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Prohibition of Cartels in the Construction Sector; Interaction of EU Competition and Public Procurement Law

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General Note about the Content

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Abstract

The construction industry, which accounts for the largest portion of the population's total employment as well as for a significant part of the gross domestic product, is one of the economic cornerstones of practically all industrialized countries in Europe and in the rest of the developed world. However, as such, this industry, due to its great importance and the amount of capital that circulates within it, also represents a very fertile environment for the emergence and maintenance of behavior that represents a violation of the legal rules of market competition. Such violations manifest themselves in the creation of cartels whose aim is to prevent new competitors from entering the market or harming the ones already existing there, by fixing prices or dividing the market and clients. Since the state itself is the most frequent customer of capital construction works for the demands of its infrastructure, public procurement processes have seen the biggest number of cartels in the history of the construction industry.

The subject of this Master Thesis was the analysis of the market competition, i.e., the emergence of prohibited cartels within the construction sector of individual European Union member states, which represent one of the most developed markets and the most well-organized legal systems in the world. The history of changes in the attitude and behavior of construction companies, from cartels as "regular and legitimate economic activity" to prohibited and criminal practice, is shown through relevant legislation, case law, and literature listed in the bibliography. This paper also tries to answer the question how certain cases and the adaptation of legal regulations of EU member states to its legal provisions contributed to the situation with collusion in this sector significantly improving compared to the time at the end of the last and the beginning of this century. However, there is still a lot of work to do until the complete disappearance of prohibited agreements within the construction sector through various processes and reforms.

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List of Abbreviations

I.	EU	European Union
II.	TEU	The Treaty on European Union
III.	EC	European Commission
IV.	TFEU	Treaty on the Functioning of the European Union
V.	CJEU	Court of Justice of the European Union
VI.	GC	General Court
VII.	ECSC	European Coal and Steel Community
VIII.	EEC	European Economic Community
IX.	EUMS	European Union Member State
X.	OECD	Organization for Economic Co-operation and Development
XI.	VARA	Virtual Assets Regulatory Authority
XII.	GDP	Gross Domestic Product
XIII.	PCO	The German Federal Cartel Office (Bundeskartellamt)

1. Introduction

For most countries that have adopted a free market regulated by the price mechanism as their economic model, competition has several advantages, since it is believed to ensure lower prices, a wide range of customized options, as well as overall efficiency and innovation.[1] The European Commission, which is the EU body responsible for enforcing antitrust law, emphasizes the importance of this concept in the following statement: "Competition is a basic mechanism of the market economy which encourages companies to offer consumers goods and services at the most favorable terms, it encourages efficiency and innovation and reduces prices; to be effective, competition requires companies to act independently of each other, but subject to the competitive pressure exerted by the others."[2] The main objective of the European Union as a monetary, customs, and trade association of sovereign states is economic integration, with free market competition as the basic requirement for this goal to be realized.[3] Thus, the internal market is an area where the fundamental freedoms of the EU Treaty are put into practice, i.e. they help the Union to achieve undistorted market competition on the territory of the Member States.[4] Establishing a single market, that represents the highest level of integration, reflects the Union's priority objective since its creation.[5]

Despite the objectives and perception of the fair competition having an impact on the common market, there are certain competitors whose behavior disrupts market harmony and seriously

[1] Moritz, Lorentz. "*An introduction to EU Competition Law."* Cambridge (UK); New York: Cambridge University Press, (2013): 1-3.
[2] European Commission, "Antitrust", http://ec.europa.eu/competition/antitrust/overview_en.html, Accessed 16 January 2023.
[3] Treaty establishing the European Community (consolidated version) OJ No. C 321E of 29 December 2006, p.37.
[4] Moritz, Lorentz. "*An introduction to EU Competition Law."* Cambridge (UK); New York: Cambridge University Press, 2013: 28.
[5] Paul, Craig. "*The Treaty of Lisbon: Process, Architecture, and Substance*." European Law Review, 33 (2008), 137.

violates antitrust law.[6] These practices most frequently take the form of prohibited collusion between companies that are current or could be potential competitors in the same part of the economy, known as prohibited horizontal agreements.[7] The term covers decisions and actions of groups of associated businesses, concerted conduct, and cartelization as a specific commercialization that is capable of causing a significant effect on the trade flow between the Member States by distorting competition in the internal market.[8] Although legislation, in particular, Article 101 of the Treaty on the Functioning of the European Union prohibits any form of illegal cooperation between undertakings, cartels are the most significant and serious violation of fair market competition rules.[9] The reason for this is that they increase profits for illegally associated partners through price-fixing and market or customer-sharing agreements, while at the same time being difficult to investigate and detect.[10]

The attractive idea of increasing profits at any price, even if the activities are forbidden, has the consequence that almost no sector of the world economy has remained immune to their existence. One of these, on which the thesis of this paper is based, is the construction industry. In many developed countries, it is a highly valuable and essential part of the economy, which is why the anti-competitive practices applied by undertakings in this market can result in significant losses to the national budget.[11] The significance of the industry stems from the fact that it both provides the infrastructure and buildings that almost every other sector depends on using, whilst also being in itself such a large sector, employing over 40 million people in the

[6] Ioannis Lianos. "*Collusion in Vertical Relations Under Article 81 EC."* Common Market Law Review, 45 (2008), 1027, 1030.
[7] Ibid.
[8] Moritz Lorentz. "*An introduction to EU Competition Law."* Cambridge (UK); New York: Cambridge University Press, (2013): 62-63.
[9] Jonathan Crowe and Barbara Jedilckova. "*What`s Wrong with Cartels?"* Federal Law Review 44, No.3 (2016): 401-418.
[10] Ibid.
[11] Andrzej Foremny, Wojciech Dorabialski. "*Review of Collusion and Bid Rigging Detection Methods in the Construction Industry."* (2018); OECD, Organization. (2006). *Roundtable on Competition in Bidding Markets, Background Note by the Secretariat*, DAF/COMP 27.

EU, USA, and several other developed countries combined.[12] This makes the construction sector one of the largest industrial employers in Europe, providing around seven percent (7%) of all workplaces.[13] Unfortunately, there is some negative press around the construction sector, as it is well known that the industry has long been affected by cartel activity.[14] Some academic works even describe it as the most cartelized sector in history.[15] Despite an international trend for tougher penalties against hard-core cartels in general and several successful prosecutions against construction companies in particular, the sector remains fertile ground for competition law authorities.[16]

Besides the indirect impact of unfair competition in construction on the general welfare of the community, there is a direct influence when the contracting party is the state itself through public procurement procedures. This is where the government, as the contractor for the construction of new or the rehabilitation of existing infrastructure, has access to public financial resources collected through compulsory contributions from its own citizens.[17] Such access to public goods imposes on the state the obligation to dispose of them appropriately, in such a way that, as a purchaser of goods and services, it acquires them at the most reasonable price between suppliers with similar qualities.[18] It is therefore essential that the procurement process is not compromised by any form of collusion, bid-rigging, fraud, or corruption.[19] Throughout history, however, public procurement in the construction sector has often been characterized by such unlawful practices, which were considered 'normal business' for the industry, whereas today

[12] Ibid.
[13] European Commission, "Construction sector", www.ec.europa/enterprise/construction/index_en.htm , Accessed 23 January 2023.; U.S. Department of Labor Statistics, "2008-09 Editions of the occupational outlook handbook and the career guide to industries" (18 December 2007), www.bls.gov/oco/cg/print/cgs003.htm. Accessed 23 January 2023.
[14] OECD, Organization. (2006). *Roundtable on Competition in Bidding Markets, Background Note by the Secretariat*, DAF/COMP 27.
[15] Lesley Ainsworth. "*Competition Law Enforcement in the Construction Industry,"* in John Uff and Anthony Lavers. *"Legal Obligations in Construction."* (1992). 539, 549.
[16] OECD, Organization. (2006). *Roundtable on Competition in Bidding Markets, Background Note by the Secretariat*, DAF/COMP 27.

[17] OECD Organization, (2007), Bribery in Procurement, Methods, Actors, and Counter Measures.
[18] Ibid.
[19] Ibid.

they are the subject of a campaign by authorities to protect market competition in all relevant jurisdictions around the world.

The European Union's efforts to contribute better, more transparent and open market competition for all participants have resulted in changing the government's approach to restrictive agreements in the construction sector, especially in cases where the state itself acts as a purchaser of goods and services.[20] The new strategy for the regulation of cartels, as implemented within the EU, is largely based on a welfare theory with an emphasis on economic productivity and general social protection.[21] As will be explained in the remainder of this paper, the new direction of European and national competition law to the problem of prohibited agreements has stimulated certain changes in the minds of the construction companies themselves. However, some aspects of this problem still occur occasionally, and it is difficult, but not impossible, to eliminate it, which requires further reforms of competition rules, both in legislation and in the practice of the bodies responsible for their enforcement.

[20] Ibid.
[21] Jonathan Crowe and Barbara Jedilckova. "*What`s Wrong with Cartels?"* Federal Law Review 44, No.3 (2016): 401-418.

2. The Origin and Legal Character of the EU Market Competition Rules

2.1 The Historical Development of Market Competition Regulation

Since the late 1980s, competition law has evolved into a truly global regulatory enterprise, such that competition (or antitrust) regimes have emerged in more than 130 countries worldwide.[22] Their purpose consists in preventing any distortion of competition by market participants, and rests upon three fundamental pillars:

I. Provisions prohibiting restrictive agreements (in the U.S. and EU, Section 1 of the Sherman Act 1890[23] and Article 101[24] of the Treaty on the Functioning of the European Union [TFEU] respectively):

II. Provisions prohibiting monopolization (or attempts to monopolize) or abusive conduct of dominant firms (Section 2 of the Sherman Act and Article 102 TFEU):[25]

III. Provisions prohibiting mergers that will substantially lessen or significantly impede competition (Section 7 of the Clayton Act and the EU Merger Regulation, Council Regulation 139/2004).[26]

The goal of antitrust regulation and its fundamental ideas are not well-defined in many jurisdictions.[27] Instead, the specification regarding the framework provisions of these laws was left to the jurisprudence and ultimately ruled on by the Court of Justice of the European Union

[22] William W. Kovacic and Marianela Lopez-Galdos. *"Lifecycles of Competition Systems: Explaining in the Implementation of New Regime."* 79 Law and Contemp. (2016), 101-102.
[23] 15 U.S.C. § 1.
[24] Consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union [2016] OJ C202/1 (TFEU).
[25] 15 U.S.C. § 2; Consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union [2016] OJ C202/1 (TFEU).
[26] Alison Jones and William E. Kovacic. *"Identifying Anticompetitive Agreements in the United States and the European Union."* Antitrust Bulletin 62, No. 2 (2017), 254-93; Clayton Act, section 7; EU Merger Regulation, [2004] OJ L 24/1.
[27] Ibid.

(in the EU consisting of the Court of Justice [CJEU] and the General Court [GH]).[28] As for the European Union as a legal system, the inclusion of competition rules in its Treaties was uncommon, which is why they did not exist until the year 1951 when the Treaty establishing the European Coal and Steel Community (ECSC) was adopted.[29] The sectoral example set by the ECSC was followed by the 1957 Rome Treaty that established the European Economic Community (EEC), which incorporated antitrust rules, but unlike the competition regime in the ECSC added State Aid provisions and lacked merger policy powers.[30] Using secondary law regulations and directives, in 1989 merger powers were added, and in the 1990s sector competition rules, too.[31] The first component of antitrust is Article 101 (1) of the Treaty on the Functioning of the European Union (TFEU), which forbids undertakings from engaging in anticompetitive agreements unless the specific requirements for an exception (and an exemption) outlined in Article 101 (3) of the TFEU are fulfilled.[32] The Article 101 (3) TFEU exception was only used by the European Commission under the original implementing law, Council Regulation 17 of 1962, and was based on a system of previous notification of the relevant agreements.[33] The primary modernization measure under Council Regulation 1/2003 was the replacement of the notification system and Commission exemption monopoly with a directly applicable legal exception regime based on self-evaluation by the affected undertakings.[34] A focus on hard-core cartels that is largely based on a successful system of leniency application by former cartel members has gone hand in hand with first adopting an

[28] Consolidated Version of the Treaty on European Union [2008] OJ C115/13, Article 19.
[29] Wolf Sauter*." History and Framework of EU Competition Law."* In Coherence in EU Competition Law. Oxford: Oxford University Press. (2016), 27.
[30] Mauro Cappelletti, Monica Seccombe, and Joseph Weiler. *"Integration through Law: European and the American Federal Experience."* Berlin, (1986).
[31] Wolf Sauter*." History and Framework of EU Competition Law."* In Coherence in EU Competition Law. Oxford: Oxford University Press (2016), 28.
[32] Consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union [2016] OJ C202/1 (TFEU).
[33] Council Regulation No 17/62, First Regulation implementing Articles 85 and 86 of the Treaty, OJ 1962, 87 (Regulation 17).
[34] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ 2003, L1/1.

effective and more economics-based strategy.[35] However, there are several additional ways to circumvent the EU competition law framework. The most important among them are the measures of the member states governments that refer to the protection of goals of public interest which has priority over the rules of market competition (known as state action defense).[36] The European Commission has adopted a variety of secondary rules designed to deal with different infringements and exceptions to Article 101, that will be discussed in the following.

2.2 Constitutional Standing Theories of Antitrust Law

The constitutional aspect of EU competition regulations can be viewed from at least three different angles.[37] The evolution of the Treaty system as it is interpreted by the EU Courts is seen as a process of constitutionalizing, even though this development may not be generally recognized.[38] From a more technical perspective, this can be aligned with the approach to economic constitutionalism.[39] Following this theory, the rule of laws acts as a means of limiting state interventions within the market, while at the same time imposing certain constraints on market dynamics in order to promote their smooth functioning.[40] The Lisbon Treaty, which replaced the failed 2004 plan for an explicit EU constitution and ultimately fell in referendums in France and the Netherlands in 2005, has explicitly named a clause on competition policy as one of the main objectives of the EU, further strengthening the importance of the connection between the internal market and the legal anchoring of competition laws.[41] The Treaties, which

[35] Commission Notice on Immunity from fines and reduction of fines in cartel cases, OJ 2006, C298/17.
[36] Case C-309 *J. C. J. Wouters, J. W. Savelbergh and Price Waterhouse Belastingadviseurs BV v Algemene Raad van de Nederlandse Orde van Advocaten* [2002] ECR I-1577.
[37] Wolf Sauter. *"History and Framework of EU Competition Law"* In Coherence in EU Competition Law. Oxford: Oxford University Press (2016), 30.
[38] Joseph H.H. Weiler. *"The Constitution of Europe: "Do the New Clothes have an Emperor?" and Other Essays on European Integration.* Cambridge, Cambridge University Press. (1999).
[39] Ibid.
[40] Wolf Sauter. *"EU Competition Law and Industrial Policy."* Oxford, Oxford University Press, (1997).
[41] Wolf Sauter. *"History and Framework of EU Competition Law."* In Coherence in EU Competition Law. Oxford: Oxford University Press (2016), 31.

have evolved through time due to their numerous renegotiations and changes, serve as the basic legal foundation for the competition rules.[42] As a consequence, Article 3(1)b of the TFEU now declares that the Union shall have sovereign right over the implementation of the competition laws required for the proper functioning of the internal market.[43] This agreement also confirmed the competence of the European Commission to supervise and enforce the rules of market competition within the single common market.[44] Therefore, only the first two of the three constitutional dimensions cited – constitutionalizing in CJEU case law and the idea that the Treaties serve as an economic constitution – remain relevant.[45] However, it is obvious that the direct application and authority of EU law as legal principles are crucial to the efficient operation and legitimacy of EU competition policy, and they can be viewed as a constitutional force inherent in EU law.[46]

2.3 Reasons for the Implementation of a New EU Competition Regulation

The primary motivation for introducing a competition regime in the Treaty was the internal market, which was intended to be attained not through resource sharing as in the ECSC, but by removing governmental obstacles to trade, including quantitative restrictions and related mechanisms.[47] The four freedoms, the unrestricted movement of people, goods, services, and capital, were the tools used to actively further this goal.[48] To prevent private undertakings from restoring the limits that had been lifted by public authorities (for example through the formation

[42] Ibid.
[43] Consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union [2016] OJ C202/1 (TFEU).
[44] Wolf Sauter. "*History and Framework of EU Competition Law"* In Coherence in EU Competition Law. Oxford: Oxford University Press (2016), 32.
[45] Ibid.
[46] Ibid.
[47] Wolf Sauter. *"History and Framework of EU Competition Law."* In Coherence in EU Competition Law. Oxford: Oxford University Press (2016), 36.
[48] Catherine Bernard. *"The Substantive Law of the EU: The Four Freedoms, 4th ed."* Oxford: Oxford University Press, (2013).

of cartels along national lines), an antitrust policy was established.[49] The answer to the question of why they were introduced and what the purpose of EU rules regulating market competition is, can be found in decisions from court practice, e.g. in the 1969 "*Walt Wilhelm"* case, in which the Court emphasized that the primary purpose of the EU competition law, beyond the actual promotion of legislation, is the elimination of obstacles to the free movement of products and safeguarding the unity of the internal market, which in itself represents the essence of EU competition law.[50]

Strictly speaking, there are three components to the modernization of antitrust: a more substantive economic approach, decentralization, and a third component combining substance and procedure, including a new emphasis on hard-core cartels based on leniency applications as well as reform of the relevant instruments.[51] Bearing in mind the focus of this paper, prohibited cartels in the construction industry, through the prism of the relationship between EU competition law and public procurement law, the development and modernization of the rules themselves through legislation and practice had a substantial effect on improving transparency in this sector of the industry. As to why this is the case, further analysis will reveal, but it can be said that in parallel to the development of firm competition rules, there was also a change in the view of the construction industry as a sector in which collusion of market competitors and the consequent negative impact on the free market was essentially a fairly normal occurrence.

[49] Wolf Sauter. *"History and Framework of EU Competition Law."* In Coherence in EU Competition Law. Oxford: Oxford University Press (2016), 36.
[50] Case 14/68. *"Walt Wilhelm et al. V Bundeskartellamt"* [1969] ECR 1, paragraph 9.
[51] Jürgen Basedow. *"The modernization of European competition law: a story of unfinished concepts."* Texas International Law Journal 42, (2007), 429-39.

3. Prohibited Horizontal Agreements in Legal Theory and Judicial Practice

3.1 Concept and Evidence of Horizontal Agreements

Following a general theoretical introduction on the origin and purpose of implementing competition rules in the EU legal order, the focus is narrowed to the essence of what these rules regulate, i.e., prohibited agreements between undertakings. Article 101 of the TFEU aims to prevent anticompetitive behavior brought on by collaboration between businesses.[52] In most cases, this type of conduct takes two forms: horizontal agreements, which are agreements between companies at the same level of distribution, and vertical agreements, i.e. prohibited contracts among companies at different levels of the distribution chain (for example manufacturer and distributor).[53] Acting on different parts of the distribution chain in the case of vertical agreements reduces the possibility of collusion between undertakings and therefore such contacts are considered to be less harmful.[54] Horizontal agreements, however, between direct competitors in the market are prohibited per se and do not serve any purpose that would promote market competition.[55]

Wanting to confront frequent competition law violations caused by these agreements, the European Union, inspired by American legislation, has adopted relevant provisions to maintain a certain amount of effective competition within the European Community and to prevent private companies from undermining the single internal market.[56] There are three paragraphs

[52] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[53] Joseph Herrington. *"Horizontal and Vertical Agreements: Differences Between the European Union and the United States."* Annuals of the Faculty of Law in Belgrade 68, No.1 (2020): 7-27.
[54] Ibid.
[55] Ibid.
[56] CJEU Case 6/72, *Continental Can Co. V. Comm`n,* 1973 E.C.R. 215, para. 25.

in the Article mentioned: in the first, anti-competitive agreements, decisions made by associations of businesses, and concerted practices are all generally prohibited.[57] The second introduces a nullity legal punishment that is appropriate to any such contracts, decisions, or coordinated actions, and the last one permits several unlawful arrangements and coordinated actions to be exempt from the application of Article 101 (1).[58] Also, three aspects must be demonstrated by the EU authorities, a third party or the national competition body for this restriction to be enforceable.[59] Therefore, it must be shown that there has been some sort of collaboration between undertakings, in the manner of a contract, a decision created by a group of companies, or a concerned activity.[60] Further, these forms of cooperation must have an actual or potential effect on intra-community trade and must have the object or effect of preventing, restricting, or distorting competition within the Common Market. This thesis examines the first element in Article 101 (1) EU prohibition, i.e., the existence of some form of cooperation between undertakings. The difficulties in establishing a line between innocent and collusive action will be explored.

3.2 Basic Principles of Prohibited Agreements and Concerted Practices

The drafters of the TFEU used the term "concerted practices" to complement the terms "agreements" and "decisions of associations of undertakings" in order to extend the scope of Article 101 to all forms of coordination, even if the most prominent instance of cooperation between undertakings is an agreement.[61] Nevertheless the Commission and Community courts have traditionally interpreted the idea of agreement quite broadly, a common definition for this

[57] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[58] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ 2003, L1/1.
[59] Cases 110, 241 and 242/88 *Lucazeau v. SACEM,* 1989 E.C.R. 2811.
[60] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[61] Ibid.

concept has only recently been offered.[62] Therefore, the Court of First Instance declared in *Bayer v. Commission* case that the definition of 'agreement' focuses on a concordance of wills among at minimum two parties and that it is not relevant to how it manifests itself as far as it properly reflects the parties' intention.[63] The expression of a concordance of wills between the partners and the irrelevance of the contract's structure were combined in this, bringing together two criteria that had previously been distinguished in previous court rulings.[64] This broad and liberal definition of agreement allows the application of Article 101 TFEU to loosely standardize forms of cooperation and it enables Commission, member states, and domestic governmental bodies to close the net on a wide range of phrases of consensus that extend beyond formal agreement.[65]

It does, however, overcloud the distinctions between the concepts of agreement and coordinated practice: on the one hand, it seems that this distinction does not matter greatly, where the Commission has stressed that nothing much turns upon whether a practice is classified as an agreement or a concerned practice so long as proof of collusion is found.[66] On the other hand, and while the boundaries between them seem naturally fluid, a basic distinction appears to remain in the case law, as shown in the Court, even though these ideas share the objective of detecting collusion, they can be differentiated among themselves based on how intensively they arise and also how they manifest themselves.[67] Like the concept of agreement, the concerted practice was not specified in the Treaty; nevertheless, the idea of concerted action was introduced into it as a product of U.S. antitrust law, where it had already been frequently used in the context of horizontal interactions.[68]

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[62] Ibid.
[63] Case T-41/96, 2000 E.C.R II-3383, Paragraph 69.
[64] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[65] Ibid.
[66] Joined cases T-305/94, *LVM v. Comm`n,* 1999 E.C.R. II-931, paras. 696-98.
[67] Case C-49/92P, *Comm`n v. Anic Partezipazioni SpA, (Polypropylene),* 1999 E.C.R. I-4125, paras. 131-33.
[68] Daniel G. Goyder. *"EC Competition Law."* Oxford, Oxford University Press, (2003).

The Commission, a national competition authority, or a private party before a national court, will use any available direct evidence to show the existence of collusion, thus, documentary evidence, like contracts, meetings, or exchange of correspondence that may clearly show concentration between undertakings or at the very least furnish proof of the existence of unlawful contacts between them.[69] However, it is only natural that undertakings, well aware of the illegality of practices such as price-fixing and market-sharing, will try not to leave behind a trail of incriminating direct evidence.[70] Circumstantial evidence, therefore, becomes particularly important when proving the existence of collusion but also carries some risks in terms of the legal and economic assessment of market behavior.[71] After theoretically defining the relevant concepts of prohibited horizontal agreements and harmonized practices as prohibited by the positive legal provisions of the EU, they will be applied in the continuation of the work using examples from the construction sector and related public procurement procedures.

3.3 The Difference Between Unlawful and Legal Contact Between Market Participants

In addition to everything mentioned as relevant to the existence of an illegal anti-competitive agreement or coordinated behavior, it is also important to make a distinction between prohibited contacts for companies and those that could be considered legitimate and permitted business practices. Naturally, the Commission and the Community judiciary have interpreted the idea of reciprocal communication extensively; the Court of First Instance ruled that these criteria are fulfilled whenever one competitor informs the other about its upcoming plans or behavior on

[69] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[70] Mark Jephcott. *"Horizontal Agreements and EU Competition Law."* Richmond: Richmond Law and Tax, (2005).
[71] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.

the market if the former asks it or just accepts it.[72] In situations where undertakings have openly discussed or communicated anti-competitive plans, this has also been understood to include a substantial act involving the transmission of information, which does not necessarily require written or oral statements or the explicit agreement of all participants.[73] The required meeting of minds between undertakings can take place in different more interesting ways, for example, in one case, the Court held that participation by an undertaking in a meeting with an anti-competitive purpose would count as a reciprocal contact.[74] An extremely broad definition of reciprocal communication has made it possible for the category of coordinated practice discussable to cover contacts between market participants, like for example information sharing, taking part in industry gatherings, rivalry debates, or even conversations with other parties could all amount to sailing into very dangerous waters in this situation.[75] This kind of market is seen as significant as well, for instance, the Court of First Instance underlined that given the automized nature of the supply, in a truly competitive market, the transparency provided through information exchanges is not expected to considerably reduce uncertainty about the future behavior of competitors.[76] By contrast, however, transparency created in an oligopolistic market, where competition is already reduced by frequent exchanges of information is likely to have a very significant impact on competition.[77] Meetings and conversations between participants in the market may serve positive reasons and benefit all parties concerned; however, as was already mentioned, attendance at these gatherings or talks may occasionally be evidence of engagement in anti-competitive behavior.[78] As was also mentioned, the Community judicature has ruled that participation in a concerted activity can be

[72] Case 85/76, *"Hoffman-La Roche. "1979* E.C.R. 461, para. 39.
[73] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[74] Case T-7/89, *"Hercules Chems. V. Comm`n."* 1991, E.C.R. II-1711., para. 232.
[75] Albors-Llorens Albertina. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[76] Ibid.
[77] Case T-35/92, *"John Deere v. Comm`n"* 1994 E.C.R. II-957. Para. 51.
[78] Michael Waelbroeck and Aldo Frigani. " *European Competition Law."* Ardsley, Transnational Publishers, (1999).

proven by simply attending meetings where anti-competitive conditions are discussed, even if this only entails receiving information and there is nondisclosure of an undertaking's procedure.[79] The underlying presumption is that an operator present at such a meeting cannot fail to consider the information obtained in determining its practice.[80] This part of the work aimed to investigate how the European Commission and the judiciary should make the distinction between acceptable conduct by market participants and prohibited practices that violate Article 101(1) TFEU. To establish a breach of this Article, the Commission needs to prove the existence of a form of cooperation between undertakings. If there is evidence that the parties have clearly manifested their joint intention either orally or in writing, or simply one of them tactically accepting an express anti-competitive term or invitation to act in that manner, the Commission will be able to conclude that a prohibited agreement has taken place.[81] With regard to meetings and agreements between competitors, the view of the national courts is quite similar.

[79] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[80] Case T-1/89 *"Rh6ne-Poulenc v. Comm'n,* supranote 66, at paras.122-23.
[81] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.

4. Grounds for Violating Competition Law Rules in the Construction Sector

4.1 Construction Sector - Vital Component of the European Economy

After the introductory theoretical presentations on the prohibition of agreements between companies, it is necessary to point out some general facts about the functioning and importance of the construction industry as a sector of the economy in modern countries, which is often characterized by such agreements. In almost every EU Member State, the building sector represents a vital part of the economy, which works on a variety of projects, including the construction of new homes, offices, schools, factories, etc.[82] Along with many other things, it constructs roads, bridges, ports, trains, and tunnels and manufactures the raw materials, such as concrete, that go into its construction. All those structures are additionally maintained, repaired and improved by the construction sector, whose importance stems from the fact that it offers the infrastructure that almost every other sector depends on using, while also being in itself such a large industry.[83] With over 40 million employees across the European Union and some other industrialized states around the world, this sector is the largest employer in Europe, making up around 7% of all employment.[84] The average share of GDP devoted to the construction sector across all OECD nations is 6.47 percent.[85] Unfortunately, there is some negative press around the construction industry since it is widely recognized that cartel violence has long plagued the sector; in fact, Lord Borrie (a former Director General of Fair Trading in the United Kingdom) claims that the industry has the worst history of cartelization of any other

[82] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[83] Ibid.
[84] European Commission, "Construction sector", www.ec.europa/enterprise/construction/index_en.htm , Accessed 23 January 2023.; U.S. Department of Labor Statistics, "2008-09 Editions of the occupational outlook handbook and the career guide to industries" (18 December 2007), www.bls.gov/oco/cg/print/cgs003.htm. Accessed 23 January 2023.
[85] OECD Annual National Accounts Database [SNA] (2006).

sector.[86] These situations bring up several issues that could be discussed, i.e., why collusion happens so regularly in the construction sector, or what methods have competition authorities used to identify and deal with construction cartels.[87] Of course, other anti-competitive behaviors can occur in the construction sector in addition to collision, including abuses of dominant position and inappropriate mergers.[88] However, it is typically dispersed enough that monopolistic enterprises and mergers that significantly reduce competition are rare, so since cartel activity affects construction firms' ability to compete, it has received the majority of the attention in this master thesis.

4.2 Determination of the Relevant Market and its Barriers to Entry

For a better understanding of the construction sector, a closer study of its market environment will be necessary. Considering that it appears obvious that there are numerous products and services provided inside the construction industry, this could help decide how large the extent of fines should be imposed.[89] Therefore, questions arise about how specifically relevant product markets should be specified for the construction sector, whether is it adequate to distinguish between markets for infrastructure, residential structures, and commercial buildings and what unique qualities of the industry need to be considered when identifying geographic markets.[90] Regarding the consistency of the market, the concentration of goods and services within the construction sector varies to some extent. Most companies in the sector appear to be micro businesses without more than 20 employees, and the majority of the output is produced by these

[86] Lesley Ainsworth. "*Competition Law Enforcement in the Construction Industry,"* in John Uff and Anthony Lavers. *"Legal Obligations in Construction."* (1992), 539, 549.
[87] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[88] Ibid.
[89] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[90] Ibid.

enterprises.[91] On the other hand, it is crucial to recognize the significance of the few big companies because a disproportionately large share of the work is typically produced by their employees.[92] The market can sometimes be described as unconcentrated as a result of the especially high number of smaller companies.[93] The number of general contractors who can oversee very big projects is fairly rare, compared to the number of minor subcontractors, who are quite common.[94] The rivalry among small contractors that perform fundamental work tends to be closer to perfect competition, in contrast to the competition among large general contractors, which appears to more closely resemble an oligopoly.[95] Small construction companies typically have minimal initial expenses for accessing their local market, which could be because relatively few pieces of equipment must be bought, and it normally means that these enterprises rent the necessary gear depending on the current project they might have.[96] At the same time, large construction companies, by their size, are often able to bid in a wider geographical range since they can absorb their costs more efficiently compared to smaller businesses.[97] In turn, they build strong relationships with major clients, which hinders smaller or newer companies from establishing themselves and gaining the expertise and reputation needed to meet the client's requirements and secure the contract.[98]

[91] Niclas Andersson and Fredrik Malmberg*," Competition and Barriers to Entry in the Construction Sector."* Conference Proceedings for the 10th Symposium on Construction Innovation and Global Competitiveness, pp. (2003), 461, 466.
[92] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[93] Ibid.
[94] Ibid.
[95] Ibid.
[96] Ibid.
[97] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[98] Ibid.

4.3 The Lack of Competition in the Construction Sector

The idea of open competition has not always been well-received in the construction industry. Critics have even put forward reasons to say that competition here is not only unimportant but also detrimental to society.[99] They argue that the industry should therefore be immune from some or all competition rules, while on the other hand, the authorities must find ways to disprove such opinions in order to protect the market.[100] The argument of insignificance is first raised by critics, according to which opponents of competition in the construction sector claim that problems that were not predicted in the initial design of the construction plan often arise after the winner has been selected and work has started.[101] As a result, these problems lead to changes in the planned amount of work, which has to be negotiated again, and the original price, which was lower, now has to be increased.[102] Supporters of this theory, therefore, believe that the selection of works in the competition should not depend on the price ratio between competitors, as these are unpredictable and subject to change due to later circumstances. Such inevitable changes in the initial construction plans are closely related to the aspect of public procurement since the essence of such procedures is to select the competitor who sets the minimum cost (unless there is a really good reason not to do so), which may no longer be the best candidate after later changes.[103] Such a situation is of course used by competitors in public procurement processes, deliberately making low offers just to win the contract, knowing that their actual compensation will be much higher later.[104] The conclusion of this argument, which is favorable to the competition opponents, is that, in the end, the price compensation is not the result of fair competition among all tender participants, but the product of negotiations with a

[99] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[100] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[101] Ibid.
[102] Ibid.
[103] Ibid.
[104] Ibid.

single undertaking who won the contract with a fraudulently low price at the beginning.[105] Another argument made by construction firms is that their business makes them particularly vulnerable to 'ruinous competition' and that both firms and customers would profit from more cooperation and less rivalry.[106] This argument is complemented by the claim that excessive competition can discourage private companies from taking the risk of investing in research, technological development, and creating new products.[107] In contrast to the first point, complaints about destructive competition are more recent, dating from the beginning of this century, and have not proved so convincing.[108] The majority of academic articles also rejected the argument of harmful competition for the construction sector.[109] They based their view largely on the well-established proposition that free markets work, or in other words, that highly competitive markets tend to settle into effective balances in which firms tend to be profitable in the long run.[110] If a few relatively inefficient firms fail and go out of business, the market needs to demand that they leave so that it can achieve a sustainable competitive balance.[111] In addition to the two main allegations about the harmful effects of excessive competition in the construction sector, opponents point out that it is too common in the construction industry for the winner of a tender to be chosen solely based on the offered price.[112] As an explanation, they point out that this forces buyers to assume that all bidders are offering products of similar value, which, on the other hand, prevents competition on the basis of product quality.[113] Contracting

[105] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[106] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[107] Ibid.
[108] Frederic M. Scherer. *"Industrial Market Structure and Economic Performance."* 212 (2d. ed. 1980); Akintola Akintoye and Martin Skitomore. *"The Profitability of UK Construction Contractors."* 9 Construction Management and Economics 311, (1991).
[109]Michael Ball, Mahtab Farshachi Akhavan, and Maurizio Grilli." *Competition and the Persistence in the UK Construction Industry."* 18 Construction Management and Economics 733, (2000).
[110] Ibid.
[111] Ibid.
[112] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[113] Ibid.

authorities should therefore avoid constantly hiring the cheapest option for construction projects in order to support a profitable industry.[114]

4.4 Requirements for Success in the Construction Space

This section considers the normal operating model of the construction market and the associated profitability projections of companies operating inside that industry. For most economic sectors, it is primarily the elements of time, flexibility, and the ability to adapt to market conditions that are key to the success of the companies that participate there.[115] The same elements apply to construction companies, which need to establish a permanent ability to respond to changing market conditions and build a reputation for competence and integrity within their sector.[116] Moreover, success requires adaptation through better institutional organization in the company itself and the employment of people capable of managing procurement and large construction projects.[117] This assumption contradicts the claim that construction companies' profits depend entirely on consumer demand for their products and services.[118] One of the elements of the efficiency of construction companies is their opportunity to access the market and the resistance to possible barriers to entry. Depending on the location, size, and nature of the projects, contractors need to specialize, which may mean that large projects should belong to large companies, specialize by taking on projects on a regional basis, or simply focus only on certain types of work.[119] Companies generally seek to enter any market where the prospects for return on investment are greater than somewhere else.[120] The last

[114] Ibid.
[115] Michael Ball, Mahtab Farshachi Akhavan, and Maurizio Grilli. "*Competition and the Persistence in the UK Construction Industry."* 18 Construction Management and Economics 733, (2000).
[116] Ibid.
[117] Ibid.
[118] Akintola Akintoye and Martin Skitomore. "*The Profitability of UK Construction Contractors."* 9 Construction Management and Economics 311, (1991).
[119] Michael Ball, Mahtab Farshachi Akhavan, and Maurizio Grilli. "*Competition and the Persistence in the UK Construction Industry."* 18 Construction Management and Economics 733, (2000).
[120] Akintola Akintoye and Martin Skitomore. "*The Profitability of UK Construction Contractors."* 9 Construction Management and Economics 311, (1991).

assumption for the efficiency and competitiveness of construction companies is the potential to earn economic rents.[121] Businesses that innovate by creating a new product, the techniques of production, or promotional strategies may be capable of generating economic benefit.[122] It is difficult to see how numerous construction companies might gain from the type of economic rent consistently because they don`t design new construction methods; instead, they implement innovations created by manufacturers of plants and materials as well as by engineers and other people working in this industry.[123]

4.5 Tendencies to Cartelization and Collusive Behavior

In situations where construction companies fail to secure their place in the market using the legal methods of competition outlined in the previous title, or simply try to succeed the easy way, the appearance of anti-competitive behavior is inevitable. When discussing the topic of prohibited contracts in the construction industry, some authors described it as a field where economic crimes and abuses are ingrained in its cultural identity and environment.[124] The question then arises as to whether there are any characteristics of the sector which make it particularly vulnerable to being cartelized.[125] Cartels as a form of collusive behavior by undertakings, the establishment of which is prohibited by relevant European and domestic regulations, can be identified as the most significant and the most dangerous type of competition rules infringement.[126] Speaking in the broadest sense, collusion generally includes the illegal actions of market competitors who coordinate their activities, for instance by fixing prices or

[121] Michael Ball, Mahtab Farshachi Akhavan, and Maurizio Grilli. "*Competition and the Persistence in the UK Construction Industry."* 18 Construction Management and Economics 733, (2000).
[122] Ibid.
[123] Michael Ball, Mahtab Farshachi Akhavan, and Maurizio Grilli. "*Competition and the Persistence in the UK Construction Industry."* 18 Construction Management and Economics 733, (2000).
[124] Andree Doree, Elizabeth Holmen, and Jasper Caerteling." *Co-operation in the Construction Industry of the Netherlands,"* 19th Annual ARCOM Conference (Association of Researchers in Construction Management), vol. 2 (2003), pp.817-826 at 817.
[125] OECD, Public Procurement, The Role of Competition Authorities in Promoting Competition, DAF/COMP (2007)34, Background Note at 21-23.
[126] Ibid.

consenting to reduce production, all to exclude direct competitors and attempt to prevent the potential entry of new rivals into the market.[127] The bidder's goal is to stifle competition and take part of the profit that would otherwise go to someone else, according to the theory of economist Adam Smith, who described collusion as a strategy in which entrepreneurs as such rarely cooperate, except when it comes to conspiracies to raise prices and obtaining larger profits to the detriment of the general population.[128]

As it has been pointed out, secret agreements are not an unexpected characteristic of the construction sector, but a certain part of its identity, which, although with the same intention, can differ in their organization, scope, and stability.[129] The most common forms should be highlighted, beginning with the interaction between companies, bribing the government and competition, deliberately creating inflation, or setting prices.[130] In any case, the intention of companies that decided to participate in such activities is completely clear: creating their own rules and implementing them to divide the market between themselves, exclude the possibility of other participants leaving the illegal association, and prevent any possibility of a third party joining the profitable market.[131] Several factors influence secret agreements and their durability.[132] The first one is undoubtedly the number of firms in the market since industries with a low concentration of competitors will be more prone to collusion.[133] In addition to the number of operators in the market as an indicator of the possibility of forming prohibited

[127] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[128] Ibid.
[129] Anna Zakarda-Freiser and Martin Skitomore." *Decisions with moral content: Collusion, Construction Management, and Economics."* DOI. (2000), 18:1, 101-111.
[130] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[131] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[132] Ibid.
[133] Ibid.

agreements, mutual coordination, compliance with rules and synchronized decision-making are key to the maintenance of such contracts once they have been created.[134]

The next factor influencing the emergence and sustainability of collusive behavior by companies is their ability to lower prices, expand the market and retain customers, the so-called high price flexibility of the companies because, on the contrary, low price flexibility indicates that price changes cannot have a significant impact on the size of the market.[135] Finally, the most common trigger for the creation of secret agreements between undertakings is the interpretation of business risks, as companies facing similar levels of risk seek to reduce them by working together.[136] In the construction sector, there is a risk for bidders in the government system such as tendering and lowest price selection for managing projects and executing works, as future cost projections are unreliable due to their variability.[137] Therefore, it should be assumed that companies find it easier to agree on the outcome of competition to their mutual benefit than to undertake risky ventures with higher costs and lower profits than planned. Besides the mentioned market economic factors for secret agreements development, the cultural perspective is also presented through the cases of cartels in this industry. These collusive arrangements based on cultural factors showed the highest degree of organization and internal functioning, as well as the most disciplined cooperation between undertakings in history. In many ways, cooperation reflects the national mindset and fits quite well with the mix of corporatism, pragmatism, consensus, and risk aversion.[138]

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[134] Ibid.
[135] John McMillan. *"Dando: Japan`s price-fixing conspiracies."* Economics and Politics, (1991), Vol. 3, issue 3, 201-218.
[136] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[137] Christopher McDowell and Arjan de Haan.*" Migration and sustainable livelihoods: A critical review of the literature."* IDS Working Paper 65, Brighton: IDS. (1997).
[138] Christopher McDowell and Arjan de Haan.*" Migration and sustainable livelihoods: A critical review of the literature."* IDS Working Paper 65, Brighton: IDS. (1997).

4.6 Ties in the Public Procurement Process

Any covert agreement among potential competitors to avoid engaging in direct or indirect competition is referred to as a cartel, and the need for secrecy in the agreement between rivals is the primary defining feature of a cartel.[139] Cartels of various kinds are the most serious violation of antimonopoly laws with the aim of weakening competition between market participants, regardless of whether it is an agreement to fix prices or an agreement on the distribution of customers, and the consequences from which end consumers suffer the most are reflected in the reduction of effective production and higher prices.[140] Market competition may not be eliminated by cartels completely, for instance, rivals may agree to reduce competition solely for specific clients, in specific geographical markets, or about specific exchange characteristics.[141] Cartel members can at the same time agree to harmonize prices for products or at least about some customers, but also leave room for mutual competition when it comes to the quality of products and services of each member and competition about consumers that are not the subject of earlier agreements.[142]

However, the negative effect of the cartel is not only reflected in high prices or a limited amount of production.[143] By limiting natural and healthy competition between companies, they also reduce their ambition and commitment to innovation and new product development, which has a long-term detrimental impact on customer welfare, and as a consequence, the balance in a market with a cartel may differ greatly from a comparable balance attained in a market without the cartel, even if all supranormal profits are eliminated through competition.[144] Thus, discipline

[139] Alison Jones and William E. Kovacic. *"Identifying Anticompetitive Agreements in the United States and the European Union."* Antitrust Bulletin 62, No. 2, (2017), 254-93.
[140]Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4, (2012), 849-862.
[141] Ibid.
[142] Ibid.
[143] Ibid.
[144] Kai Husherlath and Nina Leheyda.*" Assessing the Effects of a Road-surfacing Cartel in Switzerland."* 6 J. Competition L and Econ, (2010), 335.

that is accomplished by good implementation of market competition rules, can be a decisive factor that ensures the ability to compete, long-term growth, and consequently a higher standard of living.[145] While the cartel agreement itself was created to violate and cheat legal rules, some of its members also have a motive to act in the same way towards their partners, for example by selling under the price consented in the agreement or even outside their prescribed area of activity, and that is exactly what makes cartels generally unstable.[146] This means that cartels often have to work hard to monitor their members and ensure that they do not cheat to achieve better business results and risk the existence of the cartel itself.[147] This approach of increased control is not necessary for the context of bid-rigging since the incentive for the members of the cartel to cheat is reduced by the transparency of the public procurement process as such.[148] In marketplaces where the product is uniform and there are few industry participants, cartels are typically quite prevalent.[149] Indeed, the evidence supports the claim that "four are few and six are many" when it comes to explicit collusion by demonstrating that the quantity of participants in industries that are sensitive to collusion rarely exceeds ten and frequently falls below five (with two biggest exceptions, both the Netherlands and the United Kingdom construction cartels with hundreds of members participating).[150]

[145]Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4 (2012), 849-862.
[146] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[147] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4 (2012). 849-862.
[148] Ibid.
[149] Louis Philips. "*Competition Policy: A Game Theoretic Perspective 25."* Cambridge, Cambridge University Press (1995).
[150] Ibid.

5. Public Procurement Processes – A Fundamental Economic Activity of the State

5.1 Concerns Relating to Public Procurement and Competition

The strong connections between the state as the contractor and the construction sector are primarily reflected in public procurement processes. When public or private companies purchase goods and services, this is referred to as procurement: the lowest bidder is obliged to supply the goods or services on offer.[151] To put it in other terms, finding the supplier with the lowest price or, more generally, securing the best value for money is the main objective of an efficient procurement policy, which is why illegal activities such as collusion, bid rigging, fraud, and corruption may not influence the procurement in any way.[152] In most cases, procurement is carried out via a competition-oriented bidding or tendering system. Competitive procedures inherently carry a set of appealing economic efficiency qualifiers, meaning that the bidding process can identify not only the most effective price but also the most effective vendor of a particular good or service.[153] Besides granting new entrants' exposure to commercial prospects, an open and competitive approach can be more easily defended against claims of favoritism or discrimination.[154] The purchase of goods or services by the public sector is described as public procurement, because of the special circumstances which occur when the public sector engages as a buyer in the market, public procurement creates particular interests.[155] The interaction created between a public purchasing entity dealing with a limited number of suppliers is similar to that of a group of oligopolists and a highly specialized

[151] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[152] Ibid.
[153] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4 (2012), 849-862.
[154] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[155] Ibid.

acquirer.[156] In contrast to a private acquirer, a public purchaser is limited in its range of strategic options, since the public sector is obliged by laws, regulations, and complex administrative procedures for the purchase of goods and services.[157] While these regulations are designed to prevent the public sector from improperly exploiting its discretionary powers, the resulting lack of flexibility limits the public purchaser's scope to intervene strategically when confronted with collusion between potential contractors seeking to increase their profits.[158] Essentially, the same concerns relating to competition that might be brought up in the context of public procurement are also likely to be relevant in a 'normal' market setting.[159] The core problem with public procurement is that the formal rules that surround it, by facilitating communication among rival bidders, may foster collusion between bidders and thereby reduce competition, which would negatively impact the efficiency of the system.[160] Collusion can take place in auctions and bidding processes just as easily as in normal commercial marketplaces, especially in settings where there are barriers to entry and where bidding is not based on a "winner-takes-all" competition.[161] There are several elements that can influence the impact of public procurement policy on competitiveness: one potential effect, although not the only one, is a short-term impact on competition between potential suppliers, or an effect on the intensity of rivalry within a given tender.[162] Given that public procurement can alter critical aspects of an industrial sector, it can also have further, longer-term consequences for competitiveness, such as the degree of innovation, the volume of investment, vertical integration, etc.[163] This, in turn, may be mirrored in the level of competition in the market.[164] The prevention of and fight against corruption is an

[156] Ibid.
[157] OECD, Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP (2006)27.
[158] Ibid.
[159] Luigi Gian Albano, Giancarlo Spagnolo, Paolo Bucciross and Matteo Zanza." *Collusion in Procurement:"* A Primer (2006).
[160] OECD, Roundtable on Competition in Bidding Markets, Note by Prof. Klemperer, DAF/COMP/WD (2006)72.
[161] Ibid.
[162] European Commission, Directorate-General for Economic and Financial Affairs, report 2004.
[163] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[164] Ibid.

important element in public procurement procedures. There should be no compromise on the relationship between increasing competitiveness and reducing or eliminating corruption, but certain anti-competitive strategies may be counterproductive and increase such collusion.[165] However, the sensitive nature of the balance between these two objectives requires governments to consider how to increase competition without compromising efforts to combat corruption and abuse of power.[166]

5.2 Policies Governing Procurement, Competition, and Corruption

Corruption and favoritism are thought to be more significant issues in public procurement in many countries because procurement frequently entails sizable orders, which makes public employees more tempted to engage in corrupt activities, especially in nations where the level of public worker salary is quite low.[167] Corruption in the public procurement procedure as a practice is caused by the conduct of the person in responsibility for its implementation, in such a way that this person manipulates the process by accepting a bribe or any other form of illegal material or non-material advantage, and influences its outcome by favoring certain companies.[168] Corruption of public officials is a special reason for caution in public procurement to avoid such activities, not only because government employees are supposed to serve the general welfare, but also because in practice such behavior has an impact on the effective distribution of public resources.[169] Corruption in procurement is defined as awarding contracts that differ from those that would have resulted from a competitive process.[170] If there is corruption, the contract may be awarded to the company that gave the bribe rather than the

[165] Ibid.
[166] Ibid.
[167] Frederic Jenny. *"Competition and Anti-Corruption Considerations in Public Procurement."* in OECD "Fighting Corruption and Promoting Integrity in Public Procurement." (2005).
[168] Ibid.
[169] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[170] Ibid.

lowest-priced bidder; in this regard, a distortion of the marketplace is implied by corruption in governmental processes, and as a result, strategies to combat such anti-competitive behavior are very complimentary.[171] Consequently, there are compromises to be made between the objectives of expanding competition and reducing cooperation; by limiting information to specific procurement oversight agencies, corruption, and favoritism may still be managed without complete transparency.[172] This can entail establishing a different oversight organization to keep an eye on the conduct of the procurement officials and restrict the information about bids that are made publicly available.[173] Certain jurisdictions have adopted rules to combat collusion when procurement authorities are directly involved in bid-rigging.[174] Although a clause in the competition laws covers the anti-competitive actions of the concerned enterprises, the competition authorities are often immune to illegal behavior by public officials.[175]

5.3 Approaches to Minimize the Possibility of Bid-Rigging and Increase Competition in Public Procurement

The possibilities of the authorities are often limited by the laws that govern public procurement in situations where such processes are confronted with anti-competitive practices.[176] Complicated legislation and unclear administrative provisions or procedures sometimes restrict the decisions of the public administration, which in the end leads to a lack of transparency.[177] As noted above, the purpose of legislation should be to prevent discriminatory practices and privileged treatment, yet those same rules may limit the capacity of the authorities responsible

[171] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[172] OECD, Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP (2006)27.
[173] Luigi Gian Albano, Giancarlo Spagnolo, Paolo Bucciross and Matteo Zanza." *Collusion in Procurement:"* A Primer, (2006).
[174] Ibid.
[175] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[176] Ibid.
[177] Ibid.

for their implementation to respond rationally when faced with the illegal activities of potential contractors who act to increase their profits.[178] It is therefore important that the legal framework for public procurement is designed to be flexible. A positive step to achieve this goal may be to introduce different new procurement procedures or to help users adapt their existing practices.[179] The combination of such flexibility and careful consideration of the impact of different elements in public procurement processes can reduce the risks to market competition and the possibility of collusion between undertakings.[180] Designing auctions and procurement tenders with collusion in mind may significantly aid in the fight against anti-competitive behavior because it enables the creation of an environment where the ability and incentives of bidders to reach collusive agreements are greatly diminished, if not eliminated.[181] The organization and implementation of public procurement procedures are subject to restrictions imposed by national laws and regulations, as well as the control of procurement authorities, which means that they have a unique opportunity at least to make creating and developing cartels more difficult.[182] Procuring authorities are best placed to monitor and prevent indicators of illegal activity in the marketplace, as they are in a position to notice changes that may indicate such practices.[183] To successfully prevent these conditions from occurring, procurement officials are usually not enough informed about the elements that favor collusion. Similarly, most of them are not sufficiently altered to suspicious activity that takes place during the tender, making it impossible for them to stop it.[184] Competition authorities and public procurement bodies can and should closely cooperate, which can help them combat bid-rigging more

[178] Ibid.
[179] Ibid.
[180] Frederic Jenny. *"Competition and Anti-Corruption Considerations in Public Procurement."* in OECD "Fighting Corruption and Promoting Integrity in Public Procurement." (2005).
[181] OECD, Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP (2006)27.
[182] Frederic Jenny. *"Competition and Anti-Corruption Considerations in Public Procurement."* in OECD "Fighting Corruption and Promoting Integrity in Public Procurement." (2005).
[183] Ibid.
[184] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.

successfully, and by increasing their awareness programs in this area.[185] Public awareness of the risks associated with bid-rigging in public tenders need to be raised as part of the wider fight against cartels, which includes, directly or indirectly, many bodies responsible for protecting competition in the market.[186] Some authorities conduct educational sessions on bid-rigging, and this instruction might at the very least take the form of a file created by the competition authority that details cartels, their various forms, and how to spot them.[187] A collection of uniform procurement rules that might be used in auctions and procurement bids could be created by authorities as a sort of operational manual for procurement officials and authorities in general.[188]

In addition to raising the awareness of officials in the authorities for the protection of market competition about the possibility of creating rigging in the evaluation of public procurements, the next method of improving competition in these processes is the selection of the most appropriate tender model. Although many distinct bidding types can be used in the procurement environment, not all of them are created equal from a competitive standpoint.[189] Preventing collusion in public procurement should be approached by choosing the adequate or most efficient bidding model given the circumstances of the process, and this should be the first step.[190] It seems pretty obvious that sealed-bid ones are less likely to be victims of collusion than open tenders, similar to how public tendering procedures are less likely to result in collusion than private conversations with potential suppliers.[191]

[185] Ibid.
[186] Albert Graells Sanchez. *"Public Procurement and the EU Competition Rules."* Second Edition, Oxford Hart Publishing, (2015).
[187] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[188] Ibid.
[189] OECD, Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP (2006)27.
[190] Ibid.
[191] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.

Along with the options mentioned, competitive law enforcement that is strict and effective can of course help to lessen collusion in public procurement.[192] Bid-rigging is specifically prohibited in many jurisdictions by their competition laws, or it is viewed as a per se breach of the competition laws: other nations for example just use the basic antitrust laws against anti-competitive agreements as the foundation for their enforcement practices against bid-rigging.[193] Many countries have introduced a broad range of mechanisms to prevent collusion in auctions or procurements, although active enforcement of competition laws against bid-rigging ensures that such enforcement activities are well known, which is an important factor in deterring collusion.[194] Therefore, it can be concluded that the key elements for the implementation of legal public procurement processes are precisely these three mentioned in mutual interaction, first of all, a suitable model of implementation of public procurements, good information of government officials for the protection of competition and the legal implementation of the rules on valid procedures.

5.4 Secret Cartels and Detection

Before addressing the practical examples of the prohibition of anti-competitive practices and their relevance to public procurement in the construction sector, it is worth recalling the general theoretical definition, the most common forms, and the methods of detecting cartels as examples of forbidden behavior by undertakings.

The term 'price-fixing' is commonly understood to refer to various agreements between competitors which directly impact prices.[195] The most common form is an agreement to set the

[192] Ibid.
[193] Frederic Jenny. *"Competition and Anti-Corruption Considerations in Public Procurement."* in OECD "Fighting Corruption and Promoting Integrity in Public Procurement." (2005).
[194] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[195] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4 (2012). 849-862.

price or prices to be charged to some or all of their clients; it usually requires contact, either in person or using digital communication, between the competitors, as market conditions and costs frequently fluctuate.[196] Price-fixing arrangements may involve partial agreements on the use of a standardized formula, the maintenance of a fixed ratio with the prices of some competing products, the exclusion of discounts or the establishment of uniform discounts, the extension of joint credit terms to consumers, the adherence to published prices, the agreement not to advertise, and many others.[197] Next to comprehensive agreements on pricing, price agreements also include the waiving of discounts or the introduction of uniform discount rates.[198] The interesting fact about such 'partial' price-fixing agreements is that they have to be concluded only on one occasion and do not require any further correspondence between the cartel members to be implemented or renewed; moreover, the contract does not have to be formalized which may make it difficult to prove such agreements.[199] In the same way, territorial or customer allocation agreements do not have to be formally agreed upon in the same manner as one-off agreements.[200] Price-fixing may not have as severe of an impact on competition as market allocation deals. Consequently, market allocation agreements may reduce the degree of pressure which usually causes the failure of price-fixing agreements and, as such, these agreements may be considerably more robust.[201] Uncovering and proving the cartel is difficult from the perspective of the damaged customers, who have neither the knowledge to detect its existence nor the opportunity to escape its effects.[202] As for the other participants, they are either content to be a part of the cartel, or they violate the cartel contract, which means it does not take angry cartel members to denounce the organization for it to fall apart.[203] On the other hand, if they

[196] Ibid.
[197] Ibid.
[198] Joseph Harrington. *"Posted Pricing as a Plus Factor."* J. Competition L and Econ. I. (2011).
[199] Ibid.
[200] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[201] Joseph Harrington. *"Posted Pricing as a Plus Factor."* J. Competition L and Econ. I. (2011).
[202] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4, (2012), 849-862.
[203] Ibid.

choose to go up against the cartel (i.e., cheat), they continue to profit from the cartel's high prices as a result. The same is true of agreements involving bid-rigging; between prospective bidders and government tenders, they are intended to distribute.[204] It is about intricate agreements that call for potential bidders to often contact one another to determine the most advantageous course of action.[205] Because the bid-rigging organizers create a fake competitive atmosphere, it is difficult to identify agreements to rig bids with proof of a single bid.[206] Additionally, industry-wide bid-rigging agreements are necessary for success because it is difficult, if not impossible, to exclude anyone from the bidding process.[207] It is not the intention of the public procurement process to detect concerned practices, i.e., it cannot be stopped simply because the bid organizers believe there has been collusion.[208] The bidding organizer needs less convincing evidence to simply call the rig.

5.5 Common Legal Concepts in Public Procurement and Competition Law

Although, in principle, the state as such should not interfere in the market in terms of competition between competitors, according to some theories such state interventions are viewed as justified when there is no other instrument available to correct market distortions and problems.[209] By establishing market-oriented standards or norms that can produce outcomes that are close to those of the market, regulatory intervention can help to improve outcomes when certain factors prevent the market from operating as it should.[210] On the other hand, where markets function well, government intervention cannot improve the system's efficiency and

[204] Shyam R. Khemani. *"A Framework for the Design and Implementation of Competition Law and Policy 23."* OECD and World Bank, (1998).
[205] Alberto Heimler. *"Cartels in Public Procurement. "*Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.
[206] Ibid.
[207] Ibid.
[208] Ibid.
[209] Alfred E. Kahn. *"The Economics of Regulation: Principles and Institutions."* New York, Wiley (1970), 172-78, 221-24.
[210] Albert Graells Sanchez. *"Public Procurement and the EU Competition Rules."* Second Edition, Oxford Hart Publishing, (2015).

economic regulation becomes undesirable due to its potential for distortion.[211] However, the advantages of government regulation over market solutions, when certain irregularities occur, should be taken with a grain of salt, as such regulation may also have shortcomings that have to be carefully analyzed (so-called 'state failures').[212] Despite these issues, both competition and procurement regulations are acceptable forms of economic regulation since they aim to repair market failure and can thus provide better outcomes than entirely unregulated markets.[213]

The primary objective of competition law is to respond to and remedy competition deficits, in particular the inefficient use of dominant position by undertakings in the market.[214] The identification of a single market deficit that underlies public procurement may be difficult given that it is complicated by the presence of other market failures, including those associated with information, internalities, externalities, the provision of public goods, and distortions caused by the political implications of government contracting.[215] It is evident that the presence of all these market and non-market irregularities creates distortions in the functioning of competitive forces in the field of public procurement and that procurement legislation needs to be carefully designed to avoid them and propose effective solutions that improve the overall efficiency of the regulatory ecosystem.[216] As a result, the two instruments of economic regulation are quite appropriate in the context of resolving market imperfections, and integrating or implementing them together should offer great opportunities given compliance with some limitations.[217] Looking at the matter from a different perspective, both competition law and public procurement are economic regulations of horizontal character and both affect the entire market

[211] Ibid.
[212] Charles Jr. Wolf. *"Theory of Non-Market Failure: Framework for Implementation Analysis."* Journal of Law and Economics, (1979), 107.
[213] Lester C. Thurow. *"The Zero-Sum Society. Distribution and the Possibilities for Economic Change."* New York, Basic Books, (1980).
[214] David S. Evans. *"Economics and the Design of Competition Law."* SSRN Electronic Journal, (2005).
[215] Albert Graells Sanchez. *"Public Procurement and the EU Competition Rules."* Second Edition, Oxford Hart Publishing, (2015).
[216] Ibid.
[217] Ibid.

specifically.[218] By contrast, antitrust rules may cover a broader scope, as competition is inherently effective in all spheres of economic activity, whereas public procurement regulations impose boundaries on the activity of the contracting entity.[219] By implication, the degree to which they apply to a specific economic sector varies with the size and frequency of the principal's activity.[220] Even if both sets of rules apply across all economic sectors at the same time, the provisions on competition remain valid.[221] Yet the rules on public procurement can be ignored in markets in which no contracting authority exists or in which its involvement is negligible.[222] Public procurement law and competition law are tasked with monitoring the behavior of some of the central players in a free market economy.[223] One is aimed primarily toward the conduct of the public purchaser, while the other is directed mainly at manufacturers and other suppliers.[224] Their remedies and regulatory mechanisms aim to preserve an unbiased competitive landscape or promote greater economic efficiency, despite the non-existence of a free market.[225] As noted above, the two sets of rules interact and overlap to some extent in their primary purpose, i.e., to monitor the behavior of some of the most important agents in a free market economy, concerning the regulation of market competition at least (both bodies of rules are competition-oriented).[226] For this reason, the strong links between the two sets of rules appear to call for a coordinated strategy and consistent enforcement, or more accurately, their objectives should be instrumental in developing such a joint approach.[227]

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[218] David S. Evans. *"Economics and the Design of Competition Law."* SSRN Electronic Journal (2005).
[219] Albert Graells Sanchez. *"Public Procurement and the EU Competition Rules."* Second Edition, Oxford Hart Publishing, (2015).
[220] Ibid.
[221] Ibid.
[222] Ibid.
[223] Chris Doyle. *"Some Economics on the Treatment of Buyer Power in Antitrust."* European Competition Law, (2007), 210.
[224] Ibid.
[225] Albert Graells Sanchez. *"Public Procurement and the EU Competition Rules."* Second Edition, Oxford Hart Publishing, (2015).
[226] Oliver Black. *"Conceptual Foundations of Antitrust."* Cambridge, Cambridge University Press, (2005).
[227] Albert Graells Sanchez. *"Public Procurement and the EU Competition Rules."* Second Edition, Oxford Hart Publishing, (2015).

6. Cartels in the Construction Sector of Developed EU Countries

6.1 The Strategic Characteristics of the Public Sector Construction Projects

The previously explained connection between the construction sector and the state, as its most frequent buyer in public procurement processes that should be as transparent as possible, is very often characterized by illegal actions of private companies that try to get such tenders due to the size and financial value of public infrastructure projects. Large-scale infrastructure projects are important from a political, social, and economic perspective.[228] Public sector agencies invest in infrastructure for strategic reasons, as it enables the delivery of goods, services, and symbols that create public value for society, such as in key social sectors like health care, education, or justice.[229] When evaluating costs, advantages, and risks, the procurement of public buildings is a complicated process.[230] Delivering infrastructure to many stakeholder groups, often requires an extensive public consultation process and a large number of subcontractors.[231] Typically, strategic planning in the public sector is described in two separate phases: formulation and implementation.[232] In the context of construction procurement, strategy development focuses on which projects to prioritize, fund, and construct.[233] Such investment decisions are made by elected officials, who may do so with or without consultation with ministerial advisors and senior officials.[234] Implementation, which involves how a construction project is to be procured, is the second stage of a construction procurement strategy in the public sector and this work is

[228] Warren Staples and John Dalrymple. *"Construction Procurement and State Government Strategy: Aligned or Disconnected?"* Australian Journal of Public Administration, (2015).
[229] John Kelly, Steven Male, and Graham Drummond. "*Value Management of Construction Projects."* Second Edition, (2002).
[230] Bent Flyvbjerg. *"Policy and Planning for Large-Infrastructure Projects: Problems, Causes, Cures."* (2007. 2009).
[231] Warren Staples and John Dalrymple. *"Construction Procurement and State Government Strategy: Aligned od Disconnected?"* Australian Journal of Public Administration, (2015).
[232] Jan-Erik Johanson. *"Strategy Formation in Public Agencies."* Public Administration, (2009).
[233] Ibid.
[234] Bent Flyvbjerg. *"Policy and Planning for Large-Infrastructure Projects: Problems, Causes, Cures."* (2007. 2009).

usually the responsibility of project managers at the state government level.[235] Both phases of the process are characterized by misunderstandings about costs and benefits, which puts decision-makers at significant risk for several reasons.[236] Their task is first to ensure the implementation and financing of public projects in a fair competitive environment, and then to isolate themselves from the risk of interference by political structures seeking their own interests in such projects, as this can seriously compromise their transparency.[237] Public procurement project managers may be involved in the assessment, subsequent selection of bidders, and award of contracts, as well as the scheduling of projects and the supervision of execution even after they have been awarded to contractors.[238] Despite the theoretical concepts of how a public procurement process for infrastructure projects of public importance should be transparent, cases from the practice of some countries demonstrate that this has often not been the case. Some of them went so far that it was even considered a desirable business practice and custom in the construction sector to bypass the rules and stages of public procurement, making tenders widely manipulated and favored by a closed group of undertakings, and such a practice lasted for a very long time.

6.2 Viewpoint on Collusion in the Dutch Construction Industry

Perhaps the best example of a flagrant violation of construction sector competition rules to the multiple detriments of competitors, the state, and therefore its citizens are the ones that happened in the Netherlands. In that country, the public sector procurement of building work

[235] Warren Staples and John Dalrymple. *"Construction Procurement and State Government Strategy: Aligned or Disconnected?"* Australian Journal of Public Administration (2015).
[236] Bent Flyvbjerg. *"Policy and Planning for Large-Infrastructure Projects: Problems, Causes, Cures."* (2007. 2009).
[237] Ibid.
[238] Warren Staples and John Dalrymple. *"Construction Procurement and State Government Strategy: Aligned od Disconnected?"* Australian Journal of Public Administration (2015).

turned into a significant issue at the early beginning of the 21st century.[239] Never had public sector procurement practices been exposed to such a hefty financial and labor investment before.[240] 'Fiddling with Millions' (VARA 2001), a television program that was broadcast to the entire country, caused political unrest in the Netherlands, i.e., it showed two employees who had exposed corporate wrongdoing by the construction business and its clients in the public sector and made serious claims against both.[241] These so-called 'whistleblowers' produced a copy of intricate financial records demonstrating unlawful cartel activities, which were spread across more than 250 pages and related to about 3500 construction companies.[242] The documents clearly showed how much the winners of hundreds of public procurement contracts had to pay to their rivals, who were left rather unsuccessful in the process.[243] "The consultation economy, or historically government-approved laws created by private companies for their industry, has a long history in the Netherlands."[244] The example of cartels and bid-rigging on such a large scale in the construction sector is probably the most significant in the relatively short history of any country`s competition legislation.[245] The anti-competitive conduct of the construction sector undertakings was found to constitute extremely serious violations of the Competition Act during the course of proceedings.[246] The Dutch Cabinet launched a more thorough examination of the procurement methods in response to suspicions that cartels were

[239] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.
[240] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[241] Ibid.
[242] Ibid.
[243] Peter A.G van Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1, (2008).
[244] John Groenewegen. *"About Double Organized Markets: Issues of Competition and Cooperation, The Dutch Construction Cartel."* An illustration. Journal of Economic Issues, (1994).
[245] Peter A.G van Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1, (2008).
[246] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.

being used, and they looked at hundreds of projects with a total contract value of several billion Euros that were procured within a period of five years.[247]

According to the studies, the favored methods for public sector procurement were public bidding processes and selection based on the lowest bid.[248] In most situations, the lowest cost still determined which company received the work, even in the case of the 'best value' selection.[249] A very large number of police officers, fiscal investigators, and prosecutors raided businesses, government buildings, and the residences of suspects all over the country in early 2002 while the studies were ongoing, and in terms of legal invasions, it was the biggest ever.[250] While the main focus of the authorities was on the procurement practices of state-owned purchasers, some local public buyers were also under investigation for manipulation.[251] At the time, the question was asked what was the cause of so many repeat contracts in the procurement procedures of local public buyers, and the only logical explanation was the high rate of close connections that were the product of bribery and secret agreements.[252] The contractor's association gradually acknowledged that, in some industries, con-bidders often met just before submitting their bids, but they also claimed, though, that these practices are not the cause of bigger prices as compared to the prices that would be obtained under normal conditions of competition.[253] Although the early claims of corruption were unfounded, serious action was

[247] Ibid.
[248] Marc Hertogh. *"Crime and Custom in the Dutch Construction Industry."* Legisprudence 4, No. 3, (2010).
[249] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[250] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[251] Peter A.G van Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1, (2008).
[252] David Proverbs. *" A Comparative Evaluation of Reinforcement Fixing Productivity Rates Among French, German, and UK Construction Contractors."* Engineering and Architectural Management, (2002).
[253] Peter A.G van Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1 (2008).

nevertheless required to put an end to the omnipresent 'wining and dining' culture.[254] Additionally, it was determined that the state disregarded its obligations and didn`t succeed to create a uniform framework for the construction sector, which means that regulations governing policy and purchasing were referred to as 'blankets on patchwork'.[255]

However, it should be highlighted that there is a lengthy history of anticompetitive behavior in the Dutch building industry.[256] This construction sector was also penalized by the European Commission in 1992 for widespread cartel practice (participating in the so-called Association for Price-Regulating Organizations).[257] The emergence, persistence, and evidence of collusion within the Dutch construction sector was a classic example of a cartel explained in competition law literature.[258] For years, the authorities considered the cartel in the general interest and acceptance was in the line with the culture and tradition of the country (cultural predisposition).[259] Over time, with the support of the state government, it has become a lifestyle or an unquestionable manner of conducting business.[260] All the listed factors contributed to the long-term existence and secrecy of this large construction cartel.[261] If there is a cultural component to this type of collusion, cartel investigations and penalties alone might not always be sufficient to put an end to collaboration. It would be appropriate to note that, for example, the establishment of self-regulatory systems in the construction sector, through various

[254] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[255] Ibid.
[256] Peter A.G van. Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1, (2008).
[257] Ibid.
[258] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[259] Peter A.G van. Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1 (2008).
[260] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[261] Ibid.

compliance systems that would include the sanctioning of individuals responsible for violating market competition, could make a significant contribution to the integrity of this sector, as well as to the much-needed change in the mentality of market participants.[262] By minimizing the incentives for bid-rigging, procurement system designers can also play a part in the process.[263] The interesting case of the Dutch construction industry demonstrates in fact how cartels might be justified based on their efficiency, although, in reality, they are immoral, harmful, and above all illegal.

6.3 CJEU Ruling on Bid-Rigging Cartels

The beginning of the dissolution of the big construction cartel that marked the Dutch, and several other European markets should be seen through the events of a few years back. The European Commission, supported by the Court of First Instance, imposed millions of euros in fines on companies proven to have participated in bid-rigging even before such a large-scale cartel was officially exposed.[264] In upholding the European Commission's decision, the Court of First Instance gave a detailed and reasoned explanation of its ruling. The court's position was that if there is an agreement between undertakings on how they intend to respond to the tender in public procurement procedures for the execution of construction works, all to consciously replace the risks of market competition with cooperation among them, a violation of Article 85. paragraph 1. (today's Article 101. paragraph 1.) TFEU has been committed.[265] Such an agreement would involve exchanging information on the costs and characteristics of the product and informing competitors about the intended course of action so that they would comply with it.[266] The court ruled that such an agreement, firstly, constitutes the fixing part of the price and,

[262] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[263] Ibid.
[264] Decision of the European Commission, Cases IV/31,572 and IV/31,571 [1992] OJ L92/I.
[265] Judgement of the Court of the First Instance, Case T-29/92 SPO [1995] ECR II, 289.
[266] Judgement of the Court of the First Instance, Case T-29/92 SPO [1995] ECR II, 289.

secondly, affects the restriction of competition between undertakings on the market in terms of their costs and final calculations, which both together leads to a general increase in prices.[267] In essence, the court confirmed what had been stated in previous presentations, i.e. the agreement between the companies to select among themselves the bidder with the lowest price. This bidder is protected from the risk of possible lower bids from its competitors, which is considered improper because it is up to the purchaser to make its judgment about the future contractor in terms of reputation, availability, and closeness to the work locations.[268] In its argumentation, the Court of First Instance considers that a horizontal agreement that extends over the territory of an entire member state has the effect that, instead of the EU's idea of a single internal market, it promotes the division of national markets.[269] Essentially, the Court's decision confirmed the European Commission's competence to take into account all legally relevant facts when assessing an agreement to determine whether or not such a contract violates Article 85. (Today Article 101.) of the TFEU or is subject to a prescribed exception, as claimed by the companies involved.[270] Examining further whether the Commission correctly applied the powers granted by the TFEU in assessing the legality of the agreement between undertakings, the court fully confirmed all its findings both in terms of decisive facts and concerning the imposed fines.[271] The penalties imposed by the European Commission and their confirmation by the European Court of Justice have been a form of introduction and warning to the construction companies that the practice of bid-rigging is absolutely no longer acceptable in any business relationship, especially in public procurement. But disclosures a few years later will show that such a warning was not efficient enough, because the practice of cartelizing the sector continued until the news fully reached the public and its true extent was revealed.

[267] Ibid.
[268] Ibid.
[269] Ibid.
[270] Decision of the European Commission, Cases IV/31,572 and IV/31,571 [1992] OJ L92/I; Judgement of the Court of the First Instance, Case T-29/92 SPO [1995] ECR II, 289.
[271] Judgement of the Court of the First Instance, Case T-29/92 SPO [1995] ECR II, 289.

6.4 The Impact of the Dutch Construction Cartel on the National Economy and Corporate Awareness

The Dutch economy is significantly influenced by the construction sector, which is distinguished by a mix of small and large businesses, diverse types of firms, and fierce pricing competition in regional marketplaces.[272] When the parliamentary investigation of the whole case was launched in 2002, the annual turnover of the construction sector amounted to about 15 billion euros, while the government was the largest customer of works worth about one-third of the total value.[273] There is a great deal of evidence that the practice of large construction companies was to meet privately before the tendering procedure to reach an agreement that the lowest bid would be submitted, while the others would increase their bids as a result, and receive compensation from the winner of the competition as a reward for their participation in the unlawful tender.[274]

A complex self-regulatory system for the construction industry was established in the 1950s at the instigation of the Dutch national government.[275] But after decades of (government-monitored) self-regulation, the Dutch approach was no longer regarded as politically and legally acceptable, because in the early 1990s, the European Commission banned the practice of preliminary consultations in the construction sector, claiming that it was breaching Article 85, Section 1 of the European Union Treaty.[276] As a result, the EU demanded that the SPO dissolve the cartel and imposed several million Euros in fines on its members. The government ultimately agreed to ban the practice of ex-ante discussions after being convinced by the

[272] Marc Herthogh. *"Crime and Custom in the Dutch Construction Industry."* Legisprudence 4, No. 3, (2010).
[273] Ibid.
[274] W. Bremer and K. Kok. *"The Dutch Construction Industry: A Combination of Competition and Corporatism."* Building Research and Information, (2000) 98-108.
[275] Ibid.
[276] Marc Herthogh. *"Crime and Custom in the Dutch Construction Industry."* Legisprudence 4, No. 3, (2010).

European Commission.[277] Even though pre-consultation in the Netherlands has been illegal since the 1990s, the Parliamentary Enquiry and numerous other investigations reveal that these new legal requirements were barely followed and most consultation meetings carried on as usual, which was well demonstrated in the television documentary.[278] It was determined that the whole Dutch construction industry was affected by the illegal activity, not just a small number of companies, but almost all undertakings were involved.[279]

However, the situation changed in certain ways when this significant cartel was uncovered. Many lawmakers and government officials felt convinced that the construction sector would now follow the rules going forward. Without a question, the industry has made a lot of changes recently, and it appears that many significant firms are no longer complicit structurally in unethical activities.[280] However, there are several compelling reasons to believe that pre-consultations are still in use today.[281] For example, in 2004, just two years after the PEC study, the media disclosed the existence of another suspect in the industry.[282] Moreover, a recent survey among businessmen in the industry suggests that in some places thy system of collusion is still alive.[283] This assertion is supported by the acknowledgment of many entrepreneurs that they are still occasionally contacted to participate in illegal bid-rigging.[284] From all of the above, it can be concluded that the system of self-regulation in the construction industry can work, but

[277] W. Bremer and K. Kok. " *The Dutch Construction Industry: A Combination of Competition and Corporatism."* Building Research and Information, (2000), 98-108.
[278] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development and Demonstration 32, No. 2, (2004), 146–56.
[279] Marc Herthogh. *"Crime and Custom in the Dutch Construction Industry."* Legisprudence 4, No. 3, (2010).
[280] Ibid.
[281] Ibid.
[282] Peter A.G van Bergejik. *"On the Allegedly Invisible Dutch Construction Sector Cartel."* Journal of Competition Law and Economics 4, No.1, (2008).
[283] Ibid.
[284] Marc Herthogh. *"Crime and Custom in the Dutch Construction Industry."* Legisprudence 4, No. 3, (2010).

for it to be truly effective, construction as an industry needs to be examined in a way that takes into account the legal awareness of participants regarding the need to regulate their market.[285]

6.5 Market Share and Consumer Allocation in Construction Product Cartels

Besides bid-rigging cartels, the most common form of collusion in public procurement, other types, such as agreements to share markets and customers for a product, can significantly affect competitors and consumers. This is a problem that occurs in various subsectors of the construction industry, especially in the production of valuable building materials on which the construction process essentially depends.[286] The price of these materials can vary greatly depending on the time of production, economic or other crises, and the conditions of supply and demand on the market.

To support the claim with a practical example, here is one that has taken place in the market of some of the largest economies in the European Union, the German cartel for building materials, specifically cement. Because cement is a homogeneous product, coordination on common pricing is relatively simple and competition is extremely fierce (making collusion more desirable).[287] Moreover, market demand for cement is inelastic because it depends on finished products where cement is a small part of the cost, and on the other hand, firms' demand is more flexible because of the limited product differentiation.[288] The number of cartels in this industry around the world also reflects the fact that although market entry costs are high and it will be

[285] Ibid.
[286] Joseph E. Harrington, Kai Hüschelrath, Ulrich Laitenberge, Florian Smuda. *"The Discontent Cartel Member and Cartel Collapse: The Case of the German Cement Cartel."* International Journal of Industrial Organization, (2015).
[287] Joseph E. Harrington, Kai Hüschelrath, Ulrich Laitenberge, Florian Smuda. *"The Discontent Cartel Member and Cartel Collapse: The Case of the German Cement Cartel."* International Journal of Industrial Organization, (2015).
[288] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.

difficult to attract new competitors to companies involved in prohibited agreements, there is still a threat of competition from competitors located in distant regions.[289]

The German Federal Cartel Office (FCO or Bundeskartellamt) reported the purported presence of a hard-core cartel in the German cement industry in the middle of 2002, about the same time when a big Dutch bid-rigging construction cartel was discovered.[290] During the examination, it was discovered that many German cement companies had been using a quota system to divide up the German market for a minimum of ten years.[291] After a thorough examination of the case and conducting an investigation, the federal office discovered significant incomes that did not match those that would have been in the conditions of normal competition and prices of this construction material and imposed fines of several hundred million euros against the six largest German manufacturers.[292] Under the terms of the leniency program, which was introduced into German law as a method of combating cartels, a member of the association admitted its existence to the authorities in exchange for a pardon or reduction of the sentence.[293] Given that the cartel`s existence has been proven, it is likely that consumers suffered greatly as a result of paying inflated prices for cement.

The first sign of the cartel breaking apart must be detected in one of the companies' announcements that it would begin substituting its cement for supplies made by other collusion participants to its daughter company like the real manufacturer.[294] The other cartel members

[289] Joseph E. Harrington, Kai Hüschelrath, Ulrich Laitenberge, Florian Smuda. *"The Discontent Cartel Member and Cartel Collapse: The Case of the German Cement Cartel."* International Journal of Industrial Organization, (2015).
[290] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.
[291] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[292] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.
[293] Ibid.
[294] Press Release, German Federal Cartel Office, "Searches Conducted in Companies in the Cement Sector" (*Bundeskartellamt*, 8 July 2002),

perceived the implementation of its announcement, which increased 'Readymix's' quotas, as a breach of the agreement.[295] The FCO conducted dawn raids on the offices of 30 cement businesses in Germany, to launch the formal inquiry into the suspected cement cartel.[296] The issue before the court was how to explain the significant drop in the price level after the cartel was exposed.[297] The judicial body leading the proceedings concluded that the takeover of the company that betrayed the cartel was a decisive moment, as the prices of raw materials increased strongly soon after this event.[298] For the procedure, it can be pointed out that prohibited agreements against the market competition in public procurement procedures, as the most frequent form of anti-competitive behavior in the construction sector, have become a criminal offense for which legal proceedings are prosecuted ex officio instead of an administrative offense.[299] German construction companies, like their colleagues from the Dutch sector, advocate the idea of greater cooperation followed by reduced competition, justifying it with platitudes about excessive costs and destructive competition that individual market participants cannot survive.[300] The German Federation of the Construction Industry goes a step further, claiming that prohibited agreements between companies are the inevitable result of taking business risks in the economic recession and that cooperation is the only way to secure any orders for materials.[301] To stop such a destructive effect of the market on construction companies, their association constructed a proposal, or the idea of creating a conditional cartel that would exist exclusively while unfavorable market circumstances for their existence last, for which, of course, prior permission from the competent authorities is necessary.[302] However,

http://www.bundeskartellamt.de/wEnglisch/News/Archiv/ArchivNews2002_07_08.php Accessed 28 January 2023.

[295] Ibid.

[296] Ibid.

[297] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.

[298] Ibid.

[299] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.

[300] Ibid.

[301] Ibid.

[302] Ibid.

taking into account all the relevant provisions of both the European and domestic antitrust laws, such a proposal would be difficult to pass in the conditions of free competition in any other sector, therefore the opinion is that it should not be used in this case either and that free, fair and equal market competition still has the priority. Although bid-rigging is most common in these interactions between construction companies, public tenders, and the state, product market-sharing agreements are also harmful to society because consumers are the ones who ultimately pay higher prices than they should, and market entry by new competitors is almost impossible in such conditions.

6.6 Significant Disadvantages of Collusion in the Construction Sector

The basic idea of a cartel is to act following the agreement by raising prices, limiting production, or dividing the market, thus achieving a higher profit than would be possible under normal competitive conditions, but at the same time, remaining undetected by the market protection authorities.[303] To maximize joint profits, cartels create a market monopoly by determining each member's quantities and shares.[304] Despite the goals and the idea of such an agreement, cartels are often, for a combination of many reasons, unstable entities that can be exposed and punished for their members' illegal business practices. Prohibited horizontal agreements, as the product of the will of their members, are most often threatened by those same participants themselves. In other words, the main threat to the existence of the cartel is the intention of individual companies to increase their already illegal profits by independent actions outside the agreement, and thus very often attract the attention of either the authorities or competitors that something is wrong in the market.[305] On the other hand, if the cartels are more homogeneous in the sense

[303] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4, (2012), 849-862.
[304] Shyam R. Khemani. *"A Framework for the Design and Implementation of Competition Law and Policy 23."* OECD and World Bank, (1998).
[305] Alberto Heimler. "Cartels in Public Procurement." Journal of Competition Law and Economics 8, No.4, (2012), 849-862.

that the participants respect the rules and act in the common interest of the association, it is much harder for the state to detect them, and years may pass before any signs or evidence of market irregularities appear.[306] For this very reason, the European Union and its member states have had to look for a different and more efficient approach to investigation and detection than simply waiting for an unprovoked mistake by one of the partners or the cartel as a collective to be exposed.[307] The first step of the European legislature was based on a model similar to the one implemented in the United States, which led to a significant increase in the fines that would be imposed if any illegality was discovered.[308] But the fear of fines was often not enough, so in addition to raising them, governments turned to the method of inducing cartel participants to cooperate with the authorities in exchange for complete immunity from sanctions. To make this idea a reality, the concept of immunity or the so-called Leniency Program has been presented in 1996.[309] It gives all members of a criminal association an equal opportunity to come forward and cooperate with the authorities in exchange for reduced punishment, making such a move a crucial factor in strengthening the enforcement of market competition law.[310]

The principle of this concept is very simple; providing an amnesty for a criminal offense in exchange for complying with a request to provide the authorities with any requested information that may help in the investigation.[311] While leniency programs grant complete protection to the first company to inform a competition authority of a cartel, they also permit lenient treatment for companies that choose to collaborate after a proceeding has already been launched.[312] A 75-100% reduction can be offered to companies that provide key information

[306] Ibid.
[307] Ibid.
[308] Massimo Motta and Michele Polo. *"Leniency Programs and Cartel Prosecution."* EUI ECO, (1999). http://hdl.handle.net/1814/708. Accessed 25 February 2023.
[309] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4, (2012), 849-862.
[310] Ibid.
[311] Julian M. Joshua. *"Leniency in U.S. and EU Cartel Cases."* Antitrust vol. 14, No.3, (2000); Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4, (2012), 849-862.
[312] Julian M. Joshua. *"Leniency in U.S. and EU Cartel Cases."* Antitrust vol. 14, No.3, (2000).

before the opening of an official investigation, and for example, a lower percentage of between 50-75% after the investigation has started but failed to provide sufficient reasons to initiate a procedure that would lead to a decision.[313] Remissions lower than these percentages can only be granted if additional evidence is provided or if the companies choose not to contest the allegations made by the European Commission or national authorities.[314] The leniency method may be the best perspective in situations where antitrust enforcers have limited resources for a full investigation, detection, and judicial punishment of cartels without applying any amnesty.[315] Since the launch of the program in the U.S., the number of cartels uncovered has increased from one per year on average to two per month, which is an inevitable testament to its effectiveness.[316] Nevertheless, the EC's initial Leniency Notice was not as successful as expected.[317] It was used successfully just once in the year of its introduction, and only four more times in the early 2000s.[318] After the initial failure and the reform in 2002, the model leniency program created and presented within the European Competition Network was adopted by the EU and its member states.[319] Today's redesigned method of the leniency program represents the most effective model of the fight against cartels in all sectors, including construction.[320]

6.7 Conclusions from the Analysis of the German and Dutch Cartel Cases

Like any institution, cartels are not permanent. Although cartels are created with the goal of their masterminds never being discovered, the combination of many elements eventually leads

[313] Massimo Motta and Michele Polo. *"Leniency Programs and Cartel Prosecution."* EUI ECO, (1999). http://hdl.handle.net/1814/708. Accessed 25 February 2023.
[314] Ibid.
[315] Ibid.
[316] Ibid.
[317] Commission Notice in the Non-imposition or Reduction of Fines in Cartel Cases, 1996, O.J. (C 207) 4; Commission Notice on Immunity from Fines and Reduction of Fines in Cartel Cases, 2002, O.J. (C 45) 3.
[318] Massimo Motta and Michele Polo. *"Leniency Programs and Cartel Prosecution."* EUI ECO, (1999). http://hdl.handle.net/1814/708. Accessed 25 February 2023.
[319] Commission Notice on Immunity from Fines and Reduction of Fines in Cartel Cases, 2002, O.J. (C 45) 3.
[320] European Commission, "Leniency", https://competition-policy.ec.europa.eu/cartels/leniency_en, Accessed 1 February 2023; Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No.4, (2012), 849-862.

to their failure, but it is not entirely clear when exactly and why the breakdown occurs.[321] Some cartels could contain the cause of their collapse in their foundations, which assumption is based on information from previous cartels and the development of equilibrium theory.[322] Setting a market allocation is a frequently thorny component of collusion and utilizing past market shares is a typical solution to this dilemma.[323] While there may be a degree of fairness in this, the blocking of the companies' respective opportunities may prevent them from growing, which may lead to initial or eventual resentment among the cartel members.[324] In the market, it is often the case that the demand for a product or service does not follow the increased capacity of the company providing such products, which leads the cartel participants to consider how to manipulate the secret allocation agreed in the collusive contract, causing the destabilization of the cartel.[325] It has been argued that this theory fits the experience of the German cartel. Early in the 1990s, one of the cartel members significantly increased its capacity in response to expectations of rising demand in the newly united country.[326] It produced more than its allotted amount when demand stopped increasing and shrank, trying in vain to hide this fact from the other cartel members, but later it also adopted a more blatant and obvious cheating tactic, which led to the cartel`s dissolution.[327] The recorded instability of the cartel is an indicator of a broader structural problem in which companies openly cheat in secret distribution regardless of the

[321] Joseph E. Harrington, Kai Hüschelrath, Ulrich Laitenberger, Florian Smuda. *"The Discontent Cartel Member and Cartel Collapse: The Case of the German Cement Cartel."* International Journal of Industrial Organization, (2015).
[322] Ibid.
[323] Ibid.
[324] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.
[325] Joseph E. Harrington, Kai Hüschelrath, Ulrich Laitenberger, Florian Smuda. *"The Discontent Cartel Member and Cartel Collapse: The Case of the German Cement Cartel."* International Journal of Industrial Organization, (2015).
[326] Ibid.
[327] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.

possibility of the cartel breaking apart.[328] Understanding cartel stability and durability requires more empirical research on this phenomenon and the creation of certain theories to explain it.[329]

7. The Role of Competition Law in Legal Public Procurement of the Construction Sector

7.1 Increasing Transparency in Public Procurement

The potential for corrupt practices in public procurement exists in every country's national economy, and no sector is excluded from being threatened by such activities.[330] Because of the complicated nature of the projects and the large number of contracts affected, some industries have been identified as being particularly vulnerable to corruption in public procurement, such as the construction sector, especially some parts of it like the building of significant bridges, dams, or tunnels.[331] The provision of development assistance was also found to present several opportunities for corruption, and it was often seen as the biggest obstacle to public procurement supported by aid.[332] In some countries where there is a lot of corruption in state structures, public procurement processes can be used as a means of blackmail to finance political parties through secret deals and bribery.[333] When it comes to public finances, transparency is essential for making wise purchasing decisions; everyone agreed that one of the best ways to prevent corruption in public procurement is through transparency.[334] Transparent processes enable a

[328] Kai Hüschelrath, Kathrin Müller, Tobias Veith. *"Concrete Shoes for Competition: The Effect of the German Cement Cartel on Market Price."* Journal of Competition Law and Economics, (2013), 97-123.
[329] Joseph E. Harrington, Kai Hüschelrath, Ulrich Laitenberger, Florian Smuda. *"The Discontent Cartel Member and Cartel Collapse: The Case of the German Cement Cartel."* International Journal of Industrial Organization, (2015).
[330] OECD. *"Fighting Corruption and Promoting Integrity of Public Procurement."* OECD Publishing (2005).
[331] Ibid.
[332] Ibid.
[333] Ibid.
[334] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.

variety of stakeholders to examine the actions and performance of public officials and contractors.

On the other hand, a lack of transparency fosters corruption.[335] However, transparent behavior by itself does not ensure a procurement procedure free of corruption. According to the OECD Competition Committee Chair, Professor Frédéric Jenny committed to the connection between corrupt public procurement practices and anticompetitive actions.[336] He emphasized the need for caution to prevent increased opportunities for collusion and corruption among bidders because of increased transparency intended to combat corruption.[337] In implementing transparency laws and procedures, consideration should be given to establishing clear and precisely defined disclosure standards for different categories of information.[338] Additionally, regulations must specify who and when information is made available, for instance, only release the content of selected bids rather than the contents of unsuccessful bids (the entire public should not always have access to this kind of information; in some circumstances, only controllers and tender issuers should have it).[339] Two relevant factors should be considered in the fight against corruption and the prosecution of similar crimes: immunities and privileges that protect individuals from the investigation.[340] Donations to campaigns and collaboration with prominent individuals have been recorded in both developed and developing countries, underscoring the need for transparency in the political process to enhance the integrity of public procurement.[341] Better and stronger anti-corruption and integrity measures in public tenders are needed, and those who support these objectives should take advantage of the public's, business community's, and government leaders' growing intolerance of corrupt behavior.[342] A contribution to this effort can be made by encouraging and supporting discussions when public

[335] Ibid.
[336] OECD. *"Fighting Corruption and Promoting Integrity of Public Procurement."* OECD Publishing (2005).
[337] OECD. *"Fighting Corruption and Promoting Integrity of Public Procurement."* OECD Publishing (2005).
[338] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[339] OECD. *"Fighting Corruption and Promoting Integrity of Public Procurement."* OECD Publishing (2005).
[340] OECD, Organization. (2007). Bribery in Procurement, Methods, Actors and Counter Measures.
[341] OECD. *"Fighting Corruption and Promoting Integrity of Public Procurement."* OECD Publishing (2005).
[342] Ibid.

procurement processes are under threat, and about how this threat can be eliminated through greater transparency and responsibility, including concepts for the development and implementation of appropriate sanctions for such behavior.[343] International organizations dealing with this issue, including the OECD, in their periodic reports and guidelines, emphasize the importance of a balanced concept of integrity and combating corruption by improving social awareness or preventing and punishing bribery through better interaction between the participants, all for the general good of society.

7.2 Public Contracting and Services under EU Law

In addition to integrating community public sector trade, the application of public procurement rules has served as a standard for identifying the character of a company in its contractual relations when providing services to the public.[344] A different class of marketplaces, usually referred to as public ones, exists inside the common market because of public procurement rules.[345] Since the public sector's goal is to uphold the public interest rather than maximize profits, their respective activities do not mirror the commercial qualities of private businesses.[346] This essential aspect offers the unique foundation for the development of public markets where the public interest takes the place of profit maximization.[347] Other differences can distinguish private and public markets based on market structural components, such as competition, supply and demand dynamics, production processes, price, and risk.[348] The EU Common Market's control of public procurement has been crucial since it has given rise to

[343] Ibid.
[344] Christopher Bovis. *"Public Procurement and Public Services in the EU."* Regulating Trade in Services in the EU and the WTO. Cambridge, Cambridge University Press., (2012).
[345] Christopher Bovis. *"Public Procurement within the Framework of European Economic Law."* European Law Journal 4 (2), (1998).
[346] Christopher Bovis. *"Public Procurement and Public Services in the EU."* Regulating Trade in Services in the EU and the WTO. Cambridge, Cambridge University Press, (2012).
[347] Case C-223/99. *"Agora Srl V.Ente Autonimo Fiera Internazionale di Milano."* ECR I-3605 (2001).
[348] Christopher Bovis. *"Public Procurement and Public Services in the EU."* Regulating Trade in Services in the EU and the WTO. Cambridge, Cambridge University Press, (2012).

political, legal, and economic arguments in favor of removing quantitative trade obstacles.[349] The two documents with the greatest influence on public procurement in the European Union are the "White Paper" for the completion of the internal market and the Single European Act.[350] The work program of the European Commission from the year 2000, whose primary goal was the modernization of the internal market and the implementation of EU institutions, was also enriched by the Commission's "Green Book" document on public procurement, along with regulations that were supposed to help implement the planned reform.[351] By introducing competition in the pertinent product and geographic markets, economic grounds for regulating public procurement seek to liberalize and integrate relevant markets of the member states.[352]

This will improve the accountability of government procurement across the single market and increase imports of goods and services intended for the public sector, leading to significant cost reductions and price adjustments.[353] The regulation of public procurement has been positioned by law as a required component of the four fundamental Treaties principles, in addition to the economic justifications.[354] The rationalization and more efficient allocation of human and capital resources will result from the integration of public markets, which will also boost the productivity and competitiveness of European undertakings.[355] These principles include transparency, non-discrimination, and objectivity in awarding public contracts.[356] Through the analysis of construction sector cartels, it can be concluded that their formation and existence

[349] Christopher Bovis. *"EC Public Procurement: Case Law and Regulation."* Oxford, Oxford University Press (2006.)
[350] Christopher Bovis. *"Public Procurement and Public Services in the EU."* Regulating Trade in Services in the EU and the WTO. Cambridge, Cambridge University Press, (2012).
[351] Ibid.
[352] Ibid.
[353] Christopher Bovis. *"EC Public Procurement: Case Law and Regulation."* Oxford, Oxford University Press, (2006.) and Christopher Bovis. *Contribution to Growth: European Public Procurement. Delivering improved Rights for European Citizens and Businesses."* Study for the Committee on the Internal Market and Consumer Protection, Policy Department for Economic, Scientific, and Quality of Life Product. Luxembourg (2018).
[354] Christopher Bovis. *"Public Procurement and Public Services in the EU."* Regulating Trade in Services in the EU and the WTO. Cambridge, Cambridge University Press, (2012).
[355] Ibid.
[356] Ibid.

harm the well-being of society as a whole, disrupt market competition, impede innovation, and prevent the entry of other possible players into the Common Market, taking into consideration all legal, moral, and economic principles of the public procurement from the perspective of the European Union.

7.3 Implementing Competition Law in Procurement Procedures

The question arising is, are there any concerns with the enforcement of competition that occurs in the procurement context?[357] The national competition authority in every OECD member country enforces the competition legislation, which also covers horizontal agreements and abuse of power in the context of procurement.[358] Therefore, difficulties with competition enforcement in the context of procurement mainly concern improving the effectiveness of enforcement of the national competition legislation. Successful prosecution of a breach of the competition law requires notification of the violation's existence and access to relevant evidence, fulfillment of the pertinent legal standards of proof necessary in court, and appropriate penalties or remedies.[359] Both private and public companies may effectively prosecute cases of collusion in procurement in many countries worldwide.

Competition enforcers, public or private, need access to information indicating a violation has taken place to gather proof to be used in court. This process may be made easier through, for example, the law protecting 'whistle-blowers' just like was the case in the Dutch construction cartel at the beginning of the 20th century.[360] As previously mentioned, several countries have clear compliance processes where undertakings can self-identify bid-rigging. In these

[357] OECD Competition Policy and Procurement Markets DAFFE/CLP (99)3. (1998).
[358] Ibid.
[359] Ibid.
[360] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.

programs, undertakings develop informational campaigns to tell everyone about the law, the consequences of breaking it, and the measures they have in place to make sure the law is followed.[361] In some countries, only undertakings that implement trade practices compliance programs are eligible to submit bids for significant governmental contracts. The firm and its managers must be aware of the risks and consequences of collaboration to qualify for such certification, and second, if a company and its managers do participate in bid-rigging after signing such certificate, they will be subject to harsh penalties.[362] Many countries think that the widespread media coverage of bid-rigging instances is a key deterrent since it will hurt the corporation as a whole and can therefore be an effective deterrent.[363] It is essential to review the field bids to ascertain whether the patterns match up with a competitive process. It is evident that this analysis is not done enough, and several cases exist.[364] First, many procurement organizations are small and do not have the means to carry out such evaluations, but it should be kept in mind that a large share of GDP is made up of public procurement in the construction sector, so with that in mind, tracking the results of public procurement would be an extremely complex task.[365]

A different strategy is to carry out a preliminary analysis of the quantity and diversity of bids.[366] In reality, the common monopolist test on market definition could reveal the likely bidders and whether there are possible bidders who are barred from bidding by rules or other obstacles, i.e., the purchaser who establishes the bidding guidelines determines whether the market is broad or narrow, hence it would be helpful to utilize antitrust market definition criteria ex-ante.[367] The

[361] OECD Competition Policy and Procurement Markets DAFFE/CLP (99)3. (1998).
[362]OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27
[363] OECD Competition Policy and Procurement Markets DAFFE/CLP (99)3. (1998).
[364] Ibid.
[365] Ibid.
[366] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[367] OECD Competition Policy and Procurement Markets DAFFE/CLP (99)3. (1998).

majority of countries consider horizontal agreements such as collusion in public procurement, to be prohibited per se or, at the very least, do not require more legal proof, such as that harm was produced or outweighed any potential advantages.[368] It is usual to state that agreements like bid-rigging (Dutch construction cartel), price-fixing, or market division (German construction cartel) are deemed to substantially impair competition without more justification in those states where horizontal agreements are unlawful if they lessen competition. Regarding penalties and remedies, it is obvious that effective collusion in procurement prevention calls for adequate sanctions and remedies.[369] In this sense, it should be emphasized that when determining the appropriate punishment, the exceptional intention of the cartel to remain undetected for as long as possible must be taken into account.[370] If it is thought that some cartels might, for a variety of reasons, avoid detection, then the appropriate sanctions should be scaled up proportionately, or in other words, the fines should be high enough to outweigh the benefits that the cartel members stand to obtain from the arrangement.[371] The European Union procurement regulations are intended to improve market access. Sadly, it looks like they might facilitate collusion, even while they undoubtedly promote competition by making the bidding process open to much more companies.[372] Competition authorities could investigate these agreements through the OECD and recommend some changes to reduce collision, for instance, instead of making the winning bid public, the government agencies find out about it first, and only then do the other contestants.[373]

[368] Ibid.
[369] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[370] Ibid.
[371] OECD Competition Policy and Procurement Markets DAFFE/CLP (99)3. (1998).
[372] Ibid.
[373] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.

7.4 Competence of Public Authorities in the Detection of Collusion Between Undertakings

Because of their far greater stability, the proven facts about the persistence of ordinary collusion agreements do not apply in the case of bid-rigging cartels.[374] The motivation for members of ordinary cartels to defraud their partners in already illegal contracts comes from the desire to maximize the planned profit by selling below the agreed price and producing more than the imposed threshold.[375] Bidding is only utilized in bid-rigging to determine the lowest price because quantities are set, and the motive to cheat is further diminished by the fact that bidding markets are far more transparent than traditional ones.[376] Taking part in a bid-rigging practice means that all the participants agree in secret meetings on the details of how to submit bids in public procurement procedures, i.e. a strategy of who will participate in one project, when and with which offer, and who will do the same in another project, and so on in a circle.[377] We had the best example of such a cartel during the examination of the Dutch construction sector where almost the whole industry participated in the market in such a way, and it lasted for years before someone decided to react and stop it. This is in contrast to regular collusive practices, which are based on price agreements or the scope of individual participants' activities, resulting in a lack of price information on competing prices available to customers.[378] As a result, bid-rigging stakeholders leave behind a large amount of incriminating evidence about the tactics used, which is not difficult for professionally trained employees of the state administration to identify.[379] Due diligence on the demand side could therefore reveal a public procurement secret agreement even if it is well established in the production sector, contrary to what occurs in the

[374] Ibid.
[375] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.
[376] Albertina Albors-Llorens. *"Horizontal Agreements and Concerted Practices in EC Competition Law: Unlawful and Legitimate Contacts Between Competitors."* Antitrust Bulletin 51, No. 4, (2006), 837–76.
[377] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.
[378] Ibid.
[379] Ibid.

private market, where cartels do the exact opposite.[380] In the analysis of bid rigging public procurement cartels, the decisive factor is the initiative of the public officials responsible for the legal management of the process, which of course includes the appropriate motivation to find and expose all irregularities and malfeasance (mostly cartels), which unfortunately they often do not have or do not want to have.[381] The evaluation of government workers is less based on the number of cartels he uncovers and more on his capacity to organize and manage competitive bidding processes as well as the speed at which the goods and services he orders are supplied.[382]

The entire buying procedure is delayed by suspicions of a cartel. Furthermore, the funds that are saved because of the breakdown of a cartel are typically transferred to the budget of the general administration rather than the administration that discovered or assisted in the discovery of the cartel.[383] Public customers are usually unconcerned about cartels because of all these factors, no one could ever blame public purchasers for overpaying because of a cartel.[384] To aid procurement authorities in identifying bid-rigging cartels, the OECD Competition Committee has established a guidance approach.[385] The guidelines identify a variety of factors that purchasing officials must take into account when conducting a bidding procedure, and above all, as in any other procedure, it is necessary to collect, record and ultimately preserve all evidence that can support the suspicion of illegal collusion and gathering of participants.[386] In that instance, examining past bids and bids from other parties may enable them to conclude that

[380] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.
[381] Ibid.
[382] Ibid.
[383] Ibid.
[384] Ibid.
[385] OECD Organization, "Cartels and Anticompetitive Agreements, Fighting Bid Rigging in Public Procurement, http://www.oecd.org/document/29/0,3746,en_37463_42230813_1_1_1_37463,00.html. Accessed 1 February 2023.
[386] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.

there has been bid rigging.[387] However, because it calls for abilities and capabilities that are distinct from those required for successfully planning and managing a bidding procedure, public administration personnel must receive training in using this guidance.[388] The practice of government officials responsible for public procurement is to report collusion to market competition authorities only when they have irrefutable and complete evidence of its existence.[389] They tend to keep any suspicion to themselves because this is unlikely, which means that relevant authorities should establish a unique line of communication for the purchasing officials, where any suspicion they may have on a bid can be expressed.[390] To combat bid manipulation, a number of measures both of legal and procedural nature may be undertaken. An initial attempt at this could be to centralize purchasing as a means of detecting unreasonably low offers, which complicates the task of all companies in the sector to facilitate the even distribution of a large-scale infrastructure project.[391] By doing so, information concerning the numerous offers can be gathered within the same organization in one place, which helps the people involved identify discrepancies between these offers.[392] Moreover, a centralized procurement agency would have an advantage in allowing for better organization of higher value bids and purchases for multiple administrations, which would result in bids being submitted on a less frequent basis and bid rigging being more challenging to be maintained.[393]

[387] Ibid.
[388] Ibid.
[389] Ibid.
[390] OECD Organization, "Cartels and Anticompetitive Agreements, Fighting Bid Rigging in Public Procurement, http://www.oecd.org/document/29/0,3746,en_37463_42230813_1_1_1_37463,00.html. Accessed 1 February 2023.
[391] Ibid.
[392] Ibid.
[393] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.

The effectiveness of leniency programs in collusive bidding is heavily dependent on the degree of stability of the cartels.[394] Given that leniency applications are more probable in less stable cartels, they are rather rare in bid-rigging cartels. Nonetheless, there are certain tools that public enforcers can use to be more successful in detecting such cases.[395] For instance, authorities can centralize the submission of bids and also increase the size of each bid in order to maximize the incentive to engage in cheating. This is necessary as firms would face lengthy waits for a second offer and have less certainty about the frequency of bids.[396] Moreover, public purchasers have no interest in reporting the existence of a cartel, despite having suspicions about it. This is due to the fact that is incentivized to act as quickly and fairly as possible so that there are no objections to their actions. The money that is spared as a result of a cartel detection by a public authority should therefore, to some extent at least, benefit the public administration. Ideally, even individuals who have contributed to the effort should be able to benefit personally in their careers so that others will be encouraged to follow this approach.[397] Identifying bid-rigging cartels is a complex task that demands a particular skill set and competence. Accordingly, public purchasers need to receive appropriate training following the recommendations made in the OECD Guidelines. Lastly, in order to ensure that public purchasers are aware that informing the authority of their suspicions is a simple matter and does not imply any responsibility on the part of the companies involved, competition authorities should establish a designated channel for communicating with the public purchasers.[398]

7.5 The EU System of Punishing Cartels

[394] Commission Notice on Immunity from fines and reduction of fines in cartel cases, OJ 2006, C298/17.
[395] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.
[396] European Commission, "Leniency", https://competition-policy.ec.europa.eu/cartels/leniency_en, Accessed 1 February 2023.
[397] Alberto Heimler. *"Cartels in Public Procurement."* Journal of Competition Law and Economics 8, No. 4, (2012), 849-862.
[398] Ibid.

In legal literature and practice, different associations are linked to cartels, from being harmful to society to being called a cancer of the free market economy.[399] Consequently, the question arises as to whether the existing regime of punishments at the level of the EU and its member states is sufficient to prevent or at least reduce their occurrence. The European approach to sentencing for participation in cartels emphasizes the view that offenders should be punished in proportion to the harm caused to the victims.[400] But such an approach applies exclusively to companies as legal entities that are involved in hardcore cartels, and a monetary penalty is the only possible sanction with an amount of up to a maximum of 10% of the company's total annual revenue on a global level.[401] Bearing in mind large multinational companies and their annual turnovers, potential fines can represent truly significant amounts, but on the other hand, the impression is that, in addition to financial ones, other forms of repression against such behavior should be taken into account. This primarily refers to the initiation of criminal proceedings and prosecution of individuals such as directors or members of management and supervisory boards as organizers of their companies' participation in prohibited anticompetitive activities.[402] For comparison, the United States, as a role model of modern competition law for European legislators, has a long tradition of criminal proceedings against undertakings involved in cartel activities, and the prescribed punishment for perpetrators whose guilt is proven by the court can be up to 10 years in prison.[403] The provisions of the TFEU stipulate that the competence of the member states is in all matters in which it is not exclusively prescribed as the competence of the Union, which includes, among other areas, criminal legislation.[404] As a

[399] Anthony Gray. *"Criminal Sanctions for Cartel Behavior." The* Queensland University of Technology Law and Justice Journals 8, No.2 (2008), 347.
[400] John M. Connor and Robert H. Lande. *"The Size of Cartel Overcharges: Implications for the U.S. and EC Finding Policies."* University of Baltimore School of Law, Antitrust Bull, (2006).
[401] Ibid.
[402] Raphael Reims, "The Criminal Prosecution of Hardcore Cartels in the USA and the EU- A Backdoor Criminalization in the EU by the USA?" (*Competition Policy International*, 30 November 2022), https://www.competitionpolicyinternational.com/the-criminal-prosecution-of-hardcore-cartels-in-the-usa-and-the-eu-a-backdoor-criminalization-in-the-eu-by-the-usa/. Accessed 27 February 2023.
[403] Ibid.
[404] John M. Connor and Robert H. Lande. *"The Size of Cartel Overcharges: Implications for the U.S. and EC Finding Policies."* University of Baltimore School of Law, Antitrust Bull, (2006).

result, some member states have chosen to extend sanctions beyond EU rules to include not only companies but also individuals, following the American system.[405] However, from the perspective of the EU as a sui generis organization that has primary responsibility for implementing market competition law, for which such national sanctions are prescribed, their very existence is questioned.[406] Although by virtue of its powers, the EU can intervene here and repeal national assessments, the importance of such sanctions is beyond question. Changes will only occur if there are individual legal actions in which the executives themselves are called to account. Otherwise, the responsibility remains entirely with the corporations. For this reason, countries such as Germany and Austria have introduced domestic laws that provide penalties of imprisonment of up to 3 to 5 years.[407] At the same time, it is surprising that countries like the Netherlands, for instance, which have had a long-standing reputation and history of hard-core cartels, have not yet imposed similar sanctions in their spheres.[408] In conclusion, it could be said that the European Union generally issues far too few cartel fines.[409] The small percentage of detected and proven cartels concerning their actual number is an indicator that these levels should be significantly higher than the actual damage they cause.[410] Aside from raising the threshold for financial sanctions against corporations, the approach of fines and lengthy prison sentences for individuals making decisions on behalf of companies would be a much more effective method of deterring the thought of such actions.[411]

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[405] Raphael Reims, "The Criminal Prosecution of Hardcore Cartels in the USA and the EU- A Backdoor Criminalization in the EU by the USA?" (*Competition Policy International*, 30 November 2022), https://www.competitionpolicyinternational.com/the-criminal-prosecution-of-hardcore-cartels-in-the-usa-and-the-eu-a-backdoor-criminalization-in-the-eu-by-the-usa/. Accessed 27 February 2023.
[406] Ibid.
[407] Ibid.
[408] Raphael Reims, "The Criminal Prosecution of Hardcore Cartels in the USA and the EU- A Backdoor Criminalization in the EU by the USA?" (*Competition Policy International*, 30 November 2022), https://www.competitionpolicyinternational.com/the-criminal-prosecution-of-hardcore-cartels-in-the-usa-and-the-eu-a-backdoor-criminalization-in-the-eu-by-the-usa/. Accessed 27 February 2023.
[409] John M. Connor and Robert H. Lande. *"The Size of Cartel Overcharges: Implications for the U.S. and EC Finding Policies."* University of Baltimore School of Law, Antitrust Bull, (2006).
[410] Ibid.
[411] Ibid.

7.6 Reform of the Construction Industry

Through the ages, the construction industry has been burdened with various problems that have affected the transparency and fair market competition of this sector, which entails the need for comprehensive reform.[412] Tougher public sector procurement regulations were suggested to change the construction industry after all cartels during history were discovered.[413] The procurement strategy that is now being promoted is one-sided, price-focused competition. Is such a conventional procurement and competition strategy justified and will it help to eliminate corruption, thus promoting a healthy construction industry in the European Union?[414] This approach puts market competition and industry policy at the center of the discussion.[415]

Governments must strike a balance between innovation and antitrust law when designing competition laws. The proper operation of the antitrust law from the first point of view means that healthy competition should be the guiding idea and the main driving force for the innovation and development of industries. [416] However, seen from another angle, for quality development and adoption of technology, companies are called upon to work together and combine all necessary resources in the form of distinct associations and partnerships, which means that a certain form of cooperation (but for legal purposes) is good and, on the contrary, desirable.[417] The balance between competition and cooperation must be achieved by competition policies. This sensitive duty is made even more difficult in the construction

[412] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.
[413] Ibid.
[414] Ibid.
[415] Marc Herthogh. *"Crime and Custom in the Dutch Construction Industry."* Legisprudence 4, No. 3, (2010).
[416] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.
[417] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.

industry since the government itself dominates the market.[418] While antitrust laws were traditionally applied very laxly, current regulations favor competition over cooperation by European Union policy, which says that cartels and bid rigging are violent restrictions of competition.[419]

According to several experts, collusions have hampered innovation in the construction sector, but, neither the investigations nor the facts lend credence to this claim.[420] It is an assertation, rather than a conclusion. The traditional perception is that competition is desirable, thus the more of it, the better (economic perception of the competition).[421] A large portion of global competition policy and antitrust laws are based on this perspective. The idea of static performance is the basis for a more strict concept of public procurement.[422] The goal is to regulate specific transactions and to establish a market that is extremely competitive and driven by one-dimensional cost competition.[423] These intensely competitive conditions frequently overlook possibilities to boost an industry`s performance and result in project control issues.[424] Construction sector innovation remains a source of serious worry.[425] More unconventional procurement techniques are needed, and selection criteria other than the lowest bid should be

[418] Jeroen Van de Rijt, Michael Hompes and Sicco Santema. *" The Dutch Construction Industry: An Overview and Its Use of Performance Information."* Journal for the Advancement of Performance Information and Value 2, No.1, (2010).
[419] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, no. 2 (2004): 146–56.
[420] Jeroen Van de Rijt, Michael Hompes and Sicco Santema. *" The Dutch Construction Industry: An Overview and Its Use of Performance Information."* Journal for the Advancement of Performance Information and Value 2, No.1, (2010).
[421] Ibid.
[422] David Audretsch and Roy Thurk. *"Linking Entrepreneurship to Growth."* OECD Science, Technology, and Industry Working Papers, (2001).
[423] Ibid.
[424] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2, (2004), 146–56.
[425] Frens Pries and Felix Janszen. *"Innovation in the Construction Industry: The Dominant Role of the Environment, Construction Management, and Economics."* (1995).

introduced, with the main objective to make a difference in the construction industry.[426] Long-term commitments, integrated teamwork, and value quality-driven competition are on the rise.[427] With competition and innovation, these measures are anticipated to address the systematic issues facing the construction sector. The industry is predicted to become healthier as a result of cooperative procurement practices, increased business ties, and better-quality performance, as well as business dynamics.[428] Also, the problems in the construction industry are not exclusively the result of secret agreements and collusion, but they are certainly one of the patterns and consequences of inadequate market functioning.[429]

8. Conclusion

This thesis has shown repeatedly how essential a functioning open economy truly is. Among the most serious structural market malfunctions are cartels, which manipulate and suppress competition through the cooperation between economically autonomous organizations. Restraints on competition lead to a misallocation of resources, which in turn hinders the creation of value and reduces the overall welfare of an economy[430]. Furthermore, in the absence of competition, there are no longer dynamic incentives to innovate, be more efficient, and surpass one's competitors. From this disparity of fair competition, no one except the participating businesses benefits; leaving the rest of society to lose out. This becomes particularly more frustrating in the case of public procurement, where the government acts as a contracting agency by issuing invitations to submit tenders for these projects. Due to the fact that the money spent

[426] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2. (2004), 146–56.
[427] Anies G. Doree. *"Collusion in the Dutch Construction Industry: An Industrial Organization Perspective."* Building Research and Information: The International Journal of Research, Development, and Demonstration 32, No. 2. (2004), 146–56.
[428] Ibid.
[429] Ibid.
[430] Mario Mariniello. "Waging war on cartels" (*Bruegel*, 6 June 2013) https://www.bruegel.org/blog-post/waging-war-cartels, Accessed 4 March 2023.

comes out of the taxpayers' pockets, the public naturally has a strong interest in getting the most value proposition out of a multitude of bids. However, we have unfortunately seen from the case of the construction industry that this is ultimately not always the case. The sector is so interesting since it plays a vital part in the overall economy.[431] Not only does it provide the fundamental infrastructure for the entire community to use, but is also the largest employer in Europe.[432] Accordingly, vast amounts of money circulate within the industry, making it more susceptible to exploitation and enrichment by those willing to take advantage of the situation. In line with the principles of a free market economy, the government should not favor certain private companies at the expense of others, which is why public projects are awarded through competitive bidding based on the principle of choosing the company that offers the lowest price for the product or service in question.[433] Thus, it is crucial that activities such as collusion, bid-rigging, fraud or corruption have no impact on the procurement process, since shared societal resources are at stake, and the interest of the state should be to ensure that transparency and the welfare of society as a whole predominates in its spending decisions.

There have been several prominent examples of collusion in the construction industry in Europe, with the Dutch industry in particular drawing negative attention to itself with regard to illicit agreements. The example of the Dutch cartel provided a clear picture of the prevailing state of mind at the time and how a cartel of this magnitude could come into existence. It highlights the need for revised regulations as well as sanctions, designed to act as a warning sign and a deterrent. Over the years, these have continued to be introduced at both the national and the EU level. Although significant progress has been achieved and the number of cartels in the construction industry has been reduced since the time of the most prominent cartels, there

[431] OECD, Organization. (2006). Roundtable on Competition in Bidding Markets, Background Note by the Secretariat, DAF/COMP 27.
[432] Ibid.
[433] OECD Organization. (2007). Bribery in Procurement, Methods, Actors, and Counter Measures.

remain several aspects that require regulatory attention in order to fully eradicate such conduct. As an economic driver, the construction industry is far too valuable to allow being manipulated and abused for illegal anti-competitive purposes.

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4. Case 14/68. *"Walt Wilhelm et al. V Bundeskartellamt"* [1969] ECR 1, Paragraf 9.

5. Case C-205/03P *"Federation Española de Empresas de Tecnología Sanitaria (FENIN) v Commission [*2006]. ECR I-6265.

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