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Cartels – an ever present danger

by

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1. Introduction

Effective competition is the key driver of economic and social welfare. The fact that effective competition leads to the best overall economic results is now undisputed in most economies around the world. Consumers can benefit directly from effective competition as it results in higher quality of products and services at lower prices.

Cartels are an ever present danger to this mechanism. The OECD's Report *"Fighting Hard Core Cartels: Harm, Effective Sanctions and Leniency Programmes"* of 2002 describes the harm of cartels as follows:

"The worldwide economic harm from cartels is clearly very substantial, although it is difficult to quantify it accurately. Conservatively, it exceeds many billions of US dollars per year. Cartels harm consumers and have pernicious effects on economic efficiency. A successful cartel raises price above the competitive level and reduces output. Consumers choose either not to pay the higher price for some or all of the cartelised product that they desire, thus forgoing the product, or they pay the cartel price and thereby unknowingly transfer wealth to the cartel operators. Further, a cartel shelters its members from full exposure to market forces, reducing pressures on them to control costs and to innovate. All of these effects adversely affect efficiency in a market economy."[1]

This essay is meant to provide you with an insight into the prosecution of cartels and its challenges in today's world. It starts with a definition of its subject: What is a cartel? Afterwards it deals with business practices and cultures and why cartels are so ineradicably linked with them. Thirdly, the essay looks at the changing landscape of our economy – globalization and digitization – and what both mean for the

[x] All views expressed are strictly personal and should not be construed as reflecting the opinion of the Bundeskartellamt.

[1] OECD Report "Fighting Hard Core Cartels: Harm, Effective Sanctions and Leniency Programmes", 2002, p. 71.

prosecution of cartels. As it is best that cartels are unable to emerge in the first place, the last subject is deterrence. The essay concludes with a short summary.

2. Cartels – a definition

What is a cartel?

On the website of the Bundeskartellamt you can find the following definition: *"If several competitors co-ordinate their market conduct with the object of restricting or eliminating competition, this is called a cartel."*[2] Therefore, a cartel requires 1. at least two competitors, i.e. companies active on the same product and geographical market, 2. who co-ordinate their market conduct by some sort of communication (agreements or concerted practices) 3. with the object of restricting or eliminating competition. So, a cartel is in essence a communication offence.

Anti-competitive agreements between companies can take different forms. Cartel prosecution is directed in particular against so called hardcore cartels, i.e. agreements or concerted practices on prices, product quantities, the allocation of sales areas or the allocation of customer groups.

However, the ban on cartels is also generally applicable to other agreements between competitors such as e.g. co-operations or market information systems.

3. Business practices and cultures vs. cartels

Business practices and cultures may be different all over the world. But how different they may be, one thing is sure: Cartels are ineradicably linked with them.

3.1. General

Very often cartels start with a competitors' discussion of the economic situation in general or the situation on a specific market. And very often the competitors feel that the situation is bad or not as good as hoped for. From this point of the discussion it is not far to think of what could remedy the situation.

A famous sentence by Adam Smith, the founder of modern economics, in his Inquiry into the Nature and Causes of the Wealth of Nations, describes this very well:

[2] See http://www.bundeskartellamt.de/EN/Banoncartels/banoncartels_node.html;jsessionid=B913EF2092BCFC6E85A766FF66B3175A.1_cid362.

"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."[3]

What is astonishing: This sentence is 240 years old! Human nature has not changed. What Adam Smith attributed to his contemporaries is still true, all around the world.

Companies participating in a cartel very often get the support of their business and trade associations in order to organize their cartel activities. In other words: Business and trade associations very often function as cartel vehicles.

In most of the cases, they organize the meetings where their members regularly can meet, discuss topics and exchange (sensitive) information. The meetings may be general meetings, but also working group meetings, committee meetings etc. The agenda very often starts with a topic like discussion of the general market situation where the results of some kind of statistics or of a market information system are discussed. And time and again it does not stop here: If the market situation is bad what could help: a price increase. But price increases are not the only subject: Other kinds of sensitive information may also be very helpful, as for example what is the current state of negotiations with customers? And it can happen that the employees of the association leave the room in order to give their members ample time for further discussions. The Bundeskartellamt even had a case where a business and trade association assisted their members' intention to raise prices by publishing a press release saying that price increases were very probable and could soon be expected.

Additionally, business and trade association meetings offer CEOs and other staff of competing companies the opportunity to get to know each other better. Thus, these meetings create the precondition of all cartels, i.e. trust. Mere business relations become personal relations. Sometimes the members of business and trade associations combine leisure and work and meet on special places. CEOs of competitors may even become friends.

3.2. Cases

[3] *Adam Smith*, An Inquiry into the Nature and Causes of the Wealth of Nations, MetaLibri digital edition 2007, p. 105-106.

For several years the Bundeskartellamt has consistently dealt with cases where business and trade associations were involved in their members' cartel activities.

In the coffee out-of-house sales case[4] the Bundeskartellamt imposed fines on eight companies and one association, the German coffee association. The fines amounted to 30 million Euros. Within the German coffee association there existed a discussion group of directors and sales managers from at least 1997 to 2008. The Bundeskartellamt found evidence that the discussion group co-ordinated price increases for roasted coffee in the out-of-house market. The meetings were held at irregular intervals, According to the Bundeskartellamt's findings a total of nine meetings took place at which price increases were discussed; at least the price increases in early 2000, early 2005 and early 2008 were co-ordinated. The organization of the discussion group lay not with the German coffee association, but the association were informed of the results of the discussion group meeting of 2005 and asked to prepare the public for an agreed price increase in a press release. And what did the association: It complied with this request.

Another interesting case is the automatic door systems case[5]: In this case the Bundeskartellamt imposed fines on eight manufacturers of automatic door systems and again on a business and trade association, the German business association for industrial and construction systems. In the course of nine years (between 2000 and the beginning of 2009) the members of the association concluded different anti-competitive agreements, such as on mutual sales of spare parts and the discounts to be granted and on uniform price ranges for certain manufacturer services (as designs, site measurements, second visits and storage costs). In this case the employees of the afore mentioned association prepared and organized the meetings, which was why a fine was imposed on it.

[4] Bundeskartellamt, decision of 8 June 2009, B11-18/08, see case summary of 26 August 2010. http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2010/B11-19-08.pdf?__blob=publicationFile&v=4.

[5] Bundeskartellamt, decision of 20 July 2012, B10-102/11, see case summary of 27 October 2015, http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2016/B10-102-11.pdf?__blob=publicationFile&v=2.

The next case is about an information exchange in the confectionary industry[6]. The exchange took place in a working group of the Association of the German confectionery industry between the end of 2003 and the beginning of 2008. The working group met regularly up to five times a year. The exchange of information concerned the state of the negotiations with the retail trade at annual talks on conditions and demands, as well as information on intended list price increases. Participating were manufacturers of all confectionery product categories, i.e. chocolate products, sugar confectionery and biscuits. The fines of the Bundeskartellamt amounted to 19.6 million Euros.

Very similar is the drugstore products case[7]: This case concerned an information exchange within the trademark association's working group on *"body care, cleaning agents and detergents"* between March 2004 and November 2006. The members of the working group were all leading suppliers of brand body care products, cleaning agents and detergents. The working group met several times a year, the meetings were also attended by the management of the trademark association. The exchanged information again concerned the current state of negotiations with selected, major retailers at annual talks and on special demands and on price increases, this time planned gross price increases for all customer groups. Fines totalling 63 million Euros were imposed on 15 companies and the trademark association.

The beer case[8] concerned again an information exchange on price increases, this time of draught and bottled beer within a regional association of breweries in the years 2006 and 2007. The group within the regional association of breweries where the information exchange took place was ironically called the competition committee. And again the Bundeskartellamt fined not only the companies but also the regional association of breweries for organizing the meetings of the competition committee.

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[6] Bundeskartellamt, decision of 31 January 2013, B11-11/08, see case summary of 27 May 2013, http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2013/B11-11-08.pdf?__blob=publicationFile&v=2.

[7] Bundeskartellamt, decisions between February 2008 and March 2013, B11-17/06, see case summary of 26 May 2015, http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2016/B11-17-06.pdf?__blob=publicationFile&v=3.

[8] Bundeskartellamt, decisions of 27 December 2013 and 31 March 2014, B10-105/11, see case summary of 2 April 2014, http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2014/B10-105-11.pdf?__blob=publicationFile&v=2.

3.3. Awareness

In order to create awareness the Bundeskartellamt regularly fines not only the companies, but also the business and trade associations involved in cartel activities of their members, i.e. a fine is imposed to the individuals representing the associations and the associations themselves. In Germany, not only the conclusion of cartel agreements is an offence, but also assisting others in concluding them.

In one case, the afore-mentioned coffee out-of-house sales case, the business and trade association wanted to reduce its fine. In the end, a reduction of fine was possible because the German coffee association was willing to publish a press release in which it not only regretted the infringement but also emphasized the need for compliance measures. The press release of the German coffee association read as follows:

„The current management and the directorate of the association regret the incident, in particular because a compliance programme had been introduced already before the investigation became known. This compliance programme is a guide to legally allowed practices within the association. Each delegate of a member company, who participates in a meeting of the association, must sign this programme and thereby commit himself to comply with its guidelines.

From its own experience the German Coffee Association advises other associations to check with utmost care all practices – even such practices which appear harmless – for their competition law relevance and to introduce internal compliance measures such as guidelines."[9]

The Bundeskartellamt appreciated this press release because it was reported by other media and got a lot of attention. In the end, the reduction of fines was well deserved.

But fines are not the only tool to create awareness. Advocacy plays an important role, too. The President of the Bundeskartellamt and other officials of the Bundeskartellamt often speak at association meetings on competition matters. The Bundeskartellamt offer different publications on its website, the brochure on Effective

[9] Translation of the German text by the author.

Cartel Prosecution, updated in December 2016[10], is only one example. The Bundeskartellamt has even developed materials for schools which can be downloaded from its website[11].

4. Cartels – the changing landscape

Cases where cartel agreements are concluded during business and trade associations' meetings are still in the Bundeskartellamt's case file. But the world has been changing during the last fifteen years. As Thomas L. Friedman described it in his Book *"The world is flat"* ten years ago:

"Why? The world went flat, and every analog process went digital, virtual, mobile, and personal."[12]

Faced with globalization and digitization cartel prosecution is required to develop and modernise its analytical toolkit to adapt to new situations. This means, on the one hand, that the concept of cartel itself has to be adapted to new forms of agreements or concerted practices. On the other hand, evidence gathering has to be updated because evidence will be less and less on paper, but, if at all, on digital devices like servers, laptops, mobile phones or the web.

4.1. Hub-and-spoke cartels

Usually, the communication between the members of a cartel A and B is direct. But, since the turn of the millenium there have been some so called hub-and-spoke constellations, especially concerning agreements/concerted practices between retailers using their manufacturers as an information hub.

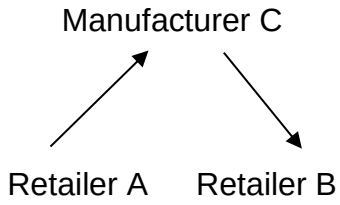
In the United Kingdom the Office of Fair Trading (OFT), the Competition Appeal Tribunal (CAT) and the Court of Appeal tried to determine which requirements must be fulfilled in this kind of situations. Starting point were two decisions by the OFT in the year 2003, i.e. the cases *"Replica football kits"*[13] and *"Toys and Games"*[14].

[10] Bundeskartellamt, Effective cartel prosecution, December 2016, http://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Brosch%C3%BCren/Brochure%20-%20Effective%20cartel%20prosecution.pdf?__blob=publicationFile&v=12.
[11] See Schulmaterialien (only in German available) http://www.bundeskartellamt.de/DE/UeberUns/Schulmaterial/schulmaterial_node.html.
[12] *Thomas L. Friedman*, The world is flat, 2006, p.428.
[13] OFT, decision No. CA98/06/2003 of 1 August 2003, case CP/0871/01; see also press release of 1 August 2003.

Decisions of the CAT[15] and Court of Appeal[16] followed in 2004 and 2006. Afterwards, the OFT dealt again with the requirements in its *"Dairy"*-decision of 26 July 2011[17]. The outcome was a so called A-B-C test.

In difference of an ordinary cartel the communication goes from retailer A as sender to manufacturer C as information hub and then to retailer B as addressee (see the following figure):

hub and spoke-cartel



The A-B-C test distinguishes between objective and subjective criteria.

As for the objective criteria, the A-B-C test requires that A provides C with information about its prospective market behaviour and that C passes this information on to B. Whereas the CAT did not see a need for further requirements[18], the Court of Appeal[19] and the OFT in its *"Dairy"*-decision[20] are of the opinion that B is required to use this information for its own market behaviour. But, the OFT in its above mentioned decision takes the view that the so-called Anic-presumption is also applicable in hub-and-spoke situations.[21] Where an undertaking participating in concerting arrangements remains active on the market, there is a presumption that it will take account of the information exchanged with its competitors. This was formulated in *"Anic",* where the European Court of Justice (ECJ) held: *"...subject to*

[14] OFT, decision No. CA98/08/2003 of 21 November 2003, case CP/0480-01; see also press releases of 19 February 2003 and 21 November 2003.
[15] CAT, decision of 1 October 2004, cases No. 1021/1/1/03 und 1022/1/1/03, [2004] CAT 17 – JJB Sports PLC and All Sports Limited v. OFT; decision of 14 December 2004, cases No. 1014 und 1015/1/1/03, [2004] CAT 24 – Argos Limited and Littlewoods Limited v. OFT.
[16] Court of Appeal, decision of 19 October 2006, case No. 2005/1071, 1074, 1623, [2006] EWCA Civ 1318.
[17] OFT, decision No. CA98/03/2011 of 26 July 2011, case CE 3094/03; see also press release of 10 August 2011.
[18] CAT, decision of 1 October 2004, case No. 1021/1/1/03 and 1022/1/1/03, [2004] CAT 17 – JJB Sports PLC and All Sports Limited v. OFT, para. 659; CAT, decision of 14 December 2004, case No. 1014 und 1015/1/1/03, [2004] CAT 24 – Argos Limited and Littlewoods Limited v. OFT, para. 779.
[19] Court of Appeal, decision of 19 October 2006, case No. 2005/1071, 1074, 1623, [2006] EWCA Civ 1318, para. 141.
[20] OFT, decision No. CA98/03/2011 of 26 July 2011, case CE 3094/03, para. 3.44.
[21] OFT, decision No. CA98/03/2011 of 26 July 2011, case CE 3094/03, para. 3.56.

proof to the contrary, which it is for the economic operators concerned to adduce, there is a presumption that the undertakings participating in concerting arrangements and remaining active on the market take account of the information exchanged with their competitors when determining their conduct on the market ..."[22] The ECJ held in this judgement that the presumption is applicable at least *"when they (the competitors) concert together on a regular basis over a long period, as was the case here"*.[23] In *"T-Mobile Netherlands"* the ECJ applied the Anic-presumption also to situations where *"the concerted action is the result of a meeting held by the participating undertakings on a single occasion."*[24] In applying the Anic-presumption to hub-and-spoke situations the view of the OFT is in the end not far from the view of the CAT.

Concerning the subjective criteria the views of the OFT, CAT and Court of Appeal differ to a greater deal. It is already not clear if a subjective element is required for both retailers A and B. Another question is what kind of subjective criteria is necessary. Following the CAT it is sufficient that it is foreseeable for A that C passes the information on to B.[25] Following the view held by the Court of Appeal it is required that A may be taken to intend that C will make use of the information to influence market conditions by passing that information to B and that B may be taken to know the circumstances in which A provided C with that information.[26] The OFT in its *"dairy"*-decision held a view in-between: Pursuant to the OFT the A-B-C test is fulfilled when A may be taken to have intended or did, in fact, foresee that C would make use of that information to influence market conditions by passing that information to B and when B may be taken to have known the circumstances in which the information was disclosed by retailer A to C or B did, in fact, appreciate that the information was being passed to it with A's concurrence.[27]

4.2. Information exchanges organized by computers and robo-selling

[22] ECJ, Commission/Anic, C-49/92 P, judgement of 8 July 1999, [1999] ECR I-4125, para. 121.
[23] ECJ, Commission/Anic, C-49/92 P, judgement of 8 July 1999, [1999] ECR I-4125, para. 121.
[24] ECJ, T-Mobile Netherlands, C-8/08, judgement of 4 June 2009, [2009] ECR I-4562, para. 62.
[25] CAT, decision of 1 October 2004, case No. 1021/1/1/03 and 1022/1/1/03, [2004] CAT 17 – JJB Sports PLC and All Sports Limited v. OFT, para. 659; CAT, decision of 14 December 2004, case No. 1014 and 1015/1/1/03, [2004] CAT 24 – Argos Limited and Littlewoods Limited v. OFT, para. 779.
[26] Court of Appeal, decision of 19 October 2006, case No. 2005/1071, 1074, 1623, [2006] EWCA Civ 1318, para. 141.
[27] OFT, decision No. CA98/03/2011 of 26 July 2011, case CE 3094/03, para. 3.44.

In hub-and-spoke situations the communication between cartel members may be indirect, but it is still the communication between physical human beings. With the growing computerisation of commercial activities, it has become possible to influence prices and other parameters of competition through appropriate programming. This will lead to increasingly challenging situations because the traditional definitions of agreement or concerted practices like *"concurrence of wills"*, *"meeting of the minds"* or *"coordination"* refer to physical human beings. The first cases where computerised systems – at least to some extent – replaced the communication between physical human beings were recently dealt with by the ECJ and by the DOJ.

The Eturas-case decided by the ECJ on 21 January 2016[28] concerned 30 travel agencies in Lithuania which were all using an online booking system called E-TURAS owned by a travel agency Eturas. Eturas imposed – through E-TURAS – on the other agencies a technical restriction on the discount rates they could offer their own clients, and posted a notice informing its 30 users about it. Discounts in excess of 3 per cent were automatically reduced to 3 per cent by the system. But additional discounts to individual clients remained possible. Nevertheless, in the end, the majority of agencies that granted higher discounts beforehand decreased the discount rate to 3 per cent after the change. The Lithuanian Competition Authority was of the opinion that Eturas and the other 30 travel agencies violated Article 101 (1) Treaty of the Functioning of the European Union (TFEU) and imposed fines. The Administrative Court Vilnius confirmed the infringement, but reduced the fines. Both, the Lithuanian Competition Agency and the travel agencies appealed the decision of the Administrative Court Vilnius. The Highest Administrative Court of Lithuania asked for a preliminary ruling of the ECJ.

The ECJ held that under the circumstances of the case those travel agencies that were aware of the content of the system notification could be presumed to have tacitly acquiesced provided that the other elements of a concerted action (behavior + causal link) are met and thus be liable as from the moment of reception.[29] Concerning awareness of the content of the system notification the ECJ pointed out that this could be proved by direct evidence, but also by coincidence and indicia.[30]

[28] ECJ, Eturas and others, C-74/14, judgement of 21 January 2016, ECLI:EU:C:2016:42.
[29] ECJ, Eturas and others, C-74/14, judgement of 21 January 2016, ECLI:EU:C:2016:42, para. 44.
[30] ECJ, Eturas and others, C-74/14, judgement of 21 January 2016, ECLI:EU:C:2016:42, para. 35-37.

However, such indirect evidence must comply with the presumption of innocence (Article 48 (1) EU Charter of Fundamental Rights). Therefore, the mere dispatch of the message in the online-booking system cannot be in itself enough to infer awareness of its content.[31] It could nonetheless be used in combination with other objective and consistent indicia to establish a rebuttable presumption of awareness.[32] Despite some criticism[33]the court's reasoning is sound and consistent.

The second case, the Topkins case of the DOJ, represents a more specific focus on robo-selling. The facts were as follows: Several companies selling posters and similar wall décor agreed to fix, increase, maintain and stabilize prices of certain posters sold in the United States on Amazon Marketplace. In order to implement the agreements, the companies involved explicitly agreed to coordinate their pricing via the use of the same software-embedded algorithm.[34]

The novel aspects of this case do not directly concern the concepts of agreement or concerted practices. Because the basis of the pricing via the use of a software embedded algorithm was undoubtedly an agreement between the competitors. But, as *Salil K Mehra* wrote in an article, the defendant's use of computer software to set prices for the conspirators algorithmically, potentially signals a challenging new area of enforcement. Robo-selling may worsen the problem of supracompetitive pricing by oligopolists *"since it will increase the speed with which price cutting will be detected, and reduce errors, making supracompetitive oligopoly equilibria more stable."*[35]

4.3. Signalling

From a different angle the concept of concertation was at stake in the container shipping case of the European Commission decided on 7 July 2016[36]. The facts were as follows: Between 2009 and 2015 carriers regularly announced their intended future price increases for deep-sea container liner shipping services on certain routes on their websites, via the press or in other ways. The announcements indicated the amount of the intended increase, the affected trade route and the

[31] ECJ, Eturas and others, C-74/14, judgement of 21 January 2016, ECLI:EU:C:2016:42, para. 38-39.
[32] ECJ, Eturas and others, C-74/14, judgement of 21 January 2016, ECLI:EU:C:2016:42, para. 40.
[33] *Heinemann/Gebicka*, Can Computers Form Cartels? About the Need for European Institutions to Revise the Concertation Doctrine in the Information Age, JECLP 2016, 431-441.
[34] Plea Agreement of 30 April 2015, United States v. David Topkins, case 3:15-cr-00201-WHO, Document 7, filed 04/30/15.
[35] *Mehra*, US v. Topkins: can price fixing be based on algorithms?, JECLP 2016, 470, 473.
[36] European Commission, decision of 7 July 2016, case AT.39850 Container Shipping.

intended date of implementation. Such announcements were known as GRI announcements. They were made in rounds 3 to 5 weeks before the intended implementation date. Announced GRIs sometimes were postponed or modified by some of the carriers.

The European Commission raised several concerns[37]:

- The parties' practice may allow them to explore whether other parties also intend to increase prices and to coordinate their behaviour.
- The announcement of price increase intentions can give indications about other parties' conduct.
- The practice may enable the parties to "test" whether they can reasonably implement a price increase without the risk of losing customers.
- GRI announcements may increase the chance that price increases announced are supported by other parties.
- GRI announcements may allow the parties to first try a push for a price increase and, should there be not enough support from other parties' GRIs, to cancel or postpone the intended increase.

The European Commission also referred to the low value of GRI announcements for customers since they may not enable them to plan ahead or compare prices between the parties.[38]

The European Commission stated that unilateral announcements that are genuinely public generally do not constitute concerted practices. This is certainly correct. But under the specific circumstances of the case the European Commission was right in its assessment that the carriers respective announcements may amount to a strategy for reaching a common understanding about the terms of coordination.[39] In the end, the carriers offered commitments, among them to stop publishing and communicating GRI announcements for the future. So, there will be no final judgement of the ECJ in this case.

4.4. Digitization and evidence gathering

[37] European Commission, decision of 7 July 2016, case AT.39850 Container Shipping, para. 37 – 39.
[38] European Commission, decision of 7 July 2016, case AT.39850 Container Shipping, para. 40 – 43.
[39] European Commission, decision of 7 July 2016, case AT.39850 Container Shipping, para. 46.

When entering the premises of companies during a dawn raid investigators face more and more the situation that there are no written documents, that the offices are paperless, that only digital devices like mobile phones, laptops, tablets, servers etc. are in use. Old-style cartels organized by meetings in smoky hotel rooms and during golf courses may become rare species in the future. One can suspect that fraudsters use more and more encrypted messaging services, online chat rooms, social networks or even the dark web. Furthermore, evidence might not only be digital, but also stored abroad.

Therefore, cartel prosecutors have to upgrade their Forensic IT capabilities on a continuous basis. In 2003 the Bundeskartellamt started with one IT specialist, today a whole unit composed of four IT-specialists and other staff is dedicated to this kind of work. But, it is not only a question of numbers. The European Commission has recently launched a *"secretive new investigation unit in Brussels, which is now staffed with former policemen and professional investigators who can handle informants and spy in places like the dark web"*.[40] New strategies have to be developed to detect covered tracks of communication. It might also be necessary to apply big data techniques to social networks, payment or market data to reveal trends which would not be apparent in a simple spreadsheet.

More (international) co-operation can also help. Within the ECN, for example, it is possible that each national competition agency can assist any other and do inspections on their behalf (see Article 22 of Regulation 1/2003). So, premises of companies or private homes of CEOs and directors can be raided simultaneously all over Europe.

5. Deterrence

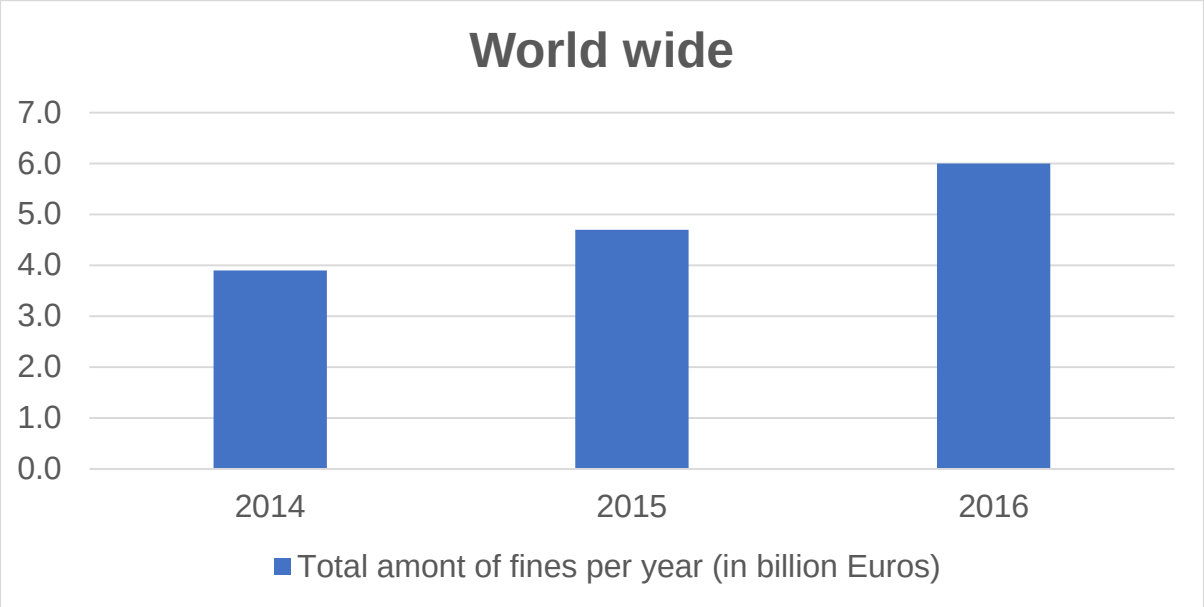
The aim of cartel prosecution is not only to uncover and end cartels. Its primary objective is to create the greatest possible deterrent effect. The negative effects of anticompetitive agreements can best be avoided if cartels are unable to emerge in the first place. To achieve this, the probability of an illegal cartel being uncovered and severely punished must be sufficiently great. The significance of the fines imposed goes beyond the detection and punishment of individual cartels. Their effect

[40] See „Margarethe Verstager's cartel strike force", politico.eu, 23 March 2017.

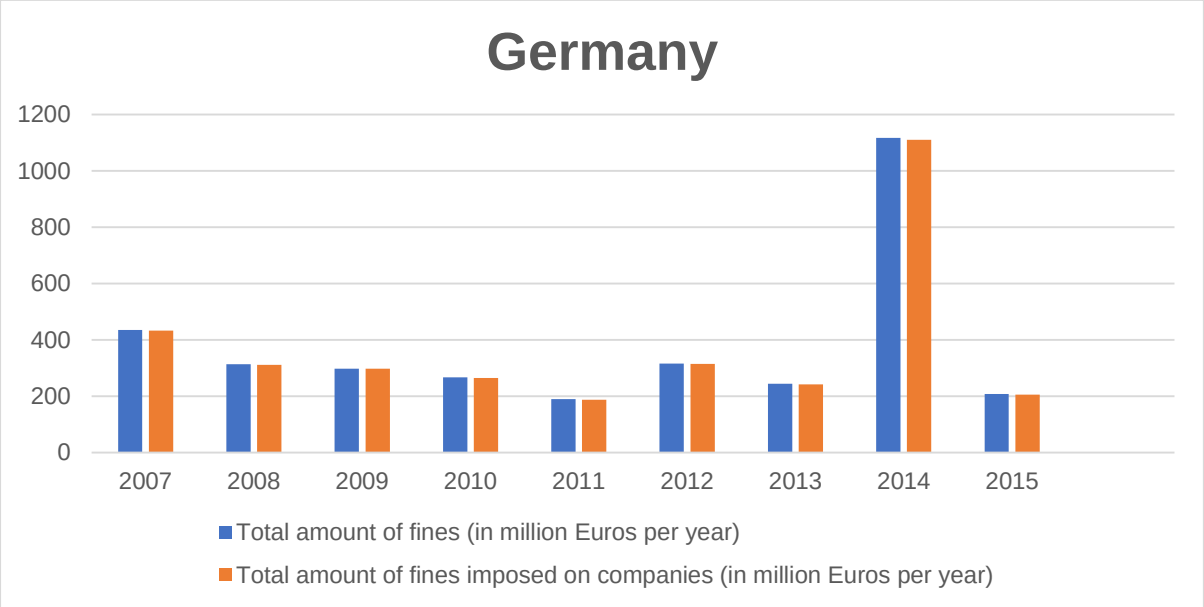
is felt far beyond the concluded proceedings. The fear of being fined can deter others from forming a cartel. But the fining of companies is only one factor, the sanctioning of individuals is important, too.

5.1. Fining of companies

Worldwide, fines have increased during the last years. In 2016, total fines amounted to 6 billion Euros. Most of these fines were imposed by the European Commission.



In Germany, fines imposed by the Bundeskartellamt between 2007 and 2015 do not show a clear trend. The amount of fines is almost always between 200 and 400 million Euros per year. There is one exception: 2014 when the Bundeskartellamt concluded three big cases in the same year (the sugar, beer and sausage cases). As the Bundeskartellamt imposes fines on individuals and companies participating in an infringement, the total amount of fines imposed on companies is a little lower than the total amount.



But, for the purpose of deterrence the total amount of fines is not so important. On the contrary, it is crucial that fines imposed on companies at least take away the financial gains obtained as a result of the infringement. For this purpose, both the expected gains from the infringement and the probability of detection, have to be taken into account.[41]

There are some studies which have analyzed cartel overcharges. A recent study which analyzed more than 1,000 cartels produced the following results:

- On average cartel agreements increase prices by 15 %, i.e. customers and consumers have to pay a price which is 15 % higher than the price they would pay if competition was not distorted and functioning well.
- International cartel agreements involving suppliers from several countries are usually more damaging than national cartels. The average cartel-induced price increase caused by international cartels is about 18 %. National cartels lead to an average price increase of about 13 %.[42]

The probability of detection is much more difficult to assess. In 1991, *Bryant/Eckard* estimated a detection rate of 13 to 17%.[43] This estimation was based on an American sample. A more recent study – using the same framework over a sample

[41] OECD Report "Fighting Hard Core Cartels: Harm, Effective Sanctions and Leniency Programmes", 2002, p. 85.
[42] *Boyer/Kotchoni*, How Much Do Cartels Overcharge?, CIRANO Scientific Series 2015, p. 28 f.
[43] *Bryant/Eckard*, Price Fixing: The Probability of Getting Caught, The Review of Economics and Statistics Vol. 73, No. 3 (Aug., 1991), p. 531-536.

of all cartels convicted by the European Commission between 1969 and 2007 – estimated the detection rate between 12.9% and 13.2%.[44]

To calculate the fine by taking into account both the expected gains from the infringement and the probability of detection may be convincing in theory, but it is difficult to apply in practice. To determine the multiplier according to the detection rate is one problem, to quantify the gain is another one.[45] In Germany, before 2005 the maximum fine was three times the additional proceeds (Section 81 (1) German Competition Act 1999). The calculation of the additional proceeds proved to be very complex and time-consuming. In 2005, the calculation of fines based on the additional proceeds was replaced by a turnover based approach much easier to handle and much more in line with European competition law (see Article 23 (2) of Regulation 1/2003). The maximum fine is now 10% of global turnover.

But is a fine up to 10% of global turnover really high enough? – In most cases the answer is yes. But in certain situations, for example when sanctioning cartels with a long duration or when sanctioning single product companies exclusively active on a domestic market, a fine up to 10% of total turnover can be a far cry from taking away the financial gains. For this reason, the Dutch legislature recently passed legislation which increases the maximum fine that the Netherlands Authority for Consumers and Markets *("ACM"*) can impose in case of competition laws infringements. Since 1 July 2016 the maximum fine is 40% of global turnover, which can be doubled for recidivists that have been fined for the same or similar behaviour in the last five years (see Article 57 (2) to (4) Dutch Competition Act). In my view, this is a necessary correction.

Loopholes can be another problem. In Germany, it was possible that companies could avoid fines under certain circumstances by restructuring their company (so called *"sausage gap"*[46]). The reason for this was that the addressee of the fine was the concrete infringing company, not the economic unit itself. This will be modified by

[44] *Combe/Monnier/Legal*, Cartels: the Probability of Getting Caught in the European Union, BEER paper No. 12, March 2008, p. 17.
[45] OECD Report "Fighting Hard Core Cartels: Harm, Effective Sanctions and Leniency Programmes", 2002, p. 86.
[46] See Bundeskartellamt, press release of 19 October 2016, http://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2016/19_10_2016_Wurst.html.

the 9th amendment of the German Competition Act, which will enter into force in April this year.

Last but not least: Even the highest maximum fine in the law is of no use if the sanction powers are not used by the Competition Authorities, i.e. Competition Authorities should impose high fines because cartels cause high damages to consumers and the economy.

5.2. Sanctioning individuals

Deterrence does not only stem from fines imposed on companies. In Germany, the Bundeskartellamt regularly imposes fines on individuals, too. Fines can be up to 1 million Euros. Usually, the pre-tax income of the last annual tax declaration is a starting point for the calculation of the fine. Under certain circumstances, the fine and its notification to the trade and industry register may also lead to a disqualification for certain professions because the fine and the notification may affect the reliability of the individual required by some professional codes.

The Bundeskartellamt usually leads administrative offences proceedings against the company and its managers at the same time. For this reason, the managers are not mere witnesses, but become addressees of the proceedings with their own lawyer. For the question of deterrence, to be addressee of the proceedings is perhaps more important than the fine itself.

In my view, to impose sanctions not only on companies, but also on individuals is very important. But, there is no need for criminalization.

In Germany, bid rigging is a criminal offence since 1998. But, the experience with criminalization in Germany does not suggest any need for (further) criminalization. The proceedings are complex because two different enforcers (public prosecutors and the Bundeskartellamt) are involved and criminal procedures are generally more complicated than administrative offence proceedings. Another problem results from the fact that many public prosecutors are not really interested in the prosecution of competition infringements. Furthermore, leniency is available only to the companies, not to the individuals. And last but not least: In reality, public prosecutors or criminal courts very often impose only poor sanctions so that the administrative fines imposed by the Bundeskartellamt are on the average much higher than the criminal

fines imposed by public prosecutors or criminal cours; jail sentences are a rare exception, and jail sentences up to two years will mostly be suspended.

5.3. Other factors

Deterrence does not stem from sanctions/fines alone. Other factors are:

- Effective organization and co-operation with other authorities (police, public prosecutor etc.);
- Effective detection devices (Leniency programme, whistle-blowing system (anonymous tip-offs), complaints' management, sector enquiries and screening etc.);
- Effective enforcement powers (dawn raids, interrogations etc.),
- Damages claims.

6. Summary

Cartels are an ever present danger! They are part of business practices and cultures all around the world.

With globalization and digitization there will be new challenges. The need to adapt the concept of cartels to new situations is one of them: Hub-and-spoke cartels, information exchanges organized by computers, robo-selling and signalling are examples. In addition, the digitization poses new challenges for evidence gathering.

The primary objective of cartel prosecution is to create the greatest possible deterrent effect. For this purpose, the fining of the companies participating in a cartel is a cornerstone. This means: High fines are absolutely necessary. But there are also other factors. One important is in my opinion the adequate sanctioning of the managers of the companies participating in a cartel.

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