European Antitrust Policy 1957-2004: 
An Analysis of Commission Decisions

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Abstract

This paper provides a survey of European antitrust law enforcement since its foundation in the Treaty of Rome in 1957. We present a complete overview and statistical analysis of all formal Commission decisions adopted up to 2004 under Articles 81, 82 and 86 of the European Community Treaty. In the period March 1964 to December 2004, there have been 538 formal Commission decisions on antitrust in total, of which in 166 cases were appealed. We report a range of summary statistics concerning report route, investigation duration, length of the decision, decision type, imposed fines, number of parties, sector classification, and Commissioner and Director General responsible. The statistics are linked to changes in legislation and administrative implementation, thereby providing a historical overview that summarizes the Commission’s work in the area of antitrust. The paper further estimates the determinants of probability that a finding of an infringement is appealed against with the European Court of Justice.

Keywords: Antitrust, Appeal, Competition policy, European Commission

JEL Classification: L40, K21

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1. Introduction

European competition policy is a visible and much debated part of European Commission policy. Its foundations were laid in the Treaty of Rome in 1957. This treaty was preceded by the 1951 Treaty of Paris establishing the now expired European Coal and Steel Community (ECSC) in which already important competition policy provisions were incorporated (Martin, 2007). Article 3(g) in the introductory part of the Treaty of Rome identifies as one of the general objectives of the EC the achievement of “a system ensuring that competition in the internal market is not distorted”. The original Treaty text has been amended several times over the history of the European Community, the latest in the Treaty of Nice of 2001. The Articles 81 and 82 of the Treaty are to protect the competitive processes in the Community’s common market from anticompetitive conduct to the benefit of consumer welfare. Today, the European Commissioner for Competition guards over the rules established in European competition law, assisted by the Directorate-General (DG) for Competition and in close cooperation with the national competition authorities (NCA) of the Member States.

The DG Competition prepares decisions in three broad areas: antitrust, mergers and state aid. Each year, several hundreds of cases in each of these areas are being investigated. Over the period 2000-2004, the average number of new antitrust cases per year was 264. In addition, there was a yearly average of 284 new merger cases and 1075 new state aid cases. The Commission’s views and actions are daily news in international media and involve many firm representatives, competition lawyers and economic consultants. Recent examples of high-profile cases include the 2004 fine of 497 million euros given to Microsoft Corporation for abuse of dominance, the 2007 record-breaking fine of 992 million euros for five elevator producers for colluding to fix prices, the Commission’s decision to block the merger between General Electric and Honeywell, which had been approved by the US competition authorities, and the Commission’s demand for reimbursement of tens of millions of state aid to public broadcasters in Denmark and the Netherlands.

In this paper, we survey the European Commission’s years of active antitrust law enforcement up to 2004 in summary statistics. We provide an analysis of all formal Commission decisions in antitrust cases pursuant of Articles 81, 82 and 86, from the very first case, a vertical negative clearance in *Grosfillex & Fillistorfin* in March 1964, up to and

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3 The current numeration of the articles was adopted by the Treaty of Amsterdam in 1997 and entered into force in 1999. Previously, Articles 81 and 82 were numbered 85 and 86 in the Treaty of Rome, respectively.

including the last decision of 2004, the *Choline Chloride* cartel in December 2004. The survey is based upon an extensive data set in which we consistently collected publicly available information on the decisions of the DG Competition contained in their publication in the *Official Journal of the European Communities*. Our analyses do not include European merger or state aid decisions or decisions under the ECSC Treaty. We chose 2004 as the last year of investigation for three reasons. First, this allowed us to get all information complete on each of the cases. Several later decisions are still unpublished (due to confidentiality claims). Second, on 1 May 2004 Regulation 1/2003 (replacing Regulation 17/62) came into force, radically modernising the enforcement procedure. Third, in November 2004 ended Mario Monti’s period in office, being replaced by the current Commissioner Kroes.

We present a wide range of summary statistics, characterizing in total 538 formal antitrust decisions published during the period 1964 to 2004. Information was collected for each of these EU antitrust cases on such variables as length of decisions, number of months between opening and closing of investigation, nature of the alleged and/or found offence, level of fines imposed, Commissioner who signed the decision, and whether there was an appeal to the case. The summary statistics are interpreted and, where possible, linked to changes in legislation and administrative implementation. This provides a broad historical overview summarizing the Commission’s work. In addition, on the basis of a total of 166 individual appeals cases with the Court of First Instance (CFI)/European Court of Justice (ECJ), we offer a statistical analysis of the probability that a finding of an infringement is appealed.

To our knowledge, no consistent summary exists of antitrust cases under the Treaty of Rome which was established half a century ago. Federal antitrust enforcement in the United States has a history that is more than twice as long, based on the Sherman Act that was passed in 1890. The actions of the US Department of Justice’s Antitrust Division and the Federal Trade Commission have been a rich source of empirical analysis. Since the seminal surveys by Posner (1970), these studies include Gallo, Craycraft and Bush (1985), Gallo, Craycraft and Dutta (1986), Corwin (1992), Gallo, Dau-Schmidt, Craycraft and Parker (1994, 2000), Lin, Baldev, Sandfort and Slottje (2000), Ghosal and Gallo (2001), and contributions in Ghosal and Stennek (2007). Kovacic and Shapiro (2000) and Baker (2003) provide global estimates of the effect of U.S. competition policy on consumer welfare.

A developing literature is concerned with the empirics of European competition law enforcement. Neven (2006) globally estimates the size of European competition policy effect, similar to Kovacic and Shapiro (2000) and Baker (2003). The majority of empirical studies focuses on European merger control, including Nilsen (1997), Duso, Neven and

Gual and Mas (2005) and Harding and Gibbs (2005) are related papers in the area of antitrust. The former estimates the probability of adverse findings in Article 81 and 82 investigations in the period from 1999 to 2004, given relevant industry-level variables. Harding and Gibbs (2005) consider the success rate of cartel appeal proceedings before the European appellate courts between 6 and 61 per cent depending on the definition of success during the period from 1995 to 2004. In addition, there is a number of empirical analyses of antitrust enforcement in individual European Union Member States. In an early study, Shaw and Simpson (1986) establish a significant decrease in market shares by leading companies after a UK Monopolies and Mergers Commission (MMC, now the Competition Commission) investigation over a time period of 14 years. Davies, Nigel and Clarke (1999) determine the probability of an adverse finding against firms investigated by the MCC between 1973 and 1995. They find different probabilities for different types of allegations. Lauk (2002) similarly investigates decisions of the German Bundeskartellamt (BkartA) on abusive practices and cartels taken between 1985 and 2000. Furthermore, there exist a number of scholarly legal publications, including Ritter and Braun (1999), Jones and van der Wouden (2006), and Vogelaar (2007) that collect European Commission decisions or Court of Appeal sentences on competition and discuss selected landmark decisions in detail.

The paper is organized as follows. The following section briefly reviews the European competition rules on antitrust. It establishes the legal and institutional framework in which the history of European antitrust enforcement unfolds. Whenever possible, trends and breaks in the remaining sections are related to these historical developments and policy changes. In Section 3, the EC antitrust decisions are summarized over time and broken down according to origin and type. In Section 4, the Commission decisions are considered by each of the five main categories of economic conduct: horizontal agreements, abuse of dominance, vertical agreements, licensing, and joint ventures. Section 5 analyses official decisions by sector. In Section 6, several statistics are presented on European antitrust enforcement, such as length and depth of investigation and measures of output per Commissioner. Section 7 focuses on the findings of an infringement. Section 8 analyses trends in remedies and sanctions. Section
9 presents a probabilistic analysis of appeals proceedings and Section 10 concludes. Appendix A gives a description of the data sources used to compile the complete set of EC decisions on antitrust.

2. The European Competition Rules on Antitrust

The European Competition rules are embodied in the Treaty Articles, Counsel Regulations, Notices and Guidelines. The latter two serve as guidance and are not legally binding. Article 81(1) of the EC Treaty establishes the prohibition of agreements and concerted practices among undertakings affecting trade between Member States as well as restricting competition within the common market. Article 81 applies to four main types of economic agreements or concerted practices: horizontal conduct, vertical restraints, licensing and joint ventures. Prior to Regulation 1/2003, effective as of May 2004, companies were to notify any arrangement that potentially could be in breach of Article 81(1). Commission investigations following a notification could translate in a negative clearance, an exemption as well as the finding of an infringement. In case of the latter, the Commission may impose remedies and sanctions according to Council Regulation 17/62/EEC before May 2004 and Council Regulation 1/2003/EC thereafter. The latter also substituted a directly applicable exemption system for the notification system. Since our analysis spans up to 2004, we refer almost entirely to decisions that fell under the first Council regulation.

Whereas a negative clearance grants permanent protection from future investigation into the notified arrangement, exemptions are only given for a limited amount of time. Article 81(3) in particular facilitates the creation of joint ventures or shared patent agreements with the intent to foster innovation. Exemptions have also been granted in a number of other cases, in particular in the early years of enforcement, as well as more recently in special industries such as banking and telecommunications. In addition, some early regulations exempted certain sectors from application of the EU competition laws. Council Regulation 141/62, for example, exempted the transport sector, in particular motor vehicle distribution. Twice were industries in a structural crisis temporarily allowed to form a cartel, during the oil shock in the early 1980s and during the recession in the early 1990s.6

Note that since 1998 full function joint ventures are decided under the Merger Regulation, i.e. Council Regulation 1310/97/EC of 30 June 1997 on the control of concentrations between undertakings.

There has been and is no possibility for negative clearance or exemptions under Article 82, which prohibits the abuse of dominance. All cases that were decided under Article 82 led to an infringement, with the exception of one case involving minority shareholder agreements before the introduction of the Merger Regulation in 1989. Article 82 infringements relate to taking anticompetitive advantage of a dominant position. It includes discriminatory sales conditions and monopolization strategies through tying and bundling and predatory pricing. Article 86 addresses dominant behavior that is in principle similar to that prohibited by Article 82. However, the article is directed to situations of dominance maintained or fostered by Member State regulation.

There were several changes made to the regulatory framework over the history of European competition policy. The Treaty of Rome contains Article 211 (ex 207), which empowers the Commission to apply its provisions and regulations, directives and decisions adopted under the Treaty’s rules by the Community institutions, to formulate recommendations and deliver opinions. The legislative power was ensured in 1962 by Council Regulation 17/62/EEC, which was initiated by Commissioner Hans von der Groeben. This regulation gave the Commission the role of central enforcement authority with procedural autonomy and institutional neutrality. The first EC competition decision in *Grosfillex & Fillistorfin* is dated 11 March 1964, after the case being notified already in September 1959.

The Commission used block exemption regulations with certain forms of economic conduct, as well as with small and medium size enterprises, partly to alleviate its work load. Council Regulation 19/65/EEC and Commission Regulation 67/67/EEC set standards for patent licensing and exclusive distribution cases, respectively. In the first half of the 1980s, more than ten block exemption regulations were issued that led to issuing comfort letters in specialization and R&D joint ventures, exclusive distribution and purchasing as well as patent and know-how licensing. A comfort letter is a weak form of a negative clearance postponing further investigations with the promise that any future ramifications should the

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notified agreement later be found an infringement, would be treated leniently. The Commission adopted the ‘de minimis doctrine’ for cases involving agreements of minor importance. All of this helped to speed up the decision making process and clear the Commission’s large backlog of more than 4000 notifications, which had accumulated in the 1960s and the 1970s. The backlog was strongly reduced even when the number of Member States was increasing.

Several institutional changes in the last four decades have also had their impact on European competition policy. Only in 1976 was the first Commissioner responsible for competition, Raymond Vouel, appointed. Previously, the President represented DG IV, as DG Competition was called prior to 1999. In 1989, the Court of First Instance (CFI) was established to deal as the first appellate court with appeals against Articles 81 and 82 Commission decisions. This allowed the European Court of Justice (ECJ) to concentrate on appeal proceedings involving Member States, and second instance appeals exclusively on basis of legal arguments. In the same year, the introduction of the Merger Regulation implied a reallocation of institutional resources to the newly established Merger task force dealing with required notifications and strict deadlines for Commission decisions.

Since 1957, the DG Competition had been divided into sector-specific units screening industries for anti-competitive conduct. In 1998, the first anti-cartel unit was formed, with some twenty specialized officials. This unit deals with cartel formation throughout all sectors of the economy. The set of enforcement instruments of the DG Competition had been extended in 1996 with the introduction of the leniency program, which aims to encourage participant of cartels to inform the authorities of their involvement in an unknown collusive arrangement in exchange for a full or partial reduction in fines. After a revision in 2002, and most recently again in 2007, a substantial number of leniency applications have been made to the Commission and fine discounts have been given accordingly in the majority of cartel

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10 Comfort letters are not official decisions ruled under the EC Treaty, but only an administrative tool. They are often not fully published. Their existence is only required to be mentioned in an Official Journal publication when a comfort letter is sent in response to a notification or a complaint. Therefore, even though we were able to collect information on a large number of comfort letters, it is impossible to do so consistently from public sources and comfort letters are not included in our analyses.

11 Commission Notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community (de minimis) (2001/C 368/07).


14 Commission Notice on immunity from fines and reduction of fines in cartel cases (Leniency Notice) of 18 July 1996; Commission Notice on immunity from fines and reduction of fines in cartel cases of 19 February 2002; Commission Notice on Immunity from fines and reduction of fines in cartel cases (New Leniency Notice) of 8 December 2006
decisions. With the revised leniency program, the Commission installed a second cartel unit. The Commission recently promotes a practice of private litigation of antitrust cases to allow for compensation for harm suffered.\footnote{15}

The cooperation of the Commission with the NCAs of the Member States developed gradually. Until 2002, the Commission exercised predominance over the NCAs with some exceptions for countries with a well working antitrust authority like Germany, the UK and France. Only purely national cases and mergers were dealt with by the NCAs as of 1986. Since Regulation 1/2003/EC, the Commission no longer is statutorily the sole executor of European Community Law. Since then the Commission dealt with only a small minority (although the most prominent) of European competition law investigations. Competition authorities dealing with many cases recently are those of France, Germany, Hungary and the Netherlands.\footnote{16}

Over the years, the complexity of economic contents arguments in competition cases increased. In both merger control and antitrust, Commission decisions were successfully appealed with the CFI/ECJ on economic grounds. The European Commission has sought to strengthen its in-house economic expertise with the creation of the position of Chief Competition Economist and its support team of economists. In addition, the Economic Advisory Group on Competition Policy, a group of leading academic advisors, was formed. These developments, together with increased international cooperation with antitrust agencies worldwide through transatlantic agreements and the International Competition Network (ICN), have advanced an economic effects-based approach to the Commission’s decisions on antitrust.\footnote{17}

3. Commission Decisions over Time by Type and Origin

Figure 1 shows how the total of the 538 separate official antitrust decisions in the period 1964-2004 are distributed over the years.\footnote{18} The first few years after the approval of Regulation 17/62, the Commission published only few decisions. Thereafter, their number rose steadily over the years although numbers differ quite substantially from one year to

\footnote{17}See Roeller and Stehman (2006).
\footnote{18}Note that because our data do not include comfort letters, the number of effective decisions by the DG Competition is substantially higher than the number of formal decisions displayed in the figures. Nevertheless, these decisions reflect the major cases.
another. A peak in the number of cases was reached in 1992 but this was followed by a substantial drop. The graph suggests that the entry of new Member States has had only limited effect on the number of decisions.

![Graph showing total number of Commission decisions on antitrust per year.](image)

Figure 1: Total number of Commission decisions on antitrust per year.

The early upward trend reflects DG Competition’s growing legitimacy and jurisdiction. Broadly speaking, and useful for further analysis later on, this first period runs from 1957 to 1977. The second period is that between 1978, when Raymond Vouel had been established one full year as Commissioner for Competition, and 1990, when several block exemption measures were taken to reduce an accumulated back-log of cases (“the drawer”) which was cleaned out by Brittan at the beginning of the 1990s. The sudden decrease in the number of cases in the early 1990s may be explained by the measures introduced to reduce the Commission’s workload, such as the block exemption regulation system and a stronger reliance on comfort letters over official decisions in this period. In addition, around this time the DG Competition was further burdened with enforcement of the 1989 merger control regulation. This may well have tied up a number of DG Competition case handlers, leading to

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The number of cases pending dropped from 3239 in 1989 to 1231 only three years later. Many of these cases dealt with notified agreements no longer in force.
decreased numbers of antitrust cases been taken up. The third enforcement period, from 1990 to 2004, is characterized by a number of innovations in enforcement, including the merger task force, the first leniency program and the anti-cartel units.

The competition policy enforcement seeks to detect and prevent anticompetitive behavior that market parties may become increasingly sophisticated in masking. Therefore, the number of cases (or even infringements) tells little about the size and shape of the pool of European antitrust violations is, except for those cases in which there was a finding of an infringement.\(^\text{20}\) Hence, neither should we draw strong normative conclusions from the development of the total number of official Commission decisions, nor judge the Commission’s industry by the sheer number of decisions without bearing this important data bias in mind.

When the sum of official decisions is averaged by month in which the decisions were taken, we find that over half of the cases are decided upon in two months: 17% is taken in July and 37% in December. Hence, there are peaks before Summer and Christmas. There are also clear concentrated periods of high productivity at the end of the terms of a Competition Commissioner. In 1988, when Sutherland ended his term, he took the majority of decisions in his last month (December) in office. The end of Brittan’s term explains the outlier in 1992, after whom van Miert took over in January 1993. The following peak is in 1999, the end of van Miert’s period in office.

Figure 2 categorizes the official decisions by type of formal decision: interim measure, infringement, exemption or negative clearance.

\(^{20}\) See Harrington (2006) for an attempt to derive conclusions on the complete pool of cartels from infringement findings.
In the early stages of EU competition law enforcement, the Commission concluded its official investigations mainly by issuing negative clearances and exemptions. Two years after Regulation 17/62 was adopted, in March 1964 the first antitrust decision on record, Grossfillex and Fillistorf, was a negative clearance under Article 81(1) for a vertical agreement between two German companies.\(^{21}\) Another four decisions followed that year. With only another four decisions in total in the years 1965-1967, 1968 saw an increase to eight. In the year 1971, with 17 decisions, enforcement for the first time overshot what would become the average of 13 decisions per year in the Commission’s effective policy period between 1964 and 2004.

The first findings of an infringement was in September 1964, in the Commission’s fourth decision, Grundig-Consten.\(^{22}\) The agreement between the two firms was decided a breach of Article 81(1) EC Treaty, and ordered to be discontinued. This first adverse finding was appealed to the ECJ. The ECJ quashed the decision on economic grounds, as the first appeal ruling in European antitrust, in June 1966.

\(^{22}\) Grundig-Consten Commission decision 64/566/EEC [1964] OJ L 64/2545, Case IV/3344
Only in July 1969 did the Commission find infringements again, in the *Quinine* cartel, with a total fine of ECU 500,000, and in the *Dyestuffs* cartel case, with a total fine of ECU 490,000. In the *Quinine* cartel a breach of Article 81(1) was found, in the form of horizontal market sharing, quota arrangements and price fixing. Prior to that, the German Bundeskartelamt had found evidence against the firms involved in the arrangement already. The decision was with limited success appealed against in three distinct ECJ cases by ACF Chemiefarma, Buchler & Company as well as Boehringer Mannheim. The ECJ largely upheld the Commission’s decision. *Dyestuffs* would become an early and seminal case, which has served in proceeding *Annual Reports* as a benchmark.

Figure 2 shows that from the early 1970s onwards, the number of infringements found increased relative to exemptions and negative clearances. In Figure 3, the official decision types have been presented in pie diagrams for the three representative enforcement periods identified above, containing 127, 203 and 208 decisions, respectively. The figure brings out that indeed the relative number of infringement decisions has increased over the periods, reducing in particular the share of negative clearances, with exemptions remaining almost constant. The rise in infringement decisions since 1999 is largely due to the Commission creating the first anti-cartel unit and starting receiving leniency applications to the 1996 introduced leniency program.

![Figure 3: Formal decisions by type for three enforcement periods.](image-url)

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Figure 4 displays the report route of the cases. It reveals that leniency formed a large attractor of cases from 2000 onwards. Two years after the introduction of the leniency program, *British Sugar* was the first decision in which leniency played a role.²⁵ Advocates of the availability of leniency often take the high number of leniency cases as a measure of the program’s success. In addition, the information provided by the parties in their applications has speeded up proceedings. One of the European cartel cases that was most swiftly dealt with is *Fine Art Auction Houses*, the first cartel decision made under the revised 2002 leniency notice after only half year of investigation in 2002.²⁶

Another clear trend in Figure 4 is that more decisions originate from the Commission’s own initiative. The role of notifications in initiating formal decisions has decreased significantly since the turn of the century. The abolishment of the notification requirement in May 2004 came at the moment when the share of notifications in formal decisions, as displayed, was already falling due to the increased use of comfort letters. This is also apparent from Figure 5, which presents pie charts of report routes per representative enforcement period.

²⁵ *British Sugar* Commission decision 1999/210/EC [1999] OJ L 76/1, Cases IV/33.708, 33.709, 33.710, 33.711
Notifications as origin of the case decreases from almost three quarters of cases between 1964 and 1977 to roughly one-third in 1991-2002. Until the 1990s, only 20 per cent of decisions started on the Commission’s own initiative, but the share increases in the 1991-2004 period.

Figure 5: Report route by type for three enforcement periods.

Figure 5 shows that official decisions on cases brought to the Commission by complaints have been increasing over the years. Regulation 17/62 provided that only parties with a legitimate interest may lodge a complaint. Nonetheless, the Commission has discretionary power in handling complaints. It can reject a complaint, which it must motivate in a written decision to the complainant and a formal statement in the *Official Journal* that is subject to appeal.\(^{27}\) However, although they carry the risk of selection bias and even strategic abuse, complaints are an essential source of information for the Commission. The data suggest that initially potential complainants needed some time to become aware of the possibility to complain about suspected anti-competitive behavior of rivals, suppliers or distributors. However, it should be kept in mind that a substantial part of the decisions that are registered as Commission’s own initiative were in fact complaints by parties that preferred to remain anonymous. This effect may have been stronger in early periods than it is today.

Table 1 displays the Commission’s official decisions against their report route for the entire enforcement history. Almost one in four notifications resulted in an infringement, but a negative clearance was slightly more likely. The majority of notifications was exempted. The categories of complaint and Commission’s own initiative are nearly always connected to an infringement. However, this should not be interpreted that complaints and investigations

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\(^{27}\) As the Commission does not systematically publish rejections of complaints, we have not included them in our analyses.
initiated by the Commission lead in a large majority of cases to an infringement. Only those investigations on complaints and by the Commission’s own initiative that result in enough evidence for an infringement decision end up in official publications.

Of the five cases in which a Commission’s initiative failed to lead to an infringement, consider *Bayer/Gist-Brocades*. After opening investigations in December 1974, a prompt notification by the parties led to an exemption for cooperation in production, sales and distribution for eight years with conditions roughly one year later. The second example is *EBU/Eurovision System*. In December 1988, the Commission started an investigation of anticompetitive conduct, to eventually conclude on a conditional five-year exemption facilitating publication rights exchange and joint buying for members for the European Broadcasting Union.

<table>
<thead>
<tr>
<th>Notification</th>
<th>Exemption</th>
<th>Infringement</th>
<th>Interim Measure</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>73.25</td>
<td>150.75</td>
<td>62</td>
<td>0</td>
<td>286</td>
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<tr>
<td>1.25</td>
<td>1.75</td>
<td>92</td>
<td>4</td>
<td>99</td>
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<td>0</td>
<td>0</td>
<td>29</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>155.5</strong></td>
<td><strong>302</strong></td>
<td><strong>5</strong></td>
<td><strong>538</strong></td>
</tr>
</tbody>
</table>

Table 1: Formal decisions by report route.

4. Commission Decisions by Type of Economic Conduct

It is possible to identify six main categories of economically motivated types of arguments in the antitrust decisions of the European Commission. These are Article 81 decisions on horizontal constraints, licensing, vertical restraints and joint ventures, together with Article 82 cases on abuse of dominance, and Article 86 cases addressed to Member States. Figure 6 breaks the total number of formal decisions of the European Commission on antitrust down into these six categories. Note that these numbers include all decisions and not only infringements, so that it reflects the investigative efforts of the Commission over economic

31 Cases may have more than one report route, resulting in the fractions in the table.
categories of potential anticompetitive behavior. A number of cases are included as procedural decisions.32

Figure 6: Formal Commission decisions by economic conduct.

Table 2 displays the distribution of the total numbers of cases, complete again with joint ventures and Article 86 cases. Each column is an investigated type of economic conduct and each row a formal decision type. Note that these numbers should not be interpreted strictly as the probabilities of adverse findings in investigations, since it is likely that many Commission investigations are never concluded with a formal decision but rather not pursuit or otherwise informally resolved.

<table>
<thead>
<tr>
<th></th>
<th>Negative Clearance</th>
<th>Exemption</th>
<th>Infringement</th>
<th>Interim Measure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>Horizontal</td>
<td>29</td>
<td>59</td>
<td>131.83</td>
<td>0</td>
<td>219.83</td>
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<tr>
<td>Dominance</td>
<td>1</td>
<td>0</td>
<td>45.33</td>
<td>3.5</td>
<td>49.83</td>
</tr>
<tr>
<td>Licensing</td>
<td>10.5</td>
<td>10.5</td>
<td>9.83</td>
<td>0.5</td>
<td>31.33</td>
</tr>
<tr>
<td>Vertical</td>
<td>24</td>
<td>32.5</td>
<td>66.5</td>
<td>1</td>
<td>124</td>
</tr>
<tr>
<td>Joint Venture</td>
<td>11</td>
<td>48.5</td>
<td>2</td>
<td>0</td>
<td>61.5</td>
</tr>
<tr>
<td>Article 86</td>
<td>0</td>
<td>5</td>
<td>16</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Procedural</td>
<td>0</td>
<td>0</td>
<td>30.5</td>
<td>0</td>
<td>30.5</td>
</tr>
<tr>
<td>Total</td>
<td>75.5</td>
<td>155.5</td>
<td>302</td>
<td>5</td>
<td>538</td>
</tr>
</tbody>
</table>

Table 2: Alleged economic conducts by decision type.33

32 These are Commission decisions adopted pursuant to Art.11, which concerns the Commission’s right to ask information, and Art.15-16, the Commission’s right to impose fines, of Regulation 17/62. These correspond – notwithstanding the differences - to the current Article 18, 23 and 24 of Regulation 1/2003.

33 If a decision involved more than one type of economic conduct, each of these received an equal share in the decision type. In total 12 decisions involved two different types of conduct. The only case causing a decision to be attributed to three different economic conducts is Decca Navigator System, see Decca Navigator System Commission decision 89/113/EC [1989] OJ L 43/27, Cases IV/30.979,
The majority of formal decisions on horizontal cases and cases on vertical restraints are an infringement. Licensing cases display an equal distribution over negative clearances, exemptions, and infringements. Joint ventures are an interesting category in these statistics, since they are notified by way of an application for a license. There were only two infringement decisions on joint ventures, which can be interpreted as companies applying for the creation of a new entity having roughly a 95% chance of being approved. Do note that there is likely to be a strong selection effect in these numbers, as companies and their legal counsels must have increased their ability to anticipate the likely view of the Commission by experience over the years. The same seven categories are presented in Figure 7 per enforcement period.

Figure 7: Formal Commission decisions by economic conduct per enforcement period.

The distribution of the types of investigations is more or less constant over the three representative periods of enforcement, with some exceptions. The category horizontal constraints is consistently the largest category. In the period 1964-1977, it makes up for almost half of all cases, including landmark decisions like Grundig-Consten (first infringement), Quinine (first landmark cartel case fined ECU 500,000), European Sugar (Largest cartel case in this period with a record breaking fine of ECU 9,000,000), BMW AG (first vertical restraint decision against one of the largest car manufacturers) and, the Chiquita

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31.394. In eight decisions simultaneously exemptions and negative clearances were granted under Article 81.
decision (largest fine in an Article 82 decision in this period, ECU 1,000,000). The category includes horizontal co-operations such as trade associations, agreements on standards, and strategic alliances, many of which received a negative clearance or an exemption. More than 75 per cent of all horizontal infringement cases are cartel cases, concerned with fixing prices or dividing the market with the intent of eliminating competition. Whereas initially cartels were notified to the Commission, this quickly stopped and cases were instead brought to the attention of the authorities through complaints, active detection by the Commission and in the last decade, leniency applications.

The category vertical restraints is the second largest category. It includes territorial exclusivity agreements, selective distribution systems, exclusive dealing and franchising. In the second period of enforcement, the share of vertical restraints in total of decisions increases. Vertical restraints have a long history of block exemption regulations in particular in the automobile industry. These date back to 1967, but were several times renewed in the 1980s and beyond. The block exemption regulation introduced in June 2000 is designed to provide a ‘safe harbor’ for most vertical agreements (market shares not exceeding 30%) possibly reducing the relative importance of vertical restraints in Figure 7. In the last decade, further efforts to integrate and harmonize the single European market have led to substantial fines for automobile manufacturers for preventing parallel imports: €102 million to VW-Audi, €43 million to Opel, €72 million to Mercedes Benz.

There is a significant shift in the routes by which vertical cases have come to be considered by the European Commission. In the first enforcement period almost 80 per cent of cases was notified by companies seeking permission for their business strategies. In the last period, no more than 15 per cent of decisions are the result of a notification, another 15 per cent follows from a complaint, and the other 70 per cent are classified as Commission’s own initiative. In total we identified seven subcategories summarizing the types of vertical restraints in the economic literature. They are exclusive dealing and market foreclosure, territorial exclusivity and parallel import bans, resale price maintenance (RPM), bundling and tying, selective


35 Schinkel (2007) offers a more extensive analysis of European cartel cases.


distribution systems, franchising, and discounts/rebates. Territorial exclusivity and parallel import bans is the largest category making up for 50 per cent of all cases. The Commission exposed its aim of market integration and harmonization explicitly throughout the EC Treaty. Article 81(1) focuses on the prohibition of any conduct distorting internal EU market competition and trade. Territorial exclusivity and parallel import bans account for 80 per cent of all infringements related to vertical restraints. This sub-classification furthermore contributes to 24 per cent of exemptions and 17 per cent of negative clearances. All other sub-classifications are relatively small in size. The second and third largest categories are selective distribution systems and discounts/rebates, respectively. These two categories show a different pattern than the largest one, most often leading to an exemption or negative clearance. For selective distribution systems, only 15 per cent end in an infringement compared to 30 per cent leading to a negative clearance and 55 per cent to an exemption. For discounts/rebates, the outcome is positive for a company in all cases. 54 per cent of all cases in this classification lead to a negative clearance. In the rest of all cases, the temporary exemption from Article 81 (3) applies. Hence, selective distribution systems are not often perceived as harming competition. Discounts and rebates schemes only seem to matter whenever a dominant position is present.

The remaining four subcategories – exclusive dealing and market foreclosure, resale price maintenance (RPM), bundling and tying and franchising – sum up to 17 per cent out of all vertical conduct decisions. There have been only three cases covering exclusive dealing, all ending in a negative clearance. In contrast, RPM almost always resulted in an infringement. Only in one case, RPM ended in a negative clearance: the so-called D'Ieteren motor oils case.41 In this case, D'Ieteren was the exclusive, contractual importer for Belgium of vehicles made by Volkswagen. As the distributor was solely responsible for the Belgium market, the case also involved a territorial exclusivity component. Still, the Commission concluded that these exclusivities led to a price decrease which would be transferred to the consumer and therefore, did not interfere.

Bundling and tying never ended with a prohibition in a vertical case setting. 36 per cent of all cases ended with a negative clearance. The rest resulted in exemptions. Consequently, bundling and tying is only perceived to have negative consequences for competition in an oligopolistic market with a dominant company. The strictest vertical agreement for companies is franchising. In a franchising agreement, all conditions covering distribution and

production of a good are specified in detail. The franchisor limits entrepreneurial freedom of the franchisee for the transfer of knowledge, trademarks and/or patents. Still, the Commission did not perceive these limitations as an issue and granted all four franchise agreements ever under investigation an exemption. The first block exemption regulation covering franchising agreements dates back to 1988.42

The percentage of abuse of dominance decisions has somewhat increased in the third enforcement period in Figure 7. The Commission makes several landmark decisions during this period. We have identified ten economic sub-classifications of abuse of dominance: discriminatory sales conditions, predatory pricing, loyalty discounts/fidelity rebates, squeezing, bundling/tying, monopsony purchasing, restricting entry, refusal to sell/buy, preventing interoperability and best-price guarantees. In many abuse cases, more than one these potential forms of anticompetitive behavior play a role. In *Tetra Pak II* in 1991, for example, the company engaged simultaneously in discriminatory sales conditions, predatory pricing, tying and restricting entry. The Commission fined the firm ECU 75 million being the highest fine imposed under Article 82 up to that point, against which Tetra Pak unsuccessfully appealed.43 Another example is the *Irish Sugar* decision in 1997, in which the company offered a complex discriminatory pricing and contract scheme incorporating loyalty rebates facilitating its attempt to price predatorily thereby restricting entry. The Commission imposed a fine of about EUR 9 million euro, which was only slightly reduced on appeal.44 A recent example is the *Michelin* case in 2002.45 Michelin infringed EC competition law for the second time on anticompetitive loyalty discounts and fidelity rebates.

The share of the related Article 86 grows over the periods between 1991 and 2004, with well-known former state-run monopolies being liberalized across the Member States in *UPS/Deutsche Post*46, *British Post/Deutsche Post*47 and *Snelped/La Poste*48. In 1997, for example, out of ten official decisions that year, eight were ruled under Article 82, 86 or

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44 Sugar Commission decision 97/624/EC [1997] OJ L 258/1, Cases IV/34.621, 35.059
47 Deutsche Post AG — Interception of cross-border mail Commission decision 2001/892/EC [2001]
OJ L 331/40, Case COMP/C-1/36.915
COMP/37.133
both. Four were addressed to Member States to exempt a postponement to liberalize their local telecommunications industries. Discriminatory sales conditions and refusal to sell/buy are the two categories most often found in abuse of dominance cases. Each of them makes up for about 20 per cent of all economic dominance categories. The three sub-classifications scoring second highest are loyalty discounts, restricting entry and best price guarantees, each accounting for about 15 per cent. Monopsony purchasing has never been detected by the Commission in the entire forty-year period. Aspects of bundling or tying are found in ten cases. There are only seven cases of predatory pricing in the period considered. The first was Akzo/ECS, in which an interim measure was decided in 1983 and a fine of ECU 10 million was given in 1985. Akzo was accused of seeking to remove their British competitor ECS from the benzoyl peroxide market. There are three cases of price squeezing and two of preventing interoperability: Decca Navigator and Microsoft. The latter led to the highest fine ever in an abuse of dominance case, which was unsuccessfully appealed to the CFI.

Figure 7 shows that there is a limited rise of Article 82 infringements versus Article 81 infringements over time. Article 82 cases differ in the report route through which they enter the Commission’s investigation: there is no notification. From 1964 to 1977, the Commission initiated five proceedings and another four were based on complaints. Note again a part of officially Commission initiated cases might refer to anonymous complaints. Thereafter, the majority of cases were non-anonymously filed by firms accusing the dominant firm of practicing unfair conduct. In the third period, a landmark case involving horizontal restraints via shareholding agreement leading to a dominant position and its abuse was the Warner - Lambert/Gilette and Bic/Gilette case. The parties filed a notification which was simultaneously accompanied by a complaint. The decision incorporated a horizontal as well as dominant aspect, hence we assign one fourth of the case to a notification for a dominance decision, which is the only notification case in the period from 1991 to 2004.

Finally, licensing and joint ventures together remain a steady category over the years of around 17 per cent of all decisions, mostly negative clearances or exemptions. Joint ventures have increased somewhat in the total share of decision types from seven to twelve and

thirteen per cent over the enforcement periods. At the same time, licensing cases decreased from nine to six and four per cent.

Joint ventures (JVs) can be divided into ones involving mainly R&D and those involving mainly marketing, distribution and production. The types of JVs show a dispersed pattern over time. In the first and the last enforcement period, marketing, distribution and production agreements made up for about two-third of JV cases. In the intermediate period from 1978-90, most JVs were concerned with R&D agreements. The number of alliances increases over time from none to two and finally to eight in the last period. The alliances all received exemptions as the Commission aimed at strengthening the competitiveness of its Member State firms. All cases where brought to the attention of the EC by notification.

For licensing, we distinguish trademark & branding and Intellectual Property Rights (IPR). Across all periods, IPR licensing was more frequent than trademark and branding licenses. Whereas from 1964 until 1990 IPR licensing made up for about two thirds of all the cases, in the last enforcement period, all licensing cases were IPR cases. Licensing cases were almost all the result of notifications and increasingly came under block exemption regulations.

5. Commission Decisions by Economic Sector

The European Commission appears to have found more need for the application of the European competition rules in certain industries than in others. Amongst the horizontal cartel infringements, for example, there are many that concern chemicals. Many vertical abuses were established in the automobile, cosmetics, consumer electronics and alcoholic beverage industries. Applying the OECD sector specification, we consider the distribution of all antitrust decisions over ten sectors: agriculture; mining; manufacturing; electricity and gas; construction; trade (wholesaling and retailing) and hotels; transport; banking & insurance (incl. real estate); communication; public service. We further subdivided the manufacturing sectors in five sub-sectors: food & drinks; textile, leather and paper; chemicals; plastics, rubber and glass; metal products and engineering (incl. cars and electronics). Table 3 presents the cases for reproduces the OECD sectors.

Manufacturing, communication and transport, attracted the largest number of antitrust decisions. Manufacturing alone accounts for more than six out of ten cases and infringements. Obviously, this is a very large sector that includes many large firms. It is also a sector which is capital intensive, with relatively high entry barriers and inter-firm
dependences. This increases the risk of abuse and/or collusion relative to industries with lower barriers, lower capital intensity and less R&D expenditures.

<table>
<thead>
<tr>
<th></th>
<th>Negative Clearance</th>
<th>Exemption</th>
<th>Infringement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>Agriculture</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Mining</td>
<td>2.5</td>
<td>0</td>
<td>3.5</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>91.5</td>
<td>38.5</td>
<td>177</td>
<td>307</td>
</tr>
<tr>
<td>Food &amp; Drinks</td>
<td>6</td>
<td>3</td>
<td>31</td>
<td>40</td>
</tr>
<tr>
<td>Textile, Leather &amp; Paper</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Chemicals</td>
<td>24.5</td>
<td>11</td>
<td>49.5</td>
<td>85</td>
</tr>
<tr>
<td>Plastics, Rubber &amp; Glass</td>
<td>8</td>
<td>7</td>
<td>34</td>
<td>49</td>
</tr>
<tr>
<td>Metal products &amp; engineering</td>
<td>48</td>
<td>14.5</td>
<td>54.5</td>
<td>117</td>
</tr>
<tr>
<td>Electricity &amp; Gas</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Trade &amp; Hotels</td>
<td>6.5</td>
<td>14.5</td>
<td>9</td>
<td>30</td>
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<tr>
<td>Transport</td>
<td>9</td>
<td>2</td>
<td>30.5</td>
<td>41.5</td>
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<td>Banking &amp; Insurance</td>
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<td>5.5</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Communication</td>
<td>25.5</td>
<td>9</td>
<td>22.5</td>
<td>57</td>
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<tr>
<td>Public Service</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>155.5</strong></td>
<td><strong>75.5</strong></td>
<td><strong>271.5</strong></td>
<td><strong>502.5</strong></td>
</tr>
</tbody>
</table>

Table 3: Decision by sector classification.53

The table shows that infringements have been less common, percentage wise, in trade & hotels and in banking & insurance. The transportation sector has a high share of adverse findings. About three out of four decisions are infringements. This sector has historically attracted a lot of regulatory attention, ranging from block exemption based on considerations of public safety, to cartels in the form of maritime trade agency agreements.54 The Commission’s interest in the communication sector is partly due to liberalization in this sector. In addition, the sector saw a number of abuses of dominance, for example in postal service. The banking & insurance sector has received only seven infringement decisions. There have been cartel cases of financial institutions that fixed inter-banking commission rates. However, exemptions have been given for reasons of technological progress and the development of payment network. Finally in the construction sector, there were a lot of cartel cases found in the 1970s to 1990s. Especially in The Netherlands, Germany and Belgium

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53 Both an exemption and a negative clearance was given in nine cases. All decisions but four involved one sector only. These four cases involved two sectors. The table excludes interim measures and procedural issues under Reg. 17/62.

nation-wide cooperation existed in the form of either trade associations fixing prices and contract terms or bid-rigging cartels.\textsuperscript{55}

Table 4 presents the OECD sector classification versus economic conduct. This gives some insight into possible reasons for the difference in the rate of infringement across different sectors. The high rate in the transport sector appears due to a relatively high number of abuse of dominance issues. The low rate in the communication sector can be related to a relatively high number of joint ventures, a category that is usually exempted. Note that many Article 86 cases fall in this sector. Licensing and joint venture cases are mainly found in the metal products & engineering sub-sector.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Horizontal</th>
<th>Dominance</th>
<th>Licensing</th>
<th>Vertical</th>
<th>Joint Venture</th>
<th>Article 86</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Mining</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>136.83</td>
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<td>19.83</td>
<td>89.5</td>
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<td>307</td>
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<tr>
<td>Food &amp; Drinks</td>
<td>17</td>
<td>3</td>
<td>5.5</td>
<td>14.5</td>
<td>0</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Textile, Leather &amp; Paper</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Chemicals</td>
<td>51</td>
<td>8</td>
<td>1</td>
<td>13.5</td>
<td>11.5</td>
<td>0</td>
<td>85</td>
</tr>
<tr>
<td>Plastics, Rubber &amp; Glass</td>
<td>27</td>
<td>4</td>
<td>3</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>Metal products &amp; engineering</td>
<td>33.83</td>
<td>8.83</td>
<td>7.33</td>
<td>47.5</td>
<td>19.5</td>
<td>0</td>
<td>117</td>
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<tr>
<td>Electricity &amp; Gas</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>9</td>
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<tr>
<td>Construction</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Trade &amp; Hotels</td>
<td>10</td>
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<td>1.5</td>
<td>18.5</td>
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<tr>
<td>Transport</td>
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<td>2</td>
<td>4</td>
<td>7</td>
<td>41.5</td>
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<tr>
<td>Banking &amp; Insurance</td>
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<td>0</td>
<td>2</td>
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<td>1</td>
<td>26</td>
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<tr>
<td>Communication</td>
<td>8.5</td>
<td>8.5</td>
<td>5.5</td>
<td>4</td>
<td>17.5</td>
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<td>57</td>
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<tr>
<td>Public Service</td>
<td>2</td>
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<td>0</td>
<td>0</td>
<td>4</td>
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<tr>
<td><strong>Total</strong></td>
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<td>46.33</td>
<td>30.83</td>
<td>123</td>
<td>61.5</td>
<td>21</td>
<td>502.5</td>
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</tbody>
</table>

Table 4: Alleged economic conducts by sector classification.\textsuperscript{56}

Below, we restrict attention to the main eight (sub-)sectors: four sub-sectors of manufacturing, trade & hotels, banking & insurance, transportation and communication. Together, these sectors contain the bulk of cases. In Figure 8, these categories are presented for the three enforcement periods. Manufacturing is the largest sector. However, its overall share in number of cases became less than half during the third enforcement period. Especially the sub-sector of metal products & engineering has decreased in relative number of cases. The sub-sector of chemicals continues to be sizeable in terms of number of cases.


\textsuperscript{56} See note to Table 2.
This industry contains the bulk of repeat offenders in European antitrust. A list of the top repeat offenders (usually in cartels) contains firms like (number of participations in infringement cases between brackets): BASF (9), Solvay (8), ICI (8), Hoechst/Aventis\(^{57}\) (8), AKZO (4), Bayer (4) and Shell (4). These firms were often in cartels together, like the *Dyestuffs*, *Polypropylene* and *PVC* cases. The transportation and communication sectors show a steady increase in importance, both up to 22 per cent of all cases in the last enforcement period. Many of these decisions relate to the liberalization processes in the various Member States (Article 86).

![Figure 8: Formal Commission decisions by sector per enforcement period.](image)

### 6. Enforcement of the Competition Rules

One interesting measure of the diligence of DG Competition in its decision making is the duration of its investigations over time. Of all Article 81 and 82 decisions, the longest investigation of all Commission decisions has been in *Association Belge des Banques* (1986), with 289 months.\(^{58}\) However, the long duration of the case is best explained using the backlog effect. The Association of Belgium Banks filed a notification already in 1962 but was apparently only investigated more than two decades later under Commissioner Sutherland. Two cases were decided upon exceptionally fast (one month): *NAVEWA–ANSEAU* and *EATA*.\(^{59}\) The last case taking more than five years (60 months) dates back to July 2001. On average over all its formal decisions, the Commission needed 40.3 (in total 21647) months after opening the investigation, with an average of 43 months for Article 81

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\(^{57}\) Aventis is the name of the merged company of Hoechst and Rhône-Poulenc.


and 30 months for Article 82 decisions. Figure 9 presents the average difference in months between the date of the official decision and the date mentioned in its publication as the starting date of the investigation. The figure shows the average case duration in months per year.

![Figure 9: Duration of antitrust investigations in average number of months per year.](image)

Clearly, once enforcement got underway from the 1970s onwards, there is a downward trend in the average number of investigating months from around sixty in the 1970s to an average of about thirty months per formal decision in the 1990s. These numbers appear high, but they are influenced by some individual cases that took exceptionally long. For example, the peak in 1980 is largely due to four cases that had already been notified in 1962. Related to the duration of the investigation is the cases backlog standing overtime at DG Competition. During the 1970s, a backlog of about 4000 cases had evolved, which was first reduced in the 1980s under Commissioner Sutherland, in part because notified agreements had expired and because in the mean time introduced block exemption regulations made the notification void.
About one thousand cases were close in a short period of time.\textsuperscript{60} Thereafter, a rapid decline of the back-log took place until 1992 under Commissioner Brittan, when the stock of investigations was around one thousand.\textsuperscript{61}

Another statistic that conveys information about the enforcement process is the length of a final decision, measured as the number of recitals in the official publication. The Commission numbers the paragraphs in its decisions, which each contain a separate part of the analysis. Therefore, the length of the decisions in terms of their paragraphs conveys some information on the complexity of the case. The longest Commission decision on Article 81 in terms of recitals was the \textit{Copper Plumbing Tubes} cartel with 842 recitals.\textsuperscript{62} For Article 82 it was \textit{Microsoft} with 1080 recitals.\textsuperscript{63} There were three (procedural) cases with only one recital: \textit{Albra-Brasserie Espérance}, \textit{Brasserie MAES}, and \textit{Vereinigung deutscher Freiformschmieden}. Overall, decisions have required 82 recitals on average. Figure 10 plots the trend. As with the mean duration, the number of paragraphs is averaged over all cases of a particular year.

![Figure 10: Average number of recitals per decision per year.](image-url)

\begin{itemize}
  \item \textsuperscript{60} See XV Report on Competition, 1985, p.38.
  \item \textsuperscript{61} See XXII Report on Competition, 1992, p.83.
  \item \textsuperscript{62} \textit{Industrial copper tubes} Commission decision 2004/421/EC [2004] OJ L 125/50, Case COMP/38.240
  \item \textsuperscript{63} \textit{Microsoft} Commission decision of 24 March 2004, published on DG Comp website, Case COMP/C-3/37.792
\end{itemize}
The average number of recitals has grown exponentially. This can only partly be related to the increasing percentage of infringements (see Figure 3). In the early years, a case is on average three to four pages long. All cases after July 2001 have required more than 90 recitals. In 2002, the average length of the fourteen official decisions is about 50 pages with some complex cases, such as Plasterboard with over one hundred pages and 601 recitals.\(^{64}\) It turns out that cartels in particular make for long formal decision documents, even when their investigation time is relatively short. The number of recitals in Fine Art Auction Houses, for example, is 238.\(^{65}\) The Commission has a tendency to justify Article 81 and 82 cases about equally extensive. For the period 2001-2004 the average was 293 recitals for Article 81 cases and 273 recitals for Article 82/86 cases. It should be noted that the latter includes the large Microsoft case, though.

The European Commission is expected to justify its infringement decisions in detail. Several successful appeal procedures in the last decade have raised requirements in terms of precisions in the factual description and in the economic and legal argumentation made upon the Commission by several recent Courts’ interventions. In addition, the average number of recitals has been increased due to a selection bias, as in recent years the Commission almost exclusively publishes infringements, as opposed to negative clearances, which can be much shorter. The recent leniency applications often result in large amounts of telling evidence, which support the detail in decision documents. The two trends of shortened investigation times and more extensive decision documents also relate to an increase in DG Competition’s staff numbers and their experience and expertise.

Each official decision is signed by the Commissioner for Competition. Several breaks in the descriptive statistics of EC competition law enforcement could be attributable to the individual Commissioner’s policy. In our sample period, in total 15 different Commissioners have been in office. Table 5 relates the period in which a Commission was in office to the total number of antitrust decisions he has taken. We provide a measure for diligence that is defined as the total number of antitrust decisions signed, divided by the total number of months in office. Note the caveat that the number of decisions is not a good measure of success, because the true objective of competition policy is to deter anticompetitive behavior. The first acting Commissioner, Walter Hallstein, only signed nine cases, finding one single infringement. Yet, as explained above, in the initial years of the enforcement of the Treaty of


Rome, emphasis was on establishing the tools for enforcement of the Treaty Articles, producing a number of notices and administrative rules. The first official Commissioner of Competition, Raymond Vouel, was installed in the Summer of 1976. Peter Sutherland was the most active Commissioner, measured in number of official decisions per month. Mario Monti had less than half this number, although the next section will show that fines were much higher. He left office in November 2004, being succeeded by the current Commissioner Kroes.

<table>
<thead>
<tr>
<th>Commissioner</th>
<th>Period in Office</th>
<th>Months</th>
<th>Decisions</th>
<th>Infringements</th>
<th>Diligence 67</th>
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<tr>
<td>Walter Hallstein</td>
<td>01/58-06/67</td>
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<td>1</td>
<td>0.08</td>
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<tr>
<td>Jean Rey (acting)</td>
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<td>22</td>
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<tr>
<td>Franco M. Malfatti (acting)</td>
<td>06/70-03/72</td>
<td>21</td>
<td>25</td>
<td>11</td>
<td>1.19</td>
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<tr>
<td>Sicco Mansholt (acting)</td>
<td>03/72-01/73</td>
<td>10</td>
<td>13</td>
<td>10</td>
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</tr>
<tr>
<td>Francois-Xavier Ortoli (acting)</td>
<td>01/73-07/76</td>
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<td>Raymond Vouel</td>
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<tr>
<td>Frans Andriessen</td>
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<td>48</td>
<td>63</td>
<td>42</td>
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</tr>
<tr>
<td>Peter Sutherland</td>
<td>01/85-01/89</td>
<td>48</td>
<td>77</td>
<td>32</td>
<td>1.60</td>
</tr>
<tr>
<td>Leon Brittan</td>
<td>01/89-01/93</td>
<td>48</td>
<td>66</td>
<td>38</td>
<td>1.38</td>
</tr>
<tr>
<td>Karel van Miert</td>
<td>01/93-09/99</td>
<td>81</td>
<td>88</td>
<td>41</td>
<td>0.92</td>
</tr>
<tr>
<td>Mario Monti</td>
<td>09/99-11/04 68</td>
<td>50</td>
<td>57</td>
<td>57</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Table 5: Antitrust decisions per Commissioner’s period in office. 69


67 The diligence measure is constructed as the total number of antitrust decisions signed, divided by the total number of months in office.

68 There was the Choline Chloride case in December 2004 which we devote to Monti in our analysis. Choline chloride Commission decision of 9 December 2004, published on DG Comp website, Case COMP/E-2/37.533

69 We do not incorporate Members (M) or Vice Presidents (VP) of the Commission signing on behalf of either the President or the Commissioner: A. Borschette (M, 8), P.J. Hillery (VP, 1) and G.M. Thomson (M, 3).
<table>
<thead>
<tr>
<th>Director General</th>
<th>Period in Office</th>
<th>Months</th>
<th>Decisions</th>
<th>Infringements</th>
<th>Diligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter Verloren van Themaat</td>
<td>04/58-09/67</td>
<td>113</td>
<td>9</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Ernst Albrecht</td>
<td>10/67-12/70</td>
<td>38</td>
<td>25</td>
<td>5</td>
<td>0.66</td>
</tr>
<tr>
<td>Willy Schleider</td>
<td>01/71-04/81</td>
<td>124</td>
<td>126</td>
<td>82</td>
<td>1.01</td>
</tr>
<tr>
<td>Manfred Caspari</td>
<td>05/81-12/89</td>
<td>107</td>
<td>155</td>
<td>78</td>
<td>1.45</td>
</tr>
<tr>
<td>Claus Dieter Ehlermann</td>
<td>03/90-04/95</td>
<td>61</td>
<td>88</td>
<td>49</td>
<td>1.44</td>
</tr>
<tr>
<td>Alexander Schlaub</td>
<td>05/1995-08/02</td>
<td>88</td>
<td>97</td>
<td>60</td>
<td>1.10</td>
</tr>
<tr>
<td>Philip Lowe</td>
<td>09/02-12/04</td>
<td>27</td>
<td>38</td>
<td>27</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Table 6: Antitrust decisions per Director General’s period in office.

Table 6 presents similar information but then per Director General. Again, in the initial decade under Meter Verloren van Themaat, the Directorate General Competition produced only a few decisions. Since the early 1980’s, however, when Manfred Caspari took office, output per month is almost constant output over the DGs. Note that Philip Lowe remained in office after the end of our sample period in December 2004.

7. Findings of an Infringement

There are four main categories of infringements: horizontal constraints, abuse of dominance, vertical restraints and licensing. Although formally also an infringement, the two joint ventures (out of more than sixty applications) that the EC prohibited have been excluded from our analysis of breaches of Article 81. The prohibitions were not fined and none of them was appealed. Article 86 cases involving a Member State or a company in charge of a service of general economic interest on behalf of the Member State are also excluded. In these cases Member State regulations foster anticompetitive conduct which the company could not implement without the advantageous regulatory framework of a governmental institution. In addition, we exclude the 30 purely procedural cases from the analysis as they do not have any
identifiable underlying economic conduct. The only case which has a procedural and an economic concern is the *Theal/Watts* case.\(^70\)

In total, there are 302 infringements in the four categories. In Figure 11 we break all cases down over time. In the period between 1964 until 1977, the Commission produced only 63 infringement decisions. The second period (1978-90) and the last one (1991-04) account for 111 and 129 cases, respectively. The pattern of adverse findings by category that emerges is similar to that in economic rationale for all decisions in Figure 7. Most infringements in the last enforcement period are in the category of horizontal constraints. Apart from an increased priority for cartel enforcement, this may reflect the success of the leniency programs in attracting applications. Between 1991 and 2004, almost 40 per cent of horizontal infringement decisions resulted from investigations that involved one or more leniency applications.

![Figure 11: Infringement decisions by economic conduct per enforcement period.](image)

The category licensing infringements follows the negative trend in the total number of decisions found above. In the latest period there was only one case involving an aspect of licensing.\(^71\) This may reflect the Commission’s evolved perception of the importance of technology and trademark transfers, see also Jorde and Teece (1990). Moreover, numerous

\(^{70}\) *Theal/Watts* Commission decision 77/129/EEC [1977] OJ L 39/19, Case IV/28.812. The case involved a vertical agreement preventing parallel imports that was notified, but with incorrect information about the underlying agreement. The two companies were fined ECU 25,000 for procedural errors and the agreement was prohibited.

\(^{71}\) *Souris-Topps* Commission decision COMP/C-3/37.980 OJ L 353/5.
licensing block exemption regulations existed leading to fewer notifications and more comfort letters.\textsuperscript{72}

8. Remedies and Sanctions

The European Commission can sanction infringements of Article 81 or 82 of the EC Treaty under Council Regulation 1/2003, which replaces Council Regulation 17/62 of 1962 since May 2004. Apart from ordering the infringing parties to discontinue their anti-competitive behavior, the Commission can impose sanctions in the form of fines. The use and level of European antitrust fines has developed over the history of European competition law enforcement. Figure 12 shows the average fine per antitrust infringement with a fine over the years, corrected for inflation.\textsuperscript{73} Clearly, fines have gone up in real value over the years. This reflects the European Commission’s commitment to enforce competition rules.

![Figure 12: Average total fines per antitrust infringement with a fine in €1,000.]

\textsuperscript{72} Commission Reg. 2349/84/EEC of 23 July 1984 on the application of Article 85 (3) of the Treaty to certain categories of patent licensing agreements, Regulation 556/89 on Block Exemption of Know-How Licensing Agreements see Report on Competition VIII-

\textsuperscript{73} To correct for inflation, we used the official data from EUROSTAT. We used inflation rates over the years to express all fines in terms of Euros (ECU) of 1964.
Fines vary greatly over the type of infringement. There are no joint venture infringements with a fine, for example. Fines for procedural violations, such as failure to provide requested information, are relatively small. Procedural punishments are strictly different from sanctions for substantial matters: in only one case, *Theal/Watts* in 1976, were both types of fines levied. The highest fine the European Commission gave for an infringement of the competition rules for a single company in the period covered was for Microsoft Corporation in 2004: €497 million. All other fines in the top-10 of highest EC antitrust fines are for cartels. Examples of high profile cartel cases (incl. the outside sample period) are *Elevators and Escalators* (2007, €992.3 million), *Vitamins* (2001, €855.2 million), *Gas Insulated Switchgear* (2007, €750.7 million), *Synthetic Rubber* (2006, €519.0 million) and *Plasterboard* (2002, €478.3 million).74 From 1991 to 2004, all horizontal infringements have led to imposing a fine. Table 7 presents fines according to the economic conduct for the three enforcement periods. The table presents the sum of fines, as well as the average fine per firm per infringement with a fine in that period.

<table>
<thead>
<tr>
<th></th>
<th>Horizontal</th>
<th>Dominance</th>
<th>Licensing</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Fines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1964-77</td>
<td>10,591</td>
<td>1,650</td>
<td>0</td>
<td>506</td>
</tr>
<tr>
<td>1978-90</td>
<td>194,975</td>
<td>53,280</td>
<td>145</td>
<td>15,384</td>
</tr>
<tr>
<td>1991-04</td>
<td>4,456,228</td>
<td>850,611</td>
<td>795</td>
<td>478,898</td>
</tr>
<tr>
<td>Average Fine per Case per Firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1964-77</td>
<td>45.2</td>
<td>108.9</td>
<td>0</td>
<td>12.7</td>
</tr>
<tr>
<td>1978-90</td>
<td>2,223.5</td>
<td>3,977.3</td>
<td>2.8</td>
<td>528.2</td>
</tr>
<tr>
<td>1991-04</td>
<td>48,800.2</td>
<td>50,474.3</td>
<td>11.4</td>
<td>21,337.2</td>
</tr>
</tbody>
</table>

Table 7: Fines per type of economic conduct (in €1.000) per enforcement period.

The category of horizontal conduct is responsible for the highest share (77 per cent) of total fine. The highest average fine per firm per infringement are for the categories of horizontal conduct (cartels) and abuse of dominance. These two types of infringements are clearly perceived as most harmful for economic welfare.

9. Appeals before the CFI and the ECJ

The European Court of Justice was established in the Treaty of Paris in 1951. The main goal of the European Court of Justice is to ensure that the interpretation and application of the Treaty is observed (Article 164 EC Treaty). Firms may appeal a Commission decision with the ECJ/CFI. On average, 46 per cent of Commission’s infringement decisions have been appealed. In total 166 appeals have been lodged to the 538 formal Commission decisions. Appeals are by individual parties, so there may be several per decision. In case these related appeals are combined, Article 82 decisions are found to get appealed most often, in 69 per cent of all cases. Cartels cases follow directly after with 63 per cent.

Using available information on European Commission decisions and whether or not they were appealed with the ECJ/CFI, we can obtain some insight into the determinants of the appeal probability. To that end, we have estimated a probability model on all antitrust infringement decisions. Independent variables include case characteristics, (sub-)sector dummies (left out are the five smallest sectors) and Commissioner dummies (left out are the ones before Vouel). The latter also act as time dummies. In addition we include case characteristics like average fine, number of parties, duration number of recitals, a horizontal conduct dummy and an abuse of dominance dummy. Table 8 provides the probit results for the 300 observations.

An important determinant for the decision whether or not to appeal an infringement decision is the level of the fine: the higher the fine the higher the probability that one or more parties will appeal. Parties hope to receive a reduction of their fine on appeal. The two cases with highest fines in which there was no appeal were Fine Art Auction Houses (Euro 20.4 million) and Food Flavor Enhancers (Euro 20.6 million), both in 2002. The length of the decision in terms of the number of recitals also is a significant determinant of the probability that an appeal is lodged. We have previously interpreted the length of a decision as an indicator of the complexity of the case. It suggest that such cases leave more room for debate. Findings of an abuse of dominance have a significant higher chance of being appealed than horizontal and vertical constraint infringements. Apparently, such cases leave more room for difference of interpretation. We find no significant difference between the sectors nor between the Commissioners. Over time, the probability of appeal has been more or less comparable.

75 We ignored (the five) appeals to exemptions and negative clearances. Two observations are excluded since we do not have all required information on the number of recitals since the decision documents are not published yet. The cases are: Sodium gluconate Commission decision of 2 October 2001, Case COMP/36.756 and Sodium gluconate Commission decision of 29 September 2004, Case COMP/36.756.
76 In fact we use as variable the logarithm of the fine+1, so as to avoid dominance of the high fines in the last few years of the period under consideration.
<table>
<thead>
<tr>
<th>Category</th>
<th>Marginal Coefficient</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Drinks</td>
<td>-0.038</td>
<td>-0.096</td>
<td>0.370</td>
</tr>
<tr>
<td>Textile, Leather &amp; Paper</td>
<td>-0.125</td>
<td>-0.321</td>
<td>0.567</td>
</tr>
<tr>
<td>Chemicals</td>
<td>0.059</td>
<td>0.148</td>
<td>0.348</td>
</tr>
<tr>
<td>Plastics, Rubber &amp; Glass</td>
<td>-0.086</td>
<td>-0.216</td>
<td>0.396</td>
</tr>
<tr>
<td>Metal products &amp; engineering</td>
<td>-0.121</td>
<td>-0.303</td>
<td>0.347</td>
</tr>
<tr>
<td>Trade &amp; Hotels</td>
<td>-0.308</td>
<td>-0.774</td>
<td>0.591</td>
</tr>
<tr>
<td>Transport</td>
<td>-0.218</td>
<td>-0.546</td>
<td>0.386</td>
</tr>
<tr>
<td>Banking &amp; Insurance</td>
<td>0.280</td>
<td>0.755</td>
<td>0.614</td>
</tr>
<tr>
<td>Communication</td>
<td>0.079</td>
<td>0.197</td>
<td>0.409</td>
</tr>
<tr>
<td>Average Party Fine</td>
<td>0.031***</td>
<td>0.077</td>
<td>0.016</td>
</tr>
<tr>
<td>Number of Parties</td>
<td>0.008</td>
<td>0.020</td>
<td>0.011</td>
</tr>
<tr>
<td>Duration</td>
<td>0.001</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>Recitals</td>
<td>0.002***</td>
<td>0.005</td>
<td>0.001</td>
</tr>
<tr>
<td>Horizontal</td>
<td>0.041</td>
<td>0.102</td>
<td>0.215</td>
</tr>
<tr>
<td>Dominance</td>
<td>0.321***</td>
<td>0.804</td>
<td>0.281</td>
</tr>
<tr>
<td>Vouel</td>
<td>-0.026</td>
<td>-0.066</td>
<td>0.323</td>
</tr>
<tr>
<td>Andriessen</td>
<td>-0.066</td>
<td>-0.167</td>
<td>0.328</td>
</tr>
<tr>
<td>Sutherland</td>
<td>-0.019</td>
<td>-0.049</td>
<td>0.345</td>
</tr>
<tr>
<td>Brittan</td>
<td>0.063</td>
<td>0.157</td>
<td>0.337</td>
</tr>
<tr>
<td>van Miert</td>
<td>0.047</td>
<td>0.119</td>
<td>0.380</td>
</tr>
<tr>
<td>Monti</td>
<td>-0.216</td>
<td>-0.560</td>
<td>0.431</td>
</tr>
</tbody>
</table>

Mean dependent variable 0.46

Pseudo R² = 0.31

Note: *, **, and *** indicate significance at 10%, 5% and 1% significance levels, respectively.

Table 8: Probit results of determinants of probability of appeal.

10. Concluding Remarks

We provide a statistical analysis of all formal decisions under the Articles 81, 82 and 86 of the EC Treaty from the first decision in 1964 up to and including the last decision in 2004. Over time, the European Commission has developed its perception and enforcement of the competition rules in several dimensions. The current paper gives a background to this development over more than four decades. It is limited in its view in more than one respect. One important limitation lies in the fact that only very general case characteristics are taken into account. Another limitation is that only violations that were uncovered and for which sufficient evidence was found are published. Many antitrust violations may have gone unnoticed. The current focus of the Commission on the key infringements of cartels and cases
of abuses of dominance might, for example, have led to less attention for cases of vertical restraints. There have also been many changes over time: in the areas of block exemptions, case law, regulations, number of Member States, anti-cartel units, merger control law, Member State authorities (NCAs) and so on. At the same time, market parties and their legal advisors have grown in their understanding and ability to predict the likely views of the European Commission on matters of competition. European competition law enforcement has matured: decisions concentrate on infringements, are much more detailed, taken much faster and fines are much higher. Negative clearances have largely been replaced by comfort letters and exemptions have decreased due to block exemptions. In addition many cases are nowadays dealt by the NCAs. This has all decreased the administrative burden of the Commission. The leniency programs has led to some thirty cases, often with very high fines, up to 2004. The cartel cases and the Microsoft case have made the Commission’s work more visible than ever.
References


Appendix A: Description of the Data of Commission Decisions

The cases are retrieved from the formal decisions of the Commission published over the years in the Reports of Commission Decisions Relating to Competition (Hardcopy version from 1964 until 1998) as well as the Annual Reports on Competition Policy (from 1971 on) and the Commission website. The Annual Reports are consulted for a backing of the information retrieved in Reports of Commission Decisions Relating to Competition. In these reports, the Commission arranges the cases according to the five alleged economic conducts also employed in this paper. The case documents of Directorate-General for Competition (DGCOMP) were initially consulted on the web pages of:

http://europa.eu.int/comm/competition/antitrust/cases/

which was last accessed on the world web in April 2008. These web pages do not have the status of an official publication. To guarantee completeness of the data, the set was then checked against the official publications of the Commission, collected in:


Only minor deviations between the information on the web pages and the official publications were found.

The unofficial information provided on the web pages of the Commission is complete up to 2004. The official publications are complete up to 1998 – so that minor discrepancies may exist between the web and official records between 1998 and 2004. All decisions officially published are included in the sheets. All relevant public information published in these documents has been included. Some information was censored by the Commission for reasons of confidentiality. The data is backed by two sources as well as refined by independent proofreaders.