

Chapter III – Leniency policies: rationale, expectations and risks

1. Introduction

In recent decades, anti-cartel policies have undergone what some authors call a “leniency revolution”,⁴⁴⁶ an expression used to describe the great changes derived from the diffusion of legal mechanisms which allow the granting of benefits to cartel participants who cooperate with law enforcement authorities and denounce accomplices.⁴⁴⁷

Antitrust leniency programs were formally created in 1978, when the U.S. Department of Justice implemented its first leniency policy, the Corporate Leniency Policy.⁴⁴⁸ Under this program, cartel members who approached authorities to denounce criminal practices before the investigation was opened could be granted immunity from criminal prosecution and administrative penalties. In 1993, the Department of Justice decided to carry out a profound revision of its leniency programme, with the aim of increasing incentives and opportunities for the negotiation of agreements.⁴⁴⁹ The leniency policy was changed to ensure that the first company to come forward and report the existence of the cartel was automati-

446 According to Spagnolo, “The last ten years have witnessed what one could call, with little or no exaggeration, a revolution in competition policy and antitrust enforcement, ‘the leniency revolution’”. See Spagnolo (n 30) 259.

447 Caron Beaton-Wells, ‘Leniency Policies: Revolution or Religion?’ in Caron Beaton-Wells and Christopher Tran (eds), *Anti-cartel enforcement in a contemporary age: leniency policies* (Hart Publishing 2015). Still on the subject of the “leniency revolution”, Caron Beaton-Wells states that “Given their distinctiveness, proliferation and support, the adoption of leniency policies may be described as a ‘revolution’, a conceivably apt description in what has been referred to by enforcers as ‘the war against cartels’” (ibid., 4).

448 Wils, ‘Leniency in Antitrust Enforcement: Theory and Practice’ (n 378) 213.

449 The revisions performed by the U.S. D.O.J. are recognized as a cornerstone in the use of leniency policies in the prosecution of cartels. See Motta and Polo (n 29) 348; Margaret Levenstein and Valerie Y Suslow, ‘Contemporary International Cartels and Developing Countries: Economic Effects and Implications for Competition Policy’ (2004) 71 *Antitrust Law Journal* 801, 804-805.

cally awarded full immunity from penalties.⁴⁵⁰ In addition, all the employees of the company who agreed to cooperate with the investigations would obtain immunity.⁴⁵¹ The revised policy also enabled the use of leniency policies even if the investigation was already underway.⁴⁵²

After the 1993 revision, the average number of leniency applications went from one per year to two per month.⁴⁵³ By the early 2000s, U.S. authorities were already stating that the leniency program was the most important investigative mechanism, responsible for more cartel discoveries than all other mechanisms combined.⁴⁵⁴ The results obtained after the 1993 revisions greatly increased the importance of the leniency program in the U.S. cartel prosecution strategy, leading to the understanding by competition authorities that “leniency programs are the greatest investigative tool ever designed to fight cartels”⁴⁵⁵ and gaining international recognition.⁴⁵⁶ Based on the revision of the leniency program conducted by the U.S. Department of Justice,⁴⁵⁷ various countries established mechanisms to enable full or partial reduction of penalties of cartel members who approached law enforcement authorities to report the offense and cooperate with investigations against former accomplices. In the first decade of the twenty-first century, more than 50 countries had already adopted leniency programs, forming a rather heterogeneous group of countries.⁴⁵⁸

Similar to what happened in the context of anti-cartel enforcement, there has also been, in the last decades, a clear movement in several countries towards expanding the use of leniency policies to investigate so-called

450 According to William E. Kovacic: “The new policy made clear that the first cartel member to seek leniency would receive complete immunity from criminal prosecution if it was truthful in its presentation to the DOJ and co-operated fully with the government’s inquiry”. See Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378) 125.

451 Hammond, ‘Cornerstones of an Effective Cartel Leniency Programme’ (n 31) 10.

452 See O’Brien (n 31).

453 Bruce H Kobayashi, ‘Antitrust, Agency, and Amnesty: An Economic Analysis of the Criminal Enforcement of the Antitrust Laws against Corporations’ (2001) 69 *The George Washington Law Review* 715, 716.

454 Scott D Hammond, ‘Detecting and Deterring Cartel Activity through an Effective Leniency Program’, *International Workshop on Cartels* (DOJ 2000).

455 Hammond, ‘Cornerstones of an Effective Cartel Leniency Programme’ (n 31) 4.

456 Wils, ‘Leniency in Antitrust Enforcement: Theory and Practice’ (n 378) 214.

457 Joan-Ramon Borrell, Juan Luis Jiménez and Carmen García, ‘Evaluating Antitrust Leniency Programs’ (2014) 10 *Journal of Competition Law and Economics* 107, 108.

458 O’Brien (n 31) 37.

“organized crime” and other serious offenses.⁴⁵⁹ In this matter, too, the U.S. experience has played a very influential role, given that the specific characteristics of American criminal procedure – such as the wide discretion that procedural participants have in disposing of criminal cases – allowed cooperation with offenders to become a quite common reality in the U.S. justice system.⁴⁶⁰ The granting of benefits to offenders who expose other perpetrators and provide information and evidence to law enforcement authorities is an established practice, which has strong foundations in the American legal system and is widely used in the prosecution of different forms of crime.⁴⁶¹

In countries integrated into the Continental tradition, the negotiation of leniency agreements with offenders has historically been limited by the traditional structure of criminal procedure, in particular by the principle of compulsory prosecution or legality, which requires prosecutors to file charges whenever there is sufficient evidence of the commitment of a crime, reducing the room for negotiation in criminal proceedings.⁴⁶² Notwithstanding these obstacles, at the end of the twentieth century multiple continental tradition countries had adopted regulations that expressly provided for preferential treatment for cooperating offenders.⁴⁶³

In 1991, Italy passed legislation allowing the granting of benefits to individuals who confessed their crimes and helped public authorities to reconstruct the facts and to hold other members of the criminal organization to account for their crimes.⁴⁶⁴ In Germany, the legislation to combat drug trafficking was revised in 1982 to allow this kind of benefit, and subse-

459 Fyfe and Sheptycki (n 1) 320.

460 Florian Jeßberger notes that “in the United States cooperation with offenders is a part of the daily routine of criminal procedure. According to the author, “Supported by the wide freedom of the procedural participants to dispose of the object and the course of a criminal proceeding, the trade of cooperation in the conviction of third parties for leniency in the own punishment has been for a long time a disseminated practice”. See Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 21-22.

461 Weinstein (n 3) 564 and 569.

462 After analyzing the American experience in the prosecution of corporate crimes, Ana Maria Neira Pena asserts that “the situation in continental countries is very different (...)”. One of the main reasons for this difference is that “the principle of legality prevents prosecutors from not bringing charges when a crime has been committed. Therefore, the power to negotiate agreements is more reduced, at least in theory”. See Neira Pena (n 375) 205.

463 Peter Tak mention the legal scenario of countries such as Italy, Germany, Holland, France and Spain. See Tak (n 4).

464 Musco (n 346) 35.

quent legal reforms expanded the possibility of granting favored treatment to cooperating defendants in the prosecution of other types of crimes.⁴⁶⁵ Over recent decades, the use of cooperation with offenders has become a common mechanism in the prosecution of serious offenses in several European countries.⁴⁶⁶

The recent growth of leniency policies in Brazil has taken place in a context of alignment with foreign legal practices. Reference to international treaties and to the experience of other countries has regularly been employed to support and validate the introduction and development of Brazilian leniency policies.⁴⁶⁷ Foreign experiences, in particular from the United States, are commonly used to demonstrate the usefulness of cooperation with offenders in achieving a more efficient system of justice, especially to overcome problems of impunity in certain fields of criminality.⁴⁶⁸ In this context, the Brazilian development of leniency policies occurred – both in competition law and criminal law – under the clear influence of the American experience, as has also happened in other countries.⁴⁶⁹

This chapter presents a more nuanced portrait of leniency policies, especially in the field of white-collar crime, drawing on a growing body of literature that examines and tests the effects of these policies from various perspectives. In the face of the growing importance of leniency policies in

465 For a description of this evolution, see item IV.3.a.

466 Fyfe and Sheptycki (n 1) 339.

467 For an example in the jurisprudence of the Brazilian Federal Supreme Court, see STF, HC 127483 [2015].

468 On this points, a 2017 report of the Brazilian Federal Public Prosecution Office defended the need of a “new comprehension” of the Brazilian criminal justice, “in order to adjust it to new paradigms, adopted by the influence of the common law systems of the Anglo-Saxon legal order, in which there is no commitment to the principle of compulsory prosecution in the activities of the law enforcement authorities (...)”. See Ministério Público Federal, ‘Estudo Técnico nº 01/2017’ (n 279) 34.

469 Examining the German experience, Klaus Malek asserts critically that the introduction and development of leniency policies in criminal law reflect a wider trend of “americanization” of the German criminal procedure, stating that the example set by the United States is fundamental to validate the cooperation between offenders and enforcement authorities. See Klaus Malek, ‘Abschied von Der Wahrheitssuche’ (2011) StV 559, 566. Recognizing the American influence in the development of leniency policies worldwide, Ann O’Brien states that the United States Department of Justice (DOJ) is the “undisputed market leader of leniency” and that “DOJ prosecutors preached the benefits of leniency, and the members of the bar, the business community and cartel enforcers around the world listened and followed suit”. See O’Brien (n 31) 15.

different countries, an abundance of literature has emerged, which threw light on interesting – and often unnoticed – aspects of these mechanisms. Section III.2 describes the rationale of leniency policies as tools designed to maximize deterrence, analyzing the expectations of increased detection and prevention of organized crime. Section III.3 examines different side effects resulting from leniency policies, such as the risk of an erroneous fact-finding, the negative impact on the level of penalties and the possible strategic exploitation by offenders. Section III.4 closes the chapter analyzing the appropriateness of the ideal of a “leniency revolution”, contrasting it with the critical notion of a “leniency religion”.

2. *The rationale and expectations of leniency policies: optimal deterrence through increased detection and prevention*

At the end of the twentieth century, multiple countries underwent profound reform in their criminal justice system, through changes – in both substantive and procedural law – that sought to give greater effectiveness to the actions of law enforcement authorities in the control of new forms of crimes.⁴⁷⁰ One of the characteristics of this movement is the enlargement of the range of mechanisms at disposal of law enforcement authorities for investigating increasingly sophisticated criminal strategies, in what can be perceived as an inverted reading of the principle of equality of arms.⁴⁷¹ In this context, a clear tendency, both in Europe and globally, was the formulation of mechanisms allowing law enforcement authorities to

470 Describing a movement of “modernization of criminal law”, Winfried Hassemer speaks of “new areas, instruments and functions” assumed by criminal law in the last decades of the 20th century. See Hassemer (n 365) 382.

471 Joachim Vogel notes the dispute regarding the concept of the principle of equality of arms in the German debate of reform of criminal procedure. According to the author, the traditional view demands the improvement of the position of the accused before state organs; an alternative – more recent – view requests the empowerment of enforcement authorities to investigate sophisticated criminal organizations that act without the restrictions normally imposed upon public officials. See Joachim Vogel, ‘Chancen Und Risiken Einer Reform Des Strafrechtlichen Ermittlungsverfahrens’ (2004) 59 *JuristenZeitung* 827, 830. For a harsh criticism of the idea of equality of arms between enforcement authorities and organized crime, see: Edda Weßlau, ‘Waffengleichheit Mit Dem »Organisierten Verbrechen? Zu Den Rechtsstaatlichen Und Bürgerrechtlichen Kosten Eines Anti-OK-Sonderrechtssystems’ (1997) 80 *Kritische Vierteljahresschrift für Gesetzgebung und Rechtswissenschaft (KritV)* 238.

cooperate with offenders to investigate serious crimes.⁴⁷² Such mechanisms received different names in domestic criminal legislations, such as “*Kronzeuge*” in Germany, “*collaboratore della giustizia*” and “*pentito*” in Italy, “*kroongetuige*” in Netherlands, “*supergrass*” in the United Kingdom and “*repenti*” in France.⁴⁷³

Also in the field of competition law, there has recently been a significant increase in the use of cooperation with offenders to enhance the effectiveness of anti-cartel enforcement.⁴⁷⁴ After the successful reform of U.S. Department of Justice’s leniency policy in 1993, the European Commission adopted its first leniency program in 1996 and, soon afterwards, European countries enacted their own leniency regulations.⁴⁷⁵ Nowadays, dozens of countries have introduced recent legislation authorizing law enforcement authorities to cooperate with cartel participants in investigations against other members of anti-competitive practices.⁴⁷⁶

Although there are clearly a number of differences between these mechanisms, which acquire peculiar characteristics according to the specificities of each legal system, their mode of operation follows the same logic: confessed offenders assist law enforcement authorities in the prosecution of offenses committed by other perpetrators in exchange for benefits.⁴⁷⁷ These mechanisms are aimed at investigating wrongdoings committed through joint efforts of several agents and are designed to promote distrust and defection in criminal organizations.⁴⁷⁸ A central element of leniency policies is that they allow a subject, who is himself guilty of a wrongdoing, to assist

472 Fyfe and Sheptycki (n 1) 320.

473 Tak (n 4) 2.

474 For a good description of the so-called “leniency revolution” in antitrust, see: Spagnolo, ‘Leniency and Whistleblowers in Antitrust’ (n 30).

475 Wouter Wils observes the key role played by the American example in the dissemination of leniency policies worldwide. According to the author, the 1996 leniency program of the European Commission

“was clearly inspired by the US Department of Justice’s Corporate Leniency Policy of 1993”. Furthermore, “the leniency programmes in the EU Member States have generally been adopted following the example of the European Commission, and thus indirectly of the US Department of Justice”. See Wils, ‘Leniency in Antitrust Enforcement: Theory and Practice’ (n 378) 214-215.

476 According to Ann O’Brien, over the last decades more than 50 countries have adopted leniency policies to investigate cartels. See O’Brien (n 31) 37.

477 Several authors have noted the similarities between the use of leniency policies in criminal and competition law. See Buccirrossi and Spagnolo (n 29); Acconcia and others (n 29); Buzari (n 12).

478 On the resemblance between the different types of illicit behavior investigated through leniency policies, Reinaldo Diogo Luz and Giancarlo Spagnolo assert

in the prosecution of illegal acts committed by other agents with the objective of gaining legal benefits.⁴⁷⁹

Leniency policies are developed through a relationship of voluntary exchange between offenders and law enforcement authorities.⁴⁸⁰ For both sides involved in the exchange, this relationship is formed with the expectation that the cooperative behavior by one of the parties will be followed by a similar attitude from the other side.⁴⁸¹ The cooperative behavior of the offender does not derive from selflessness, but rather from an interest in achieving certain benefits, which generally consist of either amnesty or a reduction in penalties, but may also take other forms.⁴⁸² The objective of leniency policies is to obtain voluntary cooperation from offenders, leading to situations in which the relationship between defendants and public authorities loses some of its vertical character and acquires properties similar to private exchanges.⁴⁸³

Leniency policies are based on the creation of an incentive system, which allows the offender to perceive a more favorable outcome from cooperating with the investigations than from continuing to participate in the criminal organization. An essential element of this system of incentives is the differential treatment granted to the cooperating offender, when

that: “Cartels, corruption, and many other types of multiagent offenses depend on a certain level of trust among wrongdoers, which is precisely what leniency programs aim to undermine by offering incentives for criminals to betray their partners and cooperate with the authorities”. See Luz and Spagnolo (n 81) 6.

479 Florian Jeßberger calls this the “leniency model” (“Modell Kronzeuge”) and asserts that this model of cooperation between public officials and defendants has some specific characteristics that differentiate it from other cooperative behaviors that exist within a system of law enforcement. See Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 25-32.

480 Klaus Malek, ‘Die Neue Kronzeugenregelung Und Ihre Auswirkungen Auf Die Praxis Der Strafverteidigung’ (2010) StV 200, 203.

481 Lorenz Nicolai Frahm, *Die Allgemeine Kronzeugenregelung: Dogmatische Probleme Und Rechtspraxis Des § 46b StGB* (Duncker & Humblot 2014) 128.

482 JH Crijns, MJ Dubelaar and KM Pitcher, *Collaboration with Justice in the Netherlands, Germany, Italy and Canada* (Universiteit Leiden 2017) 25.

483 Harding, Beaton-Wells and Edwards speak of “a process of business-like negotiation rather than top-down interrogation”. See Christopher Harding, Caron Beaton-Wells and Jennifer Edwards, ‘Leniency and Criminal Sanctions in Anti-Cartel Enforcement: Happily Married or Uneasy Bedfellows?’ in Caron Beaton-Wells and Christopher Tran (eds), *Anti-cartel enforcement in a contemporary age: leniency policies* (Hart Publishing 2015) 253.

compared to other non-cooperative defendants.⁴⁸⁴ Such differentiation consists, on one hand, in offering advantages to offenders who choose to cooperate and, on the other hand, in the strict penalization of those who choose not to.⁴⁸⁵ Through leniency policies, public authorities seek to place offenders in the situation known as the prisoner's dilemma, in which the cooperative behavior of an offender, while bringing benefits to the co-operator, is detrimental to the other accused.⁴⁸⁶

The cooperation of defendants obtained through leniency policies is, therefore, based primarily on utilitarian calculations, aimed at determining what types of benefits can be obtained through the use of this mechanism.⁴⁸⁷ There is no expectation of actual repentance from the offender regarding the acts committed and to the damages caused.⁴⁸⁸ What is required is the adoption of a cooperative stance – mainly through the provision of evidence and information – that effectively contributes to investigations of crimes committed by third parties.⁴⁸⁹

Also from the point of view of public authorities, the utilitarian nature of leniency policies is clear. From this perspective, the granting of benefits to cooperating offenders is strictly based on criminal policy considerations and practical reasons.⁴⁹⁰ Leniency policies are instruments for achieving a specific objective: to assist law enforcement authorities in controlling certain crimes, in particular organized crime.⁴⁹¹ The focus of leniency policies is to increase efficiency in the control of criminal structures in modern so-

484 Jeßberger (n 2) 1161-1162.

485 According to Ann O'Brien, it is a "‘carrot and stick’ enforcement strategy". See O'Brien (n 31) 16.

486 Christopher R Leslie, 'Antitrust Amnesty, Game Theory, and Cartel Stability' (2006) 31 *The Journal of Corporation Law* 453, 455-457.

487 Colombo (n 383).

488 Malek, 'Die Neue Kronzeugenregelung Und Ihre Auswirkungen Auf Die Praxis Der Strafverteidigung' (n 481) 201.

489 Stefanie Mehrens asserts that the differential treatment obtained under leniency policies stems from the defendant's capacity to effectively contribute to the investigation of crimes committed by other agents, and not from the reduction of the damages caused by his own acts. See Mehrens (n 11) 33-35.

490 Musco (n 346) 38.

491 Crijns, Dubelaar and Pitcher highlight this aspect, asserting that: "collaboration with justice can be viewed as an instrument which serves a specific purpose, i.e. helping to combat organised and other forms of crime". See Crijns, Dubelaar and Pitcher (n 483) 29.

ciety,⁴⁹² preventing the impunity that derives from the ineffectiveness of traditional investigative tools in certain fields of criminality.⁴⁹³

Thus, the employment of leniency policies is justified, for offenders and public authorities alike, insofar as it allows the achievement of better results within the criminal proceeding. From the point of view of the offender, leniency policies enable the creation of more favorable legal situations, especially by reducing or extinguishing penalties. On the part of the authorities, the benefits associated with the use of leniency policies are normally divided into two categories.⁴⁹⁴ Firstly, such policies increase the state's capacity to collect relevant information and evidence to solve serious crimes and prosecute offenders. Secondly, such mechanisms play a role in the prevention of criminal conduct, devising obstacles that hinder or prevent the execution of criminal strategies.

a. Detection of crimes and gathering of evidence

A central objective sought by leniency policies is the reduction of the informational and evidentiary deficit faced by law enforcement authorities when prosecuting certain types of criminal behavior.⁴⁹⁵ In view of the challenges imposed by new forms of wrongdoing, in particular organized crime, these mechanisms seek to restore the state's capacity to detect offenses and identify offenders.⁴⁹⁶ In this context, leniency policies appear as

492 Jens Peglau, 'Überlegungen Zur Schaffung Neuer „Kronzeugenregelungen“' (2001) 34 *Zeitschrift für Rechtspolitik* 103, 105.

493 Frahm (n 482) 185-186.

494 Different authors analyze these two categories separately. Ellen Schlüchter speaks of "direct effects" and "indirect effects" of leniency policies. See Ellen Schlüchter, 'Erweiterte Kronzeugenregelung?' (1997) 30 *Zeitschrift für Rechtspolitik* 65, 68. Motta and Polo draw a distinction between the effects of a leniency policy on desistance and on deterrence. Massimo Motta and Michele Polo, 'Leniency programs and cartel prosecution. On a similar note, Wouter Wils differentiate between detection and deterrence. See Wils, 'Leniency in Antitrust Enforcement: Theory and Practice' (n 378) 227-229.

495 Jeßberger (n 1) 27-29.

496 Defending the use of cooperating defendants in German criminal law, Ellen Schlüchter argues that new forms of criminal structures – specially related to terrorism and organized crime – create situations of emergency that threaten the rule of law, requiring the development of effective answers. See Schlüchter (n 495) 71. On a similar vein, regarding the Italian experience, see Musco (n 346) 38.

tools employed to overcome investigative difficulties arising from the commitment of serious crimes through hermetic structures and complex conspiracies,⁴⁹⁷ which plan and execute criminal strategies using active techniques of concealment and destruction of evidence.⁴⁹⁸

In order to obtain information and evidence about crimes characterized by high levels of professionalism, there are essentially two paths that law enforcement authorities may follow.⁴⁹⁹ On the one hand, they may develop their own investigative tools, such as wiretapping or undercover agents. On the other, they may resort to the cooperation of private agents, whether individuals or corporations, with access to the elements necessary for conducting an effective prosecution.

Leniency policies fall into the latter category and exploit a characteristic of criminal organizations that allows state authorities to obtain information and evidence directly from offenders. The formation of criminal organizations, while enabling the commission of more serious and sophisticated crimes, also requires coordination of activities between multiple individuals.⁵⁰⁰ Therefore, organized criminal activities create situations where each participant has, to a certain degree, information and evidence that is useful for the prosecution of other offenders.⁵⁰¹ In criminal organizations, the offender perceives their alliance with co-conspirators as a means to illegally gain financial advantages; leniency policies enable the offender to understand cooperation with public authorities as a means of obtaining legal benefits, in particular immunity from penalties.⁵⁰²

497 Frahm (n 482) 31.

498 Harding, Beaton-Wells and Edwards (n 484) 358.

499 Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 19-20.

500 Paolo Buccirossi and Giancarlo Spagnolo notes that organized illegal transactions demand coordinated action between different agents and bring about situations prone to opportunistic behavior: “Since illegal transactions involve at least two parties and require trust among them—their potential opportunism cannot be limited by court-enforced contracts—one way law enforcement agencies traditionally fight them is undermining trust by shaping incentives to play one party against the other(s): ensuring that they find themselves in a situation as close as possible to a Prisoner’s Dilemma. Law enforcers do this by awarding leniency— typically a reduction or cancellation of legal sanctions accompanied by protection from retaliation and related benefits—to wrongdoers that self-report helping to convict ‘the rest of the gang’”. See Buccirossi and Spagnolo (n 29) 1282.

501 Spagnolo (n 30) 262.

502 Hoyer (n 442) 235.

Proximity to the criminal conduct gives the offender privileged knowledge about it,⁵⁰³ which could not be easily obtained by other investigative mechanisms. The use of this insider knowledge gains special significance in situations where criminal activities cause serious damage to society and are carried out in a sophisticated manner, preventing effective prosecution through traditional investigative tools.⁵⁰⁴ The commission of crimes by means of organized structures can create scenarios in which law enforcement authorities have enormous difficulty in ensuring the effective enforcement of criminal standards.⁵⁰⁵ In this context, the granting of benefits to offenders who cooperate with the investigations is a necessary, albeit extreme, measure for the collection of evidence about certain types of criminal conduct.⁵⁰⁶

In hierarchical criminal structures, obtaining information from an internal source is often essential for imposing criminal liability upon the leaders of the organization.⁵⁰⁷ In the structures of contemporary society, offenses are often committed within organizations, with several individuals contributing – at different levels and with varying degrees of control – to the criminal strategy.⁵⁰⁸ Given the internal division of functions at various levels, it is extremely difficult to link the offense to the main beneficiaries of the crime.⁵⁰⁹ Cooperation with offenders enables law enforcement authorities to understand the structure of the criminal organization and to obtain, from an internal source, the evidence needed to hold its leaders accountable.⁵¹⁰ In large-scale investigations, the use of cooperation mechan-

503 Jeßberger, 'Nulla Poena Quamvis in Culpa: Ammerkungen Zur Kronzeugenregelung in § 46StGB' (n 2) 1164.

504 Schlüchter (n 495) 69-71.

505 In German criminal law, Andreas Hoyer has famously called these situations "investigative emergencies" ("*Ermittlungsnotstand*"). See Hoyer (n 442) 235-240.

506 Jung (n 442) 42.

507 Acconcia and others (n 29) 1122.

508 Joachim Vogel cites three fields of criminality in which the problem of determining individual criminal responsibility arises with particular force: "economic and environmental crime which is typically committed within the framework of companies; organized crime which is committed within the framework of criminal organisations; and last but not least «state crime» which is committed within the framework of governments, armies, police bodies, bureaucracies etc". See Joachim Vogel, 'How to Determine Individual Criminal Responsibility in Systemic Contexts: Twelve Models' (2002) *Cahiers de Défense Sociale* 151, 151.

509 Colombo (n 383) 511.

510 Tak (n 4) 2.

isms may lead to the imposition of liability on individuals who seemed distant from the conduct originally investigated.⁵¹¹

In the field of white-collar criminality, where the simultaneous presence of strong investigative obstacles and potential damages creates a high dark figure,⁵¹² the use of leniency policies can contribute decisively to effective prosecution.⁵¹³ The investigation of cartels and corruption networks is particularly problematic, since in both situations the damages caused by the crimes are diffuse and rarely felt by individuals.⁵¹⁴ Unlike other offenses where the identification of victim and the assessment of damages are obvious, these offenses are structured on offender-offender relationships (“Täter-Täter-Beziehungen”),⁵¹⁵ which generally do not leave any detectable traces. In addition, such illegal behavior is usually committed within sophisticated corporate organizations and camouflaged within a large group of ordinary and legitimate business acts.⁵¹⁶

The combination of these characteristics leads to a scenario where the costs of investigating corruption networks and cartels are quite high when compared to other offenses.⁵¹⁷ The absence of obvious criminal behavior, the fact that the evidence of the offense remains in the hands of the perpetrators and the employment of organizational routines that mask the illegal strategy all hinder the efforts of law enforcement authorities.⁵¹⁸

Reactive investigative mechanisms, generally used in the investigation of traditional forms of crimes, are rarely effective in the prosecution of these offenses. In the prosecution of cartels, leniency policies are an essential source of information for antitrust authorities regarding the existence of anticompetitive conspiracies, since the other two options – the monitoring of markets and obtaining information from third parties – are of little

511 Letizia Paoli, ‘Mafia and Organised Crime in Italy: The Unacknowledged Successes of Law Enforcement’ (2007) 30 *West European Politics* 854, 863.

512 Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 305.

513 For a strong defense of the use of cooperating defendants in the investigation of economic crimes, see: Buzari (n 12) 112-114. According to the author, „this field of criminality is known for the notorious huge dark figure“; furthermore, individuals responsible for these wrongdoings, are distinguishedly suitable for becoming cooperating defendants“, due to their rational behavior.

514 Lindemann (n 17) 127.

515 Lindner (n 368) 67.

516 Katz (n 367) 436

517 For a more detailed analysis of these issues, see section II.3. Similarly, Martín (n 23).

518 Shapiro (n 366) 1.

avail.⁵¹⁹ While market monitoring may indeed reveal suspicious corporate moves, it is generally insufficient to provide a firm basis for the implementation of more severe investigative measures, given that such moves may stem from a variety of causes other than the formation of a cartel.⁵²⁰ Complaints brought by third parties – customers and competitors harmed by the cartel – often mistake legal for illegal practices and present little information capable of clearly establishing the existence of an anticompetitive collusion. Corruption networks arise, likewise, from closed conspiracies, which benefit all the participants with knowledge of the crimes committed, while trying to avoid the existence of disinterested witnesses and written evidence.⁵²¹

In this framework, characterized by enormous difficulty in detecting the damages caused by corruption schemes and cartels and in identifying those responsible for the offenses,⁵²² the introduction of leniency policies establishes a new tool for accessing information and evidence that may be extremely relevant. With the information and knowledge provided by the co-operator, all the sophistication employed to conceal the crimes may suddenly become ineffective. In many cases, cooperation with offenders enables law enforcement authorities to understand the functioning of criminal organizations, identifying hitherto unsuspecting operations, the role of each agent involved and the existence of preparatory and subsequent offenses.⁵²³

b. Prevention of illegal activities

In addition to enhancing the capacity of law enforcement authorities to detect wrongdoing, leniency policies also play a role in the prevention of

519 Wouter PJ Wils, 'The Use of Leniency in EU Cartel Enforcement: An Assessment after Twenty Years' (2016) 39 *World Competition: Law and Economics Review* 327.

520 For a good examination of the difficulties of *ex officio* investigations in anti-cartel enforcement, but defending their importance, see Hans W Friederiszick and Frank P Maier-Rigaud, 'Triggering Inspections Ex Officio: Moving beyond a Passive EU Cartel Policy' (2008) 4 *Journal of Competition Law and Economics* 89.

521 Lejeune (n 12) 87-88. Similarly: Nagel (n 341) 33.

522 Greco and Leite points out that evidentiary challenges constitute a "constant problem in the prosecution of corporate and state wrongdoing". See Greco and Leite (n 17) 290.

523 Colombo (n 383) 511.

illegal transactions, through the creation of disincentives and expansion of inherent obstacles in criminal organizations and cartels. Criminal organizations are collaborative endeavors developed through the coordinated action of multiple offenders who need to trust each other.⁵²⁴ In this respect, such organizations resemble legitimate joint ventures and face the same challenges to cooperation: how to create rules and enforcement mechanisms for the development of productive and stable relationships?⁵²⁵

However, since it is not possible to draw on the justice system to solve internal disputes, these organizations have an inherent problem of enforcement of the illegal transactions made between offenders.⁵²⁶ Thus, criminal organizations create numerous occasions for opportunistic behavior, which can only be controlled through internal mechanisms.⁵²⁷ This situation is especially problematic because a breach of an illegal transaction can ensure great benefits for the cheating offender. In corruption, for example, it is possible that the agent refuses to fulfill his or her part of the illicit deal after receiving their illegal benefit.⁵²⁸ Likewise, the breach of a cartel agreement makes it possible for a company to benefit from higher market prices, while at the same time increasing its market share, by charging below the cartel price.

524 Maria Bigoni and others, ‘Trust, Leniency, and Deterrence’ (2015) 31 *Journal of Law, Economics, and Organization* 663, 663-664.

525 Christopher R Leslie, ‘Trust, Distrust and Antitrust’ (2004) 82 *Texas Law Review* 515, 546.

526 Andreas Stephan and Ali Nikpay, ‘Leniency Decision-Making from a Corporate Perspective: Complex Realities’ in Caron Beaton-Wells and Christopher Tran (eds), *Anti-Cartel Enforcement in a Contemporary Age: Leniency Policies* (Hart Publishing 2015).

527 Michele Polo, ‘Internal Cohesion and Competition among Criminal Organisations’ in Gianluca Fiorentini and Sam Peltzman (eds), *The Economics of Organized Crime* (Cambridge University Press 1995).

528 Giancarlo Spagnolo highlights that different organized illegal activities, such as corruption and cartels, share a common feature that “cooperation among several agents is required to perform the illegal activity, so problems of free-riding, holdup, moral hazard in teams, and opportunism in general become relevant: each individual wrongdoer could “run away with the money” and must be prevented from doing it. This “governance problem” cannot be solved in standard ways in illegal organizations because—to curb opportunism of its individual members and ensure internal cooperation—these cannot rely on explicit contracts enforced by the legal system, as do legal organizations”. See Spagnolo (n 30) 261.

This creates a scenario prone to the use of violence as a way of ensuring that members of the criminal organization fulfill their obligations.⁵²⁹ In many situations, however, resorting to violence as a mechanism to guarantee the fulfillment of illegal transactions is not feasible. In addition to being costly, violence often draws the attention of public authorities and jeopardizes the reliability of the illicit transactions.⁵³⁰ In the context of white-collar crime – in which the illegal activities occur within legitimate business structures – aversion to such methods tends to be even greater. For this reason, trust is a central element to the formation and maintenance of criminal organizations,⁵³¹ especially in the field of economic and corporate crime.⁵³² It is this mutual confidence that other participants of the illicit enterprise will fulfill their obligations that makes the development of criminal strategies possible, even when they involve high risks for their members.⁵³³

In this context, a central expectation regarding the use of leniency policies is an increase in distrust among members of the criminal organization.⁵³⁴ By enhancing instability, leniency policies seek to indirectly inhibit the formation and maintenance of criminal organizations. Leniency pol-

529 Examining the presence of the Italian mafia in legitimate industries, Gambetta and Reuter argue that “the mafia solves a problem of potential cartels. (...) Its comparative advantage is likely to be in organising cartel agreements for large number industries, as well as making cartels more stable (...) Moreover, the mafia has a unique asset in this capacity, namely its reputation for effective execution of threats of violence; this creates a reputational barrier to entry”. See Diego Gambetta and Peter Reuter, ‘Conspiracy among the Many: The Mafia in Legitimate Industries’ in Gianluca Fiorentini and Sam Peltzman (eds), *The Economics of Organised Crime* (Cambridge University Press 1995).

530 JD Jaspers, ‘Managing Cartels: How Cartel Participants Create Stability in the Absence of Law’ (2017) 23 *European Journal on Criminal Policy and Research* 319.

531 For a detailed analysis of the concept and role of trust in criminal organizations, see Klaus von Lampe and Per Ole Johansen, ‘Organized Crime and Trust: On the Conceptualization and Empirical Relevance of Trust in the Context of Criminal Networks’ (2004) 6 *Global Crime* 159, 176-177. According to the authors, “trust is an empirically and theoretically significant variable for understanding organized crime, but it is a multifaceted phenomenon which stands in the way of easy explanations.”

532 According to Leslie: “Cartels are simply another type of business relationship, albeit an illegal one. Like more traditional business relationships, cartels depend on trust”. See Leslie (n 526) 547.

533 Gambetta and Reuter (n 530) 117.

534 Strongly defending the need to employ cooperating defendants in the investigation of government corruption, Stefanie Lejeune asserts that “the use of lenien-

icies create a number of advantages for members of criminal organizations that were previously unattainable, distorting the balance between the expected gains from the illegal activity and the benefits received through opportunistic behavior against the interests of the organization.⁵³⁵

Leniency policies thus generate a new structure of incentives that intensifies conflicts naturally present in criminal organizations.⁵³⁶ In addition to the inherent problems of enforcing illegal transactions, these organizations start to face the constant possibility that one of their members will abandon the illicit enterprise to denounce others and obtain leniency benefits. By heightening the instability of criminal organizations, leniency policies increase the private costs incurred by members of a criminal organization and make the maintenance of illegal schemes even more costly. With the introduction of legal possibilities for cooperation with enforcement authorities, participants have to deal with the permanent option of being rewarded for betraying the organization and the constant risk of someone else doing it first.

For this reason, leniency policies have also an important role in the prevention of illegal activities, and not only in the detection of wrongdoings.⁵³⁷ Faced with greater risk of opportunistic behavior by their accomplices, a potential offender may simply decide not to enter a criminal organization to avoid being denounced by another member.⁵³⁸ On this point, leniency policies are in line with contemporary trends in the prosecution of corporate criminality, which seek to prevent illegal practices before they are committed, and not just punish them after they occur.⁵³⁹ In leniency policies, the goal of prevention is achieved through the erosion of an essential element for the practice of organized crimes: trust among offenders. In this manner, these policies can be seen as part of a wider initiative to re-

cy policies is in cases of corruption indispensable, in order to dismantle criminal interconnections and to create the necessary incentives for those individuals willing to cooperate with the law enforcement official". See Lejeune (n 12) 88.

535 Harrington Jr. (n 29) 217.

536 Antonio Acconcia and others, 'Accomplice Witnesses and Organized Crime: Theory and Evidence from Italy' (2014) 116 *Scandinavian Journal of Economics* 1116, 1118.

537 According to Ellen Schlüchter, this preventive effect of leniency policies tends to be underestimated. See Schlüchter (n 495) 68.

538 Leslie (n 526) 552.

539 For an interesting description of these trends, see Hefendehl, 'Außerstrafrechtliche Und Strafrechtliche Instrumentarien Zur Eindämmung Der Wirtschaftskriminalität' (n 12) 828-838.

3. Principal-agent relationships, information asymmetry and the risks of leniency policies

duce corporate criminality through the early elimination of certain conditions favoring illegal behavior.⁵⁴⁰

3. *Principal-agent relationships, information asymmetry and the risks of leniency policies*

The spread of leniency policies across the globe has been accompanied by clear advocacy efforts, promoted by enforcement agencies and disseminated through international channels. A central element in the recent development of leniency policies was the strong support given by multilateral organizations, which can be clearly perceived in both competition and criminal law. In the field of anti-cartel enforcement, the introduction of leniency policies is strongly supported by organizations such as the Organization for Economic Cooperation and Development (OECD),⁵⁴¹ the International Competition Network (ICN)⁵⁴² and the United Nations Conference on Trade and Development (UNCTAD).⁵⁴³ In the realm of criminal prosecution, the United Nations Convention against Transnational Organized Crime, signed in Palermo in 2000, recommends that signatory States

540 Other examples of this wider trend can be seen in the legal requirements regarding the development of compliance programs and systems of corporate governance. For a critical view of these mechanisms, see Roland Hefendehl, 'Corporate Governance Und Business Ethics: Scheinberuhigung Oder Alternativen Bei Der Bekämpfung Der Wirtschaftskriminalität?' (2016) 61 *JuristenZeitung* 119.

541 Regarding the antitrust leniency programs adopted by various jurisdictions, the OCDE understands: "The programs uncover conspiracies that would otherwise go undetected. They elicit confessions, direct evidence about other participants, and leads that investigators can follow for other evidence too. The evidence is obtained more quickly, and at lower direct cost, compared to other methods of investigation, leading to prompt and efficient resolution of cases". See OECD, 'Fighting Hard-Core Cartels: Harm, Effective Sanctions and Leniency Programmes' (2002) 11.

542 For the description of the benefits associated with the introduction of leniency policies, see ICN, 'Anti-Cartel Enforcement Manual' (2014) 4-5.

543 On this subject, the UNCTAD Conference states that "(...) the most effective tool today for detecting cartels and obtaining the relevant evidence is leniency programmes". See UNCTAD, 'The Use of Leniency Programmes as a Tool for the Enforcement of Competition Law against Hardcore Cartels in Developing Countries', *Sixth United Nations conference to review all aspects of the set of multilaterally agreed equitable principles and rules for the control of restrictive business practices* (2010) 3.

offer benefits, such as the reduction of penalties and even full immunity, to offenders who cooperate with investigations in the prosecution of crimes committed by criminal organizations.⁵⁴⁴ The United Nations Convention against Corruption, signed in 2003 in Mérida, included a similar recommendation regarding the investigation of offenses related to public sector corruption.⁵⁴⁵

This advocacy effort relies heavily on the results achieved with the use of cooperating defendants. Leniency policies create incentives for members of criminal organizations to come forward, denounce their co-conspirators and present relevant material. These mechanisms allow public authorities to obtain information and evidence from an internal source of the criminal organization, reducing the costs of investigations and accelerating their pace. The introduction of these policies in a jurisdiction is often followed by a boom in the number of investigations opened, convictions achieved and penalties imposed.⁵⁴⁶ Given these tangible effects, leniency policies are emphatically defended by authorities responsible for their implementation as essential tools for guaranteeing an effective prosecution system, particularly in situations where the obstacles to robust evidence collection are high and the damage caused by the investigated conduct is significant.⁵⁴⁷ The tangible results achieved with the use of cooperating defendants become a source of institutional reputation and are used to promote the legal innovations brought by the introduction of leniency policies.⁵⁴⁸

544 UNODC, ‘United Nations Convention against Transnational Organized Crime and Protocols Thereto’. art. 26.

545 United Nations Convention against Corruption 2004. art. 37.

546 Regarding the investigate boom brought by leniency policies in the American and European anti-cartel enforcement, see Marvão and Spagnolo (n 32). According to the authors, “A yearly analysis of leniency applications in the European Union and the United States clearly shows that the number of cartels reported under a leniency policy and the number of individual leniency applications have both increased dramatically in recent years” (ibid., 59). Describing the enormous growth of the Mafia-related investigations after the expansion of the use of cooperating defendants in the Italian experience, see Musco (n 346) 35-36. For a description of the Brazilian experience in the investigation of corruption networks, see item II.4.

547 As occurs in the prosecution of corruption networks and cartels. On the subject, see II.3.

548 Examining the effects prompted by the 1993 revision of the U.S. Department of Justice’s Corporate Leniency Policy, William Kovacic notes that: “The DOJ placed a large and risky wager on a bold policy innovation, and it paid off handsomely. Unimaginably large fines poured into the Treasury, and a long queue of foreign antitrust officials approached the Department to learn how to do it

Over recent years a mounting body of literature has arisen to examine, test and question the effectiveness discourse disseminated by enforcement agencies. Particularly in the field of anti-cartel enforcement, where the traces of the ‘leniency revolution’ are very clear and a large data set is available, a wide range of research has investigated the use of cooperating defendants from different perspectives, going beyond the simple statistics regarding the increase in convictions and penalties. Econometric and empirical studies sought to give a more comprehensive understanding of the impact of leniency policies on general deterrence and on the incentives created both for wrongdoers and enforcement agencies. Albeit confirming the assumption that leniency policies can bring important positive results, these studies have also raised awareness of various side effects and limitations, painting a much more complex picture than that commonly portrayed by enforcement authorities.

Based on this recent literature, this section examines risks that are inherent to the structure of leniency policies. Leniency policies transfer part of the state’s prosecution activities – especially those related to the collection of information and evidence – from public authorities to cooperating defendants.⁵⁴⁹ Leniency policies create a scenario in which an accused is both the subject and the object of state prosecution.⁵⁵⁰ As the subject of the prosecution, the collaborator collects and supplies law enforcement authorities with elements that will be useful in holding other offenders liable. The material provided by the cooperator relates to wrongful conduct committed by third parties, which are not identical to the crimes the cooperator has committed.⁵⁵¹

By transferring part of the investigation activities to private agents (the offenders), leniency policies engender a form of principal-agent relationship.⁵⁵² In such relationships, a party – called the “agent” – performs, in

themselves. In light of these results, one can understand why the DOJ and other competition agencies might resist suggestions that leniency regimes require a serious rethink or major adjustments”. See Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378) 192.

549 Centonze (n 1) 44. For a comprehensive view of the “privatization” movement in the German investigative procedure, see Stoffer (n 23). For a critical view, especially in regard to the prosecution of economic crimes, see Hefendehl, ‘Außerstrafrechtliche Und Strafrechtliche Instrumentarien Zur Eindämmung Der Wirtschaftskriminalität’ (n 12) 846.

550 Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 26.

551 Mehrens (n 11) 29.

552 Centonze (n 1) 44-45.

exchange for some kind of payment, activities to obtain a result in favor of another party – called the “principal”.⁵⁵³ As the principal has limited information about the agent’s activities and difficulties in monitoring his efforts, multiple opportunities arise for the agent to obtain excessive benefits, thus harming the principal.⁵⁵⁴ In leniency policies, the principal-agent relationship is clear: offenders agree, in exchange for certain benefits, to cooperate with law enforcement authorities, which have serious limitations in assessing the offenders’ level of effort. Two main concerns arise in this scenario.

Firstly, there is a structural asymmetry of information that puts law enforcement authorities at a disadvantage and benefits the offenders, since they have detailed knowledge about the illegal activities that they may or may not choose to share with authorities. Therefore, as in other fiduciary relationships, the cooperative endeavor devised by leniency policies is subject to risks of falsification, embellishment and omission of the information held by the cooperators.⁵⁵⁵

The second concern is that law enforcement authorities and cooperating offenders clearly pursue, through leniency policies, different goals.⁵⁵⁶ While public authorities seek to maximize the effectiveness of prosecution, it is by no means to be expected that the cooperating offender genuinely shares this goal. Cooperating offenders are motivated by utilitarian reasons⁵⁵⁷ and genuine repentance is not an essential element for resorting to leniency policies.⁵⁵⁸ Once they decide to leave the criminal organization and cooperate with the investigations, offenders will act strategically to maximize their leniency benefits and to minimize the agreement’s collateral damages.⁵⁵⁹

Given the different objectives and informational asymmetry between law enforcement authorities and offenders, cooperating defendants may

553 Steven Shavell, ‘Risk Sharing and Incentives in the Principal and Agent Relationship’ (1979) 10 *The Bell Journal of Economics* 55, 55.

554 Robert Cooter and Bradley J Freedman, ‘The Fiduciary Relationship: Its Economic Character and Legal Consequences’ (1991) 66 *New York University Law Review*, 1046-1047.

555 Shapiro (n 366) 350-351.

556 Centonze (n 1) 44-45.

557 Colombo (n 383) 511.

558 Malek, ‘Die Neue Kronzeugenregelung Und Ihre Auswirkungen Auf Die Praxis Der Strafverteidigung’ (n 481) 201.

559 For a detailed analysis of this issue, see Harding, Beaton-Wells and Edwards (n 484) 357-365.

adopt several behaviors that can seriously undermine the legitimate goals pursued by leniency policies. Leniency policies aim to increase the effectiveness of law enforcement against specific forms of criminality, either by detecting criminal activities and gathering relevant material for the prosecution of co-conspirators, or by enhancing distrust and instability among criminal organizations. Such goals are achieved by an incentive system designed to motivate agents involved in collective illegal transactions to report their accomplices, in exchange for immunity or penalty reduction. However, as with any incentive system, leniency policies may lead to serious counterproductive outcomes when not correctly designed.⁵⁶⁰ The following items examine in more detail some of the risks associated with the introduction of these policies.

a. Misrepresentation of facts: under- and over-cooperation

An initial risk arises from the difficulty faced by law enforcement authorities in confirming the information presented by the offender.⁵⁶¹ The offender invariably has more knowledge about the investigated facts than the public authorities. Although this informational asymmetry is the central reason for the use of leniency policies, it also limits the ability of public authorities to determine the quality of the information provided by the offender and to verify their degree of commitment to the investigations.⁵⁶² Offenders may misuse the informational asymmetry to select the evidence shared so as to reduce the negative consequences of the confessed crimes in other fields,⁵⁶³ such as civil damages actions. Selective cooperation can also be used to target investigations against some offenders while protecting

⁵⁶⁰ Buccirosi and Spagnolo (n 29) 1296.

⁵⁶¹ The lack of credibility of the narrative presented by the cooperator and the difficulty in determining its accuracy is a recurrent subject in the German literature regarding the use of leniency policies. See Hassemer (n 11) 552; Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 127-130; Jung (n 442) 40-41.

⁵⁶² Florian Jeßberger speaks of a “paradox” in the use leniency policies: on one side, the proximity of the cooperating defendant to the illegal practices is what guarantees access to vital information and evidence; on the other, this proximity engenders various possibilities for the manipulation and distortion in the reconstruction of facts. See Jeßberger, ‘Nulla Poena Quamvis in Culpa: Ammerkungen Zur Kronzeugenregelung in § 46StGB’ (n 2) 1164.

⁵⁶³ Kloub (n 145) 7.

others.⁵⁶⁴ At the same time, given the great benefits offered by leniency policies, there is also a risk that the cooperator will present elements of little value for the investigation⁵⁶⁵ or even offer false reports.⁵⁶⁶

As occurs in other principal-agent situations, the relationship between law enforcement authorities and cooperating offenders is highly unbalanced, with the offender holding a high degree of informational control over the facts that the authorities seek to discover or understand.⁵⁶⁷ Given that criminal organizations typically employ sophisticated methods to destroy and conceal evidence, the intelligence held by the offender is normally not accessible to law enforcement authorities through other methods. This creates a scenario of strong opportunities for deception, in which the offenders have incentives to exploit – consciously or unconsciously – the ignorance of the authority in order to maximize the leniency benefits.

In addition to deciding whether or not to cooperate, offenders also have to choose what information and evidence they will share with the authorities.⁵⁶⁸ Therefore, although leniency policies always require cooperation with the investigations, the degree and quality of the assistance provided by offenders may vary widely. An erroneous finding of facts can arise either from a situation of under-cooperation – in which there is a partial omission of the information and evidence held by the offender – or of over-cooperation – in which the reported facts are exaggerated. Leniency policies create, in certain circumstances, incentives for excessive reporting and, in others, incentives for incomplete reporting.⁵⁶⁹

Under-cooperation can clearly minimize the costs for the offender. Given the exposure to other forms of liability, including civil actions, the offender has no interest in revealing the illegal activities, or their participa-

564 Dell’Osso (n 373) 205.

565 In this regard, Forrester and Berghe point out that the incentive system designed by leniency policies encourage collaborators to include, in their reports, the largest possible number of elements, though marginal, in order to maximize the benefits obtained. See Ian S Forrester and Pascal Berghe, ‘Leniency: The Poisoned Chalice or the Pot at the End of the Rainbow?’ in Caron Beaton-Wells and Christopher Tran (eds), *Anti-Cartel Enforcement in a Contemporary Age: Leniency Policies* (Hart Publishing 2015) 247-248.

566 Centonze (n 1) 58.

567 Shapiro (n 366) 348.

568 Harding, Beaton-Wells and Edwards (n 484) 358-359.

569 For the incentives of under-cooperation, see: Jeßberger, ‘Nulla Poena Quamvis in Culpa: Ammerkungen Zur Kronzeugenregelung in § 46StGB’ (n 2) 1164; Spagnolo (n 30) 295. For the incentives of over-cooperation, see: Forrester and Berghe (n 566); and Centonze (n 1) 58.

tion in them, completely.⁵⁷⁰ In this scenario, it is attractive for the offender to provide only partial and selective information, albeit sufficient to secure the desired benefit, while destroying or concealing evidences that they do not wish to share.⁵⁷¹ Given that authorities do not have prior knowledge of the scope and reach of the reported offense, the cooperator may act strategically within the framework of the leniency policy, withholding as much information as possible so as to obtain maximum benefits with minimal possible negative outcomes.⁵⁷²

An inaccurate reconstitution of the facts can also result from a situation of over-collaboration. Given the incentive structure created by leniency policies, there is a constant risk of obtaining irrelevant information or even untrue reports.⁵⁷³ In order to maximize the benefits obtained through leniency policies, cooperating defendants are prone to exaggerate their account of the reported facts, including ancillary aspects of the conduct and painting grey situations in black tones.⁵⁷⁴ It is common that leniency policies establish a direct relation between the breadth of the cooperation provided by the defendant and the benefits granted to him or her.⁵⁷⁵ Therefore, once the offender decides to apply for leniency benefits, there are incentives to convince authorities to overestimate the significance of the offered cooperation, leading to exaggerated or distorted reports.⁵⁷⁶

570 Wils, 'Leniency in Antitrust Enforcement: Theory and Practice' (n 378) 216.

571 Spagnolo (n 30) 295.

572 Jindrich Kloub (n 145) 7.

573 Centonze (n 1) 247-248.

574 As noted by Forrester and Berghe: "leniency applicants have an interest in embellishing their confessions to include marginal conduct. 'When in doubt, confess' could be the motto of the leniency policy". See Forrester and Berghe (n 566) 172.

575 This is the case of the rewarded collaboration regulation introduced by the 2013 Organized Crime Act, which designed a system of "quid-pro-quo" negotiations. The Brazilian antitrust leniency program, on the other hand, engendered a "winner-takes-it-all" leniency system. On the subject, see item I.3.b. For a comparison between the rationality of the two systems, see Feess and Walzl (n 153).

576 The European Court of Human Rights has expressed concern with this issue: "The Court is conscious of the fact that the cooperation of pentiti is a very important weapon in the Italian authorities' fight against the Mafia. However, the use of statements by pentiti does give rise to difficult problems as, by their very nature, such statements are open to manipulation and may be made purely in order to obtain the advantages which Italian law affords to pentiti, or for personal revenge". See the ruling: *Labita v Italy* App no 26772/95 (ECtHR, 6 April 2000).

This scenario is worse in corporate environments, where defendants are normally under significant pressure to wind up the investigation quickly.⁵⁷⁷ Unlike what occurs in purely criminal organizations, the opening of formal proceedings creates a series of collateral effects upon agents active in legitimate industries, exposing internal vulnerabilities and damaging reputations.⁵⁷⁸ In some cases, the choice between quick resolution through a cooperation agreement or an indefinite continuation of the proceedings may be the difference between bankruptcy and corporate survival.⁵⁷⁹ Under these circumstances, defendants may feel pressured by the corporate environment to acknowledge wrongdoing and cooperate with law enforcement authorities even in the absence of a clear breach of law, misrepresenting facts just to put a quick end to the investigation.⁵⁸⁰

- b. The dark side of leniency: amnesty effect, recidivism and the need for limits

Another intrinsic side effect of leniency policies relates to their negative impact on the severity of penalties and, consequently, on the deterrent effect of an enforcement system.⁵⁸¹ By granting penalty reductions and even full immunity, leniency policies reduce the negative consequences associated with wrongdoing,⁵⁸² diminishing the incentives for complying with the law. If the benefits granted for cooperating offenders are excessive, the leniency system may end up stimulating the commitment of offenses rather

577 Neira Pena (n 375) 204-205.

578 Benjamin M Greenblum, 'What Happens to a Prosecution Deferred? Judicial Oversight of Corporate Deferred Prosecution Agreements' (2005) 105 Columbia Law Review 1863, 1884-1885.

579 Dell'Osso (n 373) 205.

580 Peter Reily compares this situation with the "innocence problem", a term traditionally used to refer to the false confessions engendered by the U.S. system of plea bargaining. See Peter R Reilly, 'Justice Deferred Is Justice Denied: We Must End Our Failed Experiment in Deferring Corporate Criminal Prosecutions' (2015) 2015 Brigham Young University Law Review 307, 350. On the "innocence problem", see Oren Bar-Gill and Oren Gazal Ayal, 'Plea Bargains Only for the Guilty' (2006) XLIX Journal of Law and Economics 353; and F Andrew Hes-sick III and Reshma M Saujani, 'Plea Bargaining and Convicting the Innocent: The Role of the Prosecutor, the Defense Counsel, and the Judge' (2002) 16 Brigham Young University Journal of Public Law 189.

581 Wils, 'Leniency in Antitrust Enforcement: Theory and Practice' (n 378) 277.

582 Motta and Polo (n 29) 349.

than discouraging it. Leniency policies that are too generous provide an “easy way out” for offenders,⁵⁸³ encouraging illicit practices and leading to an outcome that is the opposite of that originally intended.

The reduction of penalties and the granting of immunity affect the proportionality that should exist between the practice of a wrongdoing and the sanction attached to it.⁵⁸⁴ A decrease in the expected sanctions creates incentives for the commitment of crimes, in what can be seen as a “dark side of leniency policies”.⁵⁸⁵ This collateral consequence produces an “amnesty effect”,⁵⁸⁶ increasing the returns derived from criminal behavior. Besides reducing deterrence, the granting of disproportionate benefits to cooperating defendants impacts the enforcement system negatively by increasing the costs of investigations.⁵⁸⁷

The risks arising from the ‘amnesty effect’, far from being only a theoretical question, manifest in a very concrete manner on the subject of recidivism. Repeat offenders are normally understood as a particular dangerous type of wrongdoer and it is common that sentencing guidelines stipulate harsher penalties for recidivists. However, leniency policies, when not properly designed, may end up stimulating recidivism, since the leniency applicant will commit a serious crime and – through the obtainment of full or partial immunity – retain the illegal profits earned from the wrongdoing. This scenario can create incentives for agents to enter into a recurrent game of ‘commit a wrongdoing, apply for leniency’, as some real-life situations indicate.⁵⁸⁸

Repeated leniency applicants raise the question as to whether the leniency policy is discouraging the practice of wrongdoings or, on the contrary, spurring the commitment of illegal conduct. Given the ‘amnesty effect’, leniency policies have an ambiguous influence on the incentives for agents to adopt an illicit behavior: while they enhance the chance of detection of

583 Marvão and Spagnolo (n 32).

584 Musco (n 346) 116.

585 Acconcia and others (n 537) 43.

586 Harrington Jr. (n 29) 217.

587 Catarina Marvão, ‘The EU Leniency Programme and Recidivism’ (2016) 48 *Review of Industrial Organization* 1, 4.

588 On the field of anti-cartel enforcement, Brent Fisse asserts that “it is possible for corporations to play the game of ‘enter into cartel, get immunity’ on more than one occasion” and cite examples of recidivists that profited from the European Commission leniency program. See Brent Fissé, ‘Reconditioning Corporate Leniency: The Possibility of Making Compliance Programmes a Condition of Immunity’ in Caron Beaton-Wells and Christopher Tran (eds), *Anti-Cartel Enforcement in a Contemporary Age: Leniency Religion* (Hart Publishing 2015) 186.

illicit conduct and increase the instability inherent to criminal organizations, they also boost the gains that may be obtained through the commitment of offenses. A large record of recidivists applying successfully to a leniency program raises concerns regarding its effectiveness and its overall impact on general deterrence. It may indicate that agents are learning to use (or abuse) the leniency rules to promote their own interests, reinforce criminal strategies and maximize illegal profits.⁵⁸⁹ Furthermore, it puts in doubt the fairness of the policy and affects its social credibility.⁵⁹⁰ Various studies report a worrisome pattern of recidivism amongst leniency beneficiaries and confirm the importance of this issue for a correct assessment of the effects of a leniency policy.⁵⁹¹

In view of the adverse consequences resulting from the ‘amnesty effect’, the definition of strict limits for awarding preferential treatment to cooperating defendants is an important feature of a solid leniency policy.⁵⁹² While generating incentives for wrongdoers to abandon the criminal organization and denounce their co-conspirators, leniency policies also must rigidly define the scope for the granting of benefits to confessed criminals.⁵⁹³ In order to guarantee that the positive impact brought by a lenien-

589 Marvão (n 588) 25.

590 Wouter PJ Wils, ‘Recidivism in EU Antitrust Enforcement: A Legal and Economic Analysis’ (2012) 35 *World Competition* 5.

591 According to Christopher Harding, Caron Beaton-Wells And Jennifer Edwards: “A brief survey of European Commission proceedings against cartels over the past 30 years reveals an interesting profile of corporate repeat players as defendants and successful leniency applicants”. See Harding, Beaton-Wells and Edwards (n 484) 256. For a detailed analysis of the subject on the European system of anti-cartel enforcement, see Marvão (n 588) 25.

592 Multiple authors point in this direction. William Kovacic speaks of “capping the dosage” of leniency policies. See Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378). Catarina Marvão asserts that leniency policies “may also have pro-collusive effects, which are reinforced by the fact that the cartels that are reported by a given firm are often in a single market. In summary, it appears clear that the guidelines should be more explicit and less generous, especially with regard to how repeat offenders are treated”. See Marvão (n 588) 25.

593 On the field of anti-cartel enforcement, Giancarlo Spagnolo asserts that “a well-designed and implemented leniency program is one that makes the incentives of an individual (potential or real) cartel member as conflicting as possible with the interest of the cartel taken together. This means that a well-designed program must maximize incentives to betray the cartel by reporting important information to the Antitrust Authority, while at the same time limiting as much as possible the reduction in fines imposed on the whole cartel”. See Spagnolo (n 30) 293.

cy policy surpasses the associated negative effects, it is necessary that the award of advantages stays limited to the minimum necessary, avoiding inappropriate reduction of penalties.⁵⁹⁴

The need to balance the establishment of incentives for cooperation with limits on the granting of benefits gives rise to several constraints on the design of leniency policies. A recurrent restriction that appears in this context relates to the number of accused that can become cooperating defendants and gain privileged treatment in the investigation of a given offense. In the field of anti-cartel enforcement, it is common that leniency policies limit the possibility of granting differentiated treatment to one successful applicant per investigation.⁵⁹⁵ This “winner-takes-it-all” model aims to trigger a race between co-conspirators to become the first agent to blow the whistle, maximizing the distrust and enhancing the instability within a criminal organization.⁵⁹⁶ Furthermore, it restricts the amount of benefits granted overall to the participants of the illegal scheme and ensures that all other accountable agents receive the stipulated penalties in their entirety.⁵⁹⁷

Another frequent restriction concerns the discrimination in leniency regulations towards agents that have instigated or acted as a leader in the commitment of the offense.⁵⁹⁸ Several leniency policies prohibit ringleaders from receiving any differentiated treatment in exchange for cooperation, while others set limits to the benefits that can be awarded in these sit-

594 According to Wils: “It is thus crucial to design and apply leniency policies in such a way that this negative effect is outweighed by the positive effects discussed above, and that no more leniency is granted than strictly necessary to obtain these positive effects”. See Wils (n 378).

595 As occurs in the Brazilian and American antitrust leniency programs. See Martinez (n 8).

596 According to Hammond: “This ‘winner-take-all’ approach sets up a race, and this dynamic leads to tension and mistrust among the cartel members”. See Hammond, ‘Detecting and Deterring Cartel Activity through an Effective Leniency Program’ (n 455) 5.

597 On this issue, see: Spagnolo (n 30) 293.

598 There is much discussion on economic literature regarding the effects of exclusion or discrimination of ringleaders in leniency policies. See J Herre and Alexander Rasch, *The Deterrence Effect of Excluding Ringleaders from Leniency Programs* (University of Cologne 2009) 1; Michael Hesch, ‘The Effects of Ringleader Discrimination on Cartel Stability and Deterrence - Experimental Insights’ (2012) 3 *Journal of Advanced Research in Law and Economics* 9; Stephen Davies and Oindrila De, ‘Ringleaders in Larger Number Asymmetric Cartels’ (2013) 123 *Economic Journal* 524.

uations.⁵⁹⁹ Such restrictions are normally justified by the concern that granting immunity or penalty reductions to ringleaders may end up stimulating the formation of cartels and criminal organizations and allowing the most dangerous agents to remain unpunished.⁶⁰⁰ The discrimination of ringleaders in leniency regulations theoretically increases deterrence through the reduction of the incentives for agents to instigate unlawful collusions and other wrongdoings.⁶⁰¹

- c. Distortion of incentives for enforcement authorities: leniency over-reliance, statistical boost and the overheated market for cooperation

A core argument for the introduction of leniency policies is their impact on the incentives faced by participants of criminal organizations. A recurrent point stressed by enforcement authorities is that leniency policies create a prisoner's dilemma for offenders, setting up an incentive system that stimulates betrayals in the criminal organization and erodes the relationships of trust among co-conspirators.⁶⁰² According to this view, leniency policies turn the confession of wrongdoings and the adoption of cooperative behavior into the dominant strategy in the game played by co-conspirators and, consequently, engender a permanent factor of destabilization of criminal organizations and of deterrence from their illegal practices.⁶⁰³

From another perspective, several authors point out that the use of leniency policies, besides affecting the incentives for defendants, also has a

599 Aubert, Rey and Kovacic (n 29) 1250: "In practice, leniency programs often refuse amnesty to ring-leaders".

600 As noted by: Leslie (n 487) 480-481. The author, however, criticizes the restriction.

601 According to Bigoni, Fridolfsson, Le Coq and Spagnolo, these rules may have a positive deterrent effect "if firms wait for other firms to take the initiative of forming the cartel to keep the right to obtain leniency". On the other hand, they may have the opposite effect "because ringleaders become more trustworthy for other cartel members reducing their incentives to rush to report". See Bigoni and others (n 138) 386.

602 On the breach of trust in corruption networks caused by leniency policies, see Lejeune (n 12) 88-89. For an association of leniency policies with the prisoner's dilemma, see Buccirossi and Spagnolo (n 29). 1282. Criticizing as naïve the traditional economic approach to the rationale of corporate wrongdoers, Ana Frazão, 'Corrupção e Compliance' in Claudio; Lamachia and Carolina Petrarca (eds), *Compliance: essência e efetividade* (OAB 2018) 196-197.

603 For a strong defense of this position, see Leslie (n 487) 465-475 and 488.

decisive impact on the behavior and the strategies of law enforcement agencies. The introduction of a program that awards benefits for cooperating defendants is a game changer not only for the accused, but also for the public authorities responsible for the investigation and prosecution of serious crimes.⁶⁰⁴ Leniency policies change – and may distort – the actions, priorities, allocation of resources and decision-making process of enforcement agencies.⁶⁰⁵

A central cause of this distortion stems from the fact that leniency policies significantly reduce the costs incurred by public authorities when investigating organized forms of criminality, since they transfer a relevant part of the task of fact-finding in a criminal inquiry to cooperating defendants.⁶⁰⁶ Leniency policies assign accused an active role within the apparatus of state prosecution: instead of remaining in the traditional defensive position, defendants become active agents in relation to wrongdoings committed by other individuals.⁶⁰⁷ In this new role as a “branch-office” of enforcement agencies, defendants collect evidence and information, screen relevant documents and perform other duties in the prosecution of third parties.⁶⁰⁸

This structure of leniency policies, which resembles the model of other public-private partnerships developed between public organs and private agents,⁶⁰⁹ makes their use highly attractive to enforcement.⁶¹⁰ This is particularly true in the investigation of wrongdoings – such as corruption networks and business cartels – that normally do not leave any visible damages and are committed through the ordinary routines of legitimate organizations.⁶¹¹ The correct determination of facts regarding these conducts

604 As noted Evgenia Motchenkova in the field of anti-cartel enforcement, “It is intuitively clear that a legally sanctioned opportunity for costless self-reporting changes the nature of the game played between the antitrust authority and the group of firms”. See Evgenia Motchenkova, ‘Effects of Leniency Programs on Cartel Stability’ (2004) Discussion Paper 2004–98 Center for Economic Research Tilburg University, 2.

605 For an interesting analysis of this issue, see Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378).

606 Centonze (n 1) 44-45.

607 Jeßberger (n 1) 26.

608 See Harry First, ‘Branch Office of the Prosecutor: The New Role of the Corporation in Business Crime Prosecutions’ (2010) 89 North Carolina Law Review 23, 97.

609 For a more thorough analysis of this issue, see item V.3.c.

610 See Stephan and Nikpay (n 527) 211.

611 See items II.3.a e II.3.b.

faces several constraints due to inherent difficulties in the effective gathering of evidence,⁶¹² which makes the investigation costs markedly higher when compared to other types of crimes.⁶¹³ In this context, the boundaries between serious crimes and regular conducts are very fine, and the use of traditional investigative mechanisms – such as search and seizure procedures and wiretapping – are often of an inconclusive nature.

Assistance provided by an internal source reduces the obstacles and uncertainties faced by enforcement authorities in the prosecution of organized forms of white-collar criminality, providing a fast and apparently reliable path to hold powerful individuals accountable for serious crimes.⁶¹⁴ The minimization of investigative costs and the fast results brought about by cooperation with defendants encourage the deployment of leniency policies in place of other investigative tools and lead authorities to prioritize investigations that rely on cooperators.

Given the incentives for enforcement authorities, the rapid expansion of leniency policies after their introduction is a phenomenon noticeable in the experience of multiple countries and in different fields of enforcement.⁶¹⁵ Over-reliance on leniency policies may generate several side effects on an enforcement system, affecting the use of traditional investigative mechanisms and reducing the potential for *ex officio* detection of wrongdoings.⁶¹⁶ In the long run, it can also undermine the credibility of the investigative capacity of enforcement agencies, seen as unduly dependent on the assistance of former criminals.⁶¹⁷

612 As noted by several authors. See Greco and Leite (n 17) 290; Lindemann (n 17); Nagel (n 341) 33.

613 See Martín (n 23) 70.

614 Regarding the recent Brazilian experience with the use of the rewarded collaboration regulation to investigate “macro-delinquency”, see item II.4.

615 For a good description of the recent “leniency revolution” in anti-cartel enforcement, see Spagnolo (n 30) 261-68. Analysing the Italian experience with of cooperating defendants in the investigation of mafia organizations, Enzo Musco holds that the use of this mechanism has grown “unprecedentedly to reach enormous, gigantic dimensions, unthinkable at the moment of the introduction of the legislation on cooperation”. See Musco (n 346) 35.

616 On this subject, Caron Beaton-Wells asserts that “Over-reliance on leniency at the expense of investment in other detection tools undermines the perceived threat of detection, independent of such policies”. See Beaton-Wells (n 448) 18. For a wide-ranging defense of the use of *ex officio* tools in the investigation of cartels, see Friederiszick and Maier-Rigaud (n 521).

617 In Italy, over-reliance on cooperating defendants is often indicated as one of the central factors to the loss of credibility in mafia-related investigations in the mid-1990s. See Paoli (n 512) 872. See also: Megan Dixon and Ethan Kate, ‘Too

Another risk associated with the over-reliance on cooperating defendants is the misplaced use of enforcement statistics – such as the number and amounts of imposed penalties, recovered financial sums and successful leniency applications – as a measure to assess the performance of public agencies. Enforcement agencies have strong incentives to actively advertise the results achieved by leniency policies, communicating these developments as proof of enhanced effectiveness in the prosecution of serious crimes.⁶¹⁸ These statistics, however, are misleading as indicators of effectiveness, since they turn a blind eye to the overall number of wrongdoings and neglect the impact of the amnesty effect on the incentives for commitment of new violations.⁶¹⁹ Because of this impact, the introduction of leniency policies can generate a boost in the statistics regarding convictions and fines imposed on wrongdoers and, at the same time, jeopardize the objective of increased deterrence.⁶²⁰ When improperly conceived, leniency programs – while reducing the costs of investigation, streamlining the activities of public authorities and generating visible results – may end up having a negative overall effect on an enforcement system.⁶²¹

There are, therefore, several reasons to analyze the official discourse of enforcement agencies, which usually describes leniency policies as highly effective tools of deterrence, with a degree of skepticism.⁶²² Law enforcement authorities not only lack incentives to acknowledge the shortcom-

Much of a Good Thing? Is Heavy Reliance on Leniency' (2014) 2014 CPI Antitrust Chronicle.

618 William Kovacic notes that “leniency can reinforce an unhealthy disposition to treat fines recovered and prison sentences imposed as the appropriate means for assessing agency effectiveness” and that “leniency applications can yield more cases and raise the level of fines or other sanctions the agency obtains. In particular, leniency can raise the financial recoveries that command attention in the business press”. See Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378) 193 and 194.

619 Marvão (n 588) 25.

620 On this point, William Kovacic observes that “an agency focused on maximising activity levels runs a risk of making compromises that increase the number of visible outcomes (for example, fines recovered), at the expense of future deterrence”. See Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378) 195.

621 Highlighting the need for strict limits in the granting of benefits to cooperating defendants, Spagnolo affirms that the goal of a leniency policy should be enhancing deterrence, and not “making the job of prosecutors easier”. See Spagnolo (n 30) 293.

622 Nathan H Miller, ‘Strategic Leniency and Cartel Enforcement’ (2009) 99 American Economic Association 750, 751.

ings and side effects of leniency policies, but are also prone to administer such mechanisms in a flexible and generous manner.⁶²³ Because the benefits of visible outcomes are promptly internalized by public agencies, while the long run costs of these mechanisms are inconspicuously externalized to society, the incentives for the development of an “overheated cooperation market” are very strong.⁶²⁴ Contrary to the official discourse and ordinary assumptions, the introduction of a leniency policy may generate several successful cases of prosecution and, simultaneously, lead to an increase in the commitment of crimes.⁶²⁵

d. Gaming the leniency system: repeated games, sophisticated agents and reverse exploitation

Leniency policies are usually defended on the basis that they expand the investigative capacity of law enforcement authorities and increase the efficiency of the state response to new types of criminal structure.⁶²⁶ Besides creating a new channel for the detection of wrongdoings and the collection of evidence, they are also expected to encourage defection and enhance distrust between co-conspirators within criminal organizations.⁶²⁷ A common assertion is that leniency policies create a prisoner’s dilemma for co-conspirators, creating incentives for them to abandon the criminal organization and cooperate with public authorities.⁶²⁸

Although normally described as mechanisms that empower law enforcement authorities, leniency policies also provide new opportunities for offenders to adopt strategic behaviors and, through innovative methods, turn

623 Marvão and Spagnolo (n 32) 92.

624 Weinstein (n 3) 564-565. According to the author: “The current market for snitches cannot optimize the use of cooperation because these decision-makers internalize the benefits and externalize (and so largely ignore) the costs”.

625 Joseph E Harrington and Myong Hun Chang, “When Can We Expect a Corporate Leniency Program to Result in Fewer Cartels?” (2015) 58 *Journal of Law and Economics* 417, 419.

626 See item III.2.a. In German criminal law literature, see Hoyer (n 442); Jung (n 442); Buzari (n 12).

627 See item III.2.b. Highlighting the preventive effect of leniency policies on the formation of criminal organizations, see: Schlüchter (n 495) 68. Also: Lejeune (n 12) 87-88.

628 Leslie (n 487) 456-458.

the possibility of cooperation into a device to maximize profits.⁶²⁹ The interactions between law enforcement authorities and criminal organizations are much more complex than a one-shot prisoner's dilemma, more closely resembling a scenario of "repeated games",⁶³⁰ where players constantly evolve by learning from past experiences⁶³¹ and implement their strategy anticipating the reactions of opponents.⁶³²

Leniency policies change the structure of the game played by law enforcement authorities and members of criminal organizations and all participants will adapt to the new circumstances, learning from past experiences and evolving to explore the possibilities created by this new environment.⁶³³ This is particularly true in the field of economic and corporate crimes, in which organizational resources allow for the commitment of highly complex and sophisticated criminal conduct.⁶³⁴ Given the high rewards that arise from illicit behavior and the resourcefulness of legitimate corporations, cartels and corruption networks are constantly developing new solutions for the challenges posed by law enforcement.⁶³⁵

629 Analyzing the antitrust leniency programs, Catarina Marvão notes that "it seems that firms are able to use it to their own benefit, in some unintended ways". See Marvão (n 588) 25.

630 Motta and Polo (n 29); Harrington Jr. (n 29).

631 The capacity of agentes to learn and adapt in scenarios of repeated games is recurrent theme in economic literature. See John H Nachbar, 'Prediction, Optimization, and Learning in Repeated Games' (1997) 65 *Econometrica* 275; Drew Fudenberg and Eric Maskin, 'American Economic Association Evolution and Cooperation in Noisy Repeated Games' (1990) 80 *Source: The American Economic Review* 274.

632 In this sense, Fudenberg and Maskin assert that "That strategic rivalry in a long-term relationship may differ from that of a one-shot game is by now quite a familiar idea. Repeated play allows players to respond to each other's actions, and so each player must consider the reactions of his opponents in making his decision. The fear of retaliation may thus lead to outcomes that otherwise would not occur". See Drew Fudenberg and Eric Maskin, 'The Folk Theorem in Repeated Games with Discounting or with Incomplete Information' (1986) 54 *Econometrica* 533, 533.

633 Kovaci, 'A Case for Capping the Dosage: Leniency and Competition Authority Governance' (n 378) 196-197.

634 See item II.3.b.

635 Examining the German experience, Britta Bannenberg asserts the sophistication, resourcefulness and adaptability of corruption networks. See Bannenberg (n 17) 108-114. On a similar note: Zambrano Leal (n 355) 30-33. On the field of anti-cartel enforcement, Wils observes that "successful cartels tend to be sophisticated organizations, capable of learning. It is thus safe to assume that cartel participants will try to adapt their organization to leniency policies, not only so as to

Leniency policies amplify the role played within the apparatus of state prosecution by accused, who abandon a defensive stance to become active agents in the collection of information and evidence.⁶³⁶ The cooperating defendant takes over part of the state's prosecution tasks, becoming a key player in the process of fact-finding and establishment of criminal liability.⁶³⁷ For sophisticated agents, this new role may seem an empowering situation, one that creates new opportunities for the fulfillment of individualistic goals through the reverse exploitation of the leniency system.⁶³⁸

A much debated example in economic literature refers to the use of leniency policies as a strategic device to stabilize relationships within the criminal organization, strengthening the "internal discipline" through threats of retaliation against dissidents.⁶³⁹ Since co-conspirators cannot enforce the illegal arrangements through legitimate channels, leniency policies can be exploited to coerce the members of the organization to comply with the unlawful deals under the penalty of being reported.⁶⁴⁰ The triggering of leniency policies may be used as a credible threat to demand the fulfillment of illegal transactions that would otherwise be devoid of any enforcement mechanism. The possibility of denouncement to authorities provides an internal enforcement mechanism and may ultimately make illicit arrangements between offenders more stable.⁶⁴¹

minimize the destabilising effect, but also, where possible, to exploit leniency policies to facilitate the creation and maintenance of cartels". See Wils (n 378) 230.

636 Jeßberger, *Kooperation Und Strafzumessung: Der Kronzeuge Im Deutschen Und Amerikanischen Strafrecht* (n 1) 26.

637 Centonze (n 1) 44.

638 Harding, Beaton-Wells and Edwards describe this situation as "‘strategic’ leniency, leniency ‘gaming’ or ‘reverse exploitation’". See Harding, Beaton-Wells and Edwards (n 484) 361.

639 On this issue, see: Buccirosi and Spagnolo (n 29) 1282-1283; Wils (n 378) 231.

640 Giancarlo Spagnolo notes that "in corrupt relationships where transactions are frequently repeated, moderate leniency programs can increase the parties' ability to punish deviations, thereby stabilizing the illegal arrangements by reducing gains from defecting. In practice, the information that wrongdoers have on each other plays the role of a "hostage" that is used as a credible threat to govern the illegal exchange and punish failures to comply with the agreement". See Spagnolo (n 30) 275.

641 Aubert, Rey and Kovacic (n 29) 1262-1263.

Another risk is the possible use of leniency policies as strategic tools to harm competitors and obtain advantages in the struggle for markets.⁶⁴² In a context of fierce competition in legitimate industries, the possibility of exposing other firms while evading sanctions establishes a clear opportunity for raising the costs of competitors and gaining ground in the market. An important concern arises from evidence indicating that a large part of the infringements reported by leniency applicants refers to illicit schemes that were already inoperative or on the verge of breaking up.⁶⁴³ Leniency policies create the possibility for wrongdoers to “tame the end-game” of a failed or dying illegal arrangement and, at the same time, harm their former co-conspirators and now rivals.⁶⁴⁴

4. Conclusion: leniency revolution and leniency religion

Leniency policies can constitute important tools in the investigation of corruption networks and cartels, offenses usually carried out through sophisticated and deceptive strategies and capable of causing high, diffuse losses while leaving no visible trace of damage and no tangible evidence of the illegal conduct.⁶⁴⁵ Due to the characteristics of these wrongdoings, state authorities face great obstacles in uncovering the crimes committed and, even in case of detection, encounter serious difficulties in the collection of evidence capable of determining the facts and establishing legal responsibilities. Leniency policies enable state authorities to obtain information and evidence of inestimable value for the development of an efficient prosecution system for corrupt practices and collusion schemes. Besides facilitating the detection of crimes and the gathering of evidence, leniency policies also have the important effect of enhancing the conflicts and instabilities in criminal organizations. The incentive system designed by lenien-

642 Ellis and Wilson note that “the introduction of leniency policy allows some Örms to gain a market advantage from self-reporting”. See Christopher J Ellis and Wesley W Wilson, ‘What Doesn’t Kill Us Makes Us Stronger: An Analysis of Corporate Leniency Policy’ 1, 33.

643 For an analysis in this direction regarding the leniency program of the European Comission, see Stephan and Nikpay (n 527).

644 Andreas Stephan, ‘An Empirical Assessment of the European Leniency Notice’ (2008) 5 Journal of Competition Law and Economics 537, 559.

645 On the losses caused by these practices, see item II.3.c. On the problems of factual-finding and collection of evidence, see items II.3.a e II.3.b.

cy policies creates a constant threat of defection and whistleblowing, eroding an essential element of criminal organizations: trust.

In the last decades, more and more jurisdictions have adopted leniency regulations in multiple fields of law enforcement, as a means of enhancing the capacity of public authorities to develop an efficient system of prosecution and reduce impunity amongst individuals responsible for serious offenses. In this context, the U.S. leniency practices have often set a remarkable standard followed by other countries,⁶⁴⁶ particularly in the realm of white-collar crime prosecution. According to some reports, the American example showed that the concept of leniency was “a wildly successful idea”,⁶⁴⁷ and became the source of “tremendous global emulation”.⁶⁴⁸ The experiences of different countries indicate that the introduction of leniency policies is commonly followed by a sharp increase in the number of important investigations and compelling convictions. In view of these visible results and the proliferation of leniency policies worldwide, several authors have spoken of a “leniency revolution”.⁶⁴⁹

Despite this palpable and well publicized success, a growing body of literature has emerged recently to question the effectiveness, the working mechanisms and even the theoretical assumptions associated with leniency policies. Over the last years, different studies have thoroughly analyzed, tested and shown the risks arising from the employment of leniency policies. A fundamental point of concern is the overall impact of leniency policies on the deterrent effect of the enforcement system: because of the amnesty effect, leniency policies increase the profits obtained through illegal behavior and reduce the level of penalties, always containing a hardly noticeable “dark side”.⁶⁵⁰ Another risk relates to the informational asymmetry that gives cooperating defendants significant control over the reported facts and limits the authorities’ capacity to verify the accuracy and truthfulness of the narrative presented.⁶⁵¹ This asymmetry favors the adoption of opportunistic behavior, that can be carried out through strategies of under-cooperation or over-cooperation. The principal-agent structure of leniency policies also creates, in a scenario of repeated games and evolving actors, possibilities for reverse exploitation, that may even lead to the rein-

646 Malek (n 470) 566.

647 O’Brien (n 31) 15.

648 Kovacic, ‘A Case for Capping the Dosage: Leniency and Competition Authority Governance’ (n 378).

649 Spagnolo (n 30) 259.

650 Acconcia and others (n 537). See item III.3.b.

651 See item III.3.a.

forcement of the illicit conduct.⁶⁵² All in all, a robust body of literature indicates that the effects of the introduction of leniency policies in an enforcement system are far from being unequivocally positive. On the contrary, when inadequately designed and implemented, these policies may generate significant collateral damage and lead to counterproductive results.

A critical point of analysis is the way leniency policies change the practices and strategies of law enforcement authorities.⁶⁵³ These mechanisms enable the collection of information and evidence at a much lower cost than traditional investigative measures and are highly attractive when compared to other alternatives. Through leniency policies, private agents – the cooperating defendants – perform a series of investigative acts on behalf of enforcement authorities, gathering evidence, screening the relevant material and organizing different elements into a coherent narrative. Furthermore, leniency policies generate faster outcomes and more certain results than autonomous investigations. Law enforcement authorities have, therefore, strong incentives to rely on cooperating defendants, even if this happens at the expense of granting generous benefits and, consequently, dramatically lowering the overall level of penalties.

Viewed in this light, the assessment of the impacts of a leniency policy on an enforcement system proves to be a much more complicated task than suggested by the usual approach of public authorities. Focused on reporting increased numbers of opened cases and imposed convictions, public authorities often underestimate and downplay the side effects and risks that arise from the establishment of cooperative relationships with confessed offenders. The emphasis on indicators such as successful prosecutions and applied sanctions overshadows the multiple costs of the employment of leniency policies. An upsurge of these statistics may have different meanings, one of which is simply a growth in the number of illegal activities. Simplistic appraisals grounded on the record of convictions and sanctions may suggest in the short-term a promising enforcement scenario, while generating several side effects that will be noticed only in the future. As Caron Y. Beaton-Wells has accurately observed, the perspective disseminated by enforcement authorities regarding leniency policies – marked by an inward-looking, narrow, isolated and uncritical approach – resemble a religion as much as a revolution.⁶⁵⁴

652 See item III.3.d.

653 See item III.3.c.

654 Beaton-Wells (n 33) 4 and 44.