FIGHTING CARTELS: AN APPLICATION OF ECONOMIC THEORY AND THE EFFECTS OF LENIENCY POLICIES[1]

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Abstract. *The paper focuses on the theory and practice of antitrust action in detecting and deterring cartels and analyzing the development of the modern leniency policy. Drawing from game theory and following the examination of the main conditions and reasons for cartel formation and sustainability and a statistical analysis of cartel prosecutions, our attempt is to show that leniency programs, accompanied by strong enforcement powers and effective sanctions, increase the inherent instability of cartels and therefore have proven to represent a functional and successful tool for detecting and punishing, as well as preventing the formation of anticompetitive agreements.*

Key words: *cartel, leniency, competition policy, game theory, heterodox economic theory*

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies; much less to render them necessary.

Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations (1776).

Introduction

Competition is a crucial factor for creating proper conditions for economic growth and prosperity. The role of modern competition policy is to ensure that competition is indeed effective. Secret cartel agreements are a direct assault on the principles of competition and

[1] An abridged version of this paper was originally submitted to the conference "The Global Challenges for Economic Theory and Practice in Central and Eastern European Countries" at Vilnius University in September 2010. In this version, we focus on the inherent weaknesses of cartels to sustain themselves.

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are universally recognized as the most harmful of all types of anticompetitive conduct. Facing the challenges associated with the globalization of market economy, competition authorities around the world are increasing their efforts to design and implement modern instruments, effective enforcement procedures and adequate sanctions against cartels.

The aim of the paper is an analysis of prohibited agreements among competitors, the theoretical and practical aspects of such agreements, and highlighting the economic merits of legal regulation. Additionally, we seek to examine statistical analyses of cases of international cartels and the extent of fines imposed on them in the last decade, changes in antitrust policy, and their supervision. We pay special attention to the application of amnesty programs' influence of international antitrust practices as interpreted by the legal framework of the European Union.

Methods employed are the meta-analysis of economic and legal literature, cartel case studies, and descriptive statistical analysis.

The economics of cartels

A cartel is essentially an arrangement between competing firms, designed to limit or eliminate competition among them, with the objective of increasing the prices and profits of the participating companies. In practice, this is generally done by fixing prices, limiting output, sharing markets, allocating customers or territories, bid rigging or a combination of these specific types of restriction. Collusive behaviour does not always rely on the existence of explicit agreements among firms: coordination of firms' competitive behaviour can also result from situations where firms act individually but – in recognition of their interdependence with competitors – jointly exercise market power with the other colluding competitors. This is normally described as "tacit collusion".

The theory of "cooperative" oligopoly provides the basis for analyzing the formation and economic effects of cartels. Oligopolistic firms join a cartel to increase their market power, and members work together to determine jointly the level of output that each member will produce and/or the price that each member will charge. By working together, the cartel members are able to behave like a monopoly by restricting industry output, raising or fixing prices in order to earn higher profits. As long as the firms adhere to the implied agreement or understanding, they can profitably raise their prices above current levels and earn greater profits. This harms their consumers who now pay more and consume less, because in order to raise prices the cartel members must restrict the output. The effects of a cartel are thus comparable to those of a monopolistic market: redistribution of surplus from consumers to producers as well as a welfare loss due to a too small quantity supplied (deadweight loss). Competition law aims at prohibiting such restrictive practices in order to eliminate sources of inefficiencies (Posner, 1998).

Collusive conduct of firms can take many forms. Price fixing is any agreement among competitors to raise, fix, or otherwise maintain the price of a product or service. Price

fixing can include agreements to establish a minimum price, to eliminate discounts, or to adopt a standard formula for calculating prices, etc. Output restrictions can involve agreements on production volumes, sales volumes, or percentages of market growth. Market allocation or division schemes are agreements in which competitors divide markets among themselves: competing firms allocate specific customers or types of customers, products or territories. In a bid-rigging conspiracy, competitors may agree to rotate winning bids, may divide bids, or one bidder may agree to submit an artificially high or "comp" or "cover" bid in return for a subcontract or payoff. In other words, competitors agree to restrict or eliminate competition for some piece of defined business, be it a sale, a contract, or a project (Defining Hard Core Cartel, 2005).

According to Monti (2001), cartels differ from most other forms of restrictive agreements by serving to restrict competition without producing any objective countervailing benefits. In contrast, a joint venture between competitors, for example, while restricting competition, may at the same time produce efficiencies such as economies of scale or quicker product innovation and development. In these cases, a proper analysis requires that the positive and negative effects are balanced against one another. But with cartels, there are simply no countervailing benefits. By artificially limiting competition, cartel members avoid constrains which generate innovation, product development or introduction of more efficient productions methods. Of all restrictions of competition, cartels contradict most radically the principle of a market economy based on competition and therefore are almost universally condemned. Even those who sometimes criticize the competition law for intervening into the free play of market forces accept the prohibition of cartels as inevitable.

The damage caused by cartels to the economy and consumer welfare is substantial. A good indication of the direct and immediate social harm caused by cartel activity is its effect on prices. In 2008, the Commission of the European Communities made some general estimates of the harm to the economy caused by cartels. The Commission services looked at the 18 cartels which were the subject of Commission decisions during the years 2005 to 2007, the size of the markets involved, the cartels' duration and the very conservative assumptions regarding the estimated overcharge. Assuming an overcharge between 5% to 15%, the harm suffered ranges from around EUR 4 billion to EUR 11 billion for these 18 cartels. Taking the middle point of this overcharge range – 10% – gives a conservative estimate of consumer harm of EUR 7,6 billion due to these cartels. Even this figure is probably too low: the economic literature on the subject suggests that the average overcharge in prices can be as high as 20% to 25% (Moran, 2009).

Nevertheless, cartels have been defended from time to time. Veljanovski (2006) points out that price and market sharing arrangements were until recently seen as the usual way of doing business; others have claimed that price-fixing is sometimes necessary to prevent "ruinous" or "destructive" competition in oligopolistic industries with high

fixed costs subject to frequent "price wars" and that there may be social gains from price-fixing agreements. Similarly, Salin (1996) argues that cartels play a positive role in meeting some specific demands of the market.

A different tack criticizing government intervention against cartels is that cartels are inherently unstable and short-lived, and therefore not a real problem. Moran and Novak (2009), questioning government intervention against cartels as being seldom effective and sometimes counterproductive, state that competitive firms may conspire to push up prices and profits, but this is difficult to achieve for a lengthy period of time. They argue that firms have different costs, market prospects and objectives, and price or market share agreements break down because of:

- ever-present incentives of the members to "cheat" on their rivals by gaining market share through surreptitiously undercutting the agreed prices;
- the prospect of new entrants being attracted into the market by the high prices.

Indeed, game theory suggests that cartels are inherently unstable, as the behaviour of members of a cartel is an example of a Prisoner's dilemma (Fernandez and Bierman, 1998). Each member of a cartel faces a conflict of interests when agreeing to increase its prices: by producing more output than it has agreed to produce, a cartel member can increase its share of the cartel's profits. Hence, there is a built-in incentive for each cartel member to cheat. Of course, if all members cheated, the cartel would cease to earn monopoly profits, and there would no longer be any incentive for firms to remain in the cartel. Furthermore, the incentive and possibility of cheating, together with the lack of an effective mechanism for monitoring and disciplining, results (or so it is argued) in an atmosphere of mistrust among cartel members, which makes cartels difficult to maintain, once established.

However, in our opinion, only knowing the theoretical possibilities for cartel members to cheat is insufficient to conclude that all or many of them are unstable and short-lived. As Veljanovski (2006) points out, rather, the economic approach suggests that while there is this tension, the stability or otherwise will be based on a rational calculation of the gains and losses from cheating. The gains to an individual firm from reneging on the cartel arrangement are made up of the profit from "stealing" a greater market share less the expected losses due to punishment and retaliation should the cartel discover that the firm has cheated. Thus, the likelihood of cheating, and hence instability depends on the first term being greater than the second term – that is a cost–benefit assessment of the expected profits exceeding the expected losses.

Evidence supporting our view that colluding firms are able to overcome problems causing the instability can be gleaned from the cartels prosecuted by competition authorities. Statistical data on the longevity of more than 230 private international cartels discovered anywhere in the world from January 1990 to the end of 2005 shows that one cartel that persisted through two World Wars and multiple changes in competition laws

endured for 95 years. The median duration of cartels during the indicated period was 5 years and mean duration was 6.4 years. The longest lasting cartels were of a global nature (6 median years) and EU-wide (5.5) types (Connor, Helmers, 2006).

Another study of the 56 reported cartel prosecutions (involving 306 firms) by the EC Commission since 1999 to January 2009 shows that these cartels had an average duration of 7.4 years with a range of 2.6 months (*French Beef*) to more than a quarter of a century (29 years for *Organic Peroxides*) (Veljanovski, 2009).

Yet, the theory of cartel instability can be very useful, first, for identifying industries more or less susceptible to effective formation and maintaining of a cartel and, second, for devising the means and instruments that increase the instability of cartels and facilitate their detection.

Factors that facilitate or hinder collusion

Cartels do not occur with the same frequency in all sectors. Some sectors have been particularly prone to cartelization. Connor and Helmers (2006) in their report state that the leading cartelized industries are in manufacturing (79% of sales), especially chemicals, nonmetallic minerals, paper, and electronic devices, followed by services (21%), and the least important are raw materials. Most cartelized goods are industrial intermediate inputs (62%).

What makes a cartel agreement successful and what circumstances turn out to be conducive? These questions have a long history, and many economists and social scientists paid attention to this phenomenon. In an influential article addressing these questions, Nobel laureate George Stigler identified two principal hurdles for any successful cartel: first, reaching a consensus on the terms of coordination, and, second, establishing a system to detect and punish those cheating against agreed terms (Stigler, 1964). These twin hurdles have proven to be higher in some industries than in others, and in many settings, sellers have found them insurmountable. Developed by Stigler and refined by others[2], this approach sets out a list of conditions favourable (or not) to the cartelization of an industry. According to Dick (2008), cartels tend to be less likely to form and less likely to endure in industries where:

1. Numerous small sellers are currently producing.
2. Additional sellers could begin producing at a relatively low start-up cost and with little delay.
3. The products being sold are complex.

[2] R.A. Posner. Antitrust Law, 2nd edn. University of Chicago Press, 2001, Chap.3. D.W. Carlton, J.M. Perloff. Modern Industrial Organization, 4th edn. Pearson Addison Wesley, 2005, Chap. 5. P.A. Grout, S. Sonderegger. Predicting Cartels. Office of Fair Trading, Economics Discussion Paper. OFT 773, March 2005.

4. A small number of large customers, each purchasing relatively infrequently.
5. Each customer is accustomed to negotiating for its own individual price and other terms of service.
6. New products or new production methods are developed frequently.

Not only economic, but also institutional factors may be relevant assessing the possibility of setting up and maintaining a cartel. The presence of well-established and efficient business interest or trade associations is able to provide the necessary operational mechanism for cartel formation and success by accumulating and disseminating information on prices, market conditions and other data necessary for participants of a cartel to signal price and output intentions to one another.

Whether these and other factors cumulatively or in some combination explain the incidence of cartelization and, what is even more important, whether this theory could be useful in predicting a collusion likely to take place, has not yet been adequately confirmed. However, there is evidence that many of the factors identified by economists as facilitating collusion are present in industries where cartels have been detected (Levenstein, Suslow, 2002).

TABLE 1. **International cartels by industry, 1999–2008**

Industry	Number of cartels	% of all cartels
Chemicals	22	39
Industrial inputs	16	29
Food	8	14
Elevators & escalators	4	7
Banks	2	4
Transport	2	4
Needles & haberdashery	1	2
Fine arts auctions	1	2

Source: (Veljanovski, 2009).

Data presented in Table 1 show that international cartels prosecuted and fined by the European Commission in the period 1999–2008 were concentrated in the chemicals (39%), industrial materials (23%) and food (14%) sectors. The European experience indicates that collaboration among competitors is particularly likely to happen in mature industries with well-established networks in trade associations and similar organizations, with markets characterized by a high degree of interdependence, a limited number of sellers, low entry barriers, high fixed costs, low ability to adapt capacity at short notice,

high mobility and little elasticity of demand, homogeneity of products, transparency of prices and customer resistance to frequent variations in prices.[3]

The above discussed theory of cartel instability can be useful not only for identifying sectors and markets more or less susceptible to collusion, but also for fighting cartels by creating incentives for a cartel member to confess and implicate his co-conspirators with a hard evidence of their collusive agreement.

Legislation and leniency policy

Secret cartels are the most serious violation of competition rules since they invariably result in higher prices. Many competition authorities in all parts of the world attach great importance to the detection of cartels. Without exception, the legal systems of the member states of the European Union include rules prohibiting collusive agreements among competitors. The detection, prohibition and punishment of cartels are among the highest priorities of the European Commission in the field of competition policy. Article 81(1) of the EC Treaty[4] prohibits "*all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market*". Article 81(1) provides a non-exhaustive list of practices caught by the above provision, which includes:

- price fixing;
- output restrictions; and
- market sharing.

Article 81(2) provides that any agreements or decisions prohibited pursuant to article 81(1) shall be automatically void and unenforceable without the need for any act or finding of the European Commission (the Commission) or any other enforcement agency or court.[5]

Considering the harmful effects of cartels on society and on consumers in particular, it is also generally accepted that the rules prohibiting cartels should be accompanied by effective enforcement powers and sanctions. Since cartels are secret by definition, "the greatest challenge in the fight against hard-core cartels is to penetrate their cloak of secrecy and counter the increasingly sophisticated means at the companies' disposal to conceal collusive behavior"[6]. In this sense, one of the most significant contributions

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[3] See, for example, P.A. Grout, S. Sonderegger. Predicting Cartels. Office of Fair Trading, Economics Discussion Paper. OFT 773, March 2005.

[4] Official Journal C 325 , 24/12/2002, pp. 0064–0065.

[5] Following the entry into force of the Lisbon Treaty on 1 December 2009, Article 81 of the EC Treaty has become Article 101 of the Treaty on the Functioning of the European Union (TFEU).

[6] The Commission adopts a new leniency policy for companies which give information on cartels. IP/02/247 13/02/2002.

of recent years to the global fight against cartels is leniency policy[7] designed so as to encourage a cartel member to confess and implicate its co-conspirators with direct evidence about their illegal activities. Although most of the national competition laws have already provided a possibility to reduce fines for companies cooperating with competition authorities during cartel investigation, but the real breakthrough in detecting and fining cartels was achieved when the existing leniency programs were changed so as to guarantee to the first – and only the first – business or individual to cooperate with competition authorities in collusion prosecution, complete amnesty or immunity from sanctions for its conduct.

Worldwide, various competition authorities have developed rules on leniency, stating that a successful enforcement of the prohibition of cartels requires an effective leniency program. For the following reasons, the fight against cartels is likely to be far more effective when a leniency program is implemented (Oers, 2000):

- cartels often remain undetected because the participants are well aware of the illegal character of their activities and are anxious to conceal all evidence. The programs that encourage participants in a cartel to come forward with inside information allow for a faster, more effective and successful dissolution of secret cartels;
- to date, most harmful cartels operate internationally, which makes it even harder for the authorities involved to produce sufficient evidence as they are (partly) located outside their jurisdiction. Parties enjoying the benefits of a leniency program may provide evidence which the authority involved would otherwise be unable to obtain;
- the success of a cartel very much depends on the cartel members trusting each other (not cheating). The mere existence of a leniency program weakens a cartel as it adds an instrument for cartel members to cheat on each other. Creating more tension among its members, a leniency program may effectively hinder the existence of long-lasting cartels.

The experience of the United States and the European Commission have shown that a properly structured leniency program can dramatically increase the success of a fight against cartels.

The first country to introduce a leniency program was the United States in 1978, but there was not an immediate success. During the following 15 years it generated on average only one application per year[8]. In 1993, the U.S. Department of Justice made

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[7] Leniency could mean any reduction in the penalty compared to what would be otherwise imposed if the cartel was detected: smaller fine, shorter sentence, less restrictive order, or complete amnesty. Leniency programs are based on particular conditions which must be achieved and respected in order to qualify for such treatment.

[8] See "A Review of Recent Development and Cases in the Antitrust Division's Criminal Enforcement Program". Presentation by Scott D. Hammond, Director of the Criminal Enforcement, Antitrust Division, US Department of Justice, before the Conference Board's 2002 Antitrust Conference, March 7, 2002. www.usdoj.gov/atr/public/speeches/10862.htm

some important changes, firstly, making the corporate leniency available not only in situations in which the Department had no prior knowledge of the possible cartel as it was under the original program, but also even after an investigation had begun if the Department had not developed evidence enough to sustain a conviction for the conduct. Secondly, under the original program, granting leniency was still subject to the Departments discretion, while under the new program the grant was automatic if the necessary conditions were met.[9] These changes had a substantial impact on the program: the rate of applications jumped to approximately one per month. Leniency applications were directly responsible for successful prosecutions in several high-profile prosecutions by the Justice Department, including conspiracies in vitamins, graphite electrodes, marine construction and fine art auctions. From 1998 to 2002, the fines imposed in cases resulting from leniency applications totaled more than US$ 1,5 billion, and many individuals were sentenced to terms of imprisonment.[10]

The European Commission first introduced its leniency program in 1996[11] and revised it twice – in February 2002[12] and in December 2006[13]. The principal changes, comparing the 2002 revision to the original version were to promise full (100%) immunity from fines to the first corporation for providing evidence before the Commission had begun an investigation, and to drop the "decisive evidence" requirement for receiving full immunity, requiring only that it provides evidence enough to permit the Commission to initiate an investigation on the premises of suspected enterprises. The effect of these two changes was to increase both the rewards that a successful applicant would receive and the degree of transparency and certainty in the program (Hard Core Cartels, 2003). The improvements in the 2006 revision reflected the experience acquired in implementing previous versions and were set out to ensure even greater transparency and legal certainty.

Under the 1996 Leniency Notice, the Commission received 188 applications for non-imposition or reduction of fines and decided either not to impose fines or to grant a very substantial reduction (from 75 % to 100 %) or a significant reduction (50 % to 75 %) in 17 cases. Under the 2002 and the 2006 Notices, the Commission received 157 applications for immunity and 146 applications for reduction of fines, granting conditional immunity on 58 applications from entry into force of the Notice on 14 February 2002 until the end of 2008. During this period, the Commission adopted statements of objections in 52 cartel investigations; 46 of these investigations started on the basis of information

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9 Corporate Leniency Policy. US Department of Justice – Antitrust Division (1993).

10 See "A Review of Recent Development and Cases in the Antitrust Division's Criminal Enforcement Program". Presentation by Scott D. Hammond, Director of the Criminal Enforcement, Antitrust Division, US Department of Justice, before the Conference Board's 2002 Antitrust Conference, March 7, 2002. www.usdoj.gov/atr/public/speeches/10862.htm

11 Commission Notice on the non-imposition or reduction of fines in cartel cases. OJ C 207, 18.07.1996.

12 Commission Notice on the non-imposition or reduction of fines in cartel cases. OJ C 45, 19.02.2002, pp. 3–5.

13 Commission Notice on Immunity from fines and reduction of fines in cartel cases. OJ C 298, 08.12.2006, p. 17.

received under the 1996, 2002 or 2006 Leniency Notice[14]. These numbers suggest that leniency policy has been extremely effective making the detection of cartels more probable and prosecution more frequent. However, the ultimate purpose of using leniency to fight cartels is to deter every company from continuing or engaging in such behavior. Miller (2009) provides evidence that leniency programs might have positive effects in this respect. His study of U.S. cartels between 1985 and 2005 shows that the number of cartel discoveries significantly increased around the date of the introduction of the 1993 corporate leniency program and then sharply dropped. Such a pattern is consistent with the intensified cartel detection and improved deterrence.

The success of the U.S. and EC programs has stimulated other countries to adopt national leniency programs as an effective instrument to counter cartels. The Lithuanian Competition Council, integrating the guidelines of the EC Leniency Notice, introduced its leniency program in 2008[15].

Data presented in Table 2 show that after implementing Leniency Notices by the European Commission (since 1998) the fight against cartels has become more efficient: the number of decisions in cartel cases increased three times; 75% of cartels since 1990 were detected, prosecuted and fined in the period 2000–2009.

Comparative analysis of leniency programs and their implementation experiences in the US and European Union allows conclusions to be drawn about the necessary elements of a successful leniency policy, which could be summarized as follows:

- maximum motivation for a cartel member to be the first in the "race to confess": this can be achieved by awarding complete immunity from sanctions only to the first applicant. Such provision results in a destabilizing factor within a cartel;
- certainty and transparency: in general, parties are more likely to cooperate with the competition authorities when the results of their applications are predictable as accurately as possible;
- possibility to apply for immunity or reduction of fines even if the competition agency has already began an investigation;
- maximum degree of confidentiality permitted by law to the leniency application and the grant of leniency if it occurs, as well as to the information provided by the applicant: it increases the uncertainty among the cartel members about whether or when, or which one of them might have been defected.

There is another, overriding aspect to a successful leniency program: there must be a credible threat of severe sanctions for participating in a cartel. Unless cartel operators are at

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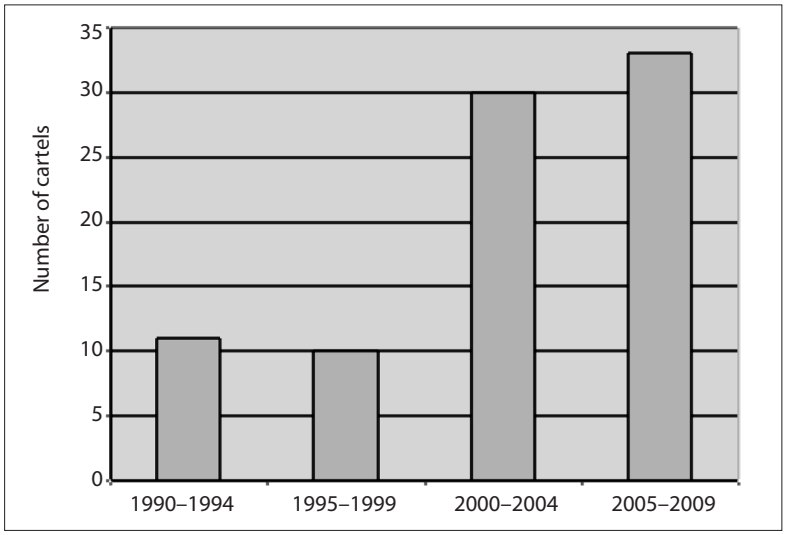
[14] See: European Parliament. Parliamentary questions. Joint answer given by Ms Kroes on behalf of the Commission. Written questions: E-0890/09, E-0891/09, E-0892/09. 2 April 2009.

[15] See "Rules on immunity from fines and reduction of fines for the parties to prohibited agreements". Resolution No. 1S-27 of 28 February 2008 of the Competition Council of the Republic of Lithuania.

TABLE 2. **Cartel cases[16] decided by the European Commission since 1990**

Period	Number of cartels	% total
1990–1994	11	13.1
1995–1999	10	11.9
2000–2004	30	35.7
2005–2009	33	39.3
Total	84	100



Source: www.europa.eu.int/competition/cartels/statistics

risk for a substantial punishment in case their agreement is discovered and prosecuted, they will have little or no incentive to enter the leniency program (Hard Core Cartels, 2003).

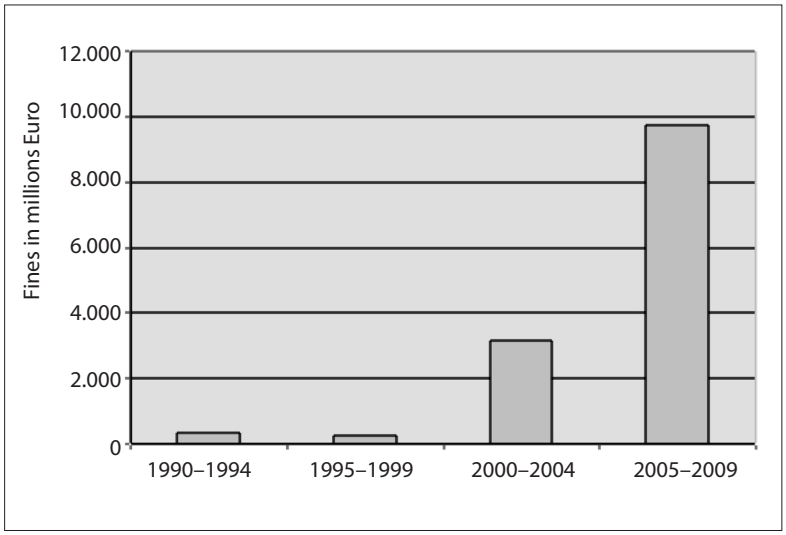
The statistical analysis of fines imposed by the European Commission on companies that infringe the EC Treaty rules leads to the conclusion that the success of the leniency policy by increasing the number of prosecuted cartels is based on the synergy created by the joint application of the guidelines on the method of setting fines[17], adopted by the Commission in 1998 in order to enhance transparency as to its fining policy, and the Leniency Notice. Compared with the period 1995–1999, the total amount of fines imposed on the companies in cartel cases increased 12 times (see Table 3).

[16] A cartel case is a single proceeding against various undertakings concerned and may involve more than one infringement. Only the cartel cases when a fine had been imposed were considered for the purpose of this table.

[17] Guidelines on the method of setting fines imposed pursuant to Article 15 (2) of Regulation No 17 and Article 65 (5) of the ECSC Treaty fines. Official Journal C 9, 14.01.1998, pp. 3–5

TABLE 3. **Fines imposed by the European Commission in cartel cases, 1990–2009**

Period	Amount in €
1990–1994	344.282.550
1995–1999	270.963.500
2000–2004	3.173.585.210
2005–2009	9.753.714.300
Total	13.542.545.560



Source: www.europa.eu.int/competition/cartels/statistics.

The synergies derived from a combination of the preventive and deterrent approach were further strengthened by the adoption in 2006 of the new Guidelines on the method of setting fines[18]. The revised Guidelines included three main changes: the new entry fee, the link between the fine and the duration of the infringement, and the increase for repeat offenders[19]. The implementation of these new Guidelines not only increased the total amount of fines imposed by the Commission with respect to cartel infringements in recent years compared to the previous periods (see Table 4), but also resulted in a number of record fines imposed in separate cartel cases (see Table 5), including fines

[18] Guidelines on the method of setting fines imposed pursuant to Article 23 (2)(a) of Regulation No 1/2003. OJ C 210 2006 9 1, p. 2.

[19] See: Competition: Commission revises Guidelines for setting fines in antitrust cases. Press release: IP/06/857 28/06/2006.

amounting to a total of EUR 1.384 billion on four companies in the car glass cartel in 2008 and fines amounting to EUR 992 million imposed on four companies in the elevators cartel in 2007.

TABLE 4: **Ten highest cartel fines per case (since 1969)**

Year	Case name	Amount (€)
2008	Car glass	1.383.896.000
2009	Gas	1.106.000.000
2007	Elevators and escalators	992.312.200
2001	Vitamins	790.515.000
2007	Gas insulated switchgear	750.712.500
2008	Paraffin waxes	676.011.400
2006	Synthetic rubber (BR/ESBR)	519.050.000
2007	Flat glass	486.900.000
2002	Plasterboard	458.520.000
2006	Hydrogen peroxide and perborate	388.128.000

Source: www.europa.eu.int/competition/cartels/statistics.

As indicated, eight of the ten largest fines were imposed in the period 2006–2009, including a record fine to the car glass cartel. In this case, the European Commission imposed fines on four automobile glass manufacturers – Asahi (Japan), Pilkington (United Kingdom), Saint-Gobain (France) and Soliver (Belgium) – for illegal market sharing and exchanging commercially sensitive information between 1998 and 2003. These four companies controlled about 90% of glass used in the European Economic Area in new cars and for original branded replacement glass for cars at that time, a market worth about €2 billion in the last full year of the infringement. The Commission increased the fines on St. Gobain by 60% because it was a repeat offender. Asahi provided additional information to help expose the infringement, and its fine was reduced by 50% under the Leniency Notice. These are the highest cartel fines the Commission has ever imposed, both on an individual company (€896.000.000 on Saint Gobain) and on a cartel as a whole.[20]

In conclusion, leniency programs together with adequate fining policies have two major effects on cartels: in the short run they facilitate the detection of cartels and thereby reduce the costs of legal enforcement, and in the long run they deter firms from antitrust abuse by discouraging them from continuing or entering into anticompetitive collusion.

[20] See: Summary of Commission Decision of 12 November 2008 relating to a proceeding under Article 81 of the Treaty establishing the European Community and Article 53 of the EEA Agreement (Case COMP/39.125 — Car glass). OJ C 173, 25.7.2009, pp. 13–16.

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