

The Use of Predictive Policing Models to Counter Extortion



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Abstract

Extortion is one of the most notorious criminal activities of the different mafias whose negative influence does not only pollute the legal economy, but it also erodes the trust of the social fabric toward justice, the law enforcement and generally toward the state. It mortifies the economic and productive system, the exercise of individual freedoms and the possibility to plan investments throughout the vast territories of the country. The use of extortion practices on behalf of the mafia has changed over time. The original predatory practice assumes an increasingly marginal character in favor of an entrepreneurial one that allows the broadening of the expansionist aims of the mafia consortia from the original territories to new settlements, both national and international. Faced with the ambivalent fact that the extortion activity and the increasingly profitable aid that the Artificial Intelligence (AI) provides in the conception of prediction models for the analysis of criminal phenomena, recent research has experimented with a model to complement the already existing anti-mafia legislation of preventative nature as a tool to enhance the efficiency of the measures to contest the extortion activity through the adoption of a risk estimation model.

Keywords: Extortion racket system; Artificial intelligence; Organized crime; Risk assessment; Prevention; Predatory crimes; Criminal

Introduction

The first documented traces of the presence of extortion in Italy date back to the post-unification period [1]. This phenomenon was described as a market protection and governance service carried out by mafias in favor of entrepreneurs. The relationship with the economy is an identity trait that characterizes the typology of mafia criminal phenomena during their evolution. Even today extortion has not lost that character of alternative social welfare to the one offered by the State, with a further vocation of “entrepreneurial” nature, passing from traditional collection of the bribe to the imposition of products, services, and manpower; to making usurious credit at convenient rates, up to the acquisition of the company in crisis (where the usurious loan is prodromal) thus assuming the connotation of packman strategy. In fact, extortion is increasingly connected to the crime of usury: this combination produces a vicious cycle between the credit offer – extortion victimization – acquisition of assets or of the business [2]. The financial availability and the decision-making speed that characterize the mafia consortia allows them to reach first, before the State”, to “assist” troubled companies, transforming them into activities with mafia capital or infiltrators, taking them over rather than simply profiting from their earnings.

The real peculiarity of mafia action, then, is the ability to be present in the legal sectors to conceal the illicitly accumulated wealth, exercising, on one hand, control over the territory (power syndicate), and on the other hand, weaving relationships of convenience for their own businesses (enterprise syndicate), generating forms of connivance with the so called “gray area” without however, completely abandoning the world of illegality; actually, hybridizing tradition and modernity in a markedly adaptive perspective [3]. To effectively contrast racketeering, prevention strategies based on fiduciary policies must be produced in the different local institutions of the State (intelligence; law enforcement; business representative organizations; anti-racketing associations; judiciary), but new investigative modalities are also necessary. It is in this perspective that the experimentation of a solution takes place, similarly to what has happened for predatory crimes with X Law [4], it has supported an innovative prevention and contrast strategy, with more effective results with regards to extortion crimes and shifting the strategic construct of the control action from a reparatory view of the damage to a probabilistic view of the risk.

The Predictive Model

At the basis of a prediction analysis there is a simple assumption: information from the past is a tool for the simulation of the future and, more in detail, the way in which situations have evolved remain constant, so, patterns in historic data are projected forward in time [5]. Precisely the existence of constants in the predatory model of criminal organizations make it possible to predict where and when the criminal act will take place. The focus of the work has originated from the need to increase the effectiveness of the measures to combat extortion activity. Hence, the adoption of a machine learning prediction model based on the construction of selective alerts capable of interpreting the territorial and economic risk assessment to perform an assistance and support function for law enforcement [6].

Starting from the research results of recent years [7], the analysis carried out uses some constants in the model

- i. Extortion activities are not practiced in all commercial sectors, nor against all companies present in each territory.
- ii. The risk assessment of companies takes into consideration the size of the company, the production sector, the governance, and the company's management.
- iii. The greater the company's technological intensity and competence, the lower its exposure to racketeering.
- iv. The greater the fiduciary texture between entrepreneurs and anti-racketeering associations, the less territorial aggressions by the mafias.
- v. The greater the successes of the judiciary and law enforcement, the lower the concentration of clans in a territory.

First of all, the research has considered the most "attractive" companies subjected to racketeering by observing the various sectors in the past; then, on the basis of a reconstructive analysis of the economic characteristics of the territory, it has estimated the extortion variation and the expertise required considering the inter-sector links through an input-output model; finally, it has taken on some preventive evaluation indexes based on the logic of prediction.

Starting precisely from the experimentation carried out to contrast predatory crimes in urban contexts [8], several steps have been carried out with the aim to structure a database consisting of a series of connected variables:

- i. The geographical and socio-economic territorial context.
- ii. Information on extortion crimes committed in the past according to descriptive macro-parameters (e.g. date of the crime; place of the crime; type of business victimized; objective of the crime; presence or absence

of spy crimes);

- iii. The identification of one or more clusters of crimes located a short distance from each other, each of which has formed a cyclical or recurring pattern.

This information was then connected, obtaining a georeferenced map: this way it was possible to apply each criminal model to the map, thus obtaining information relating to the place and day (future) in which it was more likely that an extortion crime would occur to generate an alert. Finally, to verify the functioning of the prototype and the construction of the risk index, simulations were carried out using an enabling tool, thus creating a prototype: firstly, a digital map of the territory was drawn up of one of the cities examined, using the Geographic information system (GIS); subsequently, it was enriched with structured data within a two-level relational database; lastly, on the basis of the various alerts and the prediction analysis of the evolution of risk in the space, the tool has elaborated specific alerts in which the risk of extortion to the detriment of an economic activity is highly probable [9].

A different approach to the phenomenon, in an ex ante predictive key and not only in ex post contrast, could be useful for pursuing three precise objectives: the elaboration of a prospectus of the evolution of the risk in time and space of the extortion phenomenon; the valuation of the commensurate risk of the territory in question; the processing of two types of alerts of possible future events to the detriment of economic activities useful for prevention, spy crime and extortion risk.

Conclusion

The current configuration of criminal law in Italy, general and special, foresees a two-faced law enforcement system: the criminal code regulates the crime of extortion in art. 629 which, read in conjunction with articles 416 bis and 416 bis. 1, that regulates the crime of mafia association aggravated from the mafia method, regulates the crime in such a way that all the multiform ways of manifesting the crime can be subsumed within the criminal case of the code; the anti-mafia code, D. Lgs. n. 159/2011 and subsequent amendments, most recently amended by L. n. 60/2023, contains ad hoc measures to deal with the phenomenon by expanding the existing law enforcement system. However, the limit of the legislation lies not only in the hiatus that is created between the abstractly configured potential and the applicative moment that does not reflect the expected provisions, but also in the incapacity of the institutionalized anti-mafia and the ad hoc regulatory system predisposed for the judiciary anti-mafia, to efficiently support a social anti-mafia in terms of synergetic collaboration between social actors in order to restore and maintain security.

Given the number of extortion activities that have emerged, the obscure number is certainly very high and therefore worrying. Therefore, it would be necessary: a) to encourage complaints

about the extortion suffered, triggering a “a protection network” for the victim who reports it, accompanying them throughout the procedural process and beyond; b) to interrupt that “reproductive process” for which even if a member is arrested, the other affiliates are ready to do him justice by perpetrating the criminal activity to the detriment of the complainant or his family; c) to implement and screen anti-racketeering associations; d) to monitor new openings of commercial establishments and businesses with a territorial register; e) to adopt a georeferenced database and archive to monitor the activity of criminal organizations in the area; f) to strengthen the risk assessment system, as a preventative tool, by creating inter-institutional trust relationship systems in high-risk areas in order to automatically trigger the complaint following the extortion request.

Not only do the policies to contrast the phenomenon raise the threshold of success, but it is the general mistrust in justice and in the protective function exercised by the State that could be greater, also avoiding the passive acceptance of the criminal status quo, the recourse to alternative welfare guaranteed by criminal organizations which, if it seems advantageous in the short term for those who use it, in the long term, it demonstrates its dysfunctionality in a disruptive way, generating personal awe, general impoverishment, dispossession of the business, contamination of the legal market. The hope is that the key objectives of the modern anti-mafia policies will not remain just a corollary of good intentions.

References

1. Franchetti L, Sonnino S (1877) *La Sicilia nel 1876*, Libro primo. Condizioni Politiche e amministrative, tr. G. Barbèra, Firenze.
2. 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* 35(1): 39-67.
3. Di Gennaro G (2019) Extortion. In: RD Morgan (Edt.), *Sage Encyclopedia of Criminal Psychology*, Sage Publications Inc, Thousand Oaks, CA; cfr. Block A (1983) *East Side-West Side. Organizing Crime in New York 1930-1950*, Transactions Books, New Brunswick, New Jersey, USA.
4. Lombardo E (2019) *Sicurezza 4P. Lo studio alla base del software Xlaw per prevedere e prevenire i crimini*, Mazzanti, Venezia, Italy.
5. Perry WL, McInnis B, Price CC, Smith SC, Hollywood JS (2013) *Predictive Policing. The Role of Crime Forecasting in Law Enforcement Operations*, Rand, Washington (DC), USA.
6. G Di Gennaro, E Lombardo, Marselli R, Spina M, Tolleranza zero o deterrenza selettiva: quali strade intraprendere per rispondere più efficacemente alla domanda di sicurezza. In: G Di Gennaro e R, Marselli (2017) (a cura di), *Criminalità e sicurezza a Napoli. II° Rapporto*, Federico II University Press, Italy, pp. 174-213.
7. Cfr. Di Gennaro G, La Spina A (2010) (a cura di), *I costi dell'illegalità. Camorra ed estorsioni in Campania*, il Mulino, Bologna; Di Gennaro G (2015), *Le estorsioni in Campania. Il controllo dello spazio sociale tra violenza e consenso*, Rubettino, Soveria Mannelli; Aurilia R, Di Gennaro G, La Spina A, Marselli R (2020), *L'economia illegale, Rapporto SVIMEZ, L'economia e la società del mezzogiorno*, Bologna, il Mulino, Italy, pp. 242-247.
8. Di Gennaro G, Lombardo E (2020) *Intelligenza artificiale e politiche di sicurezza urbana: verso quali modelli? Intelligenza Artificiale tra etica e diritti. Prime riflessioni a seguito del libro bianco dell'Unione europea*, Cacucci, Bari, Italy, pp. 665-694.
9. Aurilia R, Di Gennaro G, Lombardo E (2022) *Le nuove dinamiche estorsive in Italia*, manuscript published for the S. Pio Institute of Political Studies, Roma, Italy.



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