

Organised Crime Infiltration of the COVID-19 Economy:

Emerging schemes and possible prevention strategies

Michele Riccardi

Transcrime – Joint Research Centre on Transnational Crime,
Università Cattolica del Sacro Cuore¹



Abstract

The COVID-19 pandemic, and the recovery measures introduced by countries across the world to face the current economic crisis, have provided opportunities to organised crime (OC) networks to infiltrate the legitimate economy, take control of legitimate businesses and profiting from the current emergency situation. In particular, the following typologies of infiltration could be observed: (i) illicit lending and usury to entrepreneurs lacking liquidity; (ii) acquisition of firms in financial distress operating in sectors heavily affected by the crisis (e.g. hotels and restaurants); (iii) interest towards sectors pumped by the COVID-19 related lockdown (e.g. transport and logistics, cleaning services, trade of medical devices and pharmaceuticals); (iv) acquisition of recovery funds and public subsidies through fraud and accounting manipulations. By providing case studies and empirical data in selected countries, this paper will propose a classification of the infiltration strategies employed by OC networks as a consequence of the COVID-19 pandemic, of the most common targets and victims, and discuss potential prevention and investigation strategies to curb and mitigate this risk.

Keywords: Organised crime; Infiltration; Money Laundering; Fraud; COVID-19; Coronavirus.

Introduction

The COVID-19 pandemic, the related containment policies and recovery plans have provided new opportunities for expansion to organised crime (OC) – at least this is what has been advocated by public authorities and law enforcement worldwide. The pandemic events have dramatically transformed the environment in which criminals operate: targets and clients have changed their behaviors, resources have been reallocated to new areas and sectors, new regulatory loopholes have emerged and new countermeasures have been implemented.

Most of the studies published to date on the impact of COVID-19 focused on volume and urban crimes (e.g., Ashby 2020; Campedelli et al. 2020; Gerell et al. 2020; Lallie et al. 2021). Analysis of the influence posed by COVID-19 on OC is limited to few works of speculative nature, or based only on selected cases (see *Literature review* below). The timeframe available and the amount of data is yet too scarce for conducting proper empirical research on the relationship between OC groups and Coronavirus.

Among the ways through which OC groups may benefit from COVID-19 is the infiltration of legitimate businesses. Infiltration of the economy is a peculiar

¹ Author's email: michele.riccardi@unicatt.it

attribute of governance-type organised crime, and nowadays most SOC activities cannot be implemented without wide employment of legitimate firms (Levi and Soudijn 2020; Transcrime 2018; Savona et al. 2016; Europol 2021). According to the latest Europol's SOCTA, 2021, more than 80% of organised crime networks in Europe use legal businesses. The COVID-19 emergency, and the related recovery plans, risk to boost the infiltration strategy of OC groups – or at least this is what advocated by some public authorities and experts. Numerous alerts have been issued by law enforcement authorities (LEAs) and financial intelligence units (FIUs) worldwide, which stressed the risk that OC may pose to the economy suffering from the COVID-19 related crisis.

This paper would like to contribute to this debate. It provides some evidence of OC infiltration of legitimate businesses during and in the aftermath of COVID-19, and help to understand to what extent, and under which conditions, the alerts issued by public authorities are plausible and justifiable. In particular, the paper will try to provide a classification of frequent infiltration schemes, concealment techniques and typologies observed in these months; and shed light on the most affected sectors and firm-types. For doing so, it will analyse evidence of infiltration collected from intelligence reports issued by LEAs, FIUs, AML authorities across Europe; institutional reports; news and open sources. Most of the reported cases regard Italy, but references to other countries, and to OC groups different from Italian mafias, will be made. Some of these cases have been reported in previous papers and policy reports, first of all UNODC (2020) and Aziani et al. (2021), on which this paper is largely based. By employing a limited number of cases and episodes, this paper has roughly the same speculative nature of previous works published to date; but will help to try to classify typologies which have been observed in past months and which may be frequent in the near future.

The paper is structured as follows: Section 2 briefly recalls the notion of OC infiltration, and provides a brief review of studies on the relationship between (organised) crime and COVID-19; Section 3 describes the sources used to collect cases upon which the analysis is made; Section 4

Literature review

Infiltration of legitimate businesses by organised crime

The concept of *infiltration* is hard to define, to measure – and ultimately to prosecute (Riccardi & Berlusconi 2016; Transcrime 2018). In most European countries, criminal infiltration is not criminalised per se. As stressed by various scholars, infiltration may not be itself a crime, but rather it can be considered a *process* encompassing a variety of crimes. These may take the form of predicate offences, in the sense that they may constitute the crimes which generate the proceeds which are eventually employed by criminals, e.g., to incorporate a legitimate firm; or of sentinel crimes – like accounting manipulation or false invoicing - which highlight that an infiltration process is on-going. Building on Transcrime's project MORE, infiltration of a legitimate firm by organised crime may be defined as:

“Any case in which a natural person belonging to a criminal organisation, as defined by Art. 1 of the EU Framework Decision on the Fight against Organised Crime (2008/841/JHA), or involved in a serious crime as defined by Art. 83(1) of the Treaty on the Functioning of the European Union, or an already infiltrated legal person, invests financial and/or human resources to participate in the decision-making process of a legitimate business” (Transcrime 2018, p. 5).

The vagueness of the concept of ‘criminal organisation’ adopted at the EU level (Calderoni 2008; Finckenauer 2005; Hagan 2006; von Lampe 2004) may risk hindering the identification of ‘who exactly is infiltrating a legitimate business’ (von Lampe, 2017, p. 224). This in turn may instill doubts about if studying infiltration requires adopting an ‘actor-centred’ or alternatively an ‘activity-centred’ approach (van Duyne & van Dijck, 2007; von Lampe, 2017). But it is not often easy to distinguish between the two perspectives, also because it is not always clear whether the infiltrated firm was established, or employed, as part of the OC scheme itself, or was instead infiltrated as a consequence of OC (for example, the investment in a restaurant of the proceeds stemming from drug-trafficking). Finally, it is increasingly difficult to draw a boundary between ‘traditional’ OC and financial crimes such as false invoicing and VAT fraud, as also stressed by the latest Europol's SOCTA (Europol, 2021). All these patterns are confirmed when looking at COVID-19 related infiltration, as will made clear in the *Analysis and Discussion* sections.

COVID-19 and (organised) crime

As mentioned, most of the studies published to date, which address the relationship between crime and COVID-19, analysed the impact of containment policies related to Coronavirus on violent and volume crimes (e.g., Ashby 2020; Campedelli et al. 2020; Gerell et al. 2020; Lallie et al. 2021). Those dealing with organised crime are much fewer and are based on anecdotal evidence (Bruce et al. 2020; e.g., Dellasega and Vorrath 2020; GITOC 2020a). More recently, a paper by UNODC, and a working paper of Aziani et al., have tried to look more closely into the way criminal organisations reacted to the medical crisis and the economic crisis exerted by COVID-19 (UNODC 2020; Aziani, Jofre, et al. 2021). To be noted that most of these studies have focused on the first wave of COVID-19 disease (March – October 2020), which is the one characterised by the harsher lockdown measures and the strongest impact on the economy. A recent report authored by Levi and Smith shed light on fraud related to COVID-19 policies and products – which could be observed also in previous pandemics, such as the Spanish flu (Levi & Smith 2021).

These works have, on the one side, analysed how COVID-19 has impacted on the activity of OC groups, e.g. in terms of reduced (or increased) drug-trafficking or kidnapping (Balmori de la Miyar et al. 2021; Bruce et al. 2020; Djordjević & Dobovšek 2020). On the other side, the studies analysed how OC has benefited from the pandemic crisis. Positive effects can be observed two-fold: (i) in terms of increasing social consensus through the provision of social services to local communities; (ii) in terms of increasing profits through infiltration of the legal economy and the commission of financial crimes. As regards the first strategy, a variety of instances can be found in which governance-type OC groups (such as mafias or Mexican cartels) have started providing support to the local population in response of the crisis (and often in the absence and/or incapacity of official governments). Gomez (2020) illustrated how OC groups in Colombia and Mexico were able to distribute food, money, medicines, face masks, support checkpoints to the local population in the first wave of the pandemic. Similar episodes were observed in Italy by the Camorra and Cosa Nostra (Crimaldi 2020; Palazzolo 2020) and in South Africa by local gangs (Hyman 2020). OC groups were also active in ensuring social distancing within the population, as a way to get the favour of official governments which were unable to enforce this measure. This occurred for example in Brazil, El Sal-

vador and Colombia (Elfaro 2020; TuBarco 2020; Walsh 2020).

COVID-19 and organised crime infiltration: the knowledge gap

While information, analysis and evidence on the provision of illegal governance by OC groups is more abundant, the same cannot be said as regards the second OC strategy, i.e. the infiltration of the legal economy during and as a consequence of the COVID-19 pandemic. The lack of evidence contrasts with the numerous alerts issued by public authorities in this respect. Both UNODC (2020) and Aziani et al. (2021) report few cases of infiltration, but do not provide further analysis and interpretation.

Aim of this paper is to start filling this gap, not only by collecting and reporting cases of (attempted or suspicious) infiltration in legitimate firms, but by offering an analysis and a classification of: (i) the most frequent *modi operandi* and schemes of infiltration; (ii) the most frequently affected business sectors; (iii) the type of criminal actors (and sentinel crimes) involved. This paper is just an exploratory and preliminary analysis, based on a too limited and unrepresentative sample yet, which would deserve in-depth investigation as soon as more abundant empirical evidence (and more structured data) will be made available. However, it is an attempt to classify risk scenarios which may be observed by police, AML authorities, anti-fraud agencies, FIUs and prosecutors' offices currently or in the next future in most European countries.

Methodology

The cases analysed in this paper, and on which basis the classification of infiltration schemes is produced, are identified through a snowball approach, relying on a variety of sources which include: (i) academic papers; (ii) institutional reports (e.g. police or FIU reports and press releases); and (iii) media news. In particular, I make wide use of the cases already collected and reported in Aziani et al. (2021), which employed a news aggregator (LexisNexis Metabase) to scan media sources in search for relevant instances. This set is enriched further with evidence taken from more recent media articles and institutional reports, not covered by the previous works. Among them, the latest Europol's SOCTA (Europol 2021) and the periodic reports of the new-born observatory of the Italian Ministry of Interior

to monitor OC infiltration of the legal economy.² Very useful have been also the 2020 annual reports of European FIUs, which provided some statistics on COVID-19 related suspicious activity/transaction reports. 'Cases' should not be intended merely as specific instances, involving one individual or firm, for which information on names, sector, geographic area was available. But more broadly as empirical evidence, reported by (or involving) some police authorities or FIU, of infiltration and misuse of firms in relation to COVID-19. For this reason, it is not easy to count the exact number of firms analysed.

Beyond actual cases, this paper takes into account also the results of an analysis, made by Transcrime, of anomalies related to changes of beneficial owners of firms in Italy during the pandemic (April to September 2020), which involved about 40,000 firms (Bosisio et al. 2021). These are not (all) corresponding to episodes of criminal infiltration of course; but the anomalies identified in some of them may red-flag possible infiltration risks. A paragraph of the next section will be devoted to summarising the main findings of this study.

While this paper did not want a priori to focus on Italy only, most of the cases and data collected and analysed regard Italian firms. This has not to be interpreted in the sense that most infiltration cases related to COVID-19 concentrate in Italy; but is the result of sampling biases and, as stressed by previous works, too (see e.g. Riccardi and Berlusconi, 2016), of the greater attention and awareness posed by Italian public authorities and media to the 'infiltration problem'.

Analysis

Four frequent schemes, or typologies using FATF terms, of criminal infiltration of firms in relation to the COVID-19 pandemic can be identified: (i) illicit lending and usury to entrepreneurs lacking liquidity; (ii) acquisition of firms in financial distress operating in sectors heavily affected by the crisis (e.g. hotels and restaurants); (iii) interest towards sectors pumped by the COVID-19 related lockdown (e.g. transport and logistics, cleaning ser-

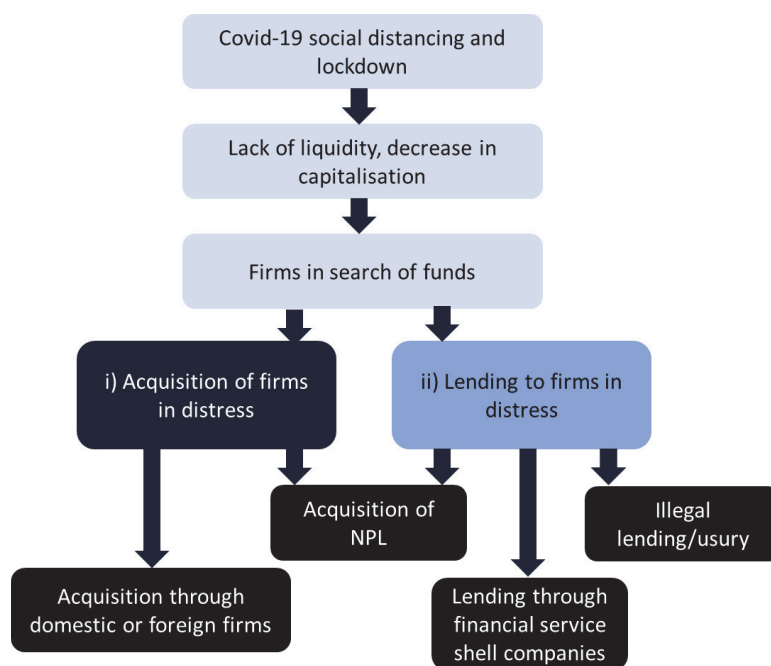
vices, trade of medical devices and pharmaceuticals); (iv) acquisition of recovery funds and public subsidies through fraud and accounting manipulations. They are analysed in detail below (the first two schemes in the same paragraph).

Infiltration of firms in financial distress and in sectors affected by COVID-19

This category includes cases of infiltration of firms fallen in financial distress as a consequence of COVID-19 containment and economic crisis. The lockdown enforced in spring 2020 in most countries (and then repeated between fall 2020 and winter 2021) heavily impacted on the capacity of certain entrepreneurs to produce turnover and cover operational expenses, including personnel costs. This has happened in particular in those economic sectors which had to reduce substantially (and, in a first phase, literally interrupt) the activity due to the lockdown: bars, restaurants, hotels, organisation of events, travel agencies and renting agencies. Also retail shops were affected – especially non-food ones, as food retailers were among the categories of businesses exempted from lockdowns. The cash and liquidity problems of these firms have increased their vulnerability to the injection of external funding of illicit and dubious origin. This has happened in two ways: (i) in terms of lending (often at usurious rate) by individuals connected to criminal organisations; (ii) in terms of acquisition of firms' control through money of illicit origin. As stressed frequently by literature, often the first strategy may then lead to the second one, as soon as firm owners are not able to guarantee restitution of the credit and therefore are forced to pass on the management of the company. Loans shall not be interpreted exclusively as the provision of illicit cash 'off-the-records', but nowadays may take more sophisticated nature, sometimes concealed behind shell companies active in the financial service sector, or through the acquisition of non-performing loans (NPLs), carried out with the complicity of colluded banks or bank officials (Di Gennaro and Pastore 2021; Barone and Masciandaro 2019; Lavezzi 2014; Transcrime 2013). Eventually, these loans may take the accounting form of 'shareholders' credits', which indeed constitutes a red-flag in the financial reports of infiltrated firms, according to previous studies (Di Bono et al. 2015; Ravenda et al. 2015; Transcrime 2018).

A number of hotels on the *Riviera Romagnola* in Italy reported to the police to have been contacted by dubious investors, during the hardest time of the COV-

2 Namely, the 'Organismo permanente di monitoraggio e analisi sul rischio di infiltrazione nell'economia da parte della criminalità organizzata di tipo mafioso'. See <https://www.interno.gov.it/it/ministero/osservatori-commissioni-e-centri-coordinamento/organismo-permanente-monitoraggio-e-analisi-sul-rischio-infiltrazione-nelleconomia-parte-criminalita-organizzata-tipo-mafioso>

Figure 1 - Infiltration of firms in financial distress: frequent schemes/typologies

Source: Author's elaboration

ID-19 pandemic, with offers to acquire the business at a cheap price (Elli 2020). The local prefecture of Rimini has issued, between September 2020 and January 2021, 10 freezing measures (*interdittive*)³ against hotels in the province due to suspicion of mafia infiltration (Conti 2021). Similar behaviours have been observed in Milan, where the 20% of restaurants, participating to a survey of a local association, declared to have received offers (in terms of acquisition or usury lending) by 'anomalous individuals' during the COVID-19 pandemic (Ticino Notizie 2020). Instances of 'anomalous acquisitions' outside the hotels & bars sector can also be found. For example, a construction company was acquired during the COVID-19 pandemic by a fiduciary company based in Malta, for which information on beneficial owners was not available; the professionals managing the trust had previous records for involvement in international corruption (Bosisio et al. 2021). A real estate/architecture firm active in renovating historical properties in Tuscany, suffering from the economic crisis, was refused renegotiation of its loan, which was instead ceased to a holding company, newly established, controlled by

3 The *interdittiva antimafia* is a measure of administrative nature issued by Italian prefectures in the presence of signals of, among others, mafia infiltration and/or influence. The measure aims at freezing the activity of a firm, and avoid it can be involved in public works and be awarded public funding.

a trust in Luxembourg, managed by individuals with previous OC records.

Infiltration of firms in sectors pumped by COVID-19

If some sectors were heavily affected by the containment policies, others have been favoured by the pandemic. The wholesale (and retail) trade of pharmaceuticals and medical devices (e.g. masks, breathing devices, sanitification devices) have boomed, as well as sanitification and cleaning services companies. But also waste disposal (especially the management of COVID-19 related hospital waste) and funeral services were favoured by the pandemic. The lockdown which obliged millions of people to stay and work from home has fostered the e-commerce, which in turn has pumped logistic and transportation services. The number of couriers dramatically increased, and bigger logistic firms have had to rely heavily on sub-contractors to satisfy the demand. Obviously, the success of these sectors induced by the pandemic did not attract only investments of dirty money; but also numerous entrepreneurs and firms unconnected with crime. However, abundant evidence of OC presence can be spotted.

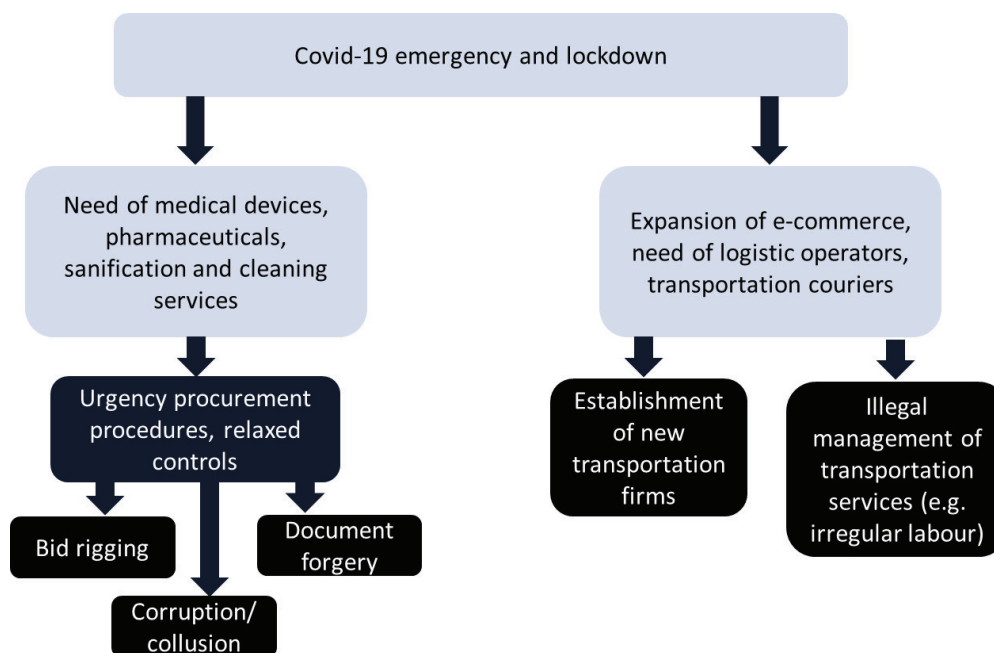
Numerous cases can be found in the provision of masks and medical devices, especially in the first wave of the pandemic (February-July 2020) which was characterised by a strong demand of these devices and lack of supply at international level, and also more relaxed controls and countermeasures. A company with unknown track-record exploiting false declarations was awarded, in Italy, a public procurement for providing masks, worth 24 million euro. Once awarded, the company was sold to a construction firm, then going bankrupt. Goods were not eventually provided (Ministero dell'Interno 2020a). In Romania, a firm linked to individuals with previous records of serious and organised offences, was investigated for bribing the director of a public company which was managing the purchase of masks, protective suits and other medical devices (Ministero dell'Interno 2020a). In Italy, again, three Chinese firms (one established 5 days before the procurement) were awarded the provision of 800 million masks (value 1.25 billion euro), facilitated by Italian intermediaries. The investigation revealed allegations of money laundering, fencing, embezzlement. Infiltration of mafia-groups was observed also in the sanitification sector: the investigation *Criminal security* revealed investments of Camorra into firms active in the sanitification of retail shops (Ministero dell'Interno 2020b), while *Dirty cleaning* highlighted again the

role of Camorra groups in companies involved in the sanitification of hotels, restaurants, trucks and vehicles (Il Fatto Quotidiano 2020). Wiretaps revealed, in the first phase of the pandemic, attempts of the 'Ndrangheta to acquire/invest even funeral companies in Northern Italy where the rate of COVID-19 deaths was highest (Ministero dell'Interno 2020b).

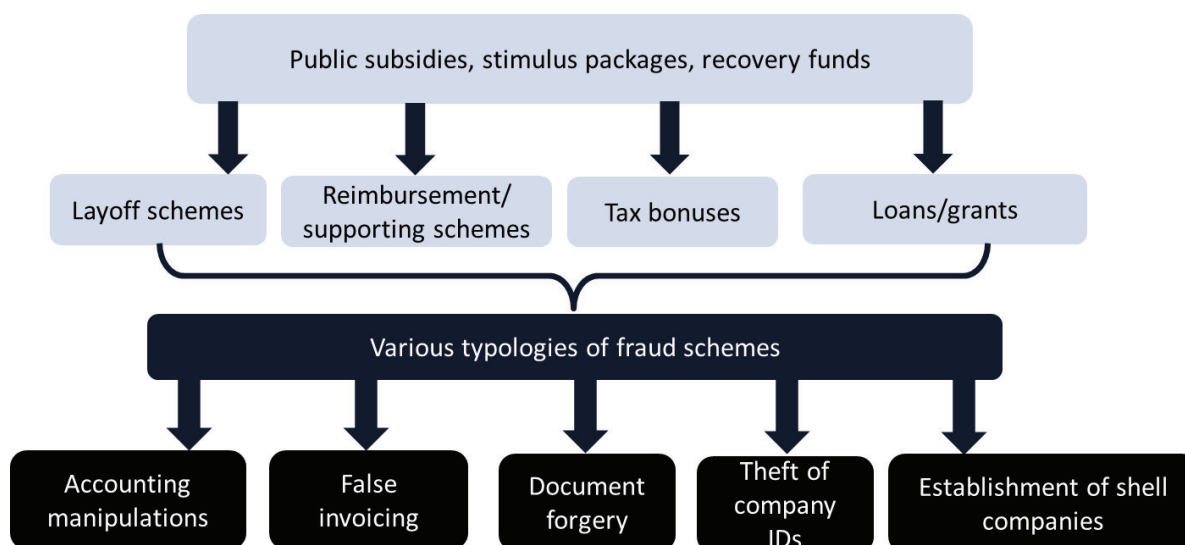
Infiltration of firms to obtain COVID-19 public subsidies and recovery funds

The third typology of OC infiltration is the one which is and will be probably most frequently observed in the next future. It is related to the employment of legitimate businesses by organised criminals to obtain the wide variety of public subsidies, stimulus packages and recovery funds activated by most countries worldwide to sustain the economy impacted by the COVID-19 crisis. Here, infiltration may take various forms: for example, fraud with layoff schemes, such as those committed in France on «*chomage partiel*» (layoffs) through fictitious use and theft of IDs of existing firms (Ministero dell'Interno 2020a). Various cases of embezzlement of reimbursement and tax bonuses issued by government as a consequence of the pandemic are reported by media: in Italy, the investigation *Habanero* revealed the Infiltration by 'Ndrangheta of Italian firms, and the commission of tax crimes and bankruptcy fraud so as

Figure 2 - Infiltration of firms in sectors pumped by COVID-19



Source: Author's elaboration

Figure 3 - Infiltration of firms to obtain COVID-19 public subsidies and recovery plans

Source: Author's elaboration

to benefit from SME public subsidies enhanced with COVID-19 (Ministero dell'Interno 2020a). In the UK, fraud on “bounce back loans” schemes were committed through fictitious use and theft of IDs of existing firms (Ministero dell'Interno 2020a). Most of these fraud and infiltration schemes entailed systematic employment of accounting manipulations, false invoicing, document forgery, theft of firms' IDs or the establishment of shell companies only for the purpose of obtaining the funds. For example, in most countries, government compensation schemes were designed in order to reimburse firms in affected sectors a certain percentage of the turnover of the previous year (i.e. 2019). If a firm were able to increase artificially the 2019 revenue, then it could obtain a higher compensation. For this reason, some criminal organisations acted as *illegal service providers* by providing entrepreneurs with false invoices so as to pump artificially their turnover. This scheme was observed in the investigation *Background* of the Italian police (Ministero dell'Interno 2020b), which further confirmed the specialisation of some Italian mafia groups (first of all, the 'Ndrangheta) in providing false invoicing services to complicit entrepreneurs (Transcrime, 2018).

Changes in firms' ownership during the COVID-19 pandemic

As mentioned, Transcrime carried out an analysis of the Italian firms which changed owners in the first wave of the pandemic, i.e. between April and September

2020 (Bosisio et al. 2021). The aim was to detect possible anomalies and red-flags among new owners which could signal risks of organised crime infiltration and money laundering. In the period under observation, 43,700 firms changed their beneficial owners (BOs) – a decrease of 38.7% with respect to the same period of the previous year. This is a sign of the economic crisis determined by COVID-19, which generated a downturn of mergers and acquisitions worldwide. However, despite the decrease in ownership changes, interesting patterns can be observed (see Bosisio et al. 2021 for full details):

- 7% of new beneficial owners are foreign, almost twice the number of foreign BOs of Italian firms;
- 1.3% of firms changing ownership have links with countries in AML and Tax blacklists and grey lists.⁴ This percentage is five times higher than the Italian average;
- Among these firms, use of trusts, fiduciaries and other corporate vehicles is 10 times higher than the Italian average;

⁴ Here, we took into account the FATF black- and grey-lists, the EU AML list of 'high-risk third countries', the EU list of non-cooperative tax jurisdictions. All lists were updated as of February 2021, which means that they did not include Malta, grey listed by FATF in June, 2021; if Malta were included, a higher volume of links with blacklisted jurisdictions would have been observed.

- 1.5% of new beneficial owners are politically exposed persons (PEPs); but in some provinces this percentage goes up to 12%.

While obviously these data shall not be interpreted necessarily as evidence of money laundering or criminal infiltration, they are symptomatic of the increasing secrecy and opacity of the investments occurred in Italian firms during the COVID-19 pandemic, which would deserve further investigation, especially in those areas and sectors with greatest concentration of anomalies.

Discussion and conclusion

The typologies of organised crime infiltration which have been reported here, while focusing mostly on Italy, show some common patterns which is worth highlighting. First, the employment of a mix of *modi operandi*, ranging from traditional methods (such as extortion, usury and 'extortive offering') to more sophisticated and concealed ones, such as the use of financial service companies as shells behind which to conceal usurious lending and economic support. Second, the overlap between governance-type OC (which Italian mafias typically belong to) and financial and white-collar offences. Most schemes of infiltration observed in the COVID-19 pandemic, either aimed at acquiring control of firms in 'pumped' sectors, or at defrauding public subsidies and recovery funds, see criminal organisations acting as *illicit financial services* providers, first of all of false invoicing and document forgery. Third, the role of facilitators played by intermediaries (like colluded entrepreneurs and PEPs), and the wide employment of trusts, fiduciaries and other opaque legal arrangements, often established in secrecy jurisdictions (also within the EU). In this sense, the cases of infiltration observed during and in the aftermath of the pandemic seem to confirm the same patterns which have been highlighted in recent years by scholars (Kruisbergen et al. 2015; Levi and Soudijn 2020; Transcrime 2018; Savona et al. 2016) and practitioners (see, above all, the new Europol's SOCTA report 2021). COVID-19 may only accelerate this process, and shift it towards different sectors - those which, for the variety of reasons above described, have become more vulnerable or more attractive to organised crime because of the pandemic.

The amount of cases and investigations identified to date is yet too limited to empirically demonstrate the numerous alerts issued by police, FIUs and other public authorities on the increased risk of organised crime infiltration of the economy as a consequence of COVID-19. However, the volume of recovery funds and public subsidies which are and will be distributed by governments (for example, in the framework of the 'NextGenerationEU' programme) is so exceptionally wide that it will undoubtedly attract fraudsters and organised criminals. What strategies can be implemented so as to prevent this to happen?

The question is to what extent the traditional AML countermeasures – centred around the 'gate-keeping' role of banks and other obliged entities, and the monitoring of FIUs - will be sufficient for this purpose; or alternatively whether a new monitoring system should be conceived. The amount of recovery funds, with the millions of requests which will be submitted by firms worldwide, will probably require an extensive screening which cannot be left only to obliged entities among their daily AML customer due diligence controls. Given the type of infiltration and fraud schemes observed to date, which entailed complex corporate structures and triangulations across firms and individuals from different countries, it seems necessary to have centralised watchtowers able to span across sectors and on the entire national (and supranational) domain. Dedicated governmental agencies, equipped with big data analytics capacities, and full access to police archives and business registers, may be a proper solution. Current technologies and algorithms are now able to process millions of transactions and entities, and early detect high-risk cases on the basis of accounting and financial red-flags (see e.g. Ravenda et al. 2015; Transcrime 2018) and ownership anomalies (Jofre et al. 2021; Aziani, Ferwerda, et al. 2021; Garcia-Bernardo et al. 2017). Given the interlinks between organised crime and financial offences, the new agencies should be able to dialogue, equally, with FIUs, anti-corruption authorities, tax agencies and anti-trust authorities; but act as clear reference authorities for the due diligence of COVID-19 related recovery funds.

References

- Ashby, M. P. J. (2020) Initial evidence on the relationship between the coronavirus pandemic and crime in the United States. *Crime Science*, 9(1), 6. <https://doi.org/10.1186/s40163-020-00117-6>
- Aziani, A., Ferwerda, J., & Riccardi, M. (2021) Who are our owners? Exploring the ownership links of businesses to identify illicit financial flows. *European Journal of Criminology*. <https://doi.org/10.1177/1477370820980368>
- Aziani, A., Jofre, M., Bertoni, G., & Riccardi, M. (2021) COVID-19 and Organized Crime: strategies employed by criminal groups to increase their profits and power in the first months of the pandemic. *Working paper*.
- Balmori de la Miyar, J. R., Hoehn-Velasco, L., & Silverio-Murillo, A. (2021) Druglords don't stay at home: COVID-19 pandemic and crime patterns in Mexico City. *Journal of Criminal Justice*, 72. <https://doi.org/10.1016/j.jcrimjus.2020.101745>
- Barone, R., & Masciandaro, D. (2019) Cryptocurrency or usury? Crime and alternative money laundering techniques | SpringerLink. *European Journal of Law and Economics*, 47, 233–254.
- Bosisio, A., Nicolazzo, G., & Riccardi, M. (2021) *I cambi di proprietà delle aziende italiane durante l'emergenza Covid-19: trend e fattori di rischio*. Università Cattolica del Sacro Cuore - Transcrime. Available at: <https://www.transcrime.it/wp-content/uploads/2021/05/Ownership-changes-report-1.pdf>
- Bruce, R., Cavgias, A., & Meloni, L. (2020) *Filling the Void? Organized Crime and COVID-19 in Rio De Janeiro* (SSRN Scholarly Paper No. ID 3678840) Rochester, NY: Social Science Research Network. <https://doi.org/10.2139/ssrn.3678840>
- Calderoni, F. (2008) A definition that could not work: The EU Framework Decision on the fight against organised crime. *European Journal of Crime, Criminal Law and Criminal Justice*, 16(3), 265–282.
- Campedelli, G. M., Favarin, S., Aziani, A., & Piquero, A. R. (2020) Disentangling community-level changes in crime trends during the COVID-19 pandemic in Chicago. *Crime Science*, 9(1), 21. <https://doi.org/10.1186/s40163-020-00131-8>
- Conti, E. (2021, January 26) Usurai del Covid in Riviera, il prefetto: «Da settembre 13 interdittive antimafia: 10 ad attività alberghiere». *Corriere di Bologna*. Available at: https://corrieredibologna.corriere.it/bologna/cronaca/21_gennaio_26/usurai-covid-riviera-prefetto-da-settembre-13-interdittive-antimafia-10-ad-attivita-alberghiere-f619b8dc-5fa9-11eb-9b56-651ef59c9fb6.shtml. Accessed 10 July 2021
- Crimaldi, G. (2020, April 16) Coronavirus a Napoli, il welfare della camorra arriva in Parlamento: «Il Viminale pronto a intervenire». *Il Mattino*. Available at: https://www.ilmattino.it/napoli/politica/coronavirus_a_napoli_il_welfare_della_camorra_in_parlamento-5175000.html. Accessed 10 July 2021
- Dellasega, M., & Vorrath, J. (2020) A Gangster's Paradise? Transnational Organised Crime in the Covid-19 Pandemic. *SWP Comment*, December(66), 1–8. <https://doi.org/10.18449/2020C66>
- Di Bono, L., Cincimino, S., Riccardi, M., & Berlusconi, G. (2015) Management strategies of infiltrated businesses. In E. U. Savona & G. Berlusconi (Eds.), *Organized crime infiltration of legitimate businesses in Europe: A pilot project in five European countries*. Trento: Transcrime – Università degli Studi di Trento.
- Di Gennaro, G., & Pastore, G. (2021) La crisi economica post-pandemia: alcuni indicatori di risk assessment strategico dell'operatività delle mafie. *Rivista giuridica del Mezzogiorno*, (1/2021). <https://doi.org/10.1444/99845>
- Djordjević, S., & Dobovšek, B. (2020) Organised crime in Western Balkans Six at the onset of coronavirus. *International Journal of Sociology and Social Policy*, 40(9/10), 807–820. <https://doi.org/10.1108/IJSSP-06-2020-0229>
- El Faro. (2020, March 31) Pandillas amenazan a quien incumpla la cuarentena. *elfaro.net*. Available at: https://elfaro.net/es/202003/el_salvador/24211/Pandillas-amenazan-a-quien-incumpla-la-cuarentena.htm. Accessed 10 July 2021
- Elli, S. (2020, April 24) Turismo, arrivano le offerte «predatorie» sugli alberghi vuoti - Il Sole 24 ORE. *Il Sole 24 Ore*. Available at: <https://www.ilssole24ore.com/art/turismo-arrivano-offerte-predatorie-alberghi-vuoti-ADJlieL>. Accessed 10 July 2021
- Europol. (2021) *EU Serious and Organised Crime Threat Assessment 2021*. The Hague: EUROPOL. Available at: <https://www.europol.europa.eu/activities-services/main-reports/european-union-serious-and-organised-crime-threat-assessment>
- Finckenauer, J. O. (2005) Problems of definition: What is organized crime? *Trends in Organized Crime*, 8(3), 63–83.
- Garcia-Bernardo, J., Fichtner, J., Takes, F. W., & Heemskerck, E. (2017) Uncovering Offshore Financial Centers: Conduits and Sinks in the Global Corporate Ownership Network | Scientific Reports. *Nature, Scientific Reports* volume 7, Article number: 6246 (2017). Available at: <https://www.nature.com/articles/s41598-017-06322-9>. Accessed 9 September 2018
- Gerell, M., Kardell, J., & Kindgren, J. (2020) Minor covid-19 association with crime in Sweden. *Crime Science*, 9(1), 19. <https://doi.org/10.1186/s40163-020-00128-3>

- GITOC. (2020) *Crime and Contagion: The impact of a pandemic on organized crime*. Available at: <https://globalinitiative.net/crime-contagion-impact-covid-crime/>. Accessed 26 May 2020
- Gomez, C. T. (2020) Organised Crime Governance in Times of Pandemic: The Impact of COVID-19 on Gangs and Drug Cartels in Colombia and Mexico. *Bulletin of Latin American Research*, 39(S1), 12–15. <https://doi.org/10.1111/blar.13171>
- Hagan, F. (2006) "Organized crime" and "organized crime": Indeterminate problems of definition. *Trends in Organized Crime*, 9(4), 127–137.
- Hyman, A. (2020, April 18) How organised crime is exploiting Covid-19. *Times*. Available at: <https://www.timeslive.co.za/news/south-africa/2020-04-18-how-organised-crime-is-exploiting-covid-19/>. Accessed 10 July 2021
- Il Fatto Quotidiano. (2020, November 19) "Sto coronavirus è proprio un buon affare": sequestrata a Pesaro ditta di sanificazioni riconducibile a un sorvegliato speciale. *Il Fatto Quotidiano*. Available at: <https://www.ilfattoquotidiano.it/2020/11/19/sto-coronavirus-e-proprio-un-buon-affare-sequestrata-a-pesaro-ditta-di-sanificazioni-riconducibile-a-un-sorvegliato-speciale/6009078/>. Accessed 10 July 2021
- Jofre, M., Bosisio, A., Riccardi, M., & Guastamacchia, S. (2021) Money laundering and the detection of bad entities: a machine learning approach for the risk assessment of anomalous ownership structures. *2021 Empirical AML Research Conference proceedings - The Central Bank of the Bahamas*. Available at: <https://bahamasamlconference.com>
- Kruisbergen, E. W., Kleemans, E. R., & Kouwenberg, R. F. (2015) Profitability, power, or proximity? Organized crime offenders investing their money in legal economy. *European Journal on Criminal Policy and Research*, 21(2), 237–256.
- Lallie, H. S., Shepherd, L. A., Nurse, J. R. C., Erola, A., Epiphaniou, G., Maple, C., & Bellekens, X. (2021) Cyber security in the age of COVID-19: A timeline and analysis of cyber-crime and cyber-attacks during the pandemic. *Computers & Security*, 105. <https://doi.org/10.1016/j.cose.2021.102248>
- Lavezzi, A. M. (2014) Organised crime and the economy: a framework for policy prescriptions. *Global Crime*, 15(1–2), 164–190. <https://doi.org/10.1080/17440572.2013.868626>
- Levi, Michael, & Soudijn, M. (2020) Understanding the Laundering of Organized Crime Money. *Crime and Justice*, 000–000. <https://doi.org/10.1086/708047>
- Levi, Mike, & Smith, R. G. (2021) *Fraud and its relationship to pandemics and economic crises: From Spanish flu to COVID-19*. Australian Institute of Criminology. Available at: https://www.aic.gov.au/sites/default/files/2021-04/rr19_fraud_and_its_relationship_to_pandemics_and_economic_crises.pdf
- Ministero dell'Interno. (2020a, July) Report 3/2020 - ORGANISMO PERMANENTE DI MONITORAGGIO ED ANALISI SUL RISCHIO DI INFILTRAZIONE NELL'ECONOMIA DA PARTE DELLA CRIMINALITÀ ORGANIZZATA DI TIPO MAFIOSO. Ministero dell'Interno.
- Ministero dell'Interno. (2020b, December) Report 4/2020 - ORGANISMO PERMANENTE DI MONITORAGGIO ED ANALISI SUL RISCHIO DI INFILTRAZIONE NELL'ECONOMIA DA PARTE DELLA CRIMINALITÀ ORGANIZZATA DI TIPO MAFIOSO. Ministero dell'Interno. Palazzolo, S. (2020, April 8) Palermo, il fratello del boss della droga fa la spesa per lo Zen. *la Repubblica*. Available at: https://palermo.repubblica.it/cronaca/2020/04/08/news/palermo_il_fratello_del_boss_della_droga_fa_la_spesa_per_lo_zen-300899406/. Accessed 10 July 2021
- Ravenda, D., Argilés-Bosch, J. M., & Valencia-Silva, M. M. (2015) Detection Model of Legally Registered Mafia Firms in Italy. *European Management Review*, 12(1), 23–39. <https://doi.org/10.1111/emre.12039>
- Riccardi, M., & Berlusconi, G. (2016) Measuring organised crime infiltration in legal businesses. In E. U. Savona, M. Riccardi, & G. Berlusconi (Eds.), *Organised Crime in European Businesses*. New York: Routledge.
- Savona, E. U., Riccardi, M., & Berlusconi, G. (2016) *Organised Crime in European Businesses*. New York: Routledge.
- Ticino Notizie. (2020, November 26) Effetto Covid: raddoppiano i tentativi della mafia di acquisire bar e ristoranti. *Ticino Notizie*. Available at: <https://www.ticinonotizie.it/effetto-covid-raddoppiano-i-tentativi-della-mafia-di-acquisire-bar-e-ristoranti/>. Accessed 10 July 2021
- Transcrime. (2013) *Progetto PON sicurezza 2007-2013* (Rapporto metodologico No. Linea 2). Milano: Transcrime.
- Transcrime (Ed.). (2018) *Mapping the risk of serious and organised crime infiltration in Europe - Final report of the MORE project*. Milano: Università Cattolica del Sacro Cuore. Available at: www.transcrime.it/more
- TuBarco. (2020, March 26) Con amenazas, disidencia de las Farc dice que hará cumplir cuarentena en Nariño. *TuBarco Noticias*. Available at: <https://tubarco.news/tubarco-noticias-occidente/tubarco-noticias-narino-tubarco-noticias-occidente/con-amenazas-disidencia-de-las-farc-dice-que-hara-cumplir-cuarentena-en-narino/>. Accessed 10 July 2021

- UNODC. (2020) Research Brief: the impact of COVID-19 on organized crime.
Available at: https://www.unodc.org/documents/data-and-analysis/covid/RB_COVID_organized_crime_july13_web.pdf. Accessed 8 February 2021
- van Duyne, P. C., & van Dijck, M. (2007) Assessing Organised Crime: The Sad State of an Impossible Art. In F. Bovenkerk & M. Levi (Eds.), *The Organized Crime Community: Essays in Honor of Alan A. Block* (pp. 101–124). New York, NY: Springer.
- von Lampe, K. (2004) Measuring Organized Crime: A Critique of Current Approaches. In P. C. van Duyne, M. Jager, K. von Lampe, & J. L. Newell (Eds.), *Threats and Phantoms of Organised Crime, Corruption and Terrorism: Critical European perspectives* (pp. 85–116) Nijmegen: Wolf Legal Publishers.
- von Lampe, K. (2017) Book review: Savona E.U., Riccardi M., Berlusconi G. (eds) (2016). Organised Crime in European Businesses. *Crime Law and Social Change*, 67, 223–228. <https://doi.org/10.1007/s10611-016-9659-x>
- Walsh, N. P. (2020, June 13) Rio cartels go from running drugs to pushing medication - CNN. *CNN*.
<https://edition.cnn.com/2020/06/13/americas/brazil-rio-favela-coronavirus-care/index.html>. Accessed 10 July 2021