parlamentare sulla mafia e altre organizzazioni criminali anche di origine straniera. Minute of the meeting held in the Parliament (Camera dei deputati) on 21 June 2017: Meeting on the enquiry of the Procura Distrettuale of Catanzaro on the infiltration of the Cosca Arena (N'drangheta) in the reception center in Capo Rizzuto island, Province of Crotone*.

Lavorgna, A., & Sergi, A. (2014). Types of organised crime in Italy. The multifaceted spectrum of Italian criminal associations and their different attitudes in the financial crisis and in the use of internet technologies. *International Journal of Law, Crime and Justice*, *42*(1), 16–32. https://doi.org/10.1016/j.ijlcj.2013.11.002

Leogrande, A. (2016). *Uomini e caporali: viaggio tra i nuovi schiavi nelle campagne del Sud*. Feltrinelli.

Lissoni, F. (2018). International migration and innovation diffusion: An eclectic survey. *Regional Studies*, *52*(5), 702–714. https://doi.org/10.1080/00343404.2017.1346370

Lunaria. (2015). *Il mondo di dentro. Il sistema di accoglienza per richiedenti asilo e rifugiati a Roma* (Working Paper). https://www.lunaria.org/wp-content/uploads/2016/10/Il_mondo_di_dentro.pdf

Martone, V. (2017). Marketisation of social services and mafia infiltration: The case of migrant reception centres in Rome. *The European Review of Organised Crime*, *4*(1), 9–28.

Mete, V., & Sciarrone, R. (2016). Mafia Capitale e dintorni: Espansione criminale e azione antimafia. *Meridiana*(87), 9–20. https://doi.org/10.23744/1031

Organisation for Economic Co-operation and Development (OECD). (2016). *Preventing corruption in public procurement*.

Organisation for Economic Co-operation and Development (OECD). (2018). *Working together for local integration of migrants and refugees*.

Parrilli, M. D., Montresor, S., & Trippl, M. (2019). A new approach to migrations: Communities-on-the-move as assets. *Regional Studies*, *53*(1), 1–5. https://doi.org/10.1080/00343404.2018.1536821

Perlik, M., & Membretti, A. (2018). Migration by necessity and by force to mountain areas: An opportunity for social innovation. *Mountain Research and Development*, *38*(3), 250–264. https://doi.org/10.1659/MRD-JOURNAL-D-17-00070.1

Pinotti, P. (2015). The economic costs of organized crime: Evidence from Southern Italy. *The Economic Journal*, *125*(586). https://doi.org/10.1111/ecoj.12235

Prime Ministry & ANAC. (2014). *Analisi istruttoria per l'individuazione di indicatori di rischio corruzione e di prevenzione e contrasto nelle amministrazioni pubbliche coinvolte nella politica di coesione*. Final Report.

Proietti, P. (2014). Segregazione etnica e criminalità in Italia. *Mondi Migranti*, *3*(32), 145–176. https://doi.org/10.3280/MM2014-003009

Proietti, P., & Veneri, P. (2021). The location of hosted asylum seekers in OECD regions and cities. *Journal of Refugee Studies*, *34*(1), 1243–1268. https://doi.org/10.1093/jrs/fez001

Rodríguez-Pose, A. (2013). Do institutions matter for regional development? *Regional Studies*, *47*(7), 1034–1047. https://doi.org/10.1080/00343404.2012.748978

Schultz, J., & Søreide, T. (2008). Corruption in emergency procurement. *Disasters*, *32*(4), 516–536. https://doi.org/10.1111/j.1467-7717.2008.01053.x

Servizio Centrale. (2015). *Manuale operativo per l'attivazione e la gestione di servizi di accoglienza integrata in favore di richiedenti e titolari di protezione internazionale e umanitaria*. https://www.retesai.it/wp-content/uploads/2018/08/SPRAR-Manuale-Operativo-2018-08.pdf

The Guardian. (2018, February 1). 'Migrants are more profitable than drugs': How the mafia infiltrated Italy's asylum system. *The Guardian*. https://www.theguardian.com/news/2018/feb/01/migrants-more-profitable-than-drugs-how-mafia-infiltrated-italy-asylum-system

The New York Times. (2017, July 17). Mafia in Italy siphons huge sums from migrant centers. *The New York Times*. https://www.nytimes.com/2017/07/17/world/europe/italy-migrants-mafia-edoardo-scordio.html

Transcrime. (2013). *Progetto PON Sicurezza 2007–2013: Gli investimenti delle mafie. Rapporto Linea 1*. Ministero dell'Interno. www.investimentioc.it