CHALMERS
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Competition and Merger Management in the European Union

A study in Antitrust cases against Multi-sided Platforms

Master's thesis in Management and Economics of Innovation

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SUMMARY
Multi-sided platforms are becoming an increasingly integral part of our everyday lives, with large companies like Google and Microsoft being some of the most well-known. The U.S. based companies Alphabet, Amazon, Apple, Facebook and Microsoft constitute half of the world's ten most valuable companies at the moment. Such size comes with a lot of power and responsibility and multi-sided platforms have had a series of quarrels with the law for misusing their power. Antitrust laws in particular are one set of laws that multi-sided platforms, perhaps unsurprisingly, have continuously violated. The aim of this report is to study how the European competition authorities have evaluated competition and mergers against multi-sided platforms. Furthermore, the study aims to provide an overview on the EU with brief remarks on the U.S. as well as provide brief remarks on potential future implications within this field. The empirical findings that were derived from studying the cases were compared to literature on platforms and antitrust. The findings indicate a clear shift in the nature of the cases that can be correlated to the growth of multi-sided platforms.

The cases in the EU become more severe as time progresses and the multi-sided platforms grow to become more dominant. It can also be seen that there is a similarity in the cases in both the EU and the U.S. but that the approaches in the two jurisdictions have some key differences, mainly with a slight bias towards the EU being stricter. Another key insight is that Antitrust law has not been able to keep up with multi-sided platforms both because their growth has been so rapid but also because the longer-term implications of these platforms are incredibly difficult to assess. Only recently, antitrust law is seemingly catching up but the exact strategy of how to move forward with regulating multi-sided platforms remains somewhat of a mystery. On the one hand innovation of multi-sided platforms undeniably creates value for consumers but on the other hand, impeding competition might be negative for consumers in the long term. Recently the notion of customer harm has also creeped into the discussion. The study concludes by acknowledging this dilemma as well as highlighting the importance of legislators to be educated on the impact of platforms and designing well balanced future regulations.

Keywords: Antitrust, Digital Economy, Multi-Sided Platforms, EU, The European Commission, Innovation, Competition, Dominant Position.

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It is now time to end this chapter of my life and move on. Before turning the page to new beginnings in my life, I would like to express my deepest gratitude to all the people that have provided me with professional and personal support during the ups and downs of this experience.

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Dear mom and dad, I will always be grateful for having you in my life and for all the love and support you have given me since I was born. I can only hope that one day I will be half the parents you are. Thank you for making me the person I am today.

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List of abbreviations

Inc. Incorporated

US United States

LLC Limited Liability Company

EU European Union

EP European Parliament

TFEU The Treaty on the Functioning of the European Union

EC European Commission

PC Personal Computer

TEU Treaty on European Union

CEC Commission of European Communities

EEA European Economic Area

MIF Multilateral Fees

SO Statement of Objections

SSO Supplementary Statement of Objections

DG Directorate-General

DG COMP Directorate-General for Competition

ECN European Competition Network

1. Introduction

In this chapter, the reader is introduced to the master's thesis study and the background to this work. The research focus and the research problem are presented together with the overall aim of the study and the research questions.

1.1 Background

The U.S. based companies Alphabet, Amazon, Apple, Facebook and Microsoft constitute half of the world's ten most valuable companies (Forbes, 2019). These companies hold immense power in today's business world due to their size, span of operations, and international impact (Överby, 2021). What brings them together is that they are all five multi-sided platforms (Forbes, 2019). Multi-sided platforms define actors in the digital market that connect two or more user groups by playing an intermediation or a matching role (Abdelkafi et. al, 2019). Alphabet Inc. is an example of a multi-sided platform that acts as a holding company with a market capitalization of around two trillion dollars with Google LLC being their largest subsidiary. Alphabet has been able to grow by acquiring companies such as YouTube, Motorola and Android. Thus, it has managed to establish a wide variety of products and services (Alphabet Inc., 2021). Before proceeding any further, it should be underlined that this thesis focuses on Alphabet, Amazon, Apple, Facebook and Microsoft and on other large multi-sided platforms as well.

Within the digital economy, Alphabet, Amazon, Apple, Facebook and Microsoft are for example hot topics as they are closely related to concepts such as Multi-Sided Platforms, Ecosystems, Value Networks et cetera. Those companies have become market leaders in their respective industry by connecting different user groups which increased their values. Despite their market leadership and increasing value, those and other multi-sided platforms have a long history of antitrust lawsuits against them. In recent years there has been a ramp up in antitrust cases against multi-sided platforms in both the U.S. and the EU. The reasons behind the different cases are usually different but are mostly related to the abuse of dominant position. One of the most recent cases concerns Google and is related to monopolistic power, where Google is accused of utilizing their dominant position to lock out competitors in various ways (Feiner, 2020).

Antitrust policy is essential for the digital economy and is constantly changing due to the reason that the current legislation is not keeping up with all the changes in the digital markets. Even though the current antitrust legislation is still convicting multi-sided platforms infringing the legislation by imposing fines and forcing several of them to come up with various commitments. This policy has the power to reform the future of technology-related industries which in turn has a ripple effect onto many other industries that are closely intertwined with the tech industry. In particular, antitrust policy can change the path of digitalization (McGinnis, J. O. and Sun, L. 2021).

The development of multi-sided platforms and the significance that antitrust policy has on shaping the industries of the world and what role antitrust policy will have on innovation has sparked an interest in a deeper understanding of the historical involvement in antitrust cases of dominant multi-sided platforms. To create a historical view of how the European Union evaluated certain actions of some multi-sided platforms regarding competition, mergers and

innovation, research and a mapping of the most significant antitrust cases that some of the most valued multi-sided platforms has been involved in during the last decade will be conducted. Furthermore, this master thesis aims to provide a comparison between different lawsuits against multi-sided platforms in the EU. This master thesis will also make brief remarks on potential future implications and whether or not the recently proposed legislations namely the DMA and the DSA will have any effect on the abilities of multi-sided platforms in terms of competition and innovation in the future.

1.2 Aim and research question

The purpose of this thesis is to investigate how the competition authority in the EU has evaluated competition and mergers against large platforms. To fulfill the purpose of the thesis, the following question will be answered:

How did the EU's competition authority evaluate competition and mergers against large platforms?

1.3 Delimitations

This report focuses on the current competition legislation within the EU and its impact on innovation. The report focuses on large platforms firsthand, but mostly on Google as the company of the study and all the different antitrust cases against them within the EU. The report will briefly address the current antitrust legislation policies and their important role in the digital markets.

1.4 Outline of the report

Chapter 1, Introduction: Presents the background of study as well as the study's aim, research questions and delimitation.

Chapter 2, Literature review: This chapter provides an introduction to the current antitrust policies. This chapter also provides a deep introduction of the European competition policy and competition law. This chapter provides a deep introduction to innovation in the digital economy.

Chapter 3, Methodology: Describes how the study was conducted in terms of research design, research process, data collection and data analysis. The chapter also discusses ethical concerns and reflects on the study's chosen methodology.

Chapter 4, Result: This chapter presents the result from the different data collected regarding the selected antitrust cases.

Chapter 5, Analysis: This chapter analyzes the selected antitrust cases based on a number of questions that will be answered.

Chapter 6, Discussion: This chapter contains a discussion of the overall study's result.

Chapter 7, Conclusions: This chapter presents the study's final conclusions and answers the research questions. Recommendations for future research are also included in this chapter.

2. Literature review

This chapter provides an introduction to the current antitrust policies. This chapter also provides a deep introduction of the laws concerning competition politics, competition right and innovation within the EU as the main focus.

2.1 Antitrust policy

In the EU, the European Commission is the sole antitrust agency. It decides which cases to pursue and then decides those cases in the first instance (Schneider, 2020). Bauer and Bohlin (2021) argues that good policy design aligns legal and regulatory frameworks with the technical and economic characteristics of the sector and the broader, social visions associated with new technologies. Mansell & Steinmuller (2020) explain that traditional competition policy, in particular antitrust policy, aims to ensure consumer welfare and fair competition. However, Mansell & Steinmuller (2020) point out that these concepts might be problematic to define in a platform context. This is partly because traditional anticompetitive, monopolistic behavior is usually assessed based on price criteria. Platforms on the other hand may give rise to an anticompetitive environment based on other factors than price. Dominant actors can use different means to secure their power such as owning large quantities of personal data that can be used to gain unfair bargaining power (Mansell & Steinmuller, 2020). Another example is given by Fox (2019) who explains that platform owners might use their dominant position in one market to gain an advantageous position in another market that they wish to enter and thus, act as a gatekeeper.

Fox (2019) discusses the challenge of antitrust policy in the modern day by comparing how the EU and U.S. manage the law differently related to digital platform companies. Fox (2019) explains that one major difference is that U.S antitrust violations are more difficult to prove compared to the EU. The reason being that, in the U.S., the accuser has to essentially prove that the accused party misused its power. Whereas in the EU this is not directly necessary, instead it has to be shown that it would be worth it for the accused party to misuse their power.

Mansell & Steinmuller (2020) also present some of the remedies that authorities may employ in the case of violations. One such remedy is the power to stop an acquisition or merger that is deemed to harm competition. In more severe cases authorities can also commission a break-up of a company but Mansell & Steinmuller (2020) stress that a break-up might actually worsen the situation, partly because of the resource intensive practice of monitoring and regulating each of the resulting, smaller companies. Different jurisdictions have different values and guiding principles relating to how they should act in these cases of misconduct. The U.S. in particular, is known to have a relatively mild standpoint in the sense that they value entrepreneurship highly and allow innovation to flourish freely, actively limiting their interference unless necessary (Bauer, 2021). The EU approach on the other hand focuses strictly on safeguarding the public interest and competition. Furthermore, the EU has the DMA which outlines behavioral criteria aimed at gatekeeper companies such as Google (Bauer, 2021). It can be argued that Bauer implies that the EU has stricter antitrust and competition policy vs the U.S. This theme can be seen in other literature as well, Manne & Wright (2011) being a more explicit example, stating the opinion that the European Commission has turned into a hostile leader against the misuse of dominance power.

There seems to be a theme in the analyzed literature that legislation is moving towards being harsher. Frieden (2021), states that antitrust and competition policy has been rather mild in the past but that it is expected to become stricter, especially in the EU. Mansell & Steinmuller (2020) also state that the size and dominance that certain platforms have reached has bolstered concern of potential harmful implications and that both the EU and the U.S. have called for more sophisticated investigations and policies to be put in place. A serious problem is that this is an incredibly challenging issue as confirmed by Frieden (2021) who states that platform intermediaries have reached a degree of market dominance at a rate that legislators simply cannot keep up with. The problem is even further magnified by the fact that it is unclear what effect certain policies might have which means that it is essentially an experimentative process on a large scale with high uncertainty as well as high risk for undesirable outcomes (Bauer, 2021). Many policy suggestions have been made and a more rigorous presentation of these is outside of the scope of this report. However, to provide a general framework, Fox (2019) has proposed a useful spectrum with the extreme point of "doing nothing" on the one end and "breaking them up" on the other end. There are clear issues with both extremes and the challenge is to find the right balance.

Schneider (2020), argues that the recent European antitrust policy and enforcement are based on a series of economic and legal misunderstandings of how markets work, and are driven by an activist agenda, and can have protectionist effects. Bauer and Bohlin (2021) however, argues that there is evidence that reliance on prevailing approaches can result in the retention of inappropriate policies, and that previous experience with the regulation of interdependent information and communication technologies showed that most regulatory interventions have differing effects on players.

2.2 Competition policy and competition law in the EU

The EP (2022) states that the main objective of the EU competition rules is to enable the proper functioning of the EU's internal market as a driver for the wellbeing of EU citizens, businesses and society as a whole. They further state that an effective competition enables businesses to compete on equal terms across the Member States, while continuously putting them under pressure to strive to offer the best possible products at the best possible prices for consumers (EP, 2022). This is intended to drive innovation forward to achieve a higher degree of innovation and long-term economic growth by achieving a free and dynamic internal market and promoting general economic welfare. EU competition policy also applies to non-EU businesses that operate in the internal market. The Treaty on the Functioning of the European Union (TFEU, 2022) contains rules that aim to prevent restrictions on and distortions of competition in the internal market. This is done by prohibiting anti-competitive agreements between undertakings and abuse of market position by dominant undertakings, which could affect trade between Member States.

However, mergers and takeovers with an EU dimension are monitored by the Commission and may be prevented if they would result in a significant reduction of competition. Societal, economic, geopolitical and technological changes constantly pose new challenges to EU competition policy (EP, 2022). Such challenges compel policymakers to assess whether the current competition policy toolbox still provides the effective tools to achieve its overarching objective or whether it needs adjustment. The EU competition policy includes rules on antitrust, merger control, State aid, and public undertakings and services. The antitrust branch

aims at restoring competitive conditions after the formation of cartels or when a company abuses its dominance. The merger control aims at pre-empting potential distortions of competition by assessing in advance whether a potential merger or acquisition could have an anti-competitive impact. The State aid rules aim to prevent undue state intervention wherever preferential treatment of given undertakings or sectors distorts, or is likely to distort (EP, 2022).

One of the tools to restrict competition is Article 101 of the TFEU which bans anti-competitive agreements (TFEU, 2022). The article prohibits agreements between two or more operators to restrict competition. The article covers both horizontal agreements which take place between competitors operating at the same level of the supply chain and vertical agreements which take place between a manufacturer and its distributor (TFEU, 2022). In such cases the companies agree to reduce competition instead of competing with each other. This would distort the playing field and in turn harm consumers and other businesses. This includes actions such as explicit agreements and concerted practices for fixing prices or limiting production output, or dividing the market among the companies. Those types of agreement are considered harmful to competition and are thus prohibited (TFEU, 2022). On the other hand, other types of agreements may be exempted, if they contribute to improving the production or distribution of goods or to promoting technical or economic progress. Those could be agreements on cost or risk sharing between companies, or on accelerating innovation through cooperation in research and development.

Another tool that aims to prohibit the abuse of a dominant position is Article 102 of the TFEU (TFEU, 2022). This tool aims at companies that hold a position of dominance in a particular market and to abuse that position. A dominant position is ‘a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and consumers (TFEU, 2022). Examples of behavior that would amount to abuse of dominant position include setting prices at below cost level, charging excessive prices, tying and bundling, refusing to innovate and refusal to deal with certain counterparts. One of the most prominent cases of abuse of dominant position occurred in the year 2004 with Microsoft. The Commission found that Microsoft had abused its dominant position in PC operating systems by withholding critical interoperability information from its competitors making the providers of rival operating systems unable to compete effectively (European Parliament, 2022).

Yet another tool is the merger control. Mergers or acquisitions can be beneficial for companies as they can create efficiencies, synergies and economies of scale (Tetenbaum, 1999). However, if they result in strengthening market power or increasing market concentration, they can also weaken competition. which is why certain mergers and acquisitions must be reviewed and may not be completed until authorization is granted (European Parliament, 2022). The Commission must be notified of planned mergers if the resulting company would exceed certain thresholds. The merger control rules apply to companies based outside the EU, if they do business in the internal market. The review process is triggered when control is acquired over another undertaking (European council, 2004). After an assessment of the likely impact of the merger on competition, the Commission may approve or reject it, or it can grant an approval, subject to certain conditions and obligations (European council, 2004). In 2014, the European Commission carried out a consultation to EU merger control rules aiming to improve the combined effectiveness of the rules at EU level and at national level (European commission, 2014).

The Commission is the main body responsible for ensuring the correct application of these rules and has inspection and enforcement powers (ECA, 2020). The Commission serves as a platform for the exchange of information aimed at improving the enforcement of competition rules (European Parliament, 2022). Since 1 May 2004, in the context of the Articles 101 and 102 the competition authorities of the Member States have assumed some competition enforcement functions. Council Regulation (EC) No 1/2003 allowed an enhanced enforcement role of national antitrust authorities and courts, which was reinforced by Directive (EU) 2019/1 (European Parliament, 2019). In the area of antitrust law, the Actions for Damages Directive was adopted in 2014 in order to heighten the deterrent effect against prohibited agreements (cartels and abuse of a dominant position) and to provide better protection for consumers. It facilitates the process for obtaining compensation for harm caused to individuals or other businesses by an infringement of competition law.

2.3 Innovation

According to Rogers, (1983) innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. Taylor, (2017) argues it is the creation and implementation of new processes, products, services and methods of delivery. Resulting in significant improvements in outcomes, efficiency, effectiveness or quality. Which reinforces the argument of Eriksson-Zetterquist et al., (2011) that innovation is the pathway to survive in a rapidly changing environment. In order for the innovation to be effective, the innovation must start small and simple, but also that it has to be focused (Drucker, P. 1985). Schreier and Sorescu, (2021) argues that research on innovation has focused on providing a potential problem solution that fulfills an existing need or creates new needs that consumers had not articulated. Some innovations might result in a monopoly in an industry, Bauer & Bohlin (2021), argues that temporary monopoly power is good for innovations that require high investment and high risks. They further argued that innovation for firms in monopolistic market position replaces existing profits.

According to Malerba and Orsenigo, (1997) there are two patterns of innovative activity. The first one is characterized by creative destruction with technological ease of entry and where entrepreneurs play the major role creating new firms conducting innovative activities. Entrepreneurs enter an industry with new ideas and innovations, launch new enterprises which challenge established firms, disrupt the ways of production, organization and distribution and wipe out previous innovations. Here, even leading firms with big market shares get different incentives to innovate in order to protect their profits and to protect the future of the firm. The second pattern is characterized by creative accumulation with the prevalence of large established firms and the presence of relevant barriers to entry for new innovators. Those companies create barriers to entry through monopoly or by other means to new entrepreneurs and small firms with their stock of knowledge in specific technological areas, their competencies in R&D, production and distribution and their relevant financial resources (Malerba and Orsenigo, 1997). Bauer & Bohlin (2021), argues that the innovation will increase when the intensity of competition increases. However, the innovation incentives will decline when the intensity of competition increases further.

Matyunina, (2019) argues that the digital economy promotes innovation activities and facilitates technological diffusion in the whole society. Innovation theory suggests that

economic, technical, and regulatory innovation opportunities will be positively related to innovation activity (Bauer & Bohlin, 2021). They also argue that an improved appropriability of innovation rents also increases innovation activity. For firms, innovation has been seen as a demand expanding engine of growth. In the digital economy however, innovation not only presents in what firms sell, but also in how they sell it (Schreier and Sorescu, 2021). Which have transformed the industrial structures from traditional labor- and capital-intensive industries to data intensive and technology intensive sectors (zhang et. al, 2022). This has led to the digital economy being characterized by high innovation, powerful penetration, and rapid diffusion which helps industries from both upstream and downstream to have better communication without conflicts. Zhang et. al, (2022) further explains that the digital economy has promoted the transformation of the intelligence of enterprises and digitalization in the process of integrating with conventional industries with its information and digital data.

3. Methodology

In the following chapter, the method used in the study is presented. First, the research design and the research process are outlined. Following, the data collection method and data analysis and how it was performed is also presented. Finally, the following chapter ends with a brief discussion regarding ethical concerns and a reflection on the chosen methodology.

3.1 Research Design

This study has utilized a qualitative research approach. According to Anderson (2010), Qualitative research has the strength of examining issues in depth and in detail. A more hybrid approach including both qualitative and quantitative methods was not of interest. This is due to the reason that the research question can be answered by only using a qualitative approach. According to Bailey et al. (2020), a qualitative approach is used to understand *Why?* and *How?*, while a quantitative approach is used to measure, count or quantify a problem. Which indicates that a quantitative approach would not add anything to or even change the result of the conducted study.

3.2 Research Process

The topic for this study was proposed by the supervisor of this master thesis. In the fall of 2021, a similar topic regarding the antitrust cases of Google in the EU and the US was written as a report in a previous course. In late May the topic was suggested and more developed to make it suitable for a master thesis. In parallel with this an initial literature review was conducted to gain knowledge about the topic and the previous research. This enabled the proposal of suitable research questions within the field. In July a methodology for the study was developed. Additional literature review, as well as additional data collection and analysis was conducted with the purpose to answer the research question and draw conclusions. In January, the thesis was presented and opposed at Chalmers University of Technology, and the report was thereafter finalized.

3.3 Data collection and Analysis

The primary data for this study was collected from qualitative data from the EU and from different studies and investigations done on this topic. The data from the EU provides a more detailed description of their current legislation when it comes to competition policy and competition rights. The data also provides information regarding why those cases appeared and whether or not there is a pattern or if there is something in common between the studied cases. The primary data also includes data regarding general antitrust policy. The collected data was further presented in a literature review. To complement the primary data, secondary data was collected. The secondary data included different antitrust cases against Google. Bell et al. (2018) states that secondary data collection is a beneficial method for research projects with time restriction and limited data availability. Due to the use of the same research method throughout the study, the data collection and data analysis were conducted in the same way. This will be further described in the sections below.

3.3.1 Literature Review

An initial literature review was performed to get a notion of competition policy, competition right and innovation. During the literature review different sources were utilized including reports from the European Union, books, as legal cases in the EU. Key words such as Competition policy, Competition right, Innovation, Antitrust, Google, EU and Multisided Platforms were used to find relevant literature. The literature review also included studying different scientific publications to get a notion of how the recently proposed, namely the Digital Market Act and the Digital Service Act will affect the abilities of the large platforms in terms of competition and innovation in the future. Another literature review was performed regarding general antitrust policies. This literature review was performed to provide an overview of antitrust policies and their important role in the digital markets.

3.3.2 Quantitative Data

To complement the primary data, secondary data was collected. The secondary data was collected by performing research dealing with the chosen antitrust cases against Google and other large platforms in the EU during the past 22 years. During the quantitative data collection different sources were utilized including reports from the European Union, academic papers, news reports, as well as different legal cases concerning the chosen cases in this report. Key words such as Antitrust, multisided platforms, Google and EU were used to find relevant data dealing with the chosen cases. The study of all the chosen cases made it easier to see how the antitrust policies in the EU had evolved during the time between each antitrust case. It also gives a better overview of how Google and other large platforms have utilized their monopolistic position over time. The data collected from both the quantitative data collection and the literature review resulted in a better overview. Which enabled answering the research question of how did the EU's competition authority evaluate competition and mergers against large platforms? It also addresses whether the recently proposed legislation namely the DMA and the DSA will affect the abilities of the large platforms in terms of competition and innovation in the future.

3.4 Ethical considerations

The study has been conducted according to Chalmers University of Technology's regulations for master thesis projects, *föreskrifter för examensarbete på civilingenjörs-, arkitekt- och masterprogram* (Chalmers University of Technology, 2016). According to the regulations the students should consider that the study is performed in an ethical way. The ethical aspects have mainly been considered during the data collection and the data analysis process, to make sure that the risk of deception and conflicts of interest is held to a minimum.

4. Results

In the following chapter, A number of lawsuits was further selected by defining different selection criteria and was later studied. The selection criteria were cases where the platforms were condemned and where the platforms were obliged to pay fines. Each lawsuit is provided with its case number, as well as with a description of each of the cases. Each of the cases was divided into three different parts namely preliminary hearings, review and secondary hearings & decision. These parts describe the different actions carried out by the European Commission in the cases and which eventually led to the condemnation of the selected multi-sided platforms. The decision of each of the lawsuits is also provided. A table representing all the different lawsuits related to multi-sided platforms in the EU is presented in the Appendix.

The first case was conducted against Microsoft, where Sun alleged that Microsoft enjoyed a dominant position as a supplier of a certain type of software product called operating systems for personal computers. Sun further alleged that Microsoft reserved to itself information that certain software products for network computing, called work group server operating systems, needed to interoperate with Microsoft's PC operating systems. The second case was conducted against Microsoft regarding two cases of abuse of dominant market position. The first case was in the field of interoperability as a response to a complaint made by the European Committee for Interoperable Systems. The second case was in the field of tying separate software products. The third case was conducted against Google following complaints by search service providers about being unfavorably treated in Google's unpaid and sponsored search results coupled with a preferential placement of Google's own services. The fourth case was conducted against MasterCard who maintained a set of cross-border acquiring rules, which created an obstacle to cross-border trade in acquiring services within the EEA. The rules made acquirers offering services in Member States where the domestic MIF were lower were prevented from offering cheaper services. The merchants were also prevented from taking advantage of the internal market and benefiting from less expensive services from card acquirers established in Member States where MIF were lower. The fifth case was conducted against Google who breached EU's Antitrust laws by forcing various requirements onto partners such as Android mobile device manufacturers as well as network providers that sell Android phones. In order for Android phone manufacturers to get a license to use the Play Store, a criterion was that they needed to agree to pre-install Google Chrome. The sixth case was conducted against Google who included exclusivity clauses in their contracts. Prohibiting publishers from placing any search adverts from competitors on their search results pages. Google had begun replacing the exclusivity clauses with so-called "Premium Placement" thus preventing Google's competitors from placing their search adverts in the most visible and clicked on parts of the websites' search results pages.

4.1 Microsoft Case (AT. 37792)

4.1.1 Preliminary Hearings

In this case, Sun complained to the Commission pursuant to Article 3 of Regulation No 17 for the initiation of proceedings against Microsoft (EC, 2004). Sun alleged that Microsoft enjoyed a dominant position as a supplier of a certain type of software product called operating systems for personal computers and further alleged that Microsoft infringed Article

82 of the Treaty by reserving to itself information that certain software products for network computing, called work group server operating systems, needed to interoperate fully with Microsoft's PC operating systems (EC, 2004). Sun further argued that the withheld interoperability information was necessary to compete as a work group server operating system supplier (EC, 2004).

After a first investigation of the complaint, the Commission sent a Statement of Objections to Microsoft to give Microsoft the opportunity to comment on its preliminary findings of facts and law (EC, 2004). The Statement of Objections mainly focused on the interoperability issues that formed the basis of Sun's complaint (EC, 2004). The Commission had previously launched an investigation into Microsoft's conduct on its own initiative, under Regulation No 17 and concerned more specifically Microsoft's Windows 2000 generation of PC and work group server operating systems and Microsoft's incorporation of a software product called Windows Media Player into its PC operating system products (EC, 2004). That investigation resulted in the Commission sending Microsoft a second Statement of Objections concerning issues of interoperability and the incorporation of Windows Media Player in Windows (EC, 2004). The Commission joined the relevant findings set out in the first Statement of Objections in the case that followed the complaint of Sun (EC, 2004).

As a response to the first and the second Statements of Objections, Microsoft submitted 46 statements from customers and system integrators, purportedly supporting its responses to the Commission's objections concerning interoperability (EC, 2004). The Commission sent a round of requests for information to those 46 customers, with a view to obtaining quantitative data on those customers' use of products relevant to the Commission's investigation (EC, 2004).

Following the second Statement of Objection, the Commission engaged in a wider market enquiry for interoperability, on the basis of an independent sample of organizations that use PC and work group server operating systems (EC, 2004). The Commission sent requests for information to 75 companies based in the EEA. The companies were randomly selected and operated in different sectors and also varied in size (EC, 2004). Some of the 71 companies that responded provided answers for their subsidiaries or sister-companies in the same group, making the total number of responses over 100, covering more than 1.2 million PC clients (EC, 2004). Their answers generated additional queries, and a follow-up questionnaire was sent to the 62 organizations that had responded to the requests for information (EC, 2004). 46 requests for information were also sent to companies active in areas relevant to the issues raised by the incorporation of Windows Media Player into Windows generating 33 responses (EC, 2004). In the light of the findings of the market enquiry and how they related to the Commission's existing objections, a supplementary Statement of Objections was sent to Microsoft (EC, 2004). It did not cover abusive practices different from the ones set out in the first two Statements of Objections, it rather refined and consolidated the legal considerations (EC, 2004).

Microsoft replied to the supplementary Statement of Objections and submitted supplementary material, containing two surveys carried out by Mercer Management Consulting on behalf of Microsoft (EC, 2004). At Microsoft's request, an oral hearing took place in which Microsoft was given an opportunity to submit material following the hearing, and to comment on the issues raised by the Commission services, the complainant and the interested third parties who attended the hearing (EC, 2004). The Commission granted Microsoft access to the files five times throughout the procedure and sent Microsoft a letter inviting it to provide

comments on the conclusions stated in the letter which drew on documents not mentioned in the statements of objections (EC, 2004).

The Advisory Committee sent its report to the Commission agreeing with the Commission's analysis that Microsoft had a dominant position in the client PC operating systems market for purposes of Article 82 of the EC Treaty and Article 54 of the EEA Agreement (EC, 2004). This was both in the interoperability element and the media player element of the case. In the interoperability element the Advisory Committee agreed with the Commission that Microsoft abused its dominant position by refusing to supply its competitors with interoperability information necessary for them to compete in the work group server operating system market (EC, 2004). Microsoft's refusal possessed a risk of elimination of competition in the work group server operating systems and limits development to the prejudice of customers (EC, 2004). The Advisory Committee also agreed that Microsoft did not have a justification for refusing to supply the interoperability information to its competitors (EC, 2004). With regard to the media player element of the case, the Advisory Committee agreed that Microsoft abused its dominant position by tying the Windows media player to the PC operating system (EC, 2004). The Advisory Committee also agreed that the tying of the media player in the PC operating system poses a risk of foreclosing competition and stifling innovation in the market for media players (EC, 2004). The Advisory Committee also agreed that Microsoft did not have a justification for tying its Windows media player with its client PC operating systems (EC, 2004). The Advisory Committee agreed that the remedy of requiring disclosure of interoperability information and the mechanism for ensuring its implementation and compliance is appropriate (EC, 2004). The Advisory Committee also agreed that the remedy of requiring Microsoft to offer to purchasers a version of its client PC operating system without Windows media player, and that the mechanism for ensuring its implementation and compliance is appropriate (EC, 2004). Finally, the Advisory Committee agreed that imposing a fine on Microsoft is appropriate and agreed that the Commission's proposed fine against Microsoft is appropriate (EC, 2004).

4.1.2 Review

The Commission further adopted a decision related to the proceedings pursuant to Article 82 of the EC Treaty and Article 54 of the EEA Agreement (EC, 2004). The Commission rejected the arguments of Microsoft and ordered them to disclose the information that it refused to share and allow its use for the development of compatible products (EC, 2004). The disclosure was limited to protocol specifications and to ensure interoperability to the extent that the decision might require Microsoft to refrain from fully enforcing its intellectual property rights (EC, 2004). Microsoft may not impose restrictions as to the type of products in which the specifications may be implemented (EC, 2004).

Regarding the tying abuse, Microsoft had to offer users and OEMs for sale in the EEA a full-functioning version of Windows which does not incorporate Windows media player (EC, 2004). Microsoft also had to refrain from using any means that would have the equivalent effect of tying Windows media player to Windows, and from giving OEMs or users a discount conditional on their obtaining Windows together with Windows media player (EC, 2004). The Commission considered Microsoft's action to constitute an infringement of Article 82 of the EC Treaty and Article 54 of the EEA Agreement (EC, 2004). Therefore, the Commission set the fine at €165 732 101 in order to reflect the order of the gravity of the infringement. Due to Microsoft's economic capacity and in order to ensure a deterrent effect

on Microsoft, the fine was multiplied with a factor of two to €331 464 203. In order to take the duration of the infringement into account the amount of the fine was increased by 50% to €497 196 304 (EC, 2004).

Following the set fine, the Commission market tested the proposals from Microsoft regarding how the company intends to implement the Commission's decision in the field of interoperability (EC, 2004). The decision required Microsoft to disclose complete and accurate interface documentation which would allow non-Microsoft workgroup servers to achieve full interoperability with Windows PCs and servers (EC, 2005). Subject to the results of the market test, work group server developers interested in receiving interoperability information from Microsoft will be able to develop and sell their products (EC, 2005). Microsoft also recognized the need to enhance the options available to recipients by creating a range of packages of information from which they can choose according to their needs (EC, 2005). In order for the Commission to make a final assessment a trustee foreseen by the Decision would, as part of its mandate in assisting the Commission in monitoring Microsoft's compliance, provide technical advice to the Commission, including evaluating the innovative character of the protocols at stake, and identifying appropriate comparable to verify whether the remuneration that Microsoft proposes to charge is reasonable (EC, 2005).

The Commission appointed Professor Neil Barrett, as the Trustee to provide technical advice to the Commission on issues relating to Microsoft's compliance with the Commission's decision (EC, 2005). The Decision foresaw a Monitoring Trustee to assist the Commission in monitoring Microsoft's compliance with the Decision. The Decision required that the Monitoring Trustee must be independent of Microsoft and must possess the necessary qualifications to carry out his mandate and have the possibility to hire expert advisors to assist him in carrying out tasks within his mandate (EC, 2005). The Monitoring Trustee's role is to provide impartial expert advice to the Commission on compliance issues (EC, 2005). In accordance with the terms of the Decision, Microsoft submitted several candidates for the position of Monitoring Trustee. The Commission examined the candidates in terms of expertise and impartiality and determined that Professor Barrett was the most qualified (EC, 2005).

4.1.3 Secondary Hearings & Decision

The Commission issued a Statement of Objections against Microsoft for its failure to comply with certain of its obligations under the Commission decision (EC, 2005). One of the remedies imposed by the decision was for Microsoft to disclose complete and accurate interface documentation which would allow non-Microsoft workgroup servers to achieve full interoperability with Windows PCs and servers (EC, 2005). The Statement of Objections indicated that the Commission's preliminary view, supported by two reports from the Monitoring Trustee, was that Microsoft has not provided complete and accurate specifications for the interoperability information (EC, 2005). After giving Microsoft an opportunity to reply to the Statement of Objections, the Commission may impose a daily penalty (EC, 2005). Since the decision, Microsoft has revised the interoperability information that it is obliged to disclose. However, the Commission took the preliminary view that this information is incomplete and inaccurate. This view is supported by the report of the Monitoring Trustee (EC, 2005). The commission gave Microsoft five weeks to respond to the Statement of Objections and has a right to an oral hearing. The Commission may then, after consulting the Advisory Committee of Member State Competition Authorities, decide

pursuant to Article 24(2) of Regulation 1/2003 imposing a fine on Microsoft for every day between 15 December 2005 and the date of that Article 24(2) decision (EC, 2005). The Commission may then take other steps to continue the daily fine until Microsoft complies with the decision (EC, 2005). As regards the second issue highlighted in the decision was the obligation for Microsoft to make the interoperability information available on reasonable terms, the Commission with the input of the Monitoring Trustee evaluated additional information provided by Microsoft (EC, 2005).

As a result, the Commission imposed a penalty payment of €280.5 million on Microsoft for its continued non-compliance with some of its obligations under the Commission's Decision (EC, 2006). If Microsoft continues to fail to comply, the decision also increases the amount of the daily penalty payment to €3 million per day (EC, 2006). The Commission based its conclusion on the advice of the Monitoring Trustee, who gives technical assistance to the Commission as regards Microsoft's compliance with the decision and the Commission's external technical advisors (EC, 2006). Of the two elements of non-compliance identified, the provision of complete and accurate interoperability information is a prerequisite for interoperable work group server operating systems to be developed (EC, 2006). Microsoft's non-compliance eliminated the effectiveness of the remedy, the Commission took the view that Microsoft's failure to comply in this respect should constitute the larger part of the daily penalty payment of €1.5 million for the element of non-compliance (EC, 2006).

Due to the failure, the Commission sent a Statement of Objections to Microsoft for failing to comply with certain of its obligations under the Commission decision (EC, 2007). The Statement of Objections indicated the Commission's preliminary view that there is no significant innovation in the interoperability information, rejecting 1500 pages of submissions by Microsoft from December 2005 onwards, and that the prices proposed by Microsoft were unreasonable (EC, 2007). Microsoft was given four weeks to reply to the Statement of Objections, after which the Commission might impose a daily penalty for failure to comply with the March 2004 decision. The issue of whether the interoperability information is complete and accurate was still under consideration (EC, 2007). Microsoft provided two separate licensing arrangements to companies wishing to obtain the interoperability information as foreseen by the 2004 Decision's remedy (EC, 2007). The first allowed licensees to use the protocols, but without taking a license for patents which Microsoft claims necessary. The second combined the first license with a license for the disputed patents (EC, 2007). Microsoft divided the protocols into Gold, Silver and Bronze price categories based on the claimed degree of innovation (EC, 2007). Microsoft agreed that there is a fourth category of protocols, not necessarily innovative, for which there will be no royalty. The Commission viewed that there is no innovation in the 51 protocols in the No Patent Agreement where Microsoft has claimed non-patented innovation, and that Microsoft's current royalty rates for this agreement are therefore unreasonable (EC, 2007).

This resulted in the Advisory Committee agreeing with the Commission that the workgroup server protocol program pricing principles appropriately reflect the rationale of the 2004 decision (EC, 2008). The Advisory Committee also agreed with the Commission that Microsoft’s remuneration schemes for the No Patent were not reasonable (EC, 2008). They further agreed that the Commission may fix the definitive amount of the periodic penalty payment for the non-compliance and on the period of non-compliance (EC, 2008). Finally, the Committee agreed on the definitive amount of the periodic penalty payment for Microsoft’s failure with its obligation to disclose interoperability information (EC, 2008).

The Commission decided to impose a penalty payment of €899 million on Microsoft for non-compliance with its obligations under the Commission's March 2004 decision (EC, 2008). The decision was adopted under Article 24(2) of Regulation 1/2003 and found that Microsoft charged unreasonable prices for access to interface documentation for work group servers (EC, 2008). The 2004 decision found that Microsoft had abused its dominant position under Article 82 of the EC Treaty and required Microsoft to disclose interface documentation which would allow non-Microsoft workgroup servers to achieve full interoperability with Windows PCs and servers at a reasonable price (EC, 2008). The Commission's Decision of 2004 required Microsoft to disclose complete and accurate interoperability information to developers of work group server operating systems on reasonable terms (EC, 2008). Initially, Microsoft demanded a royalty rate of 3.87% of a licensee's product revenues for a patent license and of 2.98% for a license giving access to the secret interoperability information (EC, 2008). In a statement of objections, the Commission set out its concerns regarding Microsoft's unreasonable pricing and Microsoft reduced its royalty rates to 0.7% for a patent license and 0.5% for an information license within the EEA (EC, 2008). As from 22 October 2007 Microsoft provided a license giving access to the interoperability information for a flat fee of €10 000 and an optional worldwide patent license for a reduced royalty of 0.4 % of licensees' product revenues (EC, 2008). The current decision concluded that the royalties that Microsoft charged for the information license were unreasonable and therefore failed to comply with the March 2004 Decision for three years, thus continuing their illegal practices (EC, 2008).

4.2 Microsoft Tying Case (AT. 39530)

4.2.1 Preliminary Hearings

In this case the Commission initiated a formal investigation against Microsoft in two cases of suspected abuse of dominant market position (EC, 2008). Thus, allegedly infringing Article 82 of the European Commission Treaty rules on abuse of a dominant market position (EC, 2008). Since it involved two cases, two proceedings were opened. The first opened proceedings were in the field of interoperability as a response to a complaint made by the European Committee for Interoperable Systems (ECIS). The second proceeding was opened in the field of tying of separate software products following among other things a complaint made by Opera (EC, 2008).

As for interoperability, the Court of First Instance confirmed the principles that must be respected by dominant companies as regards interoperability disclosures (EC, 2008). In the complaint by ECIS however, Microsoft is alleged to have illegally refused to disclose interoperability information across a broad range of products, including information related to its Office suite, a number of its server products, and also in relation to the so-called .NET Framework (EC, 2008). Due to that, the focus of the Commission was on all these areas, including the question whether Microsoft's new file format Office Open XML, as implemented in Office, is sufficiently interoperable with competitors' products (EC, 2008). In the tying of separate software products, the Court of First Instance confirmed the principles that must be respected by dominant companies (EC, 2008). In the complaint by Opera (a competing browser vendor), Microsoft allegedly engaged in illegal tying of its Internet Explorer product to its dominant Windows operating system. The complaint alleged that there is ongoing competitive harm from Microsoft's practices, in view of new proprietary technologies that Microsoft has allegedly introduced in its browser that would reduce

compatibility with open internet standards, and therefore hinder competition (EC, 2008). In addition, allegations of tying up other separate software products by Microsoft, including desktop search and Windows Live have been brought to the Commission's attention (EC, 2008). Due to that, the focus of the Commission was on the allegations that a range of products have been unlawfully tied to sales of Microsoft's dominant operating system (EC, 2008).

In order for the Commission to open and proceed with the case, the Commission used Article 11(6) of Council Regulation No 1/2003 and article 2(1) of Commission Regulation No 773/2004 as the legal base of this procedural step (EC, 2008). Article 11(6) of Regulation No 1/2003 provides that the initiation of proceedings relieves the competition authorities of the Member States of their authority to apply the competition rules laid down in Articles 81 and 82 of the Treaty (EC, 2008). Article 16(1) provides that national courts must avoid giving decisions that conflict with a decision contemplated by the Commission in their initiated proceedings (EC, 2008). Article 2 of Regulation No 773/2004 provides that the Commission can initiate proceedings with a view to adopting at a later stage a decision on substance according to Articles 7-10 of Regulation No 1/2003 at any point in time, but at the latest when issuing a statement of objections or a preliminary assessment notice in a settlement procedure (EC, 2008). In this case however, the Commission chose to open proceedings before those further steps (EC, 2008).

As a result, the Commission sent a Statement of Objections to Microsoft outlining the Commission's view that Microsoft's tying of its web browser Internet Explorer to its dominant client PC operating system Windows infringes Article 82 of the TFEU (EC, 2009). The Commission set out evidence and outlined its preliminary conclusion that Microsoft's tying of Internet Explorer to the Windows operating system harms competition between web browsers, undermines product innovation and ultimately reduces consumer choice (EC, 2009). From the evidence gathered during the investigation the Commission concluded that the tying of Internet Explorer with Windows, making Internet Explorer available on 90% of the world's PCs, distorts competition on the merits between competing web browsers as it provides Internet Explorer with an artificial distribution advantage which other web browsers are unable to match (EC, 2009). The Commission’s concern was that the tying shields Internet Explorer from head-to-head competition with other browsers which is detrimental to the pace of product innovation and to the quality of products which consumers ultimately obtain (EC, 2009). The Commission also concerned that the ubiquity of Internet Explorer created artificial incentives for content providers and software developers to design websites or software primarily for Internet Explorer which undermines competition and innovation (EC, 2009). Microsoft had 8 weeks to reply to the Statement of Objection and had the right to be heard in oral hearings if they wished. If the preliminary views expressed in the SO are confirmed, the Commission might impose a fine on Microsoft, require Microsoft to cease the abuse and impose a remedy that would restore genuine consumer choice and enable competition on the merits (EC, 2009).

The Commission noted Microsoft's plans for Windows 7, particularly the separation of Internet Explorer from Windows in the EEA. The Commission has suggested that consumers should be offered a choice of browser, not that Windows should be supplied without a browser at all (EC, 2009). In the Commission's Statement of Objections, the Commission suggested that consumers should be provided with a genuine choice of browsers since over 95% of consumers acquire Windows pre-installed on a PC (EC, 2009). Which makes it particularly important for ensuring consumer choice through the computer manufacturer

channel (EC, 2009). Since the retail sales stood for less than 5% of the total sales, the Commission suggested that consumers should be provided with a choice of web browsers (EC, 2009). Microsoft on the other hand decided to supply retail consumers with a version of Windows without a web browser at all, which rather than giving more choice to the consumers, Microsoft chose to provide less (EC, 2009). The Commission concluded that Microsoft's proposal may potentially be positive for sales to computer manufacturers by noting that computer manufacturers would be able to choose to install Internet Explorer which Microsoft will supply free of charge (EC, 2009). In the fields where the Commission concluded that Microsoft's behavior has been abusive, the Commission had to consider if the proposal would be sufficient to create consumer choice on the web browser market (EC, 2009). The Commission would, among other things, take into account the long-standing nature of Microsoft's conduct and whether the step of technical separation of Internet Explorer from Windows could be negated by other actions by Microsoft (EC, 2009).

The Commission viewed the development of new online services makes web browsers an important tool for businesses and consumers, and that the lack of consumer choice on the market would undermine innovation (EC, 2009). The specific circumstances of Microsoft's tying of IE to Windows in this case would in the Commission's view lead to significant consumer harm (EC, 2009). The Statement of Objection set that if the Commission concluded that Microsoft's conduct was abusive, any remedy needs to restore a level playing field as well as enabling consumer choice between Internet Explorer and third-party web browsers to bring the infringement to an end (EC, 2009). The Commission considered a remedy in the SO which would not require Microsoft to provide Windows to end-users without a browser and which would allow consumers to choose from different web browsers presented to them through a ballot screen in Windows (EC, 2009).

As a response to the SO Microsoft offered several commitments to the Commission. Regarding the Browser Choice Microsoft offered (EC, 2009):

- To make available a mechanism in Windows Client PC Operating Systems within the EEA that enables OEMs and end users to turn Internet Explorer off and on.
- OEMs will be free to pre-install any web browser of their choice on PCs they ship and to set any browser as the default web browser.
- Within Microsoft's PC Productivity Applications distributed in the EEA, Microsoft shall not include any icons, links or short-cuts or provide any other means to start a download or installation of a Microsoft web browser. Microsoft shall not use Windows Update to offer any new version of a Microsoft web browser to users within the EEA unless Internet Explorer is turned on the user's computer.
- Microsoft shall not retaliate against any OEM for developing, using, distributing, promoting or supporting software that competes with Microsoft web browsers, in particular by altering Microsoft's commercial relations with that OEM, or by withholding Consideration.
- Microsoft shall not enter into any agreement with an OEM that conditions the grant of any Consideration on the OEM's refraining from developing, using, distributing, promoting or supporting any software that competes with Microsoft web browsers.
- Microsoft shall not terminate a direct OEM license for Windows Client PC Operating Systems without having first given the OEM written notice of the reasons for the proposed termination and not less than thirty days' opportunity to cure.

With regards to the Browser Ballot Screen, Microsoft offered (EC, 2009):

- To distribute a Ballot Screen software update to users within the EEA of Windows XP, Windows Vista and Windows Client PC Operating Systems, by means of Windows Update.
- The Ballot Screen will give the users who have Internet Explorer set as their default web browser an opportunity to choose whether and which competing web browsers to install in addition to the ones they already have.
- The Ballot Screen software update will be distributed and installable via Windows Update in a manner that is designed to bring about installation of this update at a rate that is as least as high as that for the most recent version of Internet Explorer offered via Windows Update.
- That nothing in the design and implementation of the Ballot Screen and the presentation of competing web browsers will express a bias for a Microsoft web browser or any other web browser or discourage the user from downloading and installing additional web browsers via the Ballot Screen and making a web browser competing with a Microsoft web browser the default.
- The Ballot Screen will be populated with the 12 most widely used web browsers that run on Windows based on usage share in the EEA as measured semi-annually by a source commonly agreed between Microsoft and the Commission.
- The Ballot Screen will in a horizontal line and in an unbiased way display icons of and basic identifying information on the web browsers.
- The Ballot Screen will prominently display the final releases of the five web browsers with the highest usage share in the EEA.
- Microsoft would provide means for the contents of the Ballot Screen, to be updated monthly.
- To ensure that all the Windows APIs on which Internet Explorer relies are disclosed in a complete, accurate and timely manner.

The duration of the commitments was 5 years, and the Commission welcomed the proposals and would further investigate its practical effectiveness of ensuring consumer choice (EC, 2009). The Commission believed that the offered commitments had the potential to give European consumers real choice over how they access and use the internet.

4.2.2 Secondary Hearings & Decision

The Commission also invited comments on the commitments from consumers, software companies, computer manufacturers and on an improved proposal by Microsoft to give present and future users of the Windows PC operating system a greater choice of web browsers (EC, 2009).

Following the comments of the Commission, the Commission conducted a market test to decide to adopt a decision which would make the commitments legally binding on Microsoft. Following the market test, the Commission came to the conclusion that there are no grounds for action and that the proceedings should be brought to an end (EC, 2009). The Advisory Committee agreed with the Commission that the commitments offered by Microsoft are suitable, necessary and proportionate to meet the Commission’s concerns (EC, 2009). Under the commitments approved by the Commission, Microsoft would make available for five years in the EEA a Choice Screen enabling users of Windows XP, Windows Vista and Windows 7 to choose their own web browsers in addition to, or instead of, Microsoft's browser Internet Explorer. The commitments also provided that computer manufacturers

would be able to install competing web browsers, set those as default and turn off Internet Explorer (EC, 2009).

PC users would get to choose between Internet Explorer and competing web browsers, ensuring competition on the merits and allowing consumers to benefit from technical developments and innovation (EC, 2009). The commitments allow the Commission to review the commitments for a period of two years. Microsoft would also report to the Commission on the implementation of the commitments and under certain conditions make adjustments to the Choice Screen upon the request of the Commission (EC, 2009).

The Commission reopened its proceedings against Microsoft to investigate if Microsoft failed to comply with the commitments they offered to the Commission, offering users a choice screen enabling them to easily choose their preferred web browser (EC, 2012). The commission received information that Microsoft failed to roll out the choice screen with Windows 7 Service Pack 1. Microsoft indicated in its annual compliance report to the Commission that it was in compliance with its commitments. Millions of Windows users in the EU have not seen the choice screen (EC, 2012).

A Statement of Objections was sent by the Commission to Microsoft on non-compliance with browser choice commitments, after the Commission's view that Microsoft failed to comply with its commitments to offer users a choice screen enabling them to easily choose their preferred web browser (EC, 2012). The Advisory Committee agreed with the assessment of the Commission that Microsoft failed to comply with their commitments to the Commission (EC, 2012). The Advisory Committee also agreed with the fine the Commission intended to impose on Microsoft.

The Commission concluded that 15 million users were affected by Microsoft's failure to comply with section 2 of the commitments during the 14 months of the failure of Microsoft (EC, 2013). To ensure that the fine has its intended effect, the commission took the size and resources of Microsoft into account (EC, 2013). This was done by taking into account that Microsoft's turnover in the fiscal year from July 2011 to June 2012 and that the turnover for the last full business year was €55, 088 million (EC, 2013). The Commission set the level of the fine at €561 000 000 for failing to comply with the commitments to offer users a browser choice screen enabling them to easily choose their preferred web browser (EC, 2013). The sum of the fine corresponded to 1,02% of Microsoft's turnover in the fiscal year between July 2011 to June 2012 (EC, 2013).

In 2009, the Commission had made these commitments legally binding on Microsoft until 2014. The Commission found that Microsoft failed to roll out the browser choice screen with its Windows 7 Service Pack 1 from May 2011 until July 2012. 15 million Windows users in the EU therefore did not see the choice screen during this period. Microsoft acknowledged that the choice screen was not displayed during that time (EC, 2013).

In December 2009, the Commission had made legal binding on Microsoft commitments offered by Microsoft to address competition concerns related to the tying of their web browser, Internet Explorer, to its dominant client PC operating system Windows. Specifically, Microsoft committed to make available for five years in the EEA a choice screen that enables users of the Windows operating system to choose in an informed and unbiased manner which web browser they wanted to install in addition to, or instead of, Microsoft's web browser (EC, 2013). The choice screen was provided as of 2010 to European

Windows users who have Internet Explorer set as their default web browser. While it was implemented, the choice screen was very successful with users, where 84 million browsers were downloaded through it (EC, 2013). Back then, it was the first time that the Commission fined a company for non-compliance with a commitment's decision (EC, 2013). In the calculation of the fine the Commission took into account the gravity and duration of the infringement, the need to ensure a deterrent effect of the fine and, as a mitigating circumstance, the fact that Microsoft has cooperated with the Commission and provided information which helped the Commission to investigate the matter efficiently (EC, 2013).

4.3 Google Search Shopping Case (AT. 39740)

4.3.1 Preliminary Hearings

In this case the Commission received 17 formal complaints by several search service providers about being unfavorably treated of their services in Google's unpaid and sponsored search results coupled with a preferential placement of Google's own services (EC, 2010). This was allegedly done by lowering the ranking of unpaid search results of competing services which are specialized in providing users with specific online content such as price comparisons and by preferential placement to the results of its own vertical search services in order to shut out competing services (EC, 2010). Google was also accused of lowering the Quality Score for sponsored links of competing vertical search services. The Quality Score is one of the factors that determine the price paid to Google by advertisers (EC, 2010). Google was also alleged to have imposed exclusivity obligations on advertising partners, preventing them from placing certain types of competing ads on their web sites, as well as on computer and software vendors, with the aim of shutting out competing search tools (EC, 2010). Google was also accused of putting restrictions on the portability of online advertising campaign data to competing online advertising platforms (EC, 2010).

The Commission concluded by the allegations that Google may have violated Article 101 and/or Articles 102 of the TFEU by abusing their dominant position (EC, 2010). Due to the favorable treatment, within Google's web search results, of links to Google's own specialized web search services as compared to links to competing specialized web search services. The use by Google without consent of original content from third party web sites in its own specialized web search services. The agreements that oblige third party websites (publishers) to obtain all or most of their online search advertisements from Google. And finally, the contractual restrictions on the transferability of online search advertising campaigns to rival search advertising platforms and the management of such campaigns across Google's Adwords and rival search advertising platforms. This made the Commission committed to open an antitrust investigation against Google into the allegations made in the complaints.

Google's internet search engine provides two types of results when people are searching for information. These are unpaid search results, which are sometimes also referred to as "natural", "organic" or "algorithmic" search results, and third party advertisements shown at the top and at the right hand side of Google's search results page, the so called paid search results or sponsored links (EC, 2010). The Commission feared that the alleged practices could harm consumers by reducing their choice and stifling innovation in the fields of specialized search services and online search advertising (EC, 2013).

As a result, the Commission seeked feedback on commitments offered by Google to address competition concerns. This is done in order to explore the possibility of a settled outcome with Google on its four competition concerns (EC, 2013). The Commission invited comments from interested parties on commitments offered by Google in relation to online search and search advertising. Following the Commission's concerns regarding the alleged actions of Google in the markets for web search, online search advertising and online search advertising intermediation in the EEA. Google made proposals to try to address the concerns of the Commission (EC, 2013). In this step the interested parties have the option to submit their comments on the offered commitments from a company within one month. Which the Commission takes into account later in the analysis of Google's commitment proposals. If the Commission concludes that the offered commitments address the four competition concerns, the Commission may decide to make them legally binding on Google (EC, 2013). The possibility for a company subject to an antitrust investigation to propose commitments which the Commission can decide to make legally binding was established in 2004 by Article 9 of the EU Antitrust Regulation (Regulation 1/2003). Since this possibility was established, the Commission has taken 30 decisions making such commitments legally binding on companies (EC, 2013). The Commission argues that using this possibility may be particularly useful to swiftly restore competitive conditions on a market. Such markets may for example include fast-moving markets in the IT sector (EC, 2013).

As a response to the concerns of the Commission, Google offered a number of commitments to address the four competition concerns. Those proposed commitments are (EC, 2013):

1. To label promoted links to its own specialized search services so that users can distinguish them from natural web search results.

   To clearly separate the promoted links from other web search results by clear graphical features.

   To display links to three rival specialized search services, close to its own services, in a place that is clearly visible to users.

2. To offer all websites the option to opt-out from the use of all their content in Google's specialized search services, while ensuring that any opt-out does not unduly affect the ranking of those web sites in Google's general web search results.

   To offer all specialized search websites that focus on product search or local search the option to mark certain categories of information in such a way that such information is not indexed or used by Google.

   To provide newspaper publishers with a mechanism allowing them to control on a web page per web page basis the display of their content in Google News.

3. To no longer include in its agreements with publishers any written or unwritten obligations that would require them to source online search advertisements exclusively from Google.
4. To no longer impose obligations that would prevent advertisers from managing search advertising campaigns across competing advertising platforms.

The offered proposals would be valid for a period of 5 years and covered the EEA. The implementation of the proposed commitments would also be monitored by an independent Monitoring Trustee from the Commission.

4.3.2 Secondary Hearings & Decision

After submitting the commitments, they will be subject to a market test of one month. Complainants, third parties and members of the public are therefore able to comment on the commitments, and the extent to which they address the Commission's four concerns (EC, 2013). The Commission studies the feedback and takes into account in their analysis whether the proposed commitments address the competition concerns. The Commission also assesses whether the commitments may need to be improved to adequately address the four competition concerns that have been identified. If the Commission concludes that their concerns are not addressed by the proposed commitments by the company, the Commission would then continue its investigation through the normal antitrust procedure (EC, 2013). If the commitments form a satisfactory solution to the competition concerns of the Commission following the market test, the Commission may make them legally binding on Google by way of a Commitments Decision, the one called Article 9 procedure (EC, 2013). Such a decision does not conclude that there is an infringement of EU antitrust rules but would legally bind Google to respect the commitments offered (EC, 2013). If the concerned company breaks their proposed commitments, the Commission has the power to impose a fine of up to 10% of the company’s annual worldwide turnover.
The Commission has the right to reject the offered proposals three times. If the proposals were again unsatisfactory, the company and the Commission are obliged to go in another direction. In this case Google's previous proposals were rejected twice (EC, 2014). The negotiations thereafter focused on how Google would ensure that rival specialized search services can fairly compete with Google's services. The Commission’s concern was the favorable treatment of Google's own services on its page. The competitors' results which are potentially as relevant to the user as Google's own services could be significantly less visible or not directly visible, leading to an undue diversion of internet traffic (EC, 2014). The three main issues have been that, firstly the importance of the choice of visual formats in attracting user clicks, it is essential that the presentation of rival links is comparable to that of the Google services. Secondly the speed with which Google develops its services, that comparability of presentation of rival links has to be ensured dynamically over time. Which means that if Google improves the presentation of its services, it must do the same with the links of the rivals (EC, 2014). Lastly, in a fast moving market, any commitments must retain their relevance throughout their lifetime. This means that any new vertical search services developed by Google must also be subject to the commitments (EC, 2014).

Google agreed to guarantee that whenever it promotes its own specialized search services on its web page, the services of three rivals, selected through an objective method, will also be displayed in a way that is clearly visible to users and comparable to the way in which Google displays its own services (EC, 2014). That principle would not only apply for existing specialized search services, but also to changes in the presentation of those services and future services. The Commission would in the coming period inform the complainants in this case of the reasons why it believes Google's offer is capable of addressing the Commission's concerns. The complainants would then have the opportunity to make their views known to the Commission before the Commission takes a final decision on whether to make Google's commitments legally binding on Google (EC, 2014). After analyzing the last proposals from

Google, intense negotiations further improved Google's commitments which enabled the Commission to assess that the new proposals are capable of addressing the competition concerns. Those revised commitments enabled the Commission to move forward towards a decision based on the commitments (EC, 2014).

As a result, the Commission sent Google a Statement of Objections under EU antitrust rules alleging systematic favoring its own comparison shopping service. The Commission's preliminary view was that Google abused their dominant position in breach of EU antitrust rules by systematically favoring its own comparison shopping product in its general search results pages in the EEA (EC, 2015). The Commission was concerned that users do not see the most relevant results in response to queries to the detriment of consumers and rival comparison shopping services, as well as stifling innovation (EC, 2015). Since 2002, Google has also been active in providing comparison shopping services, which allow consumers to search for products on online shopping websites and compare prices between different vendors. The first product it offered, Froogle, was replaced by Google Product Search, which in turn was replaced by its current product Google Shopping (EC, 2015). The Statement of Objections outlined that the market for general search and comparison shopping are two separate markets. In the latter market, Google faced competition from a number of alternative providers (EC, 2015).

The Statement of Objections alleged that Google treats and has treated more favorably, in its general search results pages, Google's own comparison shopping service Google Shopping and its predecessor service Google Product Search compared to rival comparison shopping services (EC, 2015). The Commission concluded that (EC, 2015):

- Google systematically positions and prominently displays its comparison shopping service in its general search results pages, irrespective of its merits.

- Google did not apply to its own comparison shopping service the system of penalties, which it applies to other comparison shopping services on the basis of defined parameters, and which can lead to the lowering of the rank in which they appear in Google's general search results pages.

- Froogle, Google's first comparison shopping service, did not benefit from any favorable treatment, and performed poorly.

- As a result of Google's systematic favoring of its subsequent comparison shopping services Google Product Search and Google Shopping, experienced higher rates of growth, to the detriment of rival comparison shopping services.

- Google's conduct has a negative impact on consumers and innovation.

The Statement of Objections took the preliminary view that in order to remedy the conduct, Google should treat its own comparison shopping service and those of rivals in the same way. This would not interfere with either the algorithms Google applies or how it designs its search results pages. It would, however, mean that when Google shows comparison shopping services in response to a user's query, the most relevant service or services would be selected to appear in Google's search results pages (EC, 2015).

A second Statement of Objection was sent due to the Commission's view that Google abused its dominant position by artificially restricting the possibility of third party websites to display search advertisements from Google's competitors (EC, 2016). The supplementary Statement of Objections outlined a broad range of additional evidence and data that reinforces the Commission's preliminary conclusion that Google has abused its dominant position by systematically favoring its own comparison shopping service in its general search results (EC, 2016). The additional evidence was related to the way Google favored its own comparison shopping service over those of competitors. In addition, the Commission examined Google's argument that comparison shopping services should not be considered in isolation, but together with the services provided by merchant platforms, such as Amazon and eBay (EC, 2016). The supplementary Statement of Objections found that even if merchant platforms are included in the market affected by Google's practices, comparison shopping services was a significant part of that market and that Google's conduct has weakened or even marginalized competition from its closest rivals (EC, 2016).

Google's flagship product is the Google search engine, which provides search results to consumers, who pay for the service with their data. Almost 90% of Google's revenues stem from adverts, such as those it shows consumers in response to a search query (EC, 2017). In 2004 Google entered the separate market of comparison shopping in Europe, with a product that was initially called Froogle, and then re-named Google Product Search in 2008 and since 2013 has been called Google Shopping. It allows consumers to compare products and prices online and find deals from online retailers of all types, including online shops of manufacturers, platforms, and other resellers (EC, 2017). When Google entered comparison shopping markets with Froogle, there were already a number of established players. Google, however, was aware that Froogle's market performance was relatively poor (EC, 2017).

Comparison shopping services rely to a large extent on traffic to be competitive. More traffic leads to more clicks and generates revenue. Furthermore, more traffic also attracts more retailers that want to list their products with a comparison shopping service. Given Google's dominance in general internet search, its search engine is an important source of traffic for comparison shopping services (EC, 2017).

In 2008, Google began to implement a strategy change in European markets to push its comparison shopping service. The strategy relied on Google's dominance in general internet search, instead of competition on the merits in comparison shopping markets. Resulting in Google's comparison shopping service becoming more visible to consumers in Google's search results, whilst rival comparison shopping services are less visible (EC, 2017). Evidence shows that consumers click far more often on results that are more visible. Even on a desktop, the ten highest-ranking generic search results on page 1 together generally receive approximately 95% of all clicks on generic search results. The first result on page 2 of Google's generic search results receives only about 1% of all clicks (EC, 2017). This cannot just be explained by the fact that the first result is more relevant, because evidence also shows that moving the first result to the third rank leads to a reduction in the number of clicks by about 50%. The effects on mobile devices are even more pronounced given the much smaller screen size (EC, 2017).

This means that by giving prominent placement only to its own comparison shopping service and by demoting competitors, Google has given its own comparison shopping service a significant advantage compared to rivals (EC, 2017). Google's illegal practices had a significant impact on competition between Google's own comparison shopping service and

rival services. They allowed Google's comparison shopping service to make significant gains in traffic at the expense of its rivals and to the detriment of European consumers (EC, 2017). Given Google's dominance in general internet search, its search engine is an important source of traffic. As a result of Google's illegal practices, traffic to Google's comparison shopping service increased significantly, whilst rivals have suffered very substantial losses of traffic on a lasting basis (EC, 2017).

Finally, the Commission decided to fine Google an amount of €2 424 495 000 taking account of the duration and gravity of the infringement of Article 102 of the TFEU by abusing their dominant position (EC, 2017). The Commission Decision required Google to stop its illegal conduct within 90 days of the Decision and refrain from any measure that has the same or an equivalent object or effect. Google had to apply the same processes and methods to position and display rival comparison shopping services in Google's search results pages as it gives to its own comparison shopping service. If Google fails to comply with the Commission's decision, it would be liable for non-compliance payments of up to 5% of the average daily worldwide turnover of Alphabet (EC, 2017).

4.4 MasterCard Inter-Regional Fees Case (AT. 40049)

4.4.1 Preliminary Hearings

In this case the Commission opened formal proceedings to investigate the allegations that MasterCard might have been hindering competition in the EEA with their payment cards, thus breaching the EU's antitrust laws (EC, 2013). The decision to open the proceedings was due to the concerns that some of MasterCard's inter-bank fees and related practices might have been anti-competitive. In the EU, Payment cards are of crucial importance, particularly for purchases across borders or over the internet (EC, 2013). The Commission concluded that European consumers and businesses make more than 40% of their non-cash payments per year by card (EC, 2013). This makes it a priority for the European Commission to prevent competition distortions in inter-bank arrangements on fees and other conditions.
Back in 2007, the Commission prohibited some of MasterCard's inter-bank fees. The Commission were now investigating whether (EC, 2013):

1. Inter-bank fees in relation to payments made by cardholders from non-EEA countries as opposed to fees for cross border transactions within the EEA that were already prohibited in 2007.

2. All rules on cross-border acquiring in the MasterCard system that limit the possibility for a merchant to benefit from better conditions offered by banks established elsewhere in the internal market.

3. Related business rules or practices of MasterCard which amplify the Commission's competition concerns.

The above mentioned fees and practices restrict competition (EC, 2013). Inter-bank fees are often passed on to merchants resulting in higher overall fees for them. This ultimately slows down cross-border business and harms EU consumers (EC, 2013). In addition to the antitrust enforcement action, the Commission intended to propose regulations on inter-bank fees for card payments that ensure legal certainty and a durable level playing field for all providers

(EC, 2013). The Commission feared that MasterCard's actions violated Article 101 of the TFEU, which prohibits anti-competitive agreements and decisions of associations of undertakings (EC, 2013). This made the Commission committed to open an antitrust investigation against Google into the allegations made in the complaints.

A Statement of Objections was sent by the Commission to MasterCard outlining the Commission's view that MasterCard's rules prevent banks from offering lower interchange fees to retailers based in another Member State of the EEA, where interchange fees may be higher (EC, 2015). Resulting in retailers unable to benefit from lower fees elsewhere and competition between banks cross-border may be restricted, in breach of European antitrust rules (EC, 2015). The Statement of Objections alleged that MasterCard's interchange fees for transactions in the EU using MasterCard cards issued in other regions of the world breach European antitrust rules by setting an artificially high minimum price for processing these transactions (EC, 2015). Every time a consumer uses a payment card in a shop or online, the bank of the retailer pays a fee called an interchange fee to the cardholder's bank (EC, 2015). The acquiring bank passes the interchange fee on to the retailer who includes it, like any other cost in the final price he charges consumers for his products or services (EC, 2015). Thus, the interchange fees are passed on to all consumers regardless of their paying method (EC, 2015).

A Statement of Objections is a formal step in Commission antitrust investigations in which the Commission informs the parties in writing of the objections raised against them (EC, 2015). The addressee of a Statement of Objections can reply in writing and may also request an oral hearing to present its comments on the case. The Commission may then take a decision on whether the conduct addressed in a Statement of Objections is compatible or not with European antitrust rules (EC, 2015).
The Commission concerned that banks use MasterCard to set on their behalf the interchange fees that apply between them (EC, 2015). The Statement of Objections raised two concerns (EC, 2015):

- Interchange fees vary considerably from a Member State to another. MasterCard's rules prevent retailers in a high-interchange fee country from benefiting from lower interchange fees offered by an acquiring bank located in another Member State. The Commission is concerned that MasterCard's rules on cross-border acquiring limit banks' possibilities to compete cross-border on price for services to receive card payments and so restrict competition in breach of EU antitrust rules, leading to higher prices for retailers and consumers alike.

- The second concern of the Commission is that the high levels of MasterCard's "inter-regional interchange fees" are not justified. These fees are paid by an acquiring bank for transactions made in the EU with MasterCard cards issued in other regions of the world. For example, the fees paid by an acquiring bank when a Chinese tourist uses his card to pay his restaurant bill in Brussels are up to five times higher than those paid when a consumer uses a card issued in Europe. As these inter-regional fees represent hundreds of millions of euros each year, the Commission is concerned that these high inter-regional fees increase prices for retailers and may in turn lead to higher prices for products and services for all consumers, and not only those using cards issued outside the EU or paying with cards.

To address the concerns of the Commission, Mastercard offered to reduce the inter-regional MIFs by at least 40% (EC, 2018).

1. To reduce the current level of inter-regional interchange fees to or below the following binding caps, within six months of a Commission Decision making the commitments legally binding (EC, 2018):

For card payments carried out by the cardholder in a shop 0.2% of the value of the transaction for debit cards, and 0.3% of the value of the transaction for credit cards.
For online payments 1.15% of the value of the transaction for debit cards, and 1.50% of the value of the transaction for credit cards.

2. To refrain from circumventing these caps by any measure equivalent in object or effect to interregional MIFs.

3. To publish all inter-regional interchange fees covered by the commitments in a clearly visible manner on their respective websites.

The commitments made by MasterCard would apply for a period of five years and six months. A trustee would be in charge of monitoring the implementation of the commitments (EC, 2018). The Commission invited all stakeholders to submit their views on the commitments within one month of their publication in the EU's Official Journal. The Commission would then take a final view on whether the commitments address its competition concerns or not (EC, 2018).

4.4.2 Secondary Hearings & Decision

The views of the Advisory Committee were welcomed by the Commission, who agreed with the Commission that the anti-competitive behavior covered by the draft decision amounted to a decision by an association of undertakings within the meaning of Article 101 of the TFEU and Article 53 of the EEA Agreement (EC, 2019). The Advisory committee agreed with the Commission views that the action of MasterCard infringes Article 101 of the TFEU and Article 53 of the EEA Agreement. The Advisory Committee also agreed with the Commission regarding the fees and penalties to be imposed on MasterCard (EC, 2019).

MasterCard was convicted by the Commission for infringing Article 101 of the TFEU and Article 53 of the EEA Agreement (EC, 2019). As a result of the conviction the Commission imposed fines on MasterCard. While setting fines, the Commission considered the value of the sales of MasterCard's acquiring members and took into account the turnover generated during the period of the infringement (EC, 2019). The Commission also took into account that cross-border acquiring rules restricted border trade, hindered the achievement of the internal market and covered the EEA, as well as the time duration of the infringement (EC, 2019). The Commission concluded that due to the cooperation of MasterCard beyond their legal obligation during the investigation, the fine was reduced by 10% amounting to the final amount of €570 566 000 (EC, 2019).

The Commission made the commitments offered by Mastercard legally binding under the antitrust rules of the EU (EC, 2019). MasterCard would reduce their multilateral interchange fees for payments in the EEA with consumer cards issued elsewhere by 40% (EC, 2019).

When a consumer uses a debit or a credit card in a shop or online, the bank of the retailer pays a multilateral interchange fee to the cardholder's bank. The acquiring bank passes this fee to the retailer who includes it, like any other cost, in the final prices to all consumers, even to those who do not use cards. The Mastercard network sets the level of MIFs applied by their licensee banks between them and in the absence of bilateral agreements between the banks, the level of the MIFs set by Mastercard networks applies by default (EC, 2019). The retailers and consumers thus had no means of influencing the level of MIFs. The commitments offered by MasterCard to reduce their inter-regional MIFs by 40% would likely reduce the costs for retailers in the EEA when they accept payments made with cards issued outside the EEA. Resulting in lower prices to the benefit of European consumers (EC, 2019).

The Commission concerned that inter-regional MIFs may anti-competitively increase prices for European retailers accepting payments from cards issued outside the EEA resulting in higher prices for consumer goods and services in the EEA (EC, 2019).

MasterCard committed to reduce the inter-regional MIFs by an average of 40% as well as (EC, 2019):

1. Reduce the current level of inter-regional interchange fees to or below the following binding caps, within six months:

    - For card payments carried out by the cardholder in a shop:

    ● 0.2% of the value of the transaction for debit cards.
    ● 0.3% of the value of the transaction for credit cards.

    - For online payments:

    ● 1.15% of the value of the transaction for debit cards.
    ● 1.50% of the value of the transaction for credit cards.

2. Refrain from circumventing these caps by any measure equivalent in object or effect to inter-regional MIFs.
3. Publish all inter-regional interchange fees covered by the commitments in a clearly visible manner on their respective websites.

The commitments made by MasterCard would apply for five years and six months and would cover inter-regional interchange fees applied to payments made with the Mastercard, Maestro, credit and debit card brands. A trustee will be appointed by the Commission to monitor the implementation of the commitments (EC, 2019).

The Commission consulted market participants to verify the appropriateness of the proposed commitments. The results and the analysis of the market test concluded in the satisfaction of the Commission to the commitments offered by MasterCard due to the addressing of the Commission’s concerns (EC, 2019). The Commission also concluded that the proposed inter-regional MIFs caps, the cost for retailers of accepting inter-regional consumer card payments would not exceed the cost of accepting alternative means for such payments, such as cash for “Card Present Transactions” and e-wallets funded via bank transfers for “Card Not Present Transactions” (EC, 2019).

4.5 Google Android Case (AT. 40099)

4.5.1 Preliminary Hearings

In this case the Commission opened formal proceedings against Google to investigate in-depth if the company's conduct in relation to its Android mobile operating system as well as applications and services for smartphones and tablets has breached EU antitrust rules (EC, 2015). The investigation was the result of the Commission receiving two complaints regarding Android. The Commission's goal was to assess if, by entering into anti-competitive agreements and/or by abusing a possible dominant position, Google has illegally hindered the development and market access of rival mobile operating systems, mobile communication applications and services in the EEA (EC, 2015). Google has since 2005 led the development of the Android mobile operating system. Over the years, Android became the leading operating system for smart mobile devices in the EEA, to the extent that the majority of smartphones in Europe are based on Android (EC, 2015). Android is an open-source mobile operating system, enabling it to be freely used and developed by anyone. The majority of smartphone and tablet manufacturers use the Android operating system in combination with a range of Google's proprietary applications and services. In order to obtain the right to install these applications and services on their Android devices, manufacturers need to enter into certain agreements with Google (EC, 2015).

The reason behind the investigation carried out by the Commission was to assess if certain conditions in Google's agreements associated with the use of Android and Google's proprietary applications and services breach EU antitrust rules. The investigation would in that stage focus on three allegations (EC, 2015):

1. Whether Google has illegally hindered the development and market access of rival mobile applications or services by requiring or incentivizing smartphone and tablet manufacturers to exclusively pre-install Google's own applications or services.

2. Whether Google prevented smartphone and tablet manufacturers to install Google's applications and services on some of their Android devices from developing and marketing modified and potentially competing versions of Android on other devices, thereby hindering the development and market access of rival mobile operating systems and mobile applications or services.

3. Whether Google hindered the development and market access of rival applications and services by tying or bundling certain Google applications and services distributed on Android devices with other Google applications, services and/or application programming interfaces of Google.

The Commission then informed Google that they have abused their dominant position by imposing restrictions on Android device manufacturers and mobile network operators. The Commission's view was that Google implemented a strategy on mobile devices to preserve and strengthen its dominance in general internet search. The practices mean that Google Search is pre-installed and set as the default, or exclusive, search service on most Android devices sold in Europe. The practices appeared to close off ways for rival search engines to access the market, via competing mobile browsers and operating systems. In addition, they

also seemed to harm consumers by stifling competition and restricting innovation in the wider mobile space (EC, 2016).

The Commission further issued a Statement of Objection and informed Google of their assessment that Google allegedly has breached EU antitrust rules by (EC, 2016):

- Requiring manufacturers to pre-install Google Search and Google's Chrome browser and requiring them to set Google Search as default search service on their devices, as a condition to license certain Google proprietary apps.
- Preventing manufacturers from selling smart mobile devices running on competing operating systems based on the Android open source code.
- Giving financial incentives to manufacturers and mobile network operators on condition that they exclusively pre-install Google Search on their devices.

The Commission believed that the business practices of Google lead to a further consolidation of the dominant position of Google Search in general internet search services (EC, 2016). They were also concerned that the practices affect the ability of competing mobile browsers to compete with Google Chrome, and that they hinder the development of operating systems based on the Android open source code and the opportunities they would offer for the development of new apps and services (EC, 2016). The Commission viewed that this conduct harms consumers since they are not given as wide a choice as possible and because it stifles innovation (EC, 2016).

The investigation showed that it is commercially important for manufacturers of devices using the Android operating system to pre-install on those devices the Play Store, Google's app store for Android. In its contracts with manufacturers, Google has made the licensing of the Play Store on Android devices conditional on Google Search being pre-installed and set as default search service. As a result, rival search engines are not able to become the default search service on the significant majority of devices sold in the EEA. Which reduced the incentives of manufacturers to pre-install competing search apps, as well as the incentives of consumers to download such apps (EC, 2016).

In its contracts with manufacturers Google requires the pre-installation of its Chrome mobile browser in return for licensing the Play Store or Google Search. Google has also ensured that its mobile browser is pre-installed on the significant majority of devices sold in the EEA. Browsers represented an important entry point for search queries on mobile devices. By reducing manufacturers' incentives to pre-install competing browser apps and consumers' incentives to download those apps, competition in both mobile browsers and general search has been adversely affected (EC, 2016).

Android is an open-source system, meaning that it can be freely used and developed by anyone to create a modified mobile operating system, a so-called "Android fork" (EC, 2016). If a manufacturer wishes to pre-install Google proprietary apps, including Google Play Store and Google Search, on any of its devices, Google requires it to enter into an Anti-Fragmentation agreement that commits the manufacturer not to sell devices running on Android forks (EC, 2016). Google's conduct had a direct impact on consumers, by denying them access to innovative smart mobile devices based on alternative versions of the Android operating system (EC, 2016). The Commission found evidence that Google's conduct prevents manufacturers from selling smart mobile devices based on a competing Android fork which had the potential of becoming a credible alternative to the Google Android

operating system (EC, 2016). By doing so, Google has closed off a way for its competitors to introduce apps and services, particularly general search services, which could be pre-installed on Android forks (EC, 2016).

Google granted significant financial incentives to some of the largest smartphone and tablet manufacturers as well as mobile network operators on condition that they exclusively pre-install Google Search on their devices (EC, 2016). Which reduced the incentives of manufacturers and mobile network operators to pre-install competing search services on the devices they market.

The Commission concluded that Google had engaged in three practices, which aimed to cement Google's dominant position in general internet search (EC, 2018).

1. Illegal tying of Google's search and browser apps

Google offered its mobile apps and services to device manufacturers as a bundle, which included Google Play Store, the Google Search app and the Google Chrome browser. Those licensing conditions make it impossible for manufacturers to pre-install some apps but not others (EC, 2018).

The decision concluded that Google has engaged in two instances of illegal tying (EC, 2018):

- First, the tying of the Google Search app. As a result, Google has ensured that its Google Search app is pre-installed on practically all Android devices sold in the EEA. The Commission found this tying conduct to be illegal as of 2011, which is the date Google became dominant in the market for app stores for the Android mobile operating system.
- Second, the tying of the Google Chrome browser. As a result, Google has ensured that its mobile browser is pre-installed on practically all Android devices sold in the EEA. The Commission found this tying conduct to be illegal as of 2012, which is the date from which Google has included the Chrome browser in its app bundle.

Pre-installation can create a *status quo* bias. Users who find search and browser apps pre-installed on their devices are likely to stick to these apps. The Commission found evidence that the Google Search app is consistently used more on Android devices, where it is pre-installed, than on Windows Mobile devices, where users must download it. Which shows that users do not download competing apps in numbers that can offset the significant commercial advantage derived through pre-installation.

Google's practices have therefore reduced the incentives of manufacturers to pre-install competing search and browser apps, as well as the incentives of users to download such apps. This reduced the ability of rivals to compete effectively with Google (EC, 2018). The Commission also assessed Google's arguments that the tying of the Google Search app and Chrome browser were necessary, particularly to allow Google to monetize its investment in Android and concluded that these arguments were not well founded (EC, 2018).

2. Illegal payments conditional on exclusive pre-installation of Google Search

Google granted significant financial incentives to some of the largest device manufacturers and mobile network operators on condition that they exclusively pre-installed Google Search

across their entire portfolio of Android devices. Which harmed competition by significantly reducing their incentives to pre-install competing search apps (EC, 2018). The investigation revealed that rival search engines would have been unable to compensate a device manufacturer or mobile network operator for the loss of the revenue share payments from Google and still make profits. Even if the rival search engine was pre-installed on only some devices, they would have to compensate the device manufacturer or mobile network operator for a loss of revenue share from Google across all devices (EC, 2018).

3. Illegal obstruction of development and distribution of competing Android operating systems

Google prevented device manufacturers from using any alternative version of Android that was not approved by Google. To be able to pre-install on their devices Google's proprietary apps, manufacturers had to commit not to develop or sell even a single device running on an Android fork (EC, 2018). The Commission found that this conduct was abusive as of 2011, which is the date Google became dominant in the market for app stores for the Android mobile operating system (EC, 2018).

This practice reduced the opportunity for devices running on Android forks to be developed and sold. The Commission found evidence that Google's conduct prevented a number of large manufacturers from developing and selling devices based on Amazon's Android fork called "Fire OS" (EC, 2018). By doing so Google closed off an important channel for competitors to introduce apps and services, particularly general search services, which could be pre-installed on Android forks. Therefore, Google's conduct has had a direct impact on users, denying them access to further innovation and smart mobile devices based on alternative versions of the Android operating system (EC, 2018).

The Commission assessed Google's arguments that the restrictions were necessary to prevent a fragmentation of the Android ecosystem and found them not well founded. Google could have ensured that Android devices using Google proprietary apps and services were compliant with Google's technical requirements, without preventing the emergence of Android forks. Google did not provide any credible evidence that Android forks would be affected by technical failures or fail to support apps (EC, 2018).

4.5.2 Secondary Hearings & Decision

A report was sent by the Advisory Committee agreeing with the Commission’s analysis that Google had abused their dominant position regarding their Android operating system (EC, 2018). The Advisory Committee also agreed with the Commission regarding the fines to be imposed on Google for their abuse of their dominant position.

Google was found guilty by the Commission for abusing their dominant position. The Commission’s decision concluded that the three types of abuse form part of an overall strategy by Google to cement its dominance in general internet search, at a time when the importance of mobile internet was growing significantly (EC, 2018). Google's practices denied rival search engines the possibility to compete on the merits. The tying practices ensured the pre-installation of Google's search engine and browser on practically all Google Android devices and the exclusivity payments strongly reduced the incentive to pre-install competing search engines (EC, 2018). Google also obstructed the development of Android

forks, which could have provided a platform for rival search engines to gain traffic. Google's strategy also prevented rival search engines from collecting more data from smart mobile devices, including search and mobile location data, helping Google to cement its dominance as a search engine (EC, 2018).

The practices of Google harmed competition and further innovation in the wider mobile space, and not only in internet search since they prevented other mobile browsers from competing effectively with the pre-installed Google Chrome browser. Google also obstructed the development of Android forks, which could have provided a platform also for other app developers to thrive (EC, 2018).

Google was fined €4 342 865 000 taking into account the duration and gravity of the infringement. The fine was calculated on the basis of the value of Google's revenue from search advertising services on Android devices in the EEA (EC, 2018). The Commission decision required Google to end their illegal conduct in an effective manner within 90 days of the decision. At a minimum, Google had to stop and to not re-engage in any of the three types of practices. The decision also required Google to refrain from any measure that has the same or an equivalent object or effect as these practices (EC, 2018). The decision does not prevent Google from putting a reasonable, fair and objective system to ensure the correct functioning of Android devices using Google proprietary apps and services, without however affecting device manufacturers' freedom to produce devices based on Android forks (EC, 2018). If Google failed to ensure compliance with the Commission decision, it would be liable for non-compliance payments of up to 5% of the average daily worldwide turnover of Alphabet, Google's parent company (EC, 2018).

4.6 Google Search AdSense Case (AT. 40411)

4.6.1 Preliminary Hearings

After receiving five complaints, the Commission decided to initiate antitrust proceedings against Google's mother company Alphabet within the meaning of Article 11(6) of Council Regulation No 1/2003 and Article 2(1) of Commission Regulation No 773/2004 (EC, 2016). The Commission intended to investigate agreements between Google and partners of its online search advertising intermediation program AdSense (EC, 2016). The Commission sent Google a Statement of Objection informing Google of the Commission’s view that Google has abused its dominant position by artificially restricting the possibility of third party websites to display search advertisements from Google’s competitors (EC, 2016). The Commission set out in the Statement of Objections that the practices have enabled Google to protect its dominant position in online search advertising, and has also prevented existing and potential competitors, including other search providers and online advertising platforms, from entering and growing in the field (EC, 2016). Google places search ads directly on the Google search website but also on third party websites through its AdSense for Search platform (EC, 2016). These include websites of online retailers, telecom operators and newspapers, and offers a search box that allows users to search for information (EC, 2016). When users enter a search query, in addition to the search results search ads are displayed. In case the user clicks on the search ad, both Google and the third party receive a commission (EC, 2016).

The Commission considered that Google is dominant in the market for search advertising intermediation in the EEA, with market shares of around 80% in the last ten years (EC, 2016). A large proportion of Google's revenues from search advertising intermediation stems from its agreements with a limited number of large third parties, so-called Direct Partners. The Commission has concerns that in these agreements with Direct Partners, Google has breached EU antitrust rules by imposing the following conditions (EC, 2016):

- By exclusivity requiring third parties not to source search ads from Google's competitors.
- Premium placement of a minimum number of Google search ads requiring third parties to take a minimum number of search ads from Google and reserve the most prominent space on their search results pages to Google search ads. In addition, competing search ads cannot be placed above or next to Google search ads.
- Right to authorize competing ads requiring third parties to obtain Google's approval before making any change to the display of competing search ads.

The Commission took the preliminary view that the practices hinder competition on this commercially important market (EC, 2016). The Statement of Objections takes issue with the exclusivity practice as from 2006. This was gradually replaced from 2009 in most contracts by the requirement of premium placement/minimum ads and the right for Google to authorize competing ads (EC, 2016). The Commission was concerned that the practices have artificially reduced choice and stifled innovation in the market throughout the period by artificially reducing the opportunities for Google's competitors on this commercially important market, and therefore the ability of third party websites to invest in providing consumers with choice and innovative services (EC, 2016).

The Commission took note that, in the context of their antitrust proceedings, Google decided to change the conditions in its AdSense contracts with Direct Partners to give them more freedom to display competing search ads (EC, 2016). The Commission would closely monitor those changes to assess how they will impact the market and gave them10 weeks to respond to the Statement of Objections (EC, 2016).

A so-called Letter of Facts was sent by the Commission to Google, informing Google about the pre-existing evidence which Google had access to but that the Commission did not rely on in the Statement of Objection and which could be relevant to support the preliminary conclusions reached in the Statement of Objection (EC, 2019). The Commission also informed Google about new evidence that came to their attention after issuing the Statement of Objection that would support the conclusions made in the Statement of Objection (EC, 2019). The Commission also granted Google access to the Commission file containing all the documents that the Commission had obtained after the Statement of Objection until the date the Commission sent the First Letter of Facts (EC, 2019). As a response Google submitted a response to the First Letter of Facts, followed by a letter where Google requested full records of the Commission's meetings with the third parties, and later with another letter regarding the alleged implications for the case of the judgment of the European Court of Justice (EC, 2019).

4.6.2 Secondary Hearings & Decision

The Commission sent Google a second letter, a so-called Second Letter of Facts informing Google about the pre-existing evidence which Google had access to but that the Commission did not rely on in the Statement of Objection and in the First Letter of Facts and which, on further analysis of the Commission's file, would be relevant to support the conclusions reached in the Statement of Objection (EC, 2019). The Commission also informed Google about additional evidence brought to their attention after the adoption of the First Letter of Facts that could be relevant to further support the conclusions reached in the Statement of Objection (EC, 2019). The Commission also gave Google access to all documents that the Commission had obtained after the First Letter of Facts until the date of the Second Letter of Facts (EC, 2019). The Commission also provided Google with a list of Google's agreements with direct partners that the Commission had taken into account in their calculations presented in the Second Letter of Facts (EC, 2019). As a response, Google sent a Second Letter of Facts to the Commission (EC, 2019). Later the Commission provided Google with minutes of the meetings and calls that the Commission had with the third parties during the investigation (EC, 2019).

Websites such as newspaper websites, blogs or travel sites aggregators often have a search function embedded. When a user search using this search function, the website delivers both search results and search adverts, which appear alongside the search result (EC, 2019). Through AdSense for Search, Google provides these search adverts to owners of publisher websites (EC, 2019). Google acts as an intermediary, like an advertising broker, between advertisers and website owners that want to profit from the space around their search results pages. Therefore, AdSense for Search works as an online search advertising intermediation platform (EC, 2019). Google was the strongest player in online search advertising intermediation in the EEA, with a market share above 70% from 2006 to 2016. In 2016 Google held market shares above 90% in the national markets for search and above 75% in most of the national markets for online search advertising, where it is present with its flagship product, the Google search engine, which provides search results to consumers (EC, 2019).

It is not possible for competitors in online search advertising such as Microsoft and Yahoo to sell advertising space in Google's own search engine results pages. Therefore, third-party websites represent an important entry point for these other suppliers of online search advertising intermediation services to grow their business and try to compete with Google (EC, 2019). Google's provision of online search advertising intermediation services to the most commercially important publishers took place through agreements that were individually negotiated. The Commission reviewed hundreds of such agreements in the course of its investigation and found that (EC, 2019):

- Starting in 2006, Google included exclusivity clauses in its contracts. This meant that publishers were prohibited from placing any search adverts from competitors on their search results pages. The decision concerns publishers whose agreements with Google required such exclusivity for all their websites.
- As of March 2009, Google gradually began replacing the exclusivity clauses with so-called Premium Placement clauses. These required publishers to reserve the most profitable space on their search results pages for Google's adverts and request a minimum number of Google adverts. As a result, Google's competitors were prevented from placing their search adverts in the most visible and clicked on parts of the websites' search results pages.

- As of March 2009, Google also included clauses requiring publishers to seek written approval from Google before making changes to the way in which any rival adverts were displayed. This meant that Google could control how attractive, and therefore clicked on, competing search adverts could be.

Google first imposed an exclusive supply obligation, which prevented competitors from placing any search adverts on the commercially most significant websites. Then, Google introduced what it called a relaxed exclusivity strategy aiming at reserving for its own search adverts the most valuable positions and at controlling competing adverts' performance (EC, 2019). Google's practices covered over half the market by turnover throughout most of the period. Google's rivals were not able to compete on the merits, because there was an outright prohibition for them to appear on publisher websites or because Google reserved for itself by far the most valuable commercial space on those websites, while simultaneously controlling how rival search adverts could appear (EC, 2019).

Google's practices amount to an abuse of Google's dominant position in the online search advertising intermediation market by preventing competition on the merits.

The Advisory Committee then sent its report to the Commission agreeing that Google held a dominant position in the market for online search advertising intermediation (EC, 2019). The Advisory Committee also agreed that the exclusivity clause in contracts with all sites direct partners constituted an abuse of Google’s dominant position in the EEA market for online search advertising intermediation (EC, 2019). The Advisory Committee agreed with the Commission that the Premium Placement and Minimum Google Ads Clause constituted an abuse of Google's dominant position in the EEA market for online search advertising intermediation (EC, 2019). The Advisory Committee agreed with the Commission that the Authorizing Equivalent Ads Clause constituted an abuse of Google's dominant position on the EEA market for online search advertising intermediation (EC, 2019). The Advisory Committee agreed with the Commission's assessment that all the mentioned conduct constitutes a single and continuous infringement of Article 102 of the TFEU and Article 54 of the EEA Agreement. The Advisory Committee agreed with the Commission that a fine should be imposed on Google, and that Google’s gross revenues generated in the EEA by Google’s online search advertising intermediation activity should be taken into account (EC, 2019). The Advisory Committee also agreed with the Commission on the amount of the fine set.

The Commission concluded that the duration of the infringement was 10 years and eight months (EC, 2019). The conclusion was not affected by Google's claims that the implementation of an agreement within the EEA does not occur because a Direct Partner has a presence in the EEA, and that the Commission did not show that Google had a strategy to prevent other search advertising intermediaries from competing against them (EC, 2019). The implementation test was satisfied not because direct partners have a presence in the EEA but because they are active within the EEA. Direct partners target audiences in the EEA and receive revenue from clicks on search ads made by users located in the EEA (EC, 2019). For the purpose of establishing jurisdiction the Commission is not required to show a strategy aimed at preventing competitors from competing against Google (EC, 2019).

The Commission considered the single and continuous infringement and/or any of the three separate infringements constitutes the single and continuous infringement and the Commission concluded that Google is required to bring them immediately to an end (EC,

2019). But also, to refrain from any measure having an equivalent object or effect which included (EC, 2019):

(1) Google cannot make the sourcing of Google search ads conditional on requirements that require Direct Partners to reserve the most prominent space on their search results pages covered by the Google Service Agreements for Google search ads.

(2) Google cannot make the sourcing of Google search ads conditional on requirements that require Direct Partners to fill the most prominent space on their search results pages covered by the Google Service Agreements with a minimum number of Google search ads.

(3) Google cannot make the signing of a Google Service Agreement conditional on a Direct Partner's acceptance of conditions that require Direct Partners to seek Google's approval before making any change to the display of competing search ads.

(4) Google cannot punish or threaten Direct Partners that decide to source competing search ads.

The Commission concluded that Google should bring the infringement immediately to an end and refrain from any measure having an equivalent object or effect that is not affected by Google's claim that no remedy is required because Google has already ceased the Infringement (EC, 2019). Pursuant to Article 23(2)(a) of Regulation (EC) No 1/2003 and Article 5 of Council Regulation (EC) No 2894/94, the Commission decided to impose fines on Google, since they intentionally infringed Article 102 of the Treaty or Article 54 of the EEA (EC, 2019). In setting the fines to be imposed on Google, the Commission referred to the principles in its Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation (EC) No 1/2003 (EC, 2019).

The Commission defined the basic amount of the fine which is based on the value of sales of goods or services in the EEA and is assessed before VAT and other taxes directly related to the sales (EC, 2019). The Commission paid attention to the need to ensure that the fines to be imposed have a deterrent effect and pursuant to Article 23(2) of Regulation (EC) No 1/2003, the fine for an infringement shall not exceed 10% of the undertaking's total turnover in the preceding business year (EC, 2019).

As a consequence of Google's breach, the Commission decided to fine Google €1 494 459 000 (1.29% of Google's turnover in 2018) taking account of the duration and gravity of the infringement. In accordance with the Commission's 2006 Guidelines on fines, the fine has been calculated on the basis of the value of Google's revenue from online search advertising intermediation in the EEA (EC, 2019).

Google ceased the illegal practices a few months after the Commission issued a Statement of Objections concerning this case in 2016. The decision requires Google to stop its illegal conduct to the extent it has not already done so, and to refrain from any measure that has the same or equivalent object or effect (EC, 2019). Google was also liable to face civil actions for damages that can be brought before the courts of the Member States by any person or business affected by its anti-competitive behavior. The new EU Antitrust Damages Directive makes it easier for victims of anti-competitive practices to obtain damages (EC, 2019).

5. Analysis

In this chapter three questions were answered and further analyzed. The questions were regarding the six cases presented in the previous chapter. These questions are:

1. Which approach did the European Commission take to investigate the multi-sided platforms?

2. Did the European Commission evaluate the different infringements differently?

3. What was the Europeans Commission's approach and motives in setting the fines for the platforms?

In this chapter, the various patterns that were observed in the selected cases will be presented. These patterns are compared and are divided into different "steps". Each step represents an action carried out by the Commission in evaluating the selected cases of this study.

5.1 The Commission's approach

In the EU, the European Commission is the sole antitrust agency. It decides which cases to pursue and then decides those cases in the first instance (Schneider, 2020). Bauer and Bohlin (2021) argues that good policy design aligns legal and regulatory frameworks with the technical and economic characteristics of the sector and the broader, social visions associated with new technologies. In the cases presented in the previous chapter, it could be seen that the Commission's approach is quite similar throughout the cases. It usually starts with the Commission opening proceedings against a given multi-sided platform and informing the company. The decision of opening proceedings against a multi-sided platform is usually the result of third parties sending different complaints to the Commission. In order for the Commission to open and proceed with the case, the Commission uses Article 11(6) of Council Regulation No 1/2003 and Article 2(1) of Commission Regulation No 773/2004 as the legal base for the procedural step. Article 11(6) of Regulation No 1/2003 provides that the initiation of proceedings relieves the competition authorities of the Member states of their authority to apply the competition rules laid down in the Articles 81 and 82 of the treaty (EC, 2008). Article 16(1) provides that national courts must avoid giving decisions that conflict with a decision contemplated by the Commission in their initiated proceedings (EC, 2008). Article 2 of Regulation No 773/2004 provides that the Commission can initiate proceedings with a view to adopting at a later stage a decision on substance according to Articles 7-10 of Regulation No 1/2003 at any point in time, but at the latest when issuing a statement of objections or a preliminary assessment notice in a settlement procedure (EC, 2008).

In most cases a pattern could be seen where the Commission would send a Statement of Objection to the platform as a second step of each case. In the Statement of Objections, the Commission outlines their view and sets out evidence and outlines their preliminary conclusions of whether a platform is infringing the Articles 82, 101 and 102 of the TFEU. In a few cases however, the Commission did not send the platforms a Statement of Objection. In the Microsoft Case (AT. 37792) the Commission instead engaged in a wider market enquiry for interoperability, on the basis of an independent sample of organizations that use PC and work group server operating systems (EC, 2004). In the Google Search Shopping Case (AT.

39740), the Commission seeked instead feedback on the commitments offered by Google to address competition concerns. In the Google Android Case (AT. 40099), the Commission informed Google that they have abused their dominant position by imposing restrictions on Android device manufacturers and mobile network operators.

A pattern in the Commission's approach could not be observed in the third step of each case. In the Microsoft Case (AT. 37792) the Advisory Committee sent its report to the Commission agreeing with the Commission's analysis that Microsoft had a dominant position in the client PC operating systems market for purposes of Article 82 of the EC Treaty and Article 54 of the EEA Agreement (EC, 2004). In the Microsoft Tying Case (AT. 39530), the Commission welcomed the proposals and would further investigate its practical effectiveness of ensuring consumer choice (EC, 2009). In the Google Search Shopping Case (AT. 39740), Google offered a number of commitments to address the four competition concerns of the Commission. In the MasterCard Inter-Regional Fees Case (AT. 40049), the Commission invited all stakeholders to submit their views on the commitments to take a final view on whether the commitments address its competition concerns or not (EC, 2018). In the Google Android Case (AT. 40099), the Commission issued a Statement of Objection and informed Google of their assessment that Google allegedly has breached EU antitrust rules (EC, 2016). In the Google Search AdSense Case (AT. 40411), the Commission sent Google a Letter of Facts informing Google about the pre-existing evidence which Google had access to but that the Commission did not rely on in the Statement of Objection and which could be relevant to support the preliminary conclusions reached in the Statement of Objection (EC, 2019).

A pattern in the Commission's approach could not be observed in the fourth step of each case. In the Microsoft Case (AT. 37792) the Commission adopted a decision related to the proceedings and rejected the arguments of Microsoft and ordered them to disclose the information that it refused to share and allow its use for the development of compatible products (EC, 2004). In the Microsoft Tying Case (AT. 39530), the Commission invited comments on the commitments from consumers, software companies, computer manufacturers and on an improved proposal by Microsoft to give present and future users of the Windows PC operating system a greater choice of web browsers (EC, 2009). In the Google Search Shopping Case (AT. 39740), Google was subject to a market test of one month. Complainants, third parties and members of the public commented on the commitments, and the extent to which they address the Commission's four concerns (EC, 2013). The Commission would study the feedback and take into account in their analysis whether the proposed commitments addressed the competition concerns. In the MasterCard Inter-Regional Fees Case (AT. 40049), the Commission welcomed the views of the Advisory Committee, who agreed with the Commission that the anti-competitive behavior covered by the draft decision amounted to a decision (EC, 2019). In the Google Android Case (AT. 40099), the Advisory Committee sent its report agreeing with the Commission's analysis that Google had abused their dominant position regarding their Android operating system (EC, 2018). In the Google Search AdSense Case (AT. 40411), the Commission sent Google a Second Letter of Facts informing Google about the pre-existing evidence which Google had access to but that the Commission did not rely on in the Statement of Objection and in the First Letter of Facts and which, on further analysis of the Commission's file, would be relevant to support the conclusions reached in the Statement of Objection (EC, 2019).

A pattern in the Commission's approach could not be observed in the fifth step of each case except for in two cases. In the Microsoft Case (AT. 37792) the Commission market tested the proposals from Microsoft regarding how the company intends to implement the

Commission's decision in the field of interoperability (EC, 2004). In the Microsoft Tying Case (AT. 39530), the Commission conducted a market test to decide to adopt a decision which would make the commitments legally binding on Microsoft (EC, 2009). In the Google Search Shopping Case (AT. 39740), the Commission sent Google a Statement of Objections alleging systematic favoring its own comparison shopping service (EC, 2015). In the MasterCard Inter-Regional Fees Case (AT. 40049), the Commission convicted and imposed fines on MasterCard (EC, 2019). In the Google Android Case (AT. 40099), the Commission found Google guilty of abusing their dominant position which led to their conviction and them paying fines (EC, 2018). In the Google Search AdSense Case (AT. 40411), the Advisory Committee sent its report to the Commission agreeing that Google held a dominant position in the market for online search advertising intermediation (EC, 2019).

A pattern in the Commission's approach could not be observed in the sixth step of each case except for in two of the cases. In the Microsoft Case (AT. 37792) the Commission appointed a Trustee to provide technical advice to the Commission on issues relating to Microsoft's compliance with the Commission's decision (EC, 2005). In the Microsoft Tying Case (AT. 39530), the Commission reopened its proceedings against Microsoft to investigate if Microsoft failed to comply with the commitments they offered to the Commission (EC, 2012). In the Google Search Shopping Case (AT. 39740), the Commission sent a second Statement of Objection due to their view that Google abused its dominant position by artificially restricting the possibility of third party websites to display search advertisements from Google's competitors (EC, 2016). In the MasterCard Inter-Regional Fees Case (AT. 40049), the Commission made the commitments offered by Mastercard legally binding under the antitrust rules of the EU (EC, 2019). In the Google Android Case (AT. 40099), the Commission fined Google €4 342 865 000 for their infringement (EC, 2018). In the Google Search AdSense Case (AT. 40411), the Commission decided to fine Google €1 494 459 000 for their infringement (EC, 2019).

A pattern in the Commission's approach could not be observed in the seventh step of each case except for in two of the cases. In the Microsoft Case (AT. 37792) the Commission issued a Statement of Objections against Microsoft for its failure to comply with certain of its obligations under the Commission decision (EC, 2005). In the Microsoft Tying Case (AT. 39530), the Commission sent a Statement of Objections to Microsoft on non-compliance with browser choice commitments (EC, 2012). In the Google Search Shopping Case (AT. 39740), the Commission fined Google an amount of €2 424 495 000 for their infringement (EC, 2017). In the MasterCard Inter-Regional Fees Case (AT. 40049), the Commission consulted market participants to verify the appropriateness of the proposed commitments (EC, 2019).

The eighth, ninth, tenth and eleventh involved the Microsoft Case (AT. 37792) where the Commission imposed a penalty payment of €280.5 million on Microsoft for its continued non-compliance in the eight step (EC, 2006). In the ninth step, the Commission sent a Statement of Objections to Microsoft for failing to comply with certain of its obligations under the Commission decision (EC, 2007). In the tenth step, the Advisory Committee agreed with the Commission that the workgroup server protocol program pricing principles appropriately reflect the rationale of the 2004 decision (EC, 2008). In the eleventh and final step, the Commission imposed a penalty payment of €899 million on Microsoft for non-compliance with its obligations under the Commission's March 2004 decision (EC, 2008). Fox (2019) discusses the challenge of antitrust policy in the modern day by comparing how the EU and U.S. manage the law differently related to digital platform companies. Fox (2019) explains that one major difference is that U.S antitrust violations are more difficult to prove

compared to the EU. The reason being that, in the U.S., the accuser has to essentially prove that the accused party misused its power. Whereas in the EU this is not directly necessary, Instead, it has to be shown that it would be worth it for the accused party to misuse their power, and this is what has been observed throughout the cases.

The EU approach focuses strictly on safeguarding the public interest and competition. Schneider (2020), argues that the recent European antitrust policy and enforcement are based on a series of economic and legal misunderstandings of how markets work, and are driven by an activist agenda, and can have protectionist effects. Bauer and Bohlin (2021) however, argues that there is evidence that reliance on prevailing approaches can result in the retention of inappropriate policies, and that previous experience with the regulation of interdependent information and communication technologies showed that most regulatory interventions have differing effects on players.

5.2 The Commission's evaluation

In the EU, the European Commission is the sole antitrust agency. It decides which cases to pursue and then decides those cases in the first instance (Schneider, 2020). Mansell & Steinmuller (2020) explain that traditional competition policy, in particular antitrust policy, aims to ensure consumer welfare and fair competition. However, Mansell & Steinmuller (2020) point out that these concepts might be problematic to define in a platform context. This was however not the case in the EU as observed in the studied cases. Fox (2019) discusses the challenge of antitrust policy in the modern day by comparing how the EU and U.S. manage the law differently related to digital platform companies. Fox (2019) explains that one major difference is that U.S antitrust violations are more difficult to prove compared to the EU. The reason being that, in the U.S., the accuser has to essentially prove that the accused party misused its power. Whereas in the EU this is not directly necessary, instead it has to be shown that it would be worth it for the accused party to misuse their power, and this was seen throughout the studied cases. Platforms give rise to an anticompetitive environment based on other factors than price. Dominant actors can use different means to secure their power such as owning large quantities of personal data that can be used to gain unfair bargaining power (Mansell & Steinmuller, 2020). Another example is given by Fox (2019) who explains that platforms might use their dominant position in one market to gain an advantageous position in another market that they wish to enter and thus, act as a gatekeeper.

Throughout the studied cases, The Commission used tools to evaluate the different infringements made by the platforms. One of these tools aiming to restrict competition is Article 101 of the TFEU which bans anti-competitive agreements (TFEU, 2022). This tool formed the legal basis of the MasterCard Inter-Regional Fees Case (AT. 40049) involving MasterCard's fees that caused harm in the EEA. Article 101 prohibits agreements between two or more operators to restrict competition. The article covers both horizontal agreements which take place between competitors operating at the same level of the supply chain and vertical agreements which take place between a manufacturer and its distributor (TFEU, 2022).

The other tool that the Commission used aims to prohibit the abuse of a dominant position is Article 102 of the TFEU (TFEU, 2022). This tool aims at companies that hold a position of dominance in a particular market and to abuse that position. A dominant position is 'a position of economic strength enjoyed by an undertaking which enables it to prevent effective

competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and consumers (TFEU, 2022). This tool formed the legal basis of the Microsoft Tying Case (AT. 39530), the Google Search Shopping Case (AT. 39740), the Google Android Case (AT. 40099), and the Google Search AdSense Case (AT. 40411). In all these cases the platforms abused their dominant position which harmed consumers and other parties in the EEA, as well as harming innovation.

The Articles 101 and 102 were introduced in 2004 which is after the start of the proceedings in the Microsoft Case (AT. 37792). That is why this particular case had the previous legislation as legal base, namely Article 82 of the TFEU.

The Commission is the main body responsible for ensuring the correct application of these rules and has inspection and enforcement powers. The Commission serves as a platform for the exchange of information aimed at improving the enforcement of competition rules (European Parliament, 2022). Throughout the presented cases the Commission either used Article 101, Article 102 or Article 82 as their legal basis for each case. The Commission would later follow the steps presented in section 5.1 as their approach regardless of the infringement or the used tool. This indicates that the European Commission did not evaluate the different infringements differently.

5.3 Approach and motives in setting fines

The Commission imposes fines for certain procedural infringements under article 23(1) of Regulation 1/2003. This happens when Article 101 or 102 of the TFEU has been infringed or when an interim measure decision or when a commitment decision has been infringed (EC, 2022). The purpose of the fines is to sanction a party for infringing the competition rules in the EU. The purpose of the fines is also to deter both the infringing party and other parties from engaging in or continuing in a behavior that restricts competition in the EEA (EC, 2022). When the Commission determines the amount of the fine, the gravity and the duration of the infringement must be taken into consideration according to Article 23(3) of Regulation 1/2003 which gives the Commission the right to impose fines on parties (EC, 2022).

According to the 2006 guidelines on fines, the starting point of the fee is a percentage of the company’s annual sales of the product or service that the infringement concerns (EC, 2022). Relevant sales are the sales of the product or service covered by the infringement during the last full business year of the infringement (EC, 2022). This percentage could be as high as 30% and is determined according to the gravity of the infringement and depends on the seriousness of the infringement, but also on the nature of the infringement, the geographic scope and whether the infringement has been implemented or not (EC, 2011). Cartels on the other hand have a gravity percentage that starts at 15% as cartels are seen as particularly harmful restrictions of competitions (EC, 2022). The resulting amount is usually increased by considering the duration of the infringement, by using a duration multiplier calculated on the basis of the days of the infringement (EC, 2022).

Fines could be increased or decreased, and in cartels fines would be increased by an amount equivalent to 15%-25% of the value of one year's sales (EC, 2022). In case of other particularly harmful infringements an entry fee can be imposed as well. The fine is limited to 10% of the company's overall annual turnover generated in the business year before the adoption of the decision. The company composes the highest parent held company and all its

subsidiaries (EC, 2022). The fines collected by the Commission go into the budget of the EU (EC, 2022). In the area of antitrust law, the Actions for Damages Directive was adopted in 2014 in order to heighten the deterrent effect against prohibited agreements (cartels and abuse of a dominant position) and to provide better protection for consumers. It facilitates the process for obtaining compensation for harm caused to individuals or other businesses by an infringement of competition law.

In the Microsoft Case (AT. 37792) the Commission set the fine at €165 732 101 in order to reflect the order of the gravity of the infringement. Due to Microsoft's economic capacity and in order to ensure a deterrent effect on Microsoft, the fine was multiplied with a factor of two to €331 464 203. In order to take the duration of the infringement into account the amount of the fine was increased by 50% to €497 196 304 (EC, 2004). The Commission later imposed a penalty payment of €280.5 million on Microsoft for their continued non-compliance with some of its obligations under the Commission's Decision (EC, 2006). Due to Microsoft's continuous failure to comply, the decision also increased the amount of the daily penalty payment to €3 million per day (EC, 2006). Finally, the Commission imposed a penalty payment of €899 million on Microsoft for non-compliance with its obligations under the Commission's March 2004 decision (EC, 2008).

In the Microsoft Tying Case (AT. 39530), to ensure that the fine has its intended effect, the commission took the size and resources of Microsoft into account (EC, 2013). This was done by taking into account that Microsoft's turnover in the fiscal year from July 2011 to June 2012 and that the turnover for the last full business year was €55,088 million (EC, 2013). The Commission set the level of the fine at €561 000 000 for failing to comply with the commitments to offer users a browser choice screen enabling them to easily choose their preferred web browser (EC, 2013). The sum of the fine corresponded to 1,02% of Microsoft's turnover in the fiscal year between July 2011 to June 2012 (EC, 2013). In the calculation of the fine the Commission took into account the gravity and duration of the infringement, the need to ensure a deterrent effect of the fine and, as a mitigating circumstance, the fact that Microsoft has cooperated with the Commission and provided information which helped the Commission to investigate the matter efficiently (EC, 2013).

In the Google Search Shopping Case (AT. 39740), the Commission decided to fine Google an amount of €2 424 495 000 taking account of the duration and gravity of the infringement of Article 102 of the TFEU by abusing their dominant position (EC, 2017). The Commission Decision required Google to stop its illegal conduct within 90 days of the Decision and refrain from any measure that has the same or an equivalent object or effect. Google had to apply the same processes and methods to position and display rival comparison shopping services in Google's search results pages as it gives to its own comparison shopping service. If Google fails to comply with the Commission's decision, it would be liable for non-compliance payments of up to 5% of the average daily worldwide turnover of Alphabet (EC, 2017).

In the MasterCard Inter-Regional Fees Case (AT. 40049), the Commission convicted MasterCard for infringing Article 101 of the TFEU and Article 53 of the EEA Agreement (EC, 2019). As a result of the conviction the Commission imposed fines on MasterCard. While setting fines, the Commission considered the value of the sales of MasterCard's acquiring members and took into account the turnover generated during the period of the infringement (EC, 2019). The Commission also took into account that cross-border acquiring rules restricted border trade, hindered the achievement of the internal market and covered the

EEA, as well as the time duration of the infringement (EC, 2019). The Commission concluded that due to the cooperation of MasterCard beyond their legal obligation during the investigation, the fine was reduced by 10% amounting to the final amount of €570 566 000 (EC, 2019).

In the Google Android Case (AT. 40099), the Commission fined Google €4 342 865 000 taking into account the duration and gravity of the infringement. The fine was calculated on the basis of the value of Google's revenue from search advertising services on Android devices in the EEA (EC, 2018). If Google failed to ensure compliance with the Commission decision, it would be liable for non-compliance payments of up to 5% of the average daily worldwide turnover of Alphabet, Google's parent company (EC, 2018).

In the Google Search AdSense Case (AT. 40411), pursuant to Article 23(2)(a) of Regulation (EC) No 1/2003 and Article 5 of Council Regulation (EC) No 2894/94, the Commission decided to impose fines on Google, for intentionally infringing Article 102 of the Treaty or Article 54 of the EEA (EC, 2019). In setting the fines to be imposed on Google, the Commission referred to the principles in its Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation (EC) No 1/2003 (EC, 2019). The Commission defined the basic amount of the fine which is based on the value of sales of goods or services in the EEA and is assessed before VAT and other taxes directly related to the sales (EC, 2019). The Commission paid attention to the need to ensure that the fines to be imposed have a deterrent effect and pursuant to Article 23(2) of Regulation (EC) No 1/2003, the fine for an infringement shall not exceed 10% of the undertaking’s total turnover in the preceding business year (EC, 2019). As a consequence of Google’s breach, the Commission decided to fine Google €1 494 459 000 (1.29% of Google's turnover in 2018) taking account of the duration and gravity of the infringement. In accordance with the Commission's 2006 Guidelines on fines, the fine has been calculated on the basis of the value of Google's revenue from online search advertising intermediation in the EEA (EC, 2019).

6. Discussion

In this chapter, the findings from the thematic analysis conducted on the empirical data of the study are presented. In addition, these findings are discussed, and the chapter thus lays the foundation for later answering the research question of the study. To do this, all the cases are presented, examined and discussed with regard to the empirical data gathered in chapter 2.

6.1 Research problem and research questions of the study

The following study aimed to answer the question of how the EU's competition authority evaluates competition and mergers against large platforms. To analyze the collected data from the different cases, three new questions needed to be answered. The first question dealt with the approach the European Commission took to investigate the multi-sided platforms. The second question dealt with whether the European Commission evaluated the different infringements differently. The third and final question dealt with the Europeans Commission's approach and motives in setting the fines for the studied platforms.

6.2 Key findings of the study

A comparison between the U.S. and EU shows a phase shift in the nature of the cases against multi-sided platforms. This shift can be characterized by legislation moving from a passive approach, primarily regarding mergers and acquisitions, into a stricter direction that takes a more holistic stand against platform power abuse. This can be connected to the discussion by Frieden (2021) who states that the antitrust lawsuits are ramping up in the EU and in the U.S. Meanwhile, the EU is currently implementing new laws to better manage multi-sided platforms. However, Fox (2019) stressed the importance of finding a middle ground between the "break-up" option and "doing nothing" as the former would most likely be even more difficult to manage, which is also strengthened by Mansell & Steinmuller (2020) who share a similar opinion on breaking up multi-sided platforms. Nevertheless, a settlement of the current on-going cases will most likely help to better understand the direction antitrust legislation might take. Mansell & Steinmuller (2020) brought forward the importance of understanding how a monopolistic position through a multi-sided platform is different from possessing a classical price-monopoly because the new era of digital monopolies would grant the owners new ways of securing their position. Moreover, Fox (2019) stated that the platform owners could use their position to get advantageous positions within other markets. It is shown in the cases that Google has directly done this on certain occasions, exempli gratia, the case involving Google Shopping, as well as pre-installing their own services onto android phones, in which the settlement was strict in the EU.

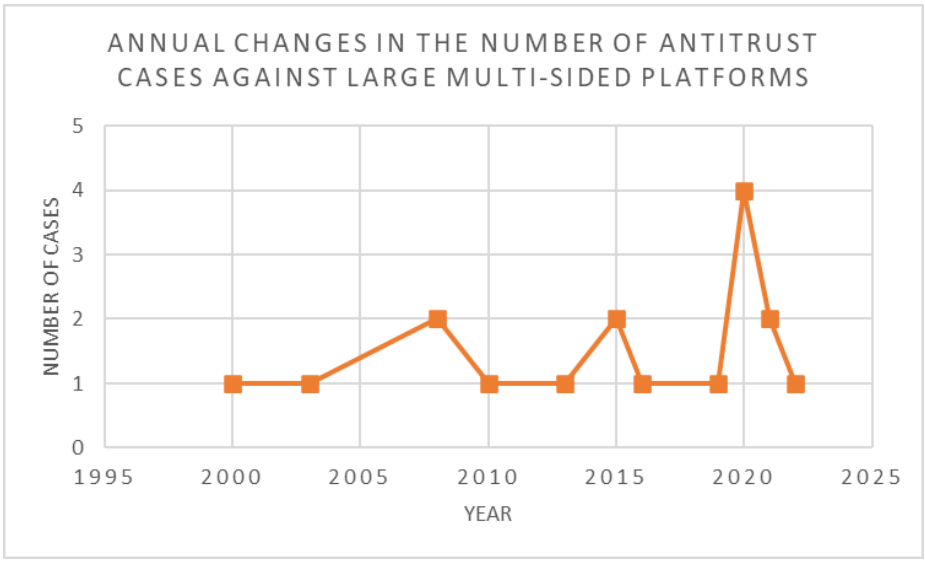

Figure 1. Annual Changes in the Number of Antitrust Cases Against Large Multi-Sided Platforms

Other findings in this study regarded the approach and the procedure of the enforcement of EU antitrust rules. The European Commission consists of a college of commissioners, commissioner for competition. The Commissioner for Competition oversees the Directorate-General for Competition (DG COMP), which reviews merger notifications, conducts antitrust and merger investigations and, in cooperation with other Commission departments, prepares decisions and policy documents, including legislative proposals, for adoption by the Commission (ECA, 2020). The Commission also provides advice to the national courts, and the national courts forwards different judgements to the Commission. Finally, the Commission takes decision binding for the EU/EEA and adopts general exemptions and issues notices and guidelines for companies operating in the single market (ECA, 2020).

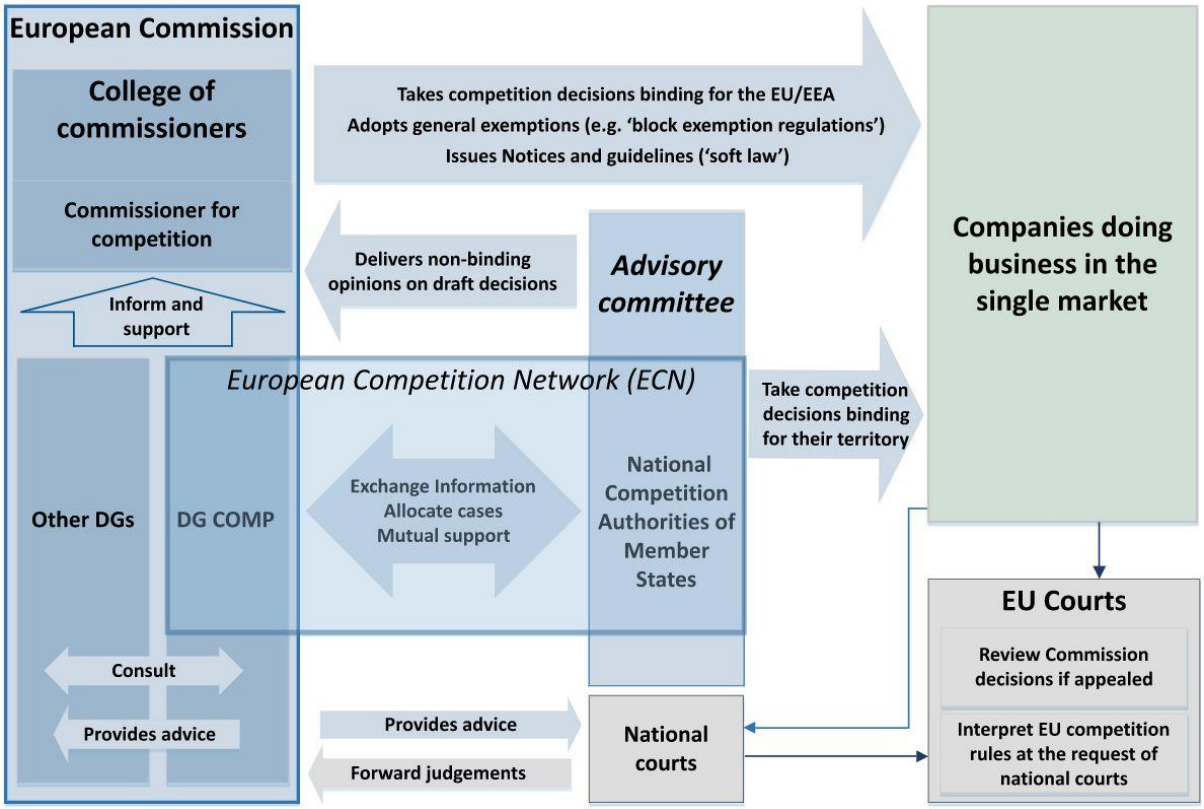

Figure 2. Parallel enforcement of EU antitrust rules (ECA, 2020)

The Commission collaborates closely with the advisory committee, which is a national competition authority of the member states of the EU by exchanging information, as well as allocating cases and providing mutual support to each other (ECA, 2020). As observed in the studied cases, the advisory committee delivers non-binding opinions on draft decisions to the European Commission. The advisory committee also takes competition decisions binding against companies on a national level (ECA, 2020). The EU Courts have the responsibility to review decisions made by the Commission if a specific company decides to appeal to a decision. The EU Courts also have the responsibility to interpret EU competition rules at the request of the national courts of the member states (ECA, 2020).

6.3 Limitation of the study

Scientific studies and research come with various limitations, this study has its own limitations. This study was limited to only 6 out of 17 cases dealing with antitrust against multi-sided platforms in the EU. The study was also limited to the EU as a geographical area. Furthermore, the study focused on the cases where the platforms were condemned and where the platforms were obliged to pay fines, which means that other patterns could have been discovered if the other cases were included as well.

The simplification and altering of the framework can turn it into a subject of inaccuracies. The final limitation of this study was the bias. This bias occurred in the methodology when it comes to the data collection. The data collection on the studied cases and which later were only collected from the European Commission and no other sources. This makes the results, and the analysis leaves the data highly biased towards the goals and the success of the

European Commission. Subsequently, the secondary data collection can therefore also be highly affected by confirmation bias.

6.4 Recommendation for implementation and future research

A key insight during the study is that it is difficult for regulators to know the best course of action as the outcomes are too uncertain. Parallel to this, the problem gets more complex due to the tremendously rapid developments of the platforms in terms of their business models and underlying tech. It is therefore questionable whether it is viable to talk about suggesting an optimal approach to legislation and the author of this study is certainly not qualified enough to reasonably comment on this. Ultimately the goal is to progress societies and the well-known large multi-sided platforms are undeniably at the forefront of doing so. For legislators the goal should be to create an optimal environment for innovation to support such progress. However, it is well known at this point that too much power can actually harm innovation in various, sometimes non-obvious ways. Furthermore, more recently, the aspect of consumer harm has also become a profound part of the debates. We might not know how to optimize antitrust law today but there is no doubt that getting it right is tremendously important for the future progression of our societies and ultimately humanity as well. Since the current antitrust legislation in the EU is obsolete and new legislations namely the DMA and the DSA have been introduced, the future research on the topic of antitrust policy in the EU should be based on the performance of these new legislations.

7. Conclusion

It is believed that the EU and the U.S. are different in how they manage antitrust. Foremost, it could be that the U.S. has a more difficult time proving an antitrust case compared to the EU, as stated by Fox (2019). However, it might also depend on the aspect presented by Bauer (2021), namely that there is a fundamental cultural difference in how each party views interference in corporations' affairs. The U.S. standpoint is to let firms and innovations grow with limited interference whilst the EU standpoint instead focuses on public interest and making sure competition stays intact. Schneider (2020), argues that the recent European antitrust policy and enforcement are based on a series of economic and legal misunderstandings of how markets work, and are driven by an activist agenda, and can have protectionist effects. In addition, the EU approach might have been different if the studied multi-sided platforms were European based companies.

As stated by the antitrust and platform literature, there is a rising tide where both the EU and U.S. are taking a stricter approach towards multi-sided platforms, a trend that is clearly supported by the presented cases in the EU. A serious problem is that this is an incredibly challenging issue as confirmed by Frieden (2021) who states that platform intermediaries have reached a degree of market dominance at a rate that legislators simply cannot keep up with. A major challenge for institutions is how to approach multi-sided platforms in an era where the classical definition of monopoly no longer suffices to understand the dynamics of the market. The lack of understanding of how platforms operate, and their impact might have led to legislators being frustrated, ultimately resulting in a stricter approach. However, many authors argue against this approach and that the focus should instead be on understanding the challenges of platforms and thus adopt the antitrust law around the new, emerging economy. The problem is even further magnified by the fact that it is unclear what effect certain policies might have which means that it is essentially an experimentative process on a large scale with high uncertainty as well as high risk for undesirable outcomes (Bauer, 2021).

Nevertheless, the fate of antitrust will most likely be decided in the near future. If legislators end up deciding to break up large multi-sided platforms they will most likely end up with a much more complex challenge, but of course doing nothing is not viable either. Lastly, it is worth commenting on the statement by Frieden (2021) of how legislation has fallen behind as platform intermediaries have grown at a substantial rate. Considering how the EU has ramped up the antitrust lawsuits recently and the new DMA and DSA legislation could be an indicator of legislators realizing their "failure" and desperately trying to catch up. To sum up, the literature seems to be well aligned with the empirical findings, with respect to the EU.

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Appendix

Complete Table of the 17 Antitrust Cases Against Multi-Sided Platforms in the EU.

Platform	Case	Date	Description	Decision
MasterCard	AT. 34579	2003 - 2007	The commission found out that MasterCard organization and the entities it is representing, have infringed Article 81 of the Treaty and Article 53 of the EEA Agreement by setting a minimum price merchants must pay to their acquiring bank for accepting payment cards in the European Economic Area, by means of the Intra-EEA fallback interchange fees for MasterCard branded consumer credit and charge cards ad for MasterCard or Maestro branded debit cards.	MasterCard has infringed Article 81 from 1992 until 2007 and article 53 from 1994 until 2007. MasterCard was forced to end their infringement by repealing fallback interchange fees within 6 months as well as modify the association's network rules. If they fail to comply with the decision, the decision imposes a daily penalty fee of 3,5% of masterCard's daily global turnover in the preceding business year according to Article 24(1)(a) of Regulation (EC) No 1/2003.
Microsoft	AT. 37792	2000 - 2012	In this case, Sun complained to the Commission pursuant to	The Commission imposed a penalty payment

			Article 3 of Regulation No 17 for the initiation of proceedings against Microsoft. Sun alleged that Microsoft enjoyed a dominant position as a supplier of a certain type of software product called operating systems for personal computers and further alleged that Microsoft infringed Article 82 of the Treaty by reserving to itself information that certain software products for network computing, called work group server operating systems, needed to interoperate fully with Microsoft's PC operating systems. Sun further argued that the withheld interoperability information was necessary to compete as a work group	of €899 million on Microsoft for non-compliance with its obligations under the Commission's March 2004 decision. The decision was adopted under Article 24(2) of Regulation 1/2003, and found that Microsoft charged unreasonable prices for access to interface documentation for work group servers.

			server operating system supplier.	
Visa	AT. 39398	2008 - 2014	The commission found out that Visa Europé had infringed Article 101 of the Treaty and Article 53 of the EEA Agreement when setting the MIFs applicable to cross-border and certain domestic point of sale transactions with Visa, Visa Electron and V PAY consumer payment cards within the EEA. The fees are paid by a merchant's bank to a cardholder's bank for each transaction made.	Visa offered a number of commitments aiming to yield transparency. The commitments offered by Visa will remain in force for a period of 5 years and 6 months. In the light of the commitments the Commission considered that there was no longer ground for action on its part and, without prejudice to Article 9(2) of Regulation (EC) No 1/2003 and the proceedings in this case was brought to an end.

Microsoft	AT. 39530	2008 - 2013	The Commission initiated a formal investigation against Microsoft in two cases of suspected abuse of dominant market position. Thus allegedly infringing Article 82 of the European Commission Treaty rules on abuse of a dominant market position. Two proceedings were opened. The first was in the field of interoperability as a response to a complaint made by the ECIS. The second proceeding was opened in the field of tying of separate software products following inter alia a complaint made by Opera.	Microsoft's failure to comply with the commitments made the Commission impose a fine of EUR 561 000 000 for limiting and thereby affecting 15,3 million of their users.
Google Search (Shopping)	AT. 39740	2010 - 2017	The Commission found out that Google has abused their dominant position in online search	The decision ordered Google and its mother company Alphabet to immediately bring the infringement to

			since at least 2008, thus violating Article 102 of the Treaty. This was done by treating search service providers unfavorably in their services in Google's unpaid and sponsored search results coupled with preferential placement of Google's own services.	an end and impose a fine of 2.42 billion Euros for infringing Article 102 of the Treaty and Article 54 of the EEA.
MasterCard	AT. 40049	2013 - 2019	MasterCard maintained a set of cross-border acquiring rules, which created an obstacle to cross-border trade in acquiring services within the EEA. Those rules meant that acquirers offering services in Member States where the domestic MIF were lower were prevented from offering cheaper services. The merchants were also prevented from taking advantage of the internal market and benefiting from less expensive	The Commission concluded that MasterCard had made an infringement of Article 101 of the Treaty and imposed a fine on MasterCard pursuant to Article 23(2) of Regulation (EC) No 1/2003 amounts to 570 million Euros.

			services from card acquirers established in Member States where MIF were lower.	
Google Android	AT. 40099	2015 - 2018	This case concerns the period 2011-2018, a time during which Google was breaching EU's Antitrust laws. Essentially, the illegal conducts have consisted of forcing various requirements onto partners such as Android mobile device manufacturers as well as network providers that sell Android phones. An example of such criteria is that in order for Android phone manufacturers to get a license to use the Play Store, they needed to agree to pre-install Google Chrome.	The decision ordered Google to bring the infringement to an end within 90 days and imposed a fine of 4.34 billion Euros for infringing Article 102 of the Treaty and Article 54 of the EEA.
Amazon	AT. 40153	2015 - 2017	The Commission opened an investigation because it had concerns about clauses included in Amazon's e-	Amazon offered various commitments to not enforce relevant clauses requiring publishers to offer Amazon

			books distribution agreements that could have breached EU antitrust rules. These clauses required publishers to offer Amazon similar or better terms and conditions as those offered to its competitors and/or to inform Amazon about more favorable or alternative terms given to Amazon's competitors. The clauses covered many aspects that a competitor can use to differentiate itself from Amazon, such as an alternative business (distribution) model, an innovative e-book or a promotion.	similar non-price and price terms and conditions as those offered to Amazon's competitors or any such clauses requiring publishers to inform Amazon about such terms and conditions. And to allow publishers to terminate ebook contracts that contain a clause linking discount possibilities for e-books to the retail price of a given e-book on a competing platform.
Google Search (AdSense)	AT. 40411	2016 - 2019	The Commission found out that starting in 2006, Google included exclusivity clauses in its contracts. Prohibiting publishers from placing any	The decision ordered Google to immediately bring the infringement to an end and impose a fine of 2.42 billion Euros for infringing Article 102 of

			search adverts from competitors on their search results pages. In 2009, Google began replacing the exclusivity clauses with so-called "Premium Placement". Preventing Google's competitors from placing their search adverts in the most visible and clicked on parts of the websites' search results pages. Google also required publishers to seek written approval from Google before making changes to the way in which any rival adverts were displayed.	the Treaty and Article 54 of the EEA.
Apple	AT. 40437	2020 - Ongoing	The Commission decided to initiate antitrust proceedings concerning the terms that govern the use of Apple's App Store by developers of music streaming apps in the EEA. The investigation	No decision has been made. The proceedings are still ongoing.

			focuses on the requirements that developers with whom Apple competes via Apple Music have to use Apple's in app purchase mechanism. Through which Apple charges a commission fee and restricts the developer to communicate with IOS users about potential alternatives possibilities outside of the app. It may also disintermediate developers from important customer data, while Apple may obtain data about the activities and offers of its competitors.	
Apple	AT. 40452	2020 - Ongoing	The Commission opened an antitrust investigation to assess whether Apple's conduct in connection with Apple Pay violates the EU competition rules. The investigation concerns Apple's terms, conditions and	No decision has been made. The proceedings are still ongoing.

			other measures for integrating Apple Pay in merchant apps and websites on iPhones and iPads, Apple's limitation of access to the Near Field Communication functionality on iPhones for payments in stores, and alleged refusals of access to Apple Pay.	
Apple	AT. 40652	2020 - Ongoing	The Commission decided to initiate antitrust proceedings concerning the terms that govern the use of Apple's App Store by developers of e-book/audiobook apps in the EEA. The investigation focuses on the requirements that developers with whom Apple competes via Apple Books have to use Apple's in app purchase mechanism. Through which Apple charges a commission fee and restricts the developer to	No decision has been made. The proceedings are still ongoing.

			communicate with IOS users about potential alternatives possibilities outside of the app.	
Amazon	AT. 40462	2019 - Ongoing	The Commission opened an antitrust investigation to assess whether Amazon's use of sensitive data from independent retailers who sell on its marketplace is in breach of EU competition rules. The investigation focuses on the standard agreements between Amazon and marketplace sellers and the role of data in the selection of the winners of the "Buy Box".	Amazon has offered commitments pursuant to Article 9 of Regulation (EC) No 1/2003, to address the Commission's competition concerns. The commission has invited interested third parties to submit their observations on the proposed commitments.
Google	AT. 40670	2021 - Ongoing	The Commission intends to investigate whether Google has violated EU competition rules by favoring, through a broad range of practices, its own online	No decision has been made. The proceedings are still ongoing.

			display advertising technology services in the so called “ad tech” supply chain, to the detriment of competing providers of advertising technology services, advertisers and online publishers.	
Facebook	AT. 40684	2021 - Ongoing	The Commission intends to investigate, the potential tying of Facebook’s online classified ads service – Facebook Marketplace – to Facebook’s social network platform and the potential use of data obtained by Facebook in the context of advertising on the social network platform to advantage other Facebook products, such as Facebook Marketplace, directly competing with products offered by advertisers of Facebook, at least since 1	No decision has been made. The proceedings are still ongoing.

			January 2015.	
Apple	AT. 40716	2020 - Ongoing	The Commission opened antitrust investigations to assess whether Apple's rules for App developers on the distribution of apps via the App Store violate EU competition rules. The investigations concern in particular the mandatory use of Apple's own proprietary in-app purchase system and restrictions on the ability of developers to inform of alternative cheaper purchasing possibilities outside of apps.	No decision has been made. The proceedings are still ongoing.
Google - Facebook (Bidding)	AT. 40774	2022 - Ongoing	The Commission intends to investigate the agreement signed in September 2018 by Google and Meta, with respect to Meta’s participation in Google’s Open Bidding programme. The Commission is	No decision has been made. The proceedings are still ongoing.

			concerned that the agreement may be part of efforts to restrict or distort competition in markets for online display advertising and related intermediary services in the European Economic Area.	

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