LUISS

Department of Political Science
Chair of European Union Law

Big data, abuse of dominance and the enforcement of article 102 TFEU in digital markets: The Google Cases

SUPERVISOR
Prof. Francesco Cherubini

CANDIDATE
Micol Gallo Curcio 085392

Academic Year
2019/2020

Content

Introduction

The development that is taking place more and more in modern society is connected to processes of both globalization and digitalization, which in turn are extremely dependent from one another. From an economic point of view, the system of globalization is the drive that allows businesses, firms and private organizations to gain significance and importance on an international scale. Globalization, nevertheless, would never be possible or even thinkable without the technical progress generated by Information and Communication Technologies (ICT) and the creation of digital markets. Consequently, also the mechanisms that govern the relationship between different undertakings and that are characterized by delicate balances have seen an extreme metamorphosis through the creation of digital markets. In general, the digitalization has not only revolutionized the way consumers choose their products and the way in which companies gain information about what to sell and to whom but it has also opened new doors to businesses, making the reliance on innovation and the gathering of digital data and capacities the focal point of market strategies. All these processes have naturally also had a significant impact on the policy and enforcement side of economic relations, in particular creating competition problems and issues to be solved from a legal point of view. Competition law and its effective application must necessarily increase their relevance in such a framework of constant change and associated market uncertainty.

The purpose of this thesis is to explore in particular the disputes and legal conundrums that digital markets and more in general digitalization have posed under the framework of European Competition Law. The specific issue that will be analyzed in the following pages is how article 102 TFEU, focusing on abuses of dominant positions by undertakings, has been applied by the European Commission in the Google cases. The thesis will also evaluate and take into account the controversies that these cases brought to light.

For this purpose, the reasoning behind the analysis has been broken down in three main parts that also correspond to the three chapters of this thesis.

The very first chapter offers a broad introduction to the relationship between digital markets and competition law and the problems that the interaction between the two can create. Primarily, it focuses on how the structure, characteristics and most of all reliance on innovation of digital markets can help create dominant positions and contribute to the phenomenon of controlling tech-giants that are then in a position to change the rules of the game, posing a potential threat to the competitive balance of the market. In addition, this chapter also offers an overview of the enforcement of article 102 TFEU, which is a provision that was added to the treaty exactly with the purpose to control

and avoid the abuses of such dominance. This will also be done while, at the same time, illustrating the special responsibility concept that stands as one of the core beliefs of the article. Finally, the essential facilities doctrine as a possible interpretation of article 102 TFEU will be presented, specifying its origin, past use and also briefly exposing the controversies that it created.

The second chapter has as its main objective the presentation of the Google cases and their analysis from a competition law perspective. The first section explores the *Google Search (Shopping)* case. After a brief introduction to the functioning and the economic rationale behind Google's products and business strategies, it follows a detailed explanation of the European Commission's decision reached in 2017 that condemned Google for its abuse of dominance under article 102. This decision and the legal reasoning that led to it are then compared to the opposed decision reached by the United States on this issue, analyzing the main similarities and differences between the two proceedings. After this, another comparison will be conducted, only this time the object of discussion will be a precedent case of abuse of dominance against a tech giant, namely the *Microsoft saga*. The comparison will focus in particular on how the essential facilities doctrine was applied (or not) in the two proceedings.
The second section of the chapter, instead, will deal with the *Google Android* case that was also decided upon by the European Commission that also in this occasion found that Google had breached article 102 TFEU. The similarities and differences between the two Google cases will be analyzed at this juncture.
The third and final section of the second chapter instead will focus on a particular form of abuse under article 102 TFEU that seems to indirectly connect all the cases presented in the course of the chapter, namely anticompetitive tying.

The last chapter instead represents an attempt at a general evaluation of the future prospects of competition law and whether it will have to change in its application and form or if competition authorities will be able to apply existing provisions efficiently also in digital markets. This issue can only be addressed after a careful assessment of what the main objectives of European competition law in general are and of how they have evolved over time. This chapter will also consider the important role that economic reasoning plays in matters of competition law and will analyze whether the More Economic Approach (MEA) already adopted by the Commission offers a good framework for competition analysis of digital markets, also exploring if the adoption of behavioralism as an economic paradigm in the legal evaluation could represent a successful possibility for a more efficient application of competition law in European digital markets. The last section will instead turn to the challenges that a particular form of digital markets, namely multisided digital platforms, have created for antitrust enforcers.

Chapter 1. BIG DATA AND DIGITAL MARKETS IN COMPETITION LAW

Why is it important for the economy to maintain competition? The answer is easy, because it is a "driver of economic growth"[1]. This is true mainly because effective competition between companies can lead to the success of the most proficient actors in the market, namely those capable to differentiate themselves from the rest thanks to more efficient strategies and better products. If these companies are then repaid for their efforts with high profits, this can lead to innovation and eventually also to the creation of new products and services. Competition law enforcement is therefore extremely important, as is ensuring that existing norms are protected and respected. Recently this has become more and more problematic, as the emergence of new types of markets has made regulation extremely difficult.

Digital markets are a prime example of that. There are different types of digital markets[2]. A first form can be recognized when the user (in other words the customer) is provided with a digital good or service offered online, such as music, books, movies etc. In other cases, the final good is not digital and the acquisition of it simply facilitated by the digital platform. Another category of digital markets aims at to simplify trade between different companies put in contact distributors and suppliers, and finally there is the category of online auctions, which are based on clear rules. Because of all these developments in the sector, antitrust authorities have been forced to reconsider and put into question existing legislation. Nevertheless, up until now, no specific laws and rules exclusively devoted to digital markets have been established by authorities, as it is generally believed that enforcement could possibly run the risk of chilling innovation[3].

However, the challenges that regulators are faced with when dealing with digital markets and the creation of dominant positions within them remain. Among the challenges, market definition is rendered very complicated because of numerous characteristics of digital markets. Indeed, digital markets are often based upon innovation and consequently rely on short product cycles while also being characterized by an extensive product differentiation, which makes market definition for authorities particularly arduous. Additionally, digital markets are often multisided, meaning that they "bring together two (or more distinct product markets that share a link which makes it impossible to consider the one without also considering the other"[4]. In many cases, one group of costumers receives the digital service at no charge, while the other side of the market, which are usually advertising businesses, does not and it is

[1] WARIO (2019: 1).
[2] VETTAS (2017: 200-202).
[3] MANNE, WRIGHT (2011: 5).
[4] ROBERTSON (2017: 134).

here that lies the problem: how can these free services be assessed from a market definition point of view?

In addition to that, the nature of high-tech and digital companies in general, is borderless, meaning that it is only difficult that, should a case arise, it would concern one single jurisdiction, but that on the contrary it could involve different antitrust authorities with different legislations[5].

Other academics have therefore upheld the view that digital markets actually require the intervention of authorities, being their characteristics possible risks for the creation of exclusive, stable market power that would be consistent over time[6]. This depends also on the fact that people rely more and more on digital platforms.

1.1 Implications of big data for the creation of dominant positions in digital markets

Now more than ever, mainly thanks to the great developments made in the field of Information and Communication Technology (ICT), it is possible to gather all kinds of data, to live a fully online life, to shop, to learn, to keep informed about things happening all around the world, to keep in touch with friends and family with devices that are simple to use. Surprisingly enough, all of the above can be done in just a matter of seconds. It only seems logical that in such a context data have acquired a very central point, not only in the daily life, but mostly in the economy, leading to the creation of digital markets. Companies, in fact, tend to gather and store permanently more and more data in order to reuse them in the future.

Only in 2018 the total amount of data created in the world corresponded to 28 zettabytes (ZB)[7], meaning a tenfold increase if compared to the data created in 2011. In fact, 1 ZB actually corresponds to 1 trillion gigabytes (for reference 1 ZB equals 250.000.000.000 DVD's). According to many studies, this number will even see a steady increase. In fact, it will probably reach 163 ZB by the end of 2025[8]. Of course, the primary source of this data creation is the Internet, meaning that digital markets and their prime operators and actors have become increasingly important and a focal point in this context has been given to Big Data.

So, what are Big Data exactly? First of all, it must be mentioned that a clear definition has not been provided by any legal framework yet, but in the Information and Communication Technology sector this term is often used to refer

[5] KARRY (2019: 2).
[6] NEWMAN (2019: 1504).
[7] REINSEL, GANTZ, RYDNING (2017: 4).
[8] REINSEL, GANTZ, RYDNING (2017: 4).

to a collection of data that cannot be processed by traditional informatic devices in a short amount of time, meaning that traditional algorithms are not able to compute them immediately.

The literature, in this sense, has even developed a descriptive approach that can be summed up in the four V's: Volume, referring to the enormous dimension of the data generated and gathered; Variety, referring to the various categories of data that are available (both structured and semi-structured); Velocity, referring to the quickness of the processing; and, finally, the Value that data acquire when they are analyzed and when they enable the extraction of useful information for the efficiency and quality of the traditional productive processes, contributing to the enhancement of the costumer experience with innovation and customization of the product[9]. Other aspects that could also have a significant impact on the practical definition of big data could be the Veracity, namely the quality and the significance of the data gathered and elaborated and also the Valence, namely the level of connections between different data and the efficacy of their visualization, as they must necessarily be summed up visually to render their interpretation possible and easily understandable for people to be able to extract knowledge from them[10].

However, what are exactly the benefits that big data bring about for digital markets?
In general, they can be said to increase the productive processes, enhance the decisional capacity of the administrators, foresee with accuracy the trends of the market and influence in an effective way advertisement and different commercial suggestions[11]. Yet in order to do that and to really become available also in practice, data must forego an intensive process with multiple steps: the collection of (which consists of their generation, acquisition and memorization); the elaboration of the data gathered, their interpretation and finally their use.

How can this explain the creation of dominant positions in digital markets, and in some cases even encourage it?
It is an empirical finding that digital markets tend to be quite concentrated, with, in most cases one, but also possibly a few firms having dominant positions and accordingly quite high market shares[12]. There are some characteristics that can actually help us understand this phenomenon.

First of all, it must be considered that, while data and also big data are generated by users all around the world, through multiple sources both online (for instance online services like social networks) and offline (such as wearable devices like the Fitbit, or more commonly smartphones, that can also collect

[9] LANEY (2001: 1-3).
[10] AGCOM (2020: 15).
[11] AGCOM (2018: 22-24).
[12] NEWMAN (2019: 1503).

data while in offline mode), the average human beings actually only possess quite limited amounts of cognitive capacity[13]. This may not have been a problem in the past years that preceded the Digital Era, as information was not available in big amounts, but in the world that we live in today this is not true anymore. As Newman puts it "information has become abundant and attention has grown scarce"[14]. It isn't surprising therefore, that "consumers rely increasingly on online sources of information"[15] when choosing products to buy.

Digital markets are now the most important source of information in modern society, but stand-alone data are not of much value. As Colangelo and Maggiolino put it "the value of big data lies in disclosing knowledge"[16], meaning that they only acquire significance when they are organized and made understandable to human beings. Therefore, the elaboration phase that especially big data go through is of utmost importance, if not the most central phase of the whole data supply chain. It is done through an analysis, performed mainly thanks to various algorithms. Generally, the algorithms that are used by each operator should be publicly available, but in practice they are individualized in order to customize their implementation and hide to users (and to possible competitors) their real functioning[17]. What most digital companies aim to do is to collect all kinds of information and make them available to online users through portals and sites that offer them what they desire. Of course, the so-called kings of digital markets become those that are then able to offer this type of service with "the lowest cognitive burden"[18] for users. And the more companies are able to filter information efficiently and assess it, the more their market power will increase, as fewer and fewer users will be willing to change their portals. In fact, humans are disinclined to change something that they are used to, even if it would not foresee significant effort in practice. This is called "aversion to the cognitive cost of switching"[19]. A clear example of this can be seen in the service that Google offers, as it links access to various services, such as the emailing service, the video platform YouTube and others, therefore reducing the search time to a minimum and, as a consequence, reducing also the cognitive work that users are required to do to navigate the Internet in search of what they need.

Another consideration must be made. While digital markets are believed to have quite low entry barriers, in the traditional sense of competition law, in practice this is true only to some extent. From the previous paragraphs it can be inferred that digital data don't have a high cost of production and/or distribution, as a matter of fact, these costs are almost equal to zero and being data

[13] NEWMAN (2019: 1505).
[14] NEWMAN (2019: 1505).
[15] PATTERSON (2017: 97).
[16] COLANGELO, MAGGIOLINO (2017: 277).
[17] AGCOM (2020: 16).
[18] NEWMAN (2019: 1506).
[19] NEWMAN (2019: 1508).

at the basis of digital markets, it would seem that new actors could enter the market easily. This actually applies only in cases where the required infrastructure and technical expertise and knowhow are already available[20]. Generally, digital products, in order to be successful, could actually require multiple years of research, a lot of information resources (such as the big data gathered) and also many financial resources to fully develop, to be launched and finally to stay in the market. So, while a new entrant may in theory enter the market, its success would be highly unlikely, and it would not necessarily constitute a possible real competitor to digital giants, such as Google, Apple, Facebook, Amazon and Microsoft. They therefore enjoy a particular benefit, if compared to other companies of the sector, as they have the possibility to avail from an enormous quantity of data, while also possessing the financial capacity to invest in the creation of new and innovative algorithms able to analyze new quantities and forms of data more efficiently.

This allows companies to act according to data driven decision making, which means that decisions are taken according to analyzed data and the correlations between them, without the necessity to actually have a preliminary understanding of the phenomena at hand. To sum up in an economic perspective of the use of these data, first the analysis of the facts occurs and finally (only when absolutely necessary) the comprehension of the phenomena. For instance, an operator of the big distribution, can change the positioning of its products on the counters of a shop, based on data, without actually needing to understand the reasons for the increased efficacy of the positioning[21]. The result of this, is data driven innovation in the economic sector. More specifically, it can be said, that companies acting in online and offline markets apply data driven decision making for the following reasons:

- Increased efficiency and betterment of the directional, management and operating processes
- To offer innovative and groundbreaking products and services
- To obtain a highly detailed knowledge of the single consumers, which can then be used to increase sales through the customization of services, but that could also even lead to the differentiation of prices for the single users.

Possible drawbacks of this approach are actually the increase of probability of confirmation bias (defined by Plous as "the tendency to search for, interpret, favor, and recall information in a way that confirms or strengthens one's prior personal beliefs or hypotheses"[22]) and also of echo chambers (namely a situation in which beliefs are amplified or reinforced by communication and repetition inside a closed system[23]). But this does not concern the economic side

[20] COLANGELO, MAGGIOLINO (2017: 259).
[21] OECD (2015: 154).
[22] PLOUS (1993: 233).
[23] BARBERÁ et al. (2015: 1538).

of the matter and therefore, to some extent, does not concern digital companies acting in the market. After all, they simply offer users what they want.

Another possible barrier to the entry of new actors in the various digital markets may be represented by positive direct and indirect network effects. Those describe the effect that an additional user of goods or services has on the value of that product to others. When a network effect is present, the value of a product or service increases according to the number of other users using it. For example, some social networks give the possibility to other actors of the digital markets to develop compatible applications, allowing, as a consequence, the development of indirect network effects. Of course, the more the digital market is established and the longer the actors have been active in it, the stronger the network effects will be.

New entrants even if having valuable additions to digital products and significant new services and features, may still be discouraged in entering digital markets with well-established digital actors, namely the so called digital giants, because they may be in a position to "copy" the new features that they are trying to introduce in the market[24]. This type of free riding would necessarily result in the success of digital giants, mainly because of the aforementioned resources both in terms of data and money, increasing their popularity, and the demise of new entrants. This would surely decrease the incentive to innovate.

To sum up, even the European Commission has acknowledged that "data can be a valuable asset and (that) analyzing large amounts of data can bring substantial benefits in the form of better products and services and can allow companies to become more efficient"[25], and this paragraph has in fact shown how dominant positions in digital markets can be facilitated by access to big data and the information that they entail. The following paragraph, on the contrary, will focus on the existing provisions inside of the European Union that represent a safeguard against the abuse of these dominant positions.

1.2 Article 102 as a safeguard against the abuse of dominance

The main provision dealing with the abuse of dominant positions in the European legal framework for Competition Law is article 102 of the Treaty on the Functioning of the European Union. It states:

> Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

[24] OBEAR (2018: 1037-1038).
[25] EUROPEAN COMMISSION (2017a: 13).

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

(b) limiting production, markets or technical development to the prejudice of consumers;

(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

a) *The special responsibility concept*

Dominance in general is defined as a favorable position of power enjoyed by a given undertaking which renders it capable of preventing competition in the relevant market by behaving independently of consumers, customers and competitors[26]. A company holding such market power would be able to set prices above the competitive level, to sell products of an inferior quality or to reduce its rate of innovation below the level that would exist in a competitive market[27].

The peculiarity of the provision contained in article 102 and in general of European Competition Law, is that dominant positions are not punishable per se. In fact, such dominance could be achieved thanks to legitimate means of competition, such as creating a better product than those offered by competitors. It is the abuse of such a dominant position that is actually prohibited instead. The reason for this, is that according to Competition Law of the European Union, dominant undertakings actually bear a special responsibility for their rivals, because of the privileged position that they find themselves in, which gives them the opportunity to be able to damage competition in general, or at least to influence it. As a consequence, dominant undertakings will be subject to particular duties and also be accountable for them. The court also recognized that "the fact that an undertaking is in a dominant position cannot disentitle it from protecting its own commercial interests if they are attacked"[28]. Therefore, the confines of these obligations must be defined case by case.

Among established and recognized categories of such an abuse we can mention: predatory and below-cost pricing, selective price cuts above the average total cost, price alignment, price discrimination, rebates, refusal to supply, license and grant access, access of less favorable terms,

[26] Judgment of the Court of Justice of 13 February 1979, C-85/76, *Hoffmann La Roche & co. AG v. Commission*, paragraph 70.
[27] DIRECTORATE-GENERAL FOR COMPETITION (2002: 14).
[28] Judgment of the Court of Justice of 14 February 1978, C-27/76, *United Brands v. Commission*, paragraph 189.

margin squeeze, tying and bundling, abuse of legal or regulatory procedures, exploitation or excessive pricing[29].

However, this list is not exhaustive and does not represent a fixed interpretative framework for article 102. The Undertaking's abusive behavior may fall into more than one category or into none of them. The general questions that the antitrust authority, namely the Commission must therefore ask in order to establish a breach of article 102 are[30]:

- Is there a company that actually enjoys a dominant position?
- Is this dominant position inside of the Internal market?
- Is there an abuse of the dominant position?
- Could the abuse have an impact on trade between Member States of the Union?

In relation to the fourth question, it must be considered that article 102 TFEU, similarly to article 101 TFEU, dealing with unlawful agreements between undertakings, can only be applied to types of abusive behavior that could have a significant effect on trade between Member States, but that that effect does not need to be proved. It is sufficient for the abusive behavior to potentially have a negative impact on Member States. On the contrary, unlike article 101(C), there is no separate exempting provision, describing in which cases the dominant company can justify its abusive conduct[31].

Nevertheless, in *British Airways* it was recognized by the Court there might also be the possibility of an objective justification, where "the exclusionary effect (…) may be counterbalanced or outweighed by advantages in terms of efficiency, which also benefit the consumer"[32]. Moreover, the objective justification may also be accepted in cases where a special situation has developed that the company cannot get out of in any alternative way and that was not caused by the undertaking in the first place.

b) The essential facilities doctrine

This doctrine originated in the United States and represents the idea that someone having a dominant position and owning a "facility which is indispensable for its competitors, has an obligation to grant them access"[33]. In the case *United States v. Terminal Railroad Association*, which is considered to be the

[29] EZRACHI (2018: 212-214).
[30] EZRACHI (2018: 212-214).
[31] Judgment of the Court of Justice of 30 September 2003, Joined cases T-191/98 and T-212-14/98, *Atlantic container line and others v. Commission*, paragraph 1381.
[32] Judgment of the Court of Justice of 15 March 2007, C-95/04 P, *British Airways v. Commission*, paragraph 86.
[33] RASPAUD (2014: 68).

origin of the essential facilities doctrine, the US Supreme Court condemned three ferry companies joining forces to buy the rails that allowed the access to the city of Saint Louis which would have led to an increase in prices and value for the three companies, while subtracting to other competitors the essential facility and infrastructure to act in the market. This was considered to be a breach of section 2 of the Sherman Act, as it could be viewed as an unlawful acquisition and/or preservation of monopoly power.

Nevertheless, the first time that the term was used, was in "The Antitrust Laws of the United States", written by Professor A. D. Neale in a description and analysis of lower court judgements but also of Supreme Court decisions having as their object refusals to deal with competitors on the side of vertically integrated dominant undertakings[34].

In the European Union, the unwillingness to give access to an essential facility has been considered to fall under the scope of article 102 TFEU, as it could be understood as an abuse of dominance, but it was not applied until the 1990's. In fact, the jurisprudence of those years has helped to better define the conditions required for the application of this doctrine.

In the *Bronner* judgment, dealing with a refusal to supply, it was found that a facility would only be recognized as essential, if it was impossible to replicate and if the competition was completely annulled in case access to that facility was denied.[35] This Judgement also helped to further define the previous *Magill* case, where instead, it was recognized "that ownership of an intellectual property right cannot confer"[36] a dominant position. Indeed, in *Bronner*, it was acknowledged that the refusal to supply in *Magill*

> "concerned a product the supply of which was indispensable for carrying the business […], prevented the appearance of a new product for which there was a […] demand, was likely to exclude all competition […] and was not justified by objective considerations"[37].

Similarly, in *IMS Health*, the European Court of Justice confirmed that the characteristics determined in *Magill* would have to be considered as cumulative[38].

[34] WALLER, WEBER (2008: 3-4).
[35] RASPAUD (2014:69).
[36] Judgment of the Court of Justice of 6 April 1995 Joined cases C-241/91P and 242/91 P, *RTE & ITP vs. Commission*, paragraph 46.
[37] Judgment of the Court of Justice of 26 November 1998, C-7/97, *Oscar Bronner GmbH Co KG vs. Mediaprint*, paragraph 40.
[38] Judgment of the Court of Justice of 29 April 2004, C-418/01, *IMS Health GmbH & Co.OHG v NDC Health GmbH & Co .KG*, paragraph 38.

In the same year, the US Supreme Court, in *Verizon Communications v. Trinko*[39], which was dealing with Verizon's unwillingness to provide access to its operation support system, reached the opposite decision, therefore diverging from the application of this doctrine given by the European Union. The court in fact decided to not address the doctrine, refusing in this way to either reject it or defend it.[40]

The United States and the European Union also fundamentally disagreed in another context: The Microsoft case, where once again the US courts interpreted the essential facilities doctrine restrictively in contrast to EU courts that instead analyzed Microsoft's refusal to give access to an operating system of Windows under article 102 TFEU, finding an abuse of dominance[41] (this point will be analyzed more in detail in Chapter 2, more precisely in subparagraph 2.1.d), *Microsoft and Google: a comparison of the application of the essential facilities doctrine).*

In general, it can be said that the essential facilities doctrine has been largely criticized by many, who stated that it lacks a theoretical basis, that it should be regarded as unnecessary, or that, if applied to intellectual property rights, it could eve help hinder innovation. Others have instead chosen to defend it, as they believe it is an effective way to restore competition and could also be used in the future in particular in digital markets[42].

What can be surely affirmed is that this doctrine originated from a need to protect the public interest and competition in sectors like public service and social welfare where it is impossible for competitors to duplicate access to the essential facility.

[39] Judgment of the Court of the United States of 13 January 2004, LLP, (02-682), 540 U.S. 398, 305 F3d 89, *Verizon Communications v. Law Offices of Curtis V. Trinko.*
[40] Judgment of the Court of the United States of 13 January 2004, LLP, (02-682), 540 U.S. 398, 305 F3d 89, *Verizon Communications v. Law Offices of Curtis V. Trinko.*
[41] RASPAUD (2014: 70).
[42] LAO (2009: 557 ff.).

Chapter 2. THE GOOGLE CASES

In the previous chapter Google has been mentioned multiple times with regard to its "Tech-giant" role in digital markets. This company was created in 1998 and its value has been increasingly rising year after year ever since, leading to the present position that it holds as one of the most successful undertakings of the globe[43]. Its corporate mission statement is: "to organize the world's information and make it universally accessible and useful"[44], while its corporate vision is "to provide access to the world's information in one click"[45].

This chapter, after giving a brief overview of some of Google's operating mechanisms and services offered, will take a look at part of Google's behavior that brought into light some competition law issues.

2.1. The Google Search Case

a. Google and its services

Google offers many different services and products but it can be generally described as a two-sided platform that gives the possibility to its users to search for whatever they want on the Internet free of charge, while advertisers, instead, are given the opportunity to put their adverts next to the search results of the queries inserted by users and/or on the web pages linked to the various results[46].

According to what previously presented in Chapter 1, big data and the algorithms used for their collection and interpretation are a crucial part of the provision of such a service. As the quantity of data generated by common users and by advertisers grows larger, the complexity of algorithms does too. As a matter of fact, nowadays, Google's algorithms also include analyses of "click-through rates" (also called Search Engine Result Pages – SERP), which is nothing else but the analysis of users' choices when clicking. These data flow into Google's algorithms in order to create content and suggestions which should result in improved and more correct search results, based on the feedback received[47].

Nonetheless for Google to be able to use and extract these kinds of information there must be some form of consent and most importantly advantage given by and for the users, because otherwise who would willingly give up their personal information, just for the sake of it? Very often the benefit for the consumer lies in the very fact that the online service is provided free of charge,

[43] THOMPSON (2019: 1).
[44] THOMPSON (2019: 1).
[45] THOMPSON (2019: 1).
[46] BERGQVIST (2019: 3).
[47] BERGQVIST (2019: 4).

meaning in another sense that users actually seem to pay for it with their own data that are practically used in the exchange as a form of alternative currency. The question that arises is, how can companies then collect and acquire the data that the users produce through their online activity? This is mainly done through tracking devices, called cookie, that are nothing else but text files that contain and sum up all the users' preferences and information in a given web page, which then enables a precise profiling that gets updated each time that user logs in the same web page[48] again. All of this acquired data is then used to develop and improve the search algorithms[49], which, in the long run, will cause Google to be able to improve all of its services. This "tailoring" of the service to the user has proven to be a very smart business decision and has contributed largely to the success of Google as a company acting in the tech-world.

More generally, Google can be said to provide three different types of results to a user's query: generalized results without a particular sponsor, sponsored advertisings that are usually displayed above the previous type and, lastly, information shown in separate boxes of commercial products and services[50]. The last two types of results can lead to Google-related services, but this issue will be discussed more in depth in the following pages.

For what regards the services offered to advertisers, instead there are two main possibilities.
The first one, Google Ads (named AdWords before the 14th of July 2018), was created in 2000 and is a service that gives the possibility to advertisers to put an offer on specific keywords in order to advertise either on Google's search engine or on its content sites Google search network and Google display[51]. When that word is then searched by the end user, the advertisement of the company that bid on it will be displayed as one of the sponsored search results. In this case, Google will receive a fee each time a user clicks on the link of that specific advertisement[52]. This is a practice called "Pay per click"[53] and is widely used in today's digital markets. Businesses and companies adopt this form of advertising, hoping that it will attract traffic from targeted costumers and stimulate them to visit their own website and possibly also to buy their products[54]. Google Ads is the main source of monetary revenue for Google and, as such, plays a pivotal role in its business form.

The second type of service offered is called AdSense. It was created only in a later time, namely 2003, and could be described as a sort of extension of the

[48] AGCOM (2020: 18).
[49] BERGQVIST (2019: 17).
[50] BERGQVIST (2019: 4).
[51] WORDSTREAM (2020: 1).
[52] WORDSTREAM (2020: 1).
[53] CARR (2020: 1).
[54] WORDSTREAM (2020: 1).

principle and idea behind Google Ads. It is in fact the platform that can be used by publishers in order to display ads (in form of text, images and videos) on a website[55]. This can help the publisher to create revenue from its website, as they are paid a little sum each time someone clicks on one of the advertisements[56]. Nevertheless, all the advertisements are managed and organized by Google itself, who still earns from offering this service. While also AdSense is an important source of revenue and can generate profit for Google through the "pay per click" system, it is secondary to Google Ads.

Google's products with which we have dealt up until this point, are to be categorized as general/horizontal search services, meaning that they offer and comprehend search across the whole Internet, covering a vast range of topics and subjects[57]. This type of search can be performed both by computers and mobile devices.

Nevertheless, Google also offers other services in addition to the ones described above that should be categorized instead as specialized/vertical search services (also called "specialty" or "topical"), as they offer a limited spectrum, by focusing on one specific theme or object and only browsing a particular part of the Internet[58]. These include for instance: Google Images, Froogle or Google Product Search, Google Shopping and Google Maps (just to name a few).

Generally speaking, horizontal and vertical search offer two different services and ways to browse the Internet, that, at first glance, seemed to be working quite independently from each other[59]. This changed in 2007, when Google decided to add a new characteristic to its general search service. As a result of a query, in addition to the general search results also a "Shopping Unit" (that in the years has also been named "Product Universal" and "Commercial Unit") was added, which is a product that shows to the user also search results from one of Google's specialized, therefore vertical, search engines related to the issue[60]. The so called "Shopping Unit" appears in a separate box, also with information describing the proposed article and pictures thereof.

This combination of services and inclusion of information taken from vertical search to the general results, was branded by Google as a way to add functionality to its services and to make the user experience as simple as possible but the general perception was that Google was also using it as a way to favor its

[55] BERGQVIST (2019: 4).
[56] WORDSTREAM (2020: 1).
[57] HILBORNDIGITAL (2017: 1).
[58] HILBORNDIGITAL (2017: 1).
[59] BERGQVIST (2019: 5).
[60] BERGQVIST (2019: 5).

own services[61]. This led to various investigations and inquiries both from antitrust authorities of the European Union and of the United States, namely the so-called Google search bias cases[62].

The following sections will analyze the result of such investigations.

b. The Google search decision and the Commission's theory of harm

In 2010, following complaints by search service suppliers, the European Commission decided to open antitrust investigations against Google to establish if it had abused its dominant position, therefore possibly violating article 102 TFEU[63]. The (at the time) alleged infringements that were scrutinized by the Commission were whether Google had lowered the ranking of competing vertical search services, given a preferential position to the results of its own specialized search services, therefore trying to limit the users access/traffic to competitors[64]. In addition to that, the Commission also looked if Google fraudulently lowered the "quality scores" (which influence the likelihood that an ad will be displayed, in case advertisers put a bid on the same keyword) of its competitors in the vertical search field[65].
Foundem, a shopping and price comparison website, also accused Google of practicing "scraping", which is when a website utilizes content from another website, and declared that Google was also forcing advertisers and publishers into exclusivity contracts in order to use Google Ads and AdSense, therefore, allegedly ruling out the possibility for other online search advertisers to be effective rivals[66].

In the years to come, the Commission tried to negotiate with Google in order to find a solution to the issues at hand by signing a decision in which Google would have been subjected to specific legally binding commitments, as is prescribed by article 9 of the Antitrust Regulation[67]. This would have represented a way to settle the matter without the imposition of a fine. In particular, three different agreement proposals were discussed, where Google proposed, among other things, that during the promotion of its own specialized search services it would also display in a visible and comparable way the services of three objectively selected rivals[68]. However, in the end, the proposals were all rejected by the Commission as they were deemed to be unsatisfactory and insufficient to grant the protection of competition under EU antitrust law. As a consequence, the Commission decided to follow this case up to a formal,

[61] BERGQVIST (2019: 6).
[62] MASSAROTTO (2018: 409).
[63] EUROPEAN COMMISSION (2010: 1).
[64] EUROPEAN COMMISSION (2010: 1).
[65] EUROPEAN COMMISSION (2010: 1).
[66] BERGQVIST (2019: 7).
[67] ALMUNIA (2014: 4).
[68] KOKKORIS (2017: 317)

legal decision and, in 2015, also opened a new antitrust investigation regarding Google's behavior for Android, its mobile operating system[69]. While the *Android* proceeding must not be confused with the case at hand, as it is a completely separate matter, the two cases actually share some characteristics, in particular regarding the legal concepts and considerations that the Commission used for the assessment of the two proceedings. For this reason, the *Google Android* case will be discussed more in detail in section 2.2 of this chapter.

The *Google Search* proceedings that were opened in 2010 were concluded seven years later, when Google and its parent company Alphabet were fined by the European Commission a total of 2 424 495 000 Euros in the *Google Search Shopping* decision which recognized Google as being dominant in the market for general search and of having abused its dominance by "positioning and displaying more favorably, in its general search results pages, its own comparison-shopping service compared to competing [ones]"[70]. The fine imposed at the time had no precedent in EU antitrust law and was the highest one charged on a technological undertaking. It was only surpassed by the 4.3 billion Euros fine that the Commission imposed on Google in the *Google Android* decision.

Google was found to definitely having a dominant position in all Member States of the Union in the market for general search services, as it had (and still has), in most cases, market shares higher than 90 per cent. This contributed and led it to become an "indispensable gateway"[71] also for comparison shopping services, competing with Google in the comparison-shopping websites market.

According to the Commission's decision, Google's behavior was abusive, because of two main reasons: it diverted traffic from its general search pages to its own vertical comparison-shopping services and it was capable and likely to have anti-competitive effects in those two markets[72]. This would necessarily fall outside the scope of competition of the merits, which instead is present when it is "based on superior efficiency rather than on means that reflect the ability to harm competition that is constitutive of the dominant position"[73].

The diversion of traffic was also confirmed by user behavior analysis, as in general, the majority of individuals are cognitively lazy, meaning that they only focus on the first search results and do not even bother looking at any other services. Accordingly, it was found that traffic is a very important thing

[69] EUROPEAN COMMISSION (2015a: 1).
[70] EUROPEAN COMMISSION (2017b: 2).
[71] EZRACHI (2018: 295).
[72] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 539.
[73] NAZZINI (2016: 6).

for the success of comparison-shopping services, as it increases the capacity of comparison-shopping services to persuade merchants to give them data about their products. Additionally, it also generates direct revenue through online search advertising or through commissions from merchants, and, most importantly, it gives rise to machine learning effects that are fundamental for the improvement of the services and, as a consequence, for being able to keep staying relevant in the market[74].

In addition to what stated above, Google was found to have breached article 102 TFEU, because it was "not subjecting its own shopping service to the same conditions as competing services"[75]. What the Commission was referring to specifically is that Google's comparison-shopping services were not required to be sorted by the same algorithms that instead competing shopping services were subjected to. In particular the decision mentioned one algorithm called Panda, that was first introduced by Google in 2011 as a way to combat "content farms", namely websites that publish large amounts of content that in many cases is not relevant to the search queries[76]. The reason for this, according to the Commission, was that Google was conscious of the fact that its own comparison shopping service would have not been able to obtain a high ranking position, as they "exhibit[ed] several of the characteristics that make competing comparison shopping services prone to being demoted"[77].

The danger that Google's conduct represented for competition, as reported by the Commission, was "the potential to foreclose competing comparison-shopping services"[78]. In turn this would cause Google to be able to impose higher fees to merchants for taking part in its service, which would probably result in higher product prices for the consumers, as the higher costs must be covered in some way. Furthermore, competing shopping services would be discouraged from investing in innovation, if they don't expect their service to attract enough traffic, and, consequently, enough revenue[79]. Likewise, also Google would have no real drive to innovate its products as it would not have any real competitor to put in question its dominant position, according to the Commission.

Google pointed out in its defense, that its behavior should not be considered abusive because the Commission failed to prove that the criteria set out in the

[74] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 447.
[75] EZRACHI (2018: 293).
[76] BERGKAMP (2019: 535).
[77] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 346.
[78] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 593.
[79] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 593.

Bronner case were fulfilled[80] and there was no real legal precedent that could help identify the conduct as illegal. Additionally, Google also claimed that it was competing on the merits, because the actions that it took were nothing else but product design improvements for innovation purposes that could therefore only be identified as abusive in exceptional circumstances[81].

The Commission disagreed with this defense and its implications, pointing out that its decision did not demand to enter into agreements or requested Google transferring its assets or giving access to them to its competitors, but instead required that Google simply applied the same conditions to its shopping service that were imposed to the shopping services of its competitors[82]. For this reason, the criteria set out in the *Bronner* case were deemed as unrelated to the issue at hand. It was also found that trying to extend one's dominant position in a given market (in this case the general search market) by foregoing anticompetitive conduct in adjacent markets (in this case the comparison shopping service market), was an established form of abuse under article 102 TFEU[83], dismissing therefore the claim that a legal precedent was missing.

Also, the possibility of an objective justification, as set out in the *British Airways* judgement[84], was dismissed by the Commission, as Google had not demonstrated that its behavior was "objectively necessary, or that the exclusionary effect produced may be counterbalanced, outweighed even, by advantages in terms of efficiency gains that also benefit consumers"[85].

Therefore, to sum up, it can be said that the analysis of Google's behavior performed by the Commission was mainly divided in three different sections[86]. The first step is a description of the conduct at hand, that does not fall (in the Commission's opinion) under the category of competition on the merits. The second step, instead, consists in an evaluation of anticompetitive effects, both potential and actual, originating from the conduct. Finally, the Commission also evaluated possible pro-competitive effects of Google's conduct, finding that they don't outweigh the anti-competitive effects caused by Google.

Google appealed to the General Court the Commission's decision, arguing that it had satisfied all the legal obligations it had to its competitors, including

---

[80] For more on this issue please see paragraph *1.2.b) The essential facilities doctrine*, in particular note 38.
[81] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 447.1.
[82] EUROPEAN COMMISSION (2017b: 3).
[83] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 727.
[84] Please see paragraph *1.2.a) The special responsibility concept.*
[85] Decision of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping)*, paragraph 653.
[86] KOENIG (2019: 4).

the one to a fair access to its products, and that the Commission also excluded other possible competitors and players, such as Amazon, in their market definition and consequently in their final decision[87]. The judgement, as of today, is still pending.

What can be inferred from the *Google Search (Shopping)* decision by the Commission is that the main violation that was harming competition is monopoly leveraging, which in antitrust theory is defined as the "use of monopoly power attained in one market to gain a competitive advantage in another"[88]. This was the case according to the Commission's decision and theory of harm that argues that Google's dominance in the general search market could have been used as a way to achieve another dominant position in the competitive market for comparison shopping services[89]. Nevertheless, in order for this consideration to hold, it must be assumed that these markets are separate from one another[90].

This decision has been highly debated and criticized, as many believe that the Commission's reasoning was too vague. In particular, scholars have been arguing whether Google's conduct actually fitted into well-established categories of harm under article 102, such as tying, discrimination or anticompetitive refusal to deal, or whether the Commission has applied a new legal standard and (if so), if it was lawful[91].

In addition to the proceedings opened (and closed with the *Google Shopping* decision) by the European Union, also the Federal Trade Commission (FTC), the antitrust authority of the United States, opened investigations into Google's behavior in its comparison shopping service, but the conclusions that were reached, differed completely from the approach taken by the European Commission. The next section will offer an analysis of this.

c. The US Google Search Decision

The FTC's investigation into Google's search activities was launched in 2012, following a request by the Chairman of the US Senate Subcommittee on Antitrust, Competition Policy and Consumer Rights[92]. The conduct was scrutinized as a breach of Section 5 of the Federal Trade Commission Act, which is a provision that sets out a prohibition of "unfair or deceptive acts or practices in or affecting commerce"[93]. According to US competition law monopolies

[87] WAKEFIELD (2020: 1).
[88] USLEGAL (2020 :1).
[89] BERGQVIST (2019: 14).
[90] BERGQVIST (2019: 14).
[91] KOENIG (2019: 2).
[92] BERGQVIST (2019: 23).
[93] FEDERALRESERVE (2020: 1).

can be recognized as being lawful, but only in the case that there is no anti-competitive conduct that helped to gain the monopolistic position or that helps in its maintenance and/or expansion[94]. As a technical procedure the FTC is always required to address anticompetitive behavior as a breach of section 5, because "the agency has no independent legal authority to bring cases for violation of antitrust law"[95], not even under the Sherman Act.

The FTC scrutinized whether Google had degraded the content of competitors in order to give an advantageous position to its own comparison-shopping service, whether Google had been practicing scraping (as reported by Foundem to the European Commission) and whether the use of Google Ads was limited by contractual restrictions able to preclude the use of competing search portals for advertisers[96]. These claims were very similar to the ones first posed by the EU Commission. In fact, in both the FTC's and the Commission's initial examination there was the shared view that Google had altered its own search result algorithm in order to promote and advance its own services at the expense of competitors[97], a claim that was initially confirmed by two white papers[98] published in 2011 by FairSearch, an association of organizations and businesses that also includes Microsoft.

Finally, in 2013 the FTC declared in a four page long statement, after an unanimous decision of the commissioners, that there was no need to file a complaint against Google, based on the evidence acquired, because its behavior was a "common by-product of competition on the merit and [of] the competitive process that the law encourages [and that the negative effects were] accidental"[99] and that there was no will of Google to favor its own services. It was also found that, while the algorithm changes performed by Google had in fact had some negative effects for its competitors, the positive effects and the innovation brought to the consumers highly outweighed them[100].

What the FTC was able to do, was achieving voluntary commitments signed by Google and valid for five year, where the undertaking agreed to remove the restrictions it imposed on the use of its Google Ads platform and also allowed rival websites to protect themselves from and prevent Google's scraping. The FTC stated that these commitments are lawful and therefore enforceable, meaning that in case of their violation, a potential lawsuit could be undergone, but at the same time their legal power is way less significant than the

[94] Judgment of the Supreme Court of the United States of 13 January 2004, LLP, (02-682), 540 U.S. 398, 305 F3d 89, *Verizon Communications v. Law Offices of Curtis V. Trinko*, page 7.
[95] BERGQVIST (2019: 30).
[96] BERGQVIST (2019: 24).
[97] MASSAROTTO (2018: 409).
[98] FAIRSEARCH (2011a: 1-5), FAIRSEARCH (2011b: 5-44).
[99] FEDERAL TRADE COMMISSION (2013: 2).
[100] FEDERAL TRADE COMMISSION (2013: 2).

one of formal consent decrees or litigations, that the FTC could have adopted in their place[101].

The conclusion of the investigations has been highly criticized by many for its brevity and vagueness, but in particular Bill Kovacic, who is a former chairman of the FTC, defined it as a lost opportunity to the regulation of cases involving tech giants and also stated that the quality of US antitrust law and its capacity to stay relevant in competition matters of arising information service and high tech economy, had been compromised by the decision not to act[102].

The debate and the arising doubts on the efficacy and effectiveness of the FTC's statement have also been fueled by the fact that part of an internal memorandum of the Commission, written by the Bureau of Competition, was leaked to the Wall Street Journal and therefore to the public. This document seems to be in complete disagreement with what the FTC had previously stated, as it supports the idea that Google's behavior was actually harming consumers and hindering effective and just competition, because of evidence that showed that Google had willfully altered the search results in order to advance its own services in the ranking[103].

The reasons why the FTC finally chose to change its initial opinion, therefore, also reaching a very different (if not opposite) decision and final outcome to the one reached by the EU Commission, in spite of the very similar original claims and findings against Google that the two cases shared, can only be speculated. The FTC may have possibly been particularly reluctant in opening a proceeding exclusively based on Section 5 and not on Section 2 of the Sherman Act (which is instead the common provision used in cases of anticompetitive conduct) or that the FTC simply gave greater importance and significance to the procompetitive effects of Google's conduct[104].

What can be safely affirmed from the Google Search Bias cases is that these two opposite and conflicting resolutions leave the door open for discussions on which approach of the two was the best in addressing the matter and whether alternative approaches and strategies could have been implemented on both sides to reach an effective solution of the problems arising from Google's conduct.

d. Microsoft and Google: a comparison of the application of the essential facilities doctrine

[101] WYATT (2013:1).
[102] KOVACIC (2020:1).
[103] MULLINS, WINKLER, KELLER (2015: 1).
[104] BERGQVIST (2019: 40).

Google is not the only tech giant to have been the object of antitrust allegations for what regards abuses of dominant positions. Also the multinational software and operating system company Microsoft was investigated by both the European and the United States' antitrust authorities between the 1990's and the early 2000's, as it held almost ninety percent of market shares in the market for personal computers[105]. Nevertheless, this phenomenon appeared to be quite natural, as the dominant position/monopoly seemed to be an easily foreseeable consequence, as Microsoft had created in fact a new product and, therefore, a new market[106].

The first US case, namely Microsoft I, was concluded in 1995 with a consent decree where behavioral remedies were imposed with the aim of restricting and reducing the conduct that was capable of hindering competition, in particular prohibiting the tying of Microsoft's products to its operating system. Also great concerns were raised regarding the decision by Microsoft to not grant access to interoperability information with the Windows system to its competitors in theory constituting an abuse of dominance under the essential facilities doctrine, but once again this doctrine was not embraced by the US antitrust authority. Behavioral remedies were deemed to be a sufficient safeguard of competition. Nevertheless, the so-called Microsoft saga did not end there.

In 1998 Microsoft promoted Internet Explorer 4, a new operating system, and tied it to the most recent version of its browser, which was the origin for the Microsoft II case[107]. In fact, Microsoft claimed that Internet Explorer was not to be considered a separate product from the general operating system, while the District Court was of the opposite opinion and also judged accordingly. Yet, on the 12th of May 1998 the Court of Appeal annulled the previous judgement and recognized that Windows 95 and Internet Explorer could be defined as integrated products[108].

As they say the third time is a charm and therefore only six days later the department of justice decided to file a third lawsuit, Microsoft III, against the tech giant claiming that it had monopolized the operating system market and consequently also tried to expand its power in other close markets. In 2001 Microsoft appealed the decision taken by the district court where the Judge had ruled in favor of the division of Microsoft in two different undertakings, one for the operating system and another for software applications[109]. Finally, the case was settled in 2002 and it was deemed sufficient to impose other behavioral and conduct remedies instead of taking a more structural action and promote the undertaking's division. The decree also foresaw the creation of a

[105] MASSAROTTO (2018: 402).
[106] MASSAROTTO (2018: 405).
[107] MASSAROTTO (2018: 402).
[108] MASSAROTTO (2018: 403).
[109] MASSAROTTO (2018: 403).

committee composed by three neutral and technical experts to inspect and look after Microsoft's activities[110].

In 2004 also the European Commission issued its opinion on the matter and found Microsoft to have breached article 102 TFEU, in particular harming consumers limiting the technical development, because it had refused to give to its competitors information on the interoperability of its operating system Windows[111], choosing to keep it as a "trade secret"[112]. In addition, it also found that Microsoft had abused its market power by tying Windows Media Player to the general Windows operating system, reducing the incentive of competitors to innovate[113]. The fine that the Commission imposed on Microsoft amounted to 497 million Euros[114].

Microsoft decided to file an action for the annulment of this decision presenting the defense that its refusal to give access to interoperability information could not constitute an abuse of dominance as that category of information was protected by intellectual property rights[115] but in 2007 the General Court confirmed the previous decision of the Commission.

With respect to the tying issue, the general court found that all the factors necessary to establish such abuse were met in this case. In fact, it was recognized that the two products (tying product and tied product) were separate, that Microsoft was actually dominant in the market for the tying product, that the consumers were not given the possibility to have access to the tying product without the tied one and that the practice was able to foreclose competition[116].

For what regards the refusal to supply, the court recognized that the exceptional circumstances described in Magill and IMS Health (that can be summarized in the essential facility concept[117]) needed for the recognition of an actual refusal to supply even in a situation where the information is protected by intellectual property rights, were all met[118].

According to the judgment, the Commission had rightfully recognized that for competitors to be able to effectively participate in the market dominated by

---

[110] Judgment of the United States District Court of 12 November 2002, No. 98-1232, *US V. Microsoft Corp.*
[111] Decision of the European Commission of 24 March 2004, C-3/37.792, *Microsoft Corporation*, paragraph 22.
[112] SURBLYTE (2015: 173).
[113] EZRACHI (2018: 305).
[114]ANGELOV (2014: 49).
[115] EZRACHI (2018: 283).
[116] EZRACHI (2018: 305).
[117] Please see section *1.2.b) The essential facilities doctrine.*
[118] Judgement of the General Court of 17 September 2007, T-201/04, *Microsoft Corp v Commission*, paragraph 318.

Windows, their operating systems needed to be compatible and interoperable with the Microsoft system. Precluding information on interoperability would therefore take out an indispensable condition for the wellbeing of competition and possibly eliminate it all together[119].
Additionally, it was held that the requirement for the recognition of the essential facility doctrine that foresees the identification of the abuse in cases where the conduct of the undertaking prevents the creation of new products, could not be "the only parameter which determines whether a refusal to license an intellectual property right is capable of causing prejudice to consumers within the meaning of [article 102]"[120]. Also in cases of limitation of products, markets and/or innovation this provision can be rightfully used.

The General Court also found that the fact that the information in question was protected by intellectual property rights was not valid a enough justification within the meaning of Magill and IMS Health and that Microsoft had not been able to demonstrate that its incentive to innovate would have been harmed by the access of its competitors to the interoperability information[121].

The Microsoft cases described above, similarly to the Google ones, also involved a platform that enables the connection between vendors offering a product and acquirers willing to buy it, but the two platforms are very different in the way they function. The platform in the case of Microsoft, is its own operating system Windows that enables users (who pay for the software) to download separate applications performing different functions created by separate application writers, which is the reason why Microsoft's product is attractive to consumers in the first place[122]. This is in fact the first difference that can be pointed out between Google and Microsoft. While Google's platform/search service operates directly on the Internet and is provided for free to its users, the product Microsoft offers is subjected to charge.

This is a very important difference as from it, it can be inferred that while customers necessarily depended on Microsoft's Windows in order to use the other applications, in Google's case this was only true up to a certain extent. Publishers could in theory also possibly find a way to obtain access to some costumers through the internet in general[123]. This might be one of the reasons why when taking this decision, the Commission did not consider the essential facilities doctrine as it had done for Microsoft. As Aguilera Valdivia puts it: "the Commission does not state whether or not search engines are essential

[119] Judgment of the General Court of 17 September 2007, T-201/04, *Microsoft Corp v Commission*, paragraph 439.
[120] Judgment of the General Court of 17 September 2007, T-201/04, *Microsoft Corp v Commission*, paragraph 647.
[121] EZRACHI (2018: 285).
[122] LANG (2016: 7).
[123] LANG (2016: 9).

facilities for comparison services. This was not part of this decision"[124]. However, was this right?

In Google's case, search engines are rather discussed. As stated above, in theory they can be replicated and are not the only way through which consumers can find products to buy and what they are interested in in general. On the other hand, if we consider the reality of things, one must recognize that the creation of a browser as successful as Google's with its unique capacity to approach a high percentage of the world's population[125] is highly improbable. Admittedly, vertical, more specialized search engines like Amazon need Google's horizontal, general search engine to reach large numbers of potential customers, as it was found that "without a Google ranking, website traffic drops up 96%"[126].

Furthermore, one could say that the essential facility should not be considered to be Google Search as such, but the first positions in the search results. As demonstrated in various studies, "users blind[ly] trust Google's ranking algorithm and [have a] tendency to click, […] on the first surrogate presented in the result list"[127]. Still, it is also true that there exist alternatives for the promotion of products. Google's competitors can choose to advertise through in print publications, TV, social networks, specialized online and printed magazines, review sites and more[128]. Competition would therefore not completely disappear if access to the first results was denied to competitors, but it is debatable how practically effective the alternatives of product promotion would be.

Additionally, the role that the big data that are generated by consumers themselves and gathered by tech companies play in the success of the undertaking in the market must be considered. As previously presented[129], the more data one is able to collect and analyze, the more the digital product it offers will be of relevance to consumers. Google on this point is much more advantaged than its counterparts as the data that it collects through its general search service can also be implemented in the development of its comparison-shopping service. As they say knowledge (and therefore also the data from which it is inferred) is power.

It appears that the choice of the Commission to analyze this case under the framework of the application of dissimilar conditions to equivalent transactions with other trading partners, as per article 102, could have actually been

[124] AGUILERA VALDIVIA (2018: 62).
[125] MAYS (2015: 754).
[126] MAYS (2015: 754).
[127] BALATSOUKAS, RUTHVEN (2012).
[128] MANNE (2010: 423).
[129] Please see section *1.1) Implications of big data for the creation of dominant positions in digital markets.*

limited in scope and that the possible and alternative definition of Google Search as an essential facility for the comparison shopping service market could have set an important precedent for future case law.

2.2. The Google Android Case

Google's smartphone applications are used all around the world and have made it one of the most successful providers. This was all possible thanks to the fact that Google in 2005 decided to acquire Android, an open source operating system that has become extremely popular, even reaching in 2015 a market share of 82.8%[130]. The explanation for its popularity can be easily identified in its availability free of charge but another possible answer is that there is a great range of applications that can be downloaded from it and that are compatible, making it therefore an appealing product[131]. The only apparently feasible rival of Android is Apple's iOS system but, at the same time, it is only available on Apple devices, meaning that almost all remaining hardware manufacturers rely on Android's installation for the functioning of their mobile devices.

Google Android is a very similar product to Google Search in its structure: it is also a platform that can be used for free, but the main difference lies in the fact that it is open source. This means that the source code is available to anyone, allowing therefore its modifications and/or enhancements possibly also by the general public[132]. It would consequently appear that anyone with the necessary knowledge, skills and capabilities could be in a position to create applications compatible with the Android system and in some cases, this would even lead to the development of Android forks. These are nothing else but other Android platforms that can be either compatible (if they comply with the Android Compatibility Definition Document and pass the Compatibility Test Suite) or non-compatible, meaning that they are created to work on their personal ecosystem[133].

Nevertheless, in order to build a mobile device, furnished with Android and also with the Google apps (such as Gmail, Google Maps, YouTube just to name a few), manufacturers must comply with some specific requirements. In fact, all Google Mobile Services (GMS), including Google Play, namely the app that is needed in order to download further apps, must be acquired with Android and are not available for separate download[134]. Therefore, if a manufacturer wants to offer a device with a free, compatible Android fork he/she can choose to do it, but it will not include any GMS's. The problem with this is that users of mobile devices have become accustomed to such services and

[130] MASSAROTTO (2018: 411).
[131] EDELMAN, GERADIN (2016: 162-163).
[132] MASSAROTTO (2018: 411).
[133] RUADHAN (2014: 1).
[134] EDELMAN, GERADIN (2016: 163).

would most likely not be satisfied with a product that wouldn't allow their download.

In order to distribute an Android device with the inclusion of the GMSs, device manufacturers must necessarily sign a Mobile Application Distribution Agreement (the so called MADA) and also an Anti-Fragmentation Agreement (AFA)[135]. The MADAs are confidential agreements that are customized each time and for each manufacturer but all of them seem to have some characteristics in common[136].
The first one is that all manufacturers shall preinstall all GMSs that Google wants them to. In addition, these apps should all be placed in a prominent position on the screen of the device. Thirdly, Google search must be the default search system and provider for all search access points. Google also requires that the Google Network Location Provider shall also be preloaded by default for it to track users' location and send that information to Google, while all web pages on the mobile apps must always be presented trough a Google WebView component.
AFAs are also confidential and the fact that no copy has ever been made available to the public does not allow us to know exactly what they require and which conditions the mobile device manufacturers must meet under these agreements, but what can be assumed is that it prohibits manufacturers from creating a forked version of Android[137].

On April 2015 the European Commission decided to open formal antitrust investigations into Google Android to see if there was a possible abuse of dominance and consequent breach of article 102 TFEU[138].
The investigations focused on whether Google had obstructed the development of rival mobile operating systems and essentially also of rival apps and whether Google had precluded the access of its competitors to the market[139].

The Commission found Google to be dominant in three different markets: in the general internet search service (as also established in the Google search decision), in the market for licensable smart mobile operating systems and finally in the market for app stores for Android mobile operating system (thanks to Google Play)[140]. The considerations on the position of dominance in the market for licensable smart mobile operating systems were also made taking into account the significant network effects working in favor of Android and creating high barriers to entry for competitors, as the more people

[135] EDELMAN, GERADIN (2016: 165-166).
[136] EDELMAN, GERADIN (2016: 165-166).
[137] EDELMAN, GERADIN (2016: 165-166).
[138] EUROPEAN COMMISSION (2015a: 1).
[139] EUROPEAN COMMISSION (2015a: 1).
[140] Decision of the European Commission of 18 July 2018, AT40099, *Google Android*, paragraph 6.

use and most importantly get accustomed to using Android, the more apps will be created for that system.

The final decision was reached on the 18th of July 2018 where the Commission found Google guilty of having abused its market dominance with its behavior related to Google Android. As a consequence of this abuse, the Commission imposed a record fine of 4,342,865,000 Euros[141].
In particular Google was found guilty because of three different illegal practices[142].

The first one is the illegal tying of GMSs such as the Google Search service (that started in 2011), the Google chrome browser (that started in 2012) and the Google Play app to Android. The fact that apps and services are provided as a bundle, makes it impossible for manufacturers to pre-install some apps and not others. According to the Commission this type of tying was a clear breach of article 102 TFEU as it reduced competition because of the creation of foreclosure through the "status quo bias" that gives rise to a situation in which if some apps are already pre-installed, users are very unlikely to download other competitor apps, therefore reducing the competition ability of rivals[143].

The second illegal behavior according to the Commission was the fact that Google granted financial incentives to manufacturers and mobile network operators for the exclusive installation of Google search for Android devices. The Commission nevertheless recognized and also took into consideration that this particular conduct went on only from 2011 to 2014 and then stopped[144].

The third illegal conduct that the Commission identified is the fact that google required manufacturers to commit to not develop or sell devices based on Android forks. The behavior started according to the Commission in 2011, in particular from the date that Google became dominant in the market. Google tried to justify its conduct by saying that it was done to avoid fragmentation, but the Commission did not accept this excuse and found they could have simply ensured that Android devices using Google proprietary apps and services were compliant with Google's technical requirements, without preventing the emergence of Android forks[145]. In general, the Commission found that "Google has imposed illegal restrictions on Android device manufacturers and

[141] Decision of the European Commission of 18 July 2018, AT40099, *Google Android*, paragraph 32.
[142] EUROPEAN COMMISSION (2018a: 3-6).
[143] EUROPEAN COMMISSION (2018a: 3-6).
[144] EUROPEAN COMMISSION (2018a: 3-6).
[145] EUROPEAN COMMISSION (2018a: 3-6).

mobile network operators to cement its dominant position in general internet search"[146], which per se appears to be a violation of article 102(a)[147].

The CEO of Google, Sundar Pichai, has released some statements openly criticizing the Commission's decision. In particular he stated that the Android ecosystem has created more choice and not less, uniting different devices into one single system able to run the same applications and that the rules they set ensure technical compatibility, no matter the form of the device[148].

In spite of this, the Commission believes that Google has failed to demonstrate that there was an objective justification for all of the three identified abusive conducts, excluding, as a consequence, that the advantages and efficiencies created could counterweigh or balance the disadvantages arising[149].

a. Similarities and differences with the Google Search case

What both cases have in common are of course their protagonists, the tech-giant Google in opposition to the antitrust authority that was concerned for its abusive behavior arising from the position of dominance that the undertaking enjoys in the various markets.

Consequently article 102 TFEU breaches were found in both cases, even though they differed in their form: as we have seen above in the Google Search case the Commission developed a theory of harm that depended mainly on monopoly leveraging, while in Google Android, instead, the theory of harm appeared to be mainly linked to the illegal tying of products and on the imposition of unfair restrictions on device manufacturers, even though, to a certain extent, it can also be observed that monopoly leveraging is present also in this case. The interesting fact is that while in Google Search there was an attempt from Google to expand its influence and dominant position in the market for general search to the market for specialized search services where it did not enjoy a position of dominance, in Google Android it leveraged its market position in a market where it was already dominant (namely the market for app stores for the Android mobile operating system) to strengthen its position in another market where it was also dominant (once again the market for general internet search).

Another aspect that can be compared across these two cases are the significant sums of money that the Commission fined Google with. The fine established for the Google Search case amounted to almost 2.5 billion Euros and was already the highest ever imposed. The fact that the fine for the Google Android

[146] EUROPEAN COMMISSION (2018a: 3-6).
[147] Please see paragraph *1.2 Article 102 as a safeguard against the abuse of dominance.*
[148] PICHAI (2018: 1).
[149] EUROPEAN COMMISSION (2018b: 2-5).

case almost doubled the previous one imposed in Google Search, can be interpreted on the one hand as the Commission's will to take over and finally effectively regulate the digital markets, while on the other hand it could even seem that Google has become a specific target of the Commission. Nevertheless, when dealing with this issue, it must be mentioned and considered that undertakings in general can be fined up to 10% of their global revenue[150]. The reported yearly revenue of Alphabet, Google's mother company, in 2017 was 110.9 billion[151] dollars, meaning that Google could have been possibly fined more than double the final amount of money that the Commission imposed in the Android decision.

What can be surely affirmed is that both these two cases have represented a challenge for the European Commission in its role as antitrust authority as they required the application of conventional and long-established competition regulation strategies and tools in digital markets that are everchanging and untraditional by default.

2.3. Tying: abuse of dominance or competition on the merits?

As briefly explained above the term tying refers to "an agreement by a party to sell one product but only on the condition that the buyer also purchase a different (or tied) product or at least agrees that he will not purchase that product from any other supplier"[152]. This practice is not necessarily anticompetitive by nature and is used in many cases as a business strategy in order to offer better products. In fact, it makes sense to sell shoes with shoelaces even if they could possibly also be sold separately. Nevertheless, a tying conduct can become abusive and extremely harmful for competition in general if market conditions arise where a dominant firm wants to engage in leveraging practices, such as wanting to expand its dominance in other markets, as we have seen in the Microsoft saga[153] and the Google cases in general.

Ties are usually created either through a contractual basis, meaning that they are established and imposed in a contract, or on a technological basis, namely when the two products (tied and tying) are purposefully created to exclusively work together[154]. According to the European Commission, a tying abuse under article 102 TFEU needs to be identified when 4 different circumstances occur: when the tying and the tied products are separate, when there is dominance of the undertaking in the market of the tying product, when the customers are not given a choice on whether or not to obtain the tying product independently

[150] EUROPEAN COMMISSION (2013: 2).
[151] CLEMENT (2020: 1).
[152] Judgment of the Supreme Court of the United States of 8 June 1992, 594 U.S. 451 *Eastman Kodak v. Image Technical Services Inc.*, p. 451.
[153] Please see section 2.1.d) *Microsoft and Google: a comparison of the application of the essential facilities doctrine.*
[154] EDELMAN, GERADIN (2016: 181).

from the tied one and finally when the foreclosure of competition takes place as a direct consequence of the tying practice[155]. Keeping this established test in mind, the practice of tying can be an important issue to be analyzed for what regards Google's general dominance in the digital world.

As a matter of fact, some scholars even believe that in addition to Google's conduct in the Android case that is an established tying instance, also the Google Shopping case could be analyzed under such a framework.
As Bitetti puts it:

> "We can construct the preferential treatment of Google's own services as a form of bundling [and] consider Google Universal Search, i.e. the fact that it integrates its own products such as Maps, Shopping or Google Plus profiles results of important people in its search results, as a tying that the search engine uses to leverage its own products against those offered by competing vertical search engines"[156].

It would appear therefore that when Google presents additional information to its search results in the form of sponsored ads, it is actually tying two different products into a single service, even leading to a sort of "commercial tie-in agreement"[157]. This integrated service might represent a benefit to the consumer but at the same time, it must also be considered that there is no possibility for consumers to choose whether or not to enjoy this product. As a consequence, there is a lack of an "untying" option according to which the consumer could switch off the reception of ads' links and therefore it seems quite unlikely that Google would be and is competing solely on the merits of its own products[158].

At the same time another consideration must be made. Digital markets and the undertakings acting in them are extremely dependent on innovation, as already mentioned several times. This means that digital goods must continuously be integrated with new features and options in order to keep being attractive for consumers. For instance, perishable digital goods, such as operating systems, need to be able to reinvent themselves with new features in order to convince the costumer to buy the improved version of the product even though they still have the previous version, while unperishable digital goods, such as search queries, need to be able to keep a large enough customer base in order to attract sufficient revenue generating activities and still be able to benefit from the services that they offer for free[159]. The two-sidedness of digital markets is accordingly a very important factor to take into account to that

[155] Decision of the European Commission of 24 March 2004, C-3/37.792, *Microsoft Corporation*, paragraph 24.
[156] BITETTI (2016: 315).
[157] ALVIN (2016: 44).
[158] EDELMAN (2015: 369).
[159] BITETTI (2016: 316).

end. This ability to keep staying relevant can only be achieved through innovation. Consequently, it becomes always more and more difficult to distinguish between additional features, complementary services and separate products and of course this also makes the distinction between competition on the merits and abusive behavior particularly questionable in tying instances in digital markets, but these problematics can also be found in general when dealing with digital markets.

Chapter 3. WILL DIGITAL MARKETS CHANGE THE ROLE OF COMPETITION LAW?

According to Vettas "competition and innovation can be identified as the two, closely interrelated, pillars of long-term [economic] growth"[160]. It appears therefore that the interconnection between the two and their significance for micro-economic strategies and policies of undertakings should not be underestimated in any market, but especially in digital markets that rely more than any other on innovation and technological advancements. In general, while competition among undertakings acting in the same market (and its lawful enforcement) enables the improvement of the goods' quality and the reduction of their prices, creating more access to better products for consumers, it is also true that such a process is primarily set in motion by the drive that companies have to innovate in their production, product design and general policies[161]. Such innovation efforts are the direct consequence of the foreseeable profit that companies think they will make. Therefore, if company A is not expecting to financially gain and profit from a given improvement to its product, may it be because company B and C (its competitors) could be easily given the opportunity to free ride on its innovation and benefit more (as could happen in the case of a duty to deal compliant with the essential facilities doctrine[162]), then there is a lack of incentive to work on and upgrade its products. In the long run this could even lead to the disappearance of the company in the market, contributing consequently to less overall competition. Accordingly, the right balance between innovation and competition enforcement is extremely hard to maintain, especially in this point in time where digital markets play a pivotal role in the general economy and are able to drastically change also the functioning of more traditional markets.

This was recognized by the European Union in its Communication of May 2015, where the Digital Single Market was set as one of its main objectives complementing thus the work started in 2010 with the Europe 2020 Agenda where the Digital Single Market was identified instead as one of the seven flagship initiatives of the strategy[163]. As of today no evaluation on whether the goals set out in the Europe 2020 Agenda, including the Digital Single Market, were reached fully was carried out or at least made public, but this document proved extremely noteworthy because of its recognition of the crucial role played by the Digital Single Market in order to enhance the capacity of the European Union to act as a leader in the sector of the global digital economy. It also recognized that the easiest way to achieve such leadership goals in compliance with technological inclusion was by bringing down all possible

[160] VETTAS (2017: 194).
[161] VETTAS (2017: 195).
[162] COLANGELO, MAGGIOLINO (2017: 265).
[163] EUROPEAN COMMISSION (2010b: 11-12).

barriers and avoid fragmentation among Member States[164]. The EU identifies in the Digital Single Market a place in which "individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition and [with] a high level of consumer and personal data protection irrespective of their nationality or their place of residence"[165]. Among the main actions described in the communication needed to reach the goal of the Digital Single Market, the Commission has highlighted the central role of online platforms in the economy as innovators, while at the same time considering the dangers of their growing market power for a fruitful enforcement of competition law[166].

Under the same framework of the Digital Single Market, the Commission also started to work on an inquiry from an antitrust point of view on the e-commerce sector, that was published in its final version in 2017, where among the main competition concerns for digital markets it is possible to identify the use of data in e-commerce along with the restrictions imposed on selling on online marketplaces[167]. The policy conclusions that were proposed in this document are directly connected to the issue of competition law enforcement by the Commission and specifically mention the problematics that may arise following the diverging interpretations given to competition law provisions[168]. The Commission in this document also concludes that it will need to "target [the] enforcement of the EU competition rules at the most widespread business practices […] that have emerged as the result of the growth of e-commerce and that may negatively impact competition and […] the functioning of the Digital Single Market"[169], as well as widen and deepen the dialogue with Member States' national competition authorities in order to reach a homogenous application of competition law inside the Union.

Yet, the issue that arises is: can the existing provisions and competition models be applied with efficacy also to digital markets considering the fact that they have some specific new features able to transform the economy in general or is the adoption of new legal standards and enforcement methods necessary to ensure a fair development of market conditions and (broadly speaking) of competition? As explained in the previous sections the characteristics and peculiarities of digital markets are more likely to cause the creation of dominant positions held by the so-called "tech-giants" and this has been often interpreted from both academia and case law as a threat to economic pluralism[170]. From this concern there are many others that consequently arise and a plurality of other questions that need to be posed, like for instance to which extent the

[164] EUROPEAN COMMISSION (2015b: 1).
[165] EUROPEAN COMMISSION (2015b: 2).
[166] EUROPEAN COMMISSION (2015b: 5).
[167] EUROPEAN COMMISSION (2017a: 10-14).
[168] EUROPEAN COMMISSION (2017a: 16).
[169] EUROPEAN COMMISSION (2017a: 16).
[170] COLANGELO, MAGGIOLINO (2017: 249)

Commission is allowed to actually develop such new legal provisions, changing the interpretation of the treaties and, at the same time, which are the goals and aims that will need to be actually pursued by the competition authority when setting and imposing such antitrust innovations in the digital sector. Finally, the biggest concern that arises is whether in the long run the role of competition law as a whole and especially of its enforcement will become obsolete or, on the contrary, if more regulation will need to be imposed in technological and digital matters. For both scenarios, the consequences that these markets will face as a result of this policy decision are still debated.

The prime example of this ongoing debate are the Google cases. Also for this reason they have been described and presented in such detail in chapter two. Google, as a company, is a quintessential innovator. This undertaking has not only created new products and consequently new markets but has even contributed to develop state-of-the-art business strategies (mainly linked to its multisided platform model and to its use and exploitation of data gathered through its general search service) that are used by a wide variety of companies in the most disparate sectors[171]. Of course Google's dominant position can be justified according to the fact that it invested at the right time in the right things, such as multisided platforms, but it must also be considered that its current status as a tech giant makes it extremely arduous for competition authorities like the Commission to control it. On these grounds it appears that the right balance between competition and innovation is extremely hard to find also in this case.

3.1. Protection of consumers vs. protection of competitors

The main reason why competition law exists is the protection of consumers. It could even be stated that "consumer welfare is at the heart of competition policy"[172]. One of the main issues that the Google cases and in particular the *Google Search (Shopping)* case brought to light was connected exactly to this. Some scholars argued that the main goal pursued by the European Commission with these instances was the protection of competitors and that the advantages and benefits that consumers enjoyed were not given the appropriate weight in the final decision. Again, the main conflict present in the discussion is also related to innovation and competition. As stated above, both innovation and competition can be said to originate from the same concern, namely consumer welfare. What happens in situations in which the two enter into conflict? Which one should be followed and should be given more importance?

Some believe that losses for competitors should only be taken into account in situations where consumers themselves are harmed like, for instance by the disappearance of a competitor that brings a valuable addition to the market

[171] MASSAROTTO (2018: 415).
[172] KOKKORIS (2017: 326).

either through its efficiency or through its role as an innovator[173]. In the *Continental Can* case it was even stated by the European Court of Justice that "[Article 102 TFEU] is not only aimed at practices which may cause damage to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure"[174]. While the protection of competitors is often considered to be the originator of the protection of consumers, in some cases the opposite is true, as protecting inappropriate competitors would hinder the emergence of more efficient ones and also pose a threat to deserving competitors[175]. Accordingly, in *Post Denmark I* it was recognized that the aim of article 102 TFEU is not to "ensure that competitors less efficient than the undertaking with the dominant position should remain on the market"[176], as competition on the merits itself could have exclusionary effects.

In the *Google Search (Shopping)* case the benefits enjoyed by the consumers thanks to the innovations of the products that led to a reduction in searching time and more relevant information as a result of the searched queries could have easily outweighed the disadvantages brought upon for competitors that were directly linked to losses for consumers under competition law theory[177]. In addition to this, it could even be observed that achieving a high position in the placement for Google's search results could be a driver of innovation as companies would be forced to compete by innovating their products as well as their websites in order to obtain more visibility[178]. As a consequence, the choice taken by the Commission in its decision to favor competition over innovation has also been interpreted by some scholars as a choice of favoring competitors over consumers, somewhat, at the same time, discrediting as a consequence also the principles underlying competition law as a whole and the aims it pursues.

A consideration that must be made under this framework concerns the peculiarity of European competition law in contrast to antitrust in general. Differently from the development of antitrust in the United States that took place and was pursued in a cohesive manner and under an already present governmental structure as it concerned one single nation, the elaboration and progression of competition law in Europe followed a different path. The vision of the United States concerning antitrust policy is predominantly focused on the maximization of consumer welfare as a way to enhance economic effi-

[173] KOKKORIS (2017: 327).
[174] Judgment of the Court of 21 February 1973, C-6/72 *Europemballage Corporation and Continental Can Company Inc. v Commission of the European Communities*, paragraph 26.
[175] ALVIN (2016: 406).
[176]Judgment of the Court of 27 March 2012, C-209/10, *Post Danmark A/S v Konkurrencerådet*, paragraph 21.
[177] KOKKORIS (2017: 326).
[178] KOKKORIS (2017: 331).

ciency and product innovation over time, also as a consequence of the dogmatic influence of the Chicago School in the evolution of antitrust policy and of case law[179]. On the contrary, the European Coal and Steel Community (ECSC) that with the European Council represented one of the first steps to achieve what we consider nowadays to be the European Union, was established with the objective "to substitute for age old rivalries the merging of […] essential interests, to create by establishing an economic community, the basis for a broader and deeper community among peoples long divided by bloody conflicts"[180], meaning that it was supposed to serve not only as a mean of economic integration but also as a catalyst of integration in general. Accordingly, also the provisions that could be summed up under the term competition policy that arose and that have remained mostly unchanged from the period following World War II were supposed to follow this more generic integration goal[181].

With time, the integration goal has become less relevant and more weight was given to the generic goal of competition promotion and protection which was also the cause for an increased closeness between the United States and the European Union in matters of antitrust policy[182]. This change in the enforcement priorities of competition law was attributed to the increased importance given to economic interpretations of cases, but this issue will be discussed in more detail in the following section.

While it is true that the integration goal could be considered to some extent to be surpassed and no more of extreme significance in the modern situation of the European Union, to some other extent, digital markets have brought up once more the need for a market synthesis and conglomeration. Indeed, as stated above, the Digital Single Market was identified as one of the top priorities of the Union in the 2020 Agenda.

So, the final decisions taken by the European Commission in matters concerning the judgement of Google's conduct in the *Google Search (Shopping)* and *Google Android* cases could partly be explained by this need to strike a common path for the Single Member States' enforcement of competition law and national competition authorities in matters of abuse of dominance by tech giants. In the decisions it was also stated that Google's behavior had the potential effect of harming consumers in the long run by preventing the success of its competitors and therefore creating less incentive to innovate, but there was no need to prove these effects as their potentiality was considered to be a sufficient reason for the finding of abuse under article 102 TFEU. At the same

[179] DRIVAS (2019: 1).
[180] Preamble to the treaty establishing the European Coal and Steel Community, 18 April 1951, *Treaty establishing the European Coal and Steel Community*, Paris.
[181] MARTIN (2007: 5-6).
[182] KIRCHNER (2007: 7).

time, therefore, it is up to debate whether the strategy of the European Commission in the long run will prove efficient also in the protection of European consumers and not only of other competitors.

According to Witt, the situation caused by the development and success of digital markets is not the first time that competition law is used also as a way to address alternative policy goals of the Union as the Court seemed to "adhere to a broader understanding of the purpose of competition law that is not limited to the enhancement of consumer welfare"[183]. Under article 101 (3) TFEU dealing with the exemptions to unlawful agreements between undertakings, the Commission has exempted various practices and agreements that would have otherwise been condemned because of a disparate list of economic benefits that they created, but at the same time, also exemptions of another type occurred that took into account benefits created by separate policy issues such as industrial, social, environmental, cultural diversity and human health policies[184]. Entering into the merits of the single cases and decisions would not serve the purpose of this paper, as they are not of direct concern for the discussed subject of abuse of dominant positions in digital markets, but the plurality of considerations made by the European Union with article 101(3) under the framework of competition law could leave the door open to a possible redefinition of the aims to be pursued by European antitrust in general, even leaving the door open for a new definition of regulation of competition matters dealing with digital markets.

3.2. The More Economic Approach (MEA) and the influence of behavioralism

Generally speaking, the European competition authority has made some efforts from the 1990's onward to develop a system of competition law enforcement more in line with economic theory following harsh criticism that the European Union had received for its too legal attitude in competition issues that was identified as being too far from economic reality[185]. This approach is called the More Economic Approach (MEA) and it was initially applied to cases concerning article 101 TFEU and to merger control and was particularly welcomed and followed by Mario Monti, the EU's Competition Commissioner between 1999 and 2004, who stated that "an increased economic approach in the interpretation of [European] rules was, indeed, one of [the] main […] objectives"[186] of his mandate.

The Commission was heavily criticized for not necessarily considering harm to consumers when establishing an abuse of dominant position, making harm

[183] WITT (2012: 444).
[184] WITT (2012: 446-53).
[185] WITT (2019: 174).
[186] MONTI (2002: 7).

to competitors through their exclusion from the market a sufficient condition to find an abuse[187]. Following the rationale exposed in the previous section, this meant that, harm to competitors actually seemed to be more central to the enforcement of European antitrust than harm to consumers. In an attempt to remedy this, the European Commission decided to issue a Guidance Paper in 2009 in order to, as the name suggests, offer general guidance to national competition authorities, businesses' attorneys and legal representatives regarding the application of article 102 TFEU following the MEA. The Guidance paper was also created to present and offer a transparent representation of the decision-making process of the Commission when deciding which cases should be persecuted and which instead should not[188].

The choice to reform article 102 TFEU through an indirect way and with an instrument of so-called soft law with no legally binding effect, instead of undergoing a treaty revision or a formal reinterpretation of the article, was probably done mainly because the precedent case law of the European Court of Justice based on the non-economic interpretation would have otherwise not been in line with the Guidance paper and therefore could have been in part discredited, or at least could have caused some confusion to both undertakings and courts[189]. As stated in the previous section the Court considered competition law also as a tool to reach the aim of the internal market and as a way to pursue policy objectives of the Union.

However, what are the main changes and reinterpretations of article 102 that took place thanks to the MOE and to the Guidance paper? First of all, the objectives and aims pursued by competition law have been restricted, giving more importance to consumer welfare than other policy concerns of the Union which meant that the application of article 102 TFEU would "focus on those types of conduct that are most harmful to consumers [to let them] benefit from the efficiency and productivity which result from effective competition between undertakings"[190]. Consumer harm would therefore need to be assessed economically in order to pursue a case under article 102 TFEU. Also the concept of harm itself has been reconsidered by the Commission, making it presentable only when it is economically quantifiable but this was done without modifying the Commission's view of what constitutes an abuse and exclusionary conduct[191]. Nevertheless, what described above has not been always applied and, in some cases, such as *Motorola* and *Baltic rail* the assessment of the foreclosure effect has been given more importance or at least was preferred to the assessment of consumer harm[192].

[187] WITT (2019: 174).
[188] EUROPEAN COMMISSION (2009: 3).
[189] WITT (2019: 175).
[190] EUROPEAN COMMISSION (2009: 5).
[191] WITT (2019: 181).
[192] WITT (2019: 182).

The More Economic Approach also foresees greater prominence to a comprehensive and detailed economic analysis and individual assessments made case by case[193]. Before the publication of the Guidance Paper the Commission had applied article 102 TFEU according to a prevalently "form-based approach [to] presumptions of illegality"[194], such as the number of market shares or exclusive statutory rights. For example, in the *London European* case, the dominant undertaking was found to have breached article 102 and of having abused its dominant position because of a tying behavior, and the Commission felt no need to undergo a specific economic evaluation[195]. These types of formal assessments should be left behind according to the MEA in favor of judgements made thanks to both qualitative and quantitative data. In fact, now the Commission also widely uses econometric tools in order to strengthen its positions and to give more significance and support to its decisions, such as it did for instance in the *Ryanair/Aer Lingus*, *MasterCard* and *Intel* cases. Notwithstanding, it must be considered that the Guidance Paper is not supposed to be used as a legal test as it is "not intended to constitute a statement of the law [but] is without prejudice to the interpretation"[196] of article 120 TFEU and should only be employed as a way to establish whether the case represents an enforcement priority of the Commission.

It was generally recognized that the European Court of Justice has been reluctant to adopt and accommodate the More Economic Approach or at least that the position it holds regarding the MEA is quite unclear. Instances for this internal dissension can be found in the case law. In the *Post Danmark II* and *TeliaSonera* cases the court took a stance that was against the factual evaluation of economic effects, while in *Post Danmark I* and *Intel* the attitude of the Court seemed more open to it[197]. Broadly speaking, the court actually seemed to reject the adoption of the MEA in cases "where the allegedly anti-competitive conduct already meets the requirements of a well-established legal test [rejecting the argument that] the European Commission should additionally explore the economic effects"[198] in such instances.

Regarding the *Google Search (Shopping)* case, scholars have identified it as being complainant and in line with the reformed MEA to article 102 TFEU[199]. The reasoning of the Commission that regards the diversion of traffic caused by Google with the change to the Panda algorithm complies with the anti-competitive foreclosure concept that is described in the 2009 Guidance Paper but was also mainly focused on potential harmful economic effects. Some

[193] WITT (2019: 184).
[194] WITT (2019: 185).
[195] WITT (2019: 185).
[196] EUROPEAN COMMISSION (2009: 3).
[197] KOENIG (2019: 681).
[198] KOENIG (2019: 681).
[199] KOENIG (2019: 684).

economists, instead, believe that a purely economic approach should be concentrated on actual effects caused by the abusive behavior and actual harm caused to consumers rather than on possible and probable effects[200]. But what matters in this case is that the Commission was able to form a case based on effects and not on form, even if they were potential. In fact, the Guidance Paper and the More Economic Approach adopted by the Commission do not officially differentiate between actual or potential effects.

As we have seen, economics, policy and law are necessarily and inevitably linked and associated with one another in matters of competition law as the definition of this doctrine and of its characteristics and goals as such are not indisputably obvious. Nevertheless, as they say, economics rules the world. To cite Bitetti, competition "rules change as, and when, the underlying economic theory changes"[201].

As a matter of fact, traditional economic paradigms and models often fail to explain antitrust issues and no longer offer a possible source of competition policy and competition law inputs and enforcement styles, as they did and still do with traditional, single-sided market configurations. Digital markets can be said to be ruled by different parameters, than traditional markets and therefore also the adoption of the MEA results increasingly difficult. The digital market system is focused on data as a form of alternative currency but also on users' attention[202] (we have seen how the cognitive laziness of individuals leads digital undertakings to compete for their attention). As a consequence, such markets would perhaps need the adoption of new economic paradigms adequate to their rightful framing under competition law.

Some scholars have proposed the endorsement of behavioralism for these purposes, as a way to innovate the field of regulation that is more commonly constructed following the traditional economic idea that people's choices are governed by rationality. Behavioral economics is a discipline that "incorporates the study of psychology into the analysis of the decision-making behind an economic outcome"[203], practically trying to surpass the microeconomic model of the completely rational *homo economicus* and arguing that most individuals are biased in their evaluations of economic transactions and decision-making in general. Factors able to influence people's (and most importantly consumers) also to their own detriment are called nudges.

In a paper titled *Google, competition policy and the owl of Minerva* Rosamaria Bitetti tried to analyze whether behavioralism and behavioral economics in general could offer a valuable and innovative addition to the interpretation of

[200] KOENIG (2019: 684).
[201] BITETTI (2016: 295).
[202] SURBLYTE (2015: 178).
[203] PARTINGTON (2017:1).

competition law in matters concerning digital markets and, more specifically, dealing with abuse of dominant positions therein, by implementing this economic paradigm in the discussion of the *Google Search (Shopping)* case. In particular her scrutiny of the case concentrated on finding out if antitrust could gain from taking into account behavioral constraints caused by nudges for both consumers and undertakings' strategies and consequently offer new ways to recognize and to find solutions and remedies for anticompetitive behavior[204].

One of the issues that the author displays in the paper is consumer inertia and path dependency that lock in consumers creating network externalities. In fact, as we have seen multiple times, when one product achieves a high level of popularity, reaching therefore a higher number of market shares and significance in the market, consumers will consider the product of more value because other people (namely the majority) also use it[205]. This type of herd behavior could be viewed under behavioralism as a nudge influencing consumers irrationally, but this behavioral consideration nonetheless is not particularly helpful in the evaluation of the case. Especially in a market so subject to the flows of innovation, there is the possibility that the herd behavior will be disrupted by the entry in the market of a new competitor that will be able to gain prominence, just as happened with Microsoft and the arrival of Google[206]. In addition, behavioral theory is not able to indicate how strong the nudges' influence actually is, making a clear evaluation of their effects on the market unreliable for antitrust authorities as it would be based on "opinions and perceptions"[207].

Another issue that the author dealt with is the use of behavioralism in antitrust remedies to abusive dominant conduct. The solution that is offered most of the time in such a framework is the so-called nudge-based regulation that aims at "gently nudge[ing] consumers by changing a default rule" in order to still offer to individuals the free choice between the previous situation/product and the recommended situation/solution by the antitrust authority[208].

A practical example of this is offered by the behavioral remedies imposed by the Commission in 2009 on Microsoft for the tying case between its products Windows and Internet Explorer that foresaw that Windows would offer to its European consumers also the choice of downloading alternative browsers and not only Internet Explorer[209]. This proved inefficient in the Microsoft case as, while it is true that Internet Explorer users diminished in the European Union, the phenomenon was not restricted to consumers that had benefitted from the

[204] BITETTI (2016: 303).
[205] BITETTI (2016: 301).
[206] BITETTI (2016: 301).
[207] BITETTI (2016: 309).
[208] BITETTI (2016: 319).
[209] BITETTI (2016: 319).

downloading choice offered by Windows, and the decrease in traffic could also be understood in terms of major innovations introduced by its competitors such as Chrome[210]. As a consequence, this behavioral solution does not seem to be very adequate to cases of abusive behavior by dominant, digital undertakings because while it is true that more freedom is left to consumers which is a factor that should in theory held improve the competition law concern for consumer welfare maximization, at the same time, as behavioral economics teaches us, people are essentially biased and could decide to remain stuck in those biases and not act upon the suggestions of the competition authority, rendering the intervention against abusive behavior obsolete and essentially useless.

Another angle worthy of consideration under which behavioralism could be useful for an evaluation of the *Google Search* case is whether consumers would keep being stuck in the use of the Google search engine also if there was a decrease in the quality of the search results or whether individuals would not even notice, whether consumers know about the data that Google and other tech-giants collect through their use of the internet and their traffic actions and if they would still keep using their services if they had a complete understanding of the functioning of digital markets in general[211].

An aspect that was not particularly considered in the aforementioned paper that regards behavioralism and its influence on competition law is the bias that competition authorities could be subjected to when judging over digital market issues. In fact, according to behavioral economics all individuals are irrational to some extent and do not possess the ability to perform a completely objective analysis if in presence of potential nudges. The nature of digital undertakings and more specifically of tech giants could be approached with some skepticism and diffidence by competition law experts and by the antitrust authorities in general, as they could be used to analyze traditional markets according to established and conventional legal standards, therefore sticking to the status quo.

3.3. How multisided platforms have changed the rules of competition

Digital markets, as explained and presented in the first chapter, are characterized by "a uniquely high likelihood of market power and anticompetitive conduct"[212]. This is also true because of the fact that, before the arrival of digitalization, in traditional markets there was a clear and established view of unity of places, employment relationships and products within undertakings that

[210] BITETTI (2016: 320).
[211] SURBLYTE (2015: 178).
[212] NEWMAN (2019: 1548)

was disrupted by the increased use of information and communication technologies in traditional markets[213] and that led companies to compete in different ways, as a clear definition of what companies actually are and how they should interact in the market was substantially put in question[214].

One of the most recurring forms that digital markets can take are multisided platforms. The Google cases described in the second chapter deal exactly with this type and kind of markets. While platforms are not by definition digital in nature (instances of non-digital multisided platforms are yellow pages or newspapers as they contain information on both advertisers and consumers), their digital two sidedness has been considered more burdensome for antitrust authorities to deal with than their non-digital and more traditional counterparts.

In fact, competition thanks to the platform system is divided in two different layers: the first one is called inter platform competition and comprehends competition arising between multisided platforms themselves, while the second layer instead is called intra platform competition and is distinguished by the competition arising between undertakings inside of the platform[215]. In addition, platforms, as elucidated previously, are also very prone to the influence of network effects, also called cross-platform externalities, meaning that the more users employ the platform, the more increases the probability that other individuals will also choose to utilize it, also if on a different side of the platform. All in all, therefore, this form of market structuration renders an antitrust assessment quite arduous, especially because of the tight relation between the different sides of the platform. These linkages raise the challenge of market definition and which attitude and method to it could present a clear and precise representation of the relevant products and markets. While it is true that market definition is not a per se legal standard able to exclusively assess the presence of abuses or breaches of competition law, at the same time, it must also be considered that it plays an incredibly important role as a tool of antitrust enforcement in connection with all the possibly relevant applicable and compatible evidence of illegitimate and unlawful conduct.

A frequent platform market definition concern is whether a platform also participates in multiple markets, namely if it does "offer a single product to users on its different sides, or does it offer different (albeit closely linked) products to its different user groups"[216]. There are two main different approaches to this issue, namely the single-market approach and the multiple market approach[217]. The former examines the pertinent market as including both sides of the platform while the latter observes and considers the participation in

[213] KIRCHNER, BEYER (2016: 327).
[214] KIRCHNER, BEYER (2016: 325).
[215] KIRCHNER, BEYER (2016: 330).
[216] KATZ, SALLET (2018: 2153).
[217] KATZ, SALLET (2018: 2144-2145).

more than one market, taking account of their interactions but viewing them also essentially as being separate.

Generally, two products are included in the same market when and just in case they are considered to be sufficiently close substitutes and, accordingly, observing this practice also in the assessment of platforms, it would make more sense to consider the markets as being separate and in line with the multiple market approach because an antitrust case could possibly only include one side of the platform. This might be more appropriate in cases involving traditional multisided platforms, but the problem arising with digital multisided platforms is that they are way more subjected to cross platform externalities and seem to be more interconnected. For instance, a newspaper does rely on selling advertisement spaces to third parts and would maybe not be able to do so if it did not sell also its articles to interested individuals, as what actually attracts advertisers is the opportunity to be viewed by as many potential customers as possible, but at the same time, it charges both sided of its platform. As a consequence, were all advertisers to disappear at a given time, the newspaper could possibly still continue to exist thanks to the profit it creates through its information service. Where instead one side of the platform is offered for free, as is the case with search engines, it is made dependent on the second side of the platform and consequently the interconnection between the two becomes essential to the definition of the market. Thus, the single market approach would seem to be the most appropriate to market definition in antitrust cases involving digital platforms. Nevertheless, the European antitrust authority does not seem to have embraced this interpretation. The monopoly leveraging accuse moved against Google explicitly in the *Google Search (Shopping*) case (and implicitly also in the *Google Android* case[218]) can only be accepted when and if the markets of the multisided platform are viewed as being separate.

Leaving by side the issue of market definition, the question remains whether or not competition authorities should take into account the gains and losses experienced by users on the multiple sides of the platform against one another[219] when assessing breaches of competition law and in particular abuses of dominant positions according to article 102 TFEU. This can again be traced back to the differing goals of protection of consumers and protection of competitors, or put differently, of consumer welfare versus alternative goals of competition explored in detail in paragraph 3.1. of this chapter. Also for this problem there are two opposed views. The net-effect analysis is an approach that favors consumer welfare and accordingly contends that the benefits and losses experienced by all platform users should be taken into account and that in the final evaluation only the net effects should be considered for the legal

[218] Please see section 2.2. a) *Similarities and differences with the Google Search case* for more details.
[219] KATZ, SALLET (2018: 2144).

assessment[220]. In contrast to this there is the separate effects analysis approach that instead represents the idea that " each buyer group is entitled to the benefits of competition and, consequently, that harm to one user group due to harm to competition cannot be offset by gains to another user group that results from the loss of competition"[221]. In the Google cases that have served as examples of enforcement of article 102 TFEU in digital markets in the discussion presented in this paper, the European Commission seems to accommodate the second attitude and approach rather than the first one as we have seen that in both cases the antitrust authority refuses that the exclusionary effects harming competitors could be counterbalanced and outweighed by the efficiencies enjoyed by consumers.

All in all it seems that multisided platforms as a manifestation of digital markets have drastically changed competition in its economic definition, ordering markets that are rendered more than ever dependent on innovation, cross platform externalities and users' attention by the digitalization, but at the same time the legal level of competition and competition law in general does not seem to have been radically changed and modified.

[220] KATZ, SALLET (2018: 2145).
[221] KATZ, SALLET (2018: 2145).

Conclusion

The main aim and objective of this thesis was to explore and analyze the way in which the European Commission in its role of the antitrust authority of the European Union has applied competition law in digital markets focusing on the enforcement of article 102 TFEU and on the fight against abuses of dominant positions. As was clearly presented in the first chapter, digital markets and in particular those relying on multisided platforms represent special challenges for competition law authorities because they can both largely contribute to the creation of dominant positions and also possess particular characteristics, such as the reliance on continuous innovation, that render antitrust enforcement to say the least particularly complicated and in some cases even controversial.

The analysis that was performed in the second chapter of the Google cases intended to offer a factual overview of the single cases and of the theory of harm that was established by the Commission. Nevertheless, in order to offer a deeper understanding of the mechanisms that are behind such decisions and the possible impact that they may also have on future case law and on the efficacy and reputation of European competition law in general, an attempt was made to analyze and display the main criticism that was moved against the findings of the Commission. In addition, the comparison of the *Google Search (Shopping)* case with precedent case law, more specifically with the *Microsoft saga* and also with the case opened by the United States that regarded the same conduct and type of abuse was aimed at exploring alternative paths that the Commission could have chosen to follow and pursue. In particular the main issues arising with the enforcement of competition law and its provisions regarding abuse of dominance within digital markets deal directly and even seem to open new doors for the establishment of redesigned goals of antitrust. The balance between protection of consumers' welfare, that is unequivocally related to the capacity of undertakings to innovate their products, and the protection of competitors as a way to ensure a fair and proportionate market (also indirectly related to consumer welfare as more competition is said to increase the probability that customers will get better products for lower prices) is extremely difficult to strike and in some cases a compromise between these two factors seems unlikely or even impossible.

At the same time, the European Commission has applied in the last two decades a less formalistic and more economic approach to competition law which has in part, but only vicariously, revolutionized the application of article 102 and that was at the same time generally welcomed by experts and academia. The problem is that existing economic paradigms don't seem to be able to efficiently capture the evolving nature of digital markets and specifically of dominant multisided platforms such as Google. As a consequence, the question whether the enforcement of existing and well-established abuses under article 102 TFEU actually is appropriate in digital markets remains open as

does the problem of the creation of new theories of harm based on alternative economic paradigms.

Another consideration to be made on this point is that while the Commission's attitude towards abuses of dominance in digital markets seems to remain in line with its more general view of abuse and to some extent is applied in an even stricter way against tech giants, the position of the European Court of Justice is still unclear, as the appeals of the Google cases, in particular the *Goggle Search (Shopping)* case, could possibly even turn the situation around and cause a change of course for the enforcement of competition law in digital markets.

Now that the analysis objective of this thesis is fulfilled and that the various future prospects have been explored it remains to be seen how the future of competition law in digital markets will be shaped by future case law.

Bibliography

Books:

- BITETTI (2016), *Google, competition policy and the owl of Minerva*, in M. KOVAČ, A. VANDENBERGHE (eds.), *Economic evidence in EU competition law*, Cambridge, p. 295 ff.
- EZRACHI (2018), *Article 102 TFEU*, in A. EZRACHI (ed.), *EU Competition Law: an analytical guide to the leading cases*, Oxford, p. 212 ff.
- KIRCHNER (2007), *Goals of Antitrust and Competition Law revisited*, in D. SCHMIDTCHEN, M. ALBERT, S. VOIGT (eds.), *The More Economic Approach to European Competition Law*, Tübingen, p. 7 ff.
- MANNE (2010), *The Problem of Search Engines as Essential Facilities: An Economic & Legal Assessment*, in B. SZOKA, A. MARCUS (eds.), *The Next Digital Decade – Essays on the Future of the Internet*, Washington, p. 419 ff.
- PLOUS (1993), *The psychology of judgment and decision-making*, New York, p. 233 ff.
- VETTAS (2017), *Competition and regulation in markets for goods and services: a survey with emphasis on digital markets*, in L. MATYAS, R. BLUNDELL, B. CHIZZOLINI, M. IVALDI W. LEININGER et al. (eds.), *Economics without borders: Economic Research for European Policy*, Cambridge, p. 194 ff.

Documents:

- ALMUNIA (2014), *Statement on the Google investigation.*
- DIRECTORATE-GENERAL FOR COMPETITION (2002), *Glossary of terms used in EU competition policy*, Brussels.
- EUROPEAN COMMISSION (2009), *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings.*
- *ID.* (2010a), *Antitrust: Commission probes allegations of antitrust violations by Google.*
- *ID.* (2010b), *EUROPE 2020: A strategy for smart, sustainable and inclusive growth.*
- *ID.* (2013), *Competition: Antitrust procedures in abuse of dominance – article 102 TFEU cases.*
- *ID.* (2015a), *Commission sends Statement of Objections to Google on comparison shopping service; opens separate formal investigation on Android.*

- *ID*. (2015b), *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Single Market Strategy for Europe*.
- *ID*. (2017a), *Report from the Commission to the Council and the European Parliament: Final report on the E-commerce Sector Inquiry*, Brussels.
- *ID*. (2017b), *Summary of Commission decision of 27 June 2017 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement (Case AT.39740 – Google Search (Shopping))*.
- *ID*. (2018a), *Press Statement: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine*, Brussels.
- *ID*. (2018b), *Summary of Commission Decision of 18 July 2018 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement.*
- FAIRSEARCH (2011a), *Can search discrimination by a monopolist violate U.S. antitrust laws?*
- *ID.* (2011b), *Google's transformation from gateway to gatekeeper: How Google's exclusionary and anticompetitive conduct restricts innovation and deceives consumers.*
- FEDERAL TRADE COMMISSION (2013), *Statement of the Federal Trade Commission Regarding Google's Search Practices In the Matter of Google Inc.*
- MONTI (2002), *Speech of the European Commissioner for Competition Policy on EU Competition Policy at the Fordham Annual Conference on International Antitrust Law & Policy*, New York.
- OECD (2015), *Data-Driven Innovation: Big data for Growth and Well-Being*, Paris.

Journal articles:

- AGUILERA VALDIVIA (2018), *The scope of the "special responsibility" upon vertically integrated dominant firms after the Google Shopping case: Is there a duty to treat rivals equally and refrain from favouring own related Business?*, in *World Competition: Law and Economics review*, p. 43 ff.
- ALVIN (2016), *Tying conduct under article 102 TFEU: can intervention against Google be justified?*, in *European Competition Law Review*, p. 406 ff.
- ANGELOV (2014), *The "exceptional circumstances" test: Implications for FRAND commitments from the essential facilities doctrine under article 102 TFEU*, in *European Competition Journal*, p. 37 ff.
- BALATSOUKAS & RUTHVEN (2012), *An Eye-Tracking Approach to the Analysis of Relevance Judgments on the Web: The Case of*

Google Search Engine, in *Journal of the American Society for Information Science and Technology*, p.1728 ff.
- BARBERÁ et al. (2015), *Tweeting from left to right: Is online political communication more than an echo chamber?*, in *Psychological science*, p. 1531 ff.
- BECKERT (2009), *The Social Order of Markets*, in *Theory and Society*, p. 245 ff.
- BERGKAMP (2019), *The European Commission's Google Shopping decision: Could bias have anything to do with it?*, in *Maastricht Journal of European and Comparative Law*, p. 524 ff.
- BERGQVIST (2019), *Google and the Trans-Atlantic Antitrust Abyss*, in *Legal Studies Research Paper Series*, p.1 ff.
- COLANGELO & MAGGIOLINO (2017), *Big data as misleading facilities*, in *European Competition Journal*, p. 249 ff.
- EDELMAN (2015), *Does Google leverage market poser through tying and bundling?*, in *Journal of Competition Law and Economics*, p. 365 ff.
- EDELMAN, GERADIN (2016), *Android and competition law: exploring and assessing Google's practices in mobile*, in *European Competition Journal*, p. 159 ff.
- KATZ, SALLET (2018), *Multisided Platforms and antitrust enforcement*, in *The Yale Law Journal*, p. 2142 ff.
- KIRCHNER (2012), *Public policy goals under EU Competition Law – Now is the time to set the house in order*, in *European Competition Journal*, p. 443 ff.
- KIRCHNER, BEYER (2016), *Die Plattformlogik als digitale Marktordnung – Wie die Digitalisierung Kopplungen von Unternehmen löst und Märkte transformiert*, in *Zeitschrift für Soziologie*, p. 324 ff.
- KOENIG (2019), *Form, effects, or both? the more economic approach and the European Commission's decision in Google*, in *European law review*, p. 680 ff.
- KOKKORIS (2017), *The Google case in the EU: Is there a case?*, in *The Antitrust Bulletin*, p. 313 ff.
- LANEY (2001), *3D Data Management: controlling data Volume, Velocity and Variety*, in *META Group Report.* p. 1 ff.
- LANG (2016), *Comparing Microsoft and Google: the concept of exclusionary abuse*, in *World Competition*, p. 5 ff.
- LAO (2009), *Networks, Access and, 'Essential Facilities': From Terminal Railroad to Microsoft*, in *Southern Methodist University Law Review*, p. 557 ff.
- MANNE, WRIGHT (2011), *Google and the limits of antitrust: the case against the case against Google*, in *Harvard Journal of Law & Public Policy*, p. 1 ff.
- MARTIN (2007), *The goals of Antitrust and Competition Policy*, in *Purdue CIBER Working Papers*, p. 1 ff.

- MASSAROTTO (2018), *From Standard Oil to Google: How the Role of Antitrust Law has changed*, in *World competition: law and economics review*, p. 395 ff.
- MAYS (2015), *The Consequences of Search Bias: How Application of the Essential Facilities Doctrine Remedies Google's Unrestricted Monopoly on Search in the United States and Europe*, in *The George Washington law review*, p. 721 ff.
- NEWMAN (2019), *Antitrust in digital markets*, in *Vanderbilt Law Review*, p. 1497 ff.
- OBEAR (2018), *Move fast and take things: Facebook and predatory pricing*, in *Columbia Business Law Review*, p. 994 ff.
- PATTERSON (2017), *Antitrust, consumer protection and the new information platforms*, in *Antitrust*, p. 9 ff.
- RASPAUD (2014), *Google as an Essential Facility: An Ill-Fitting Doctrine*, in *Common Market Law Review*, p. 68 ff.
- ROBERTSON (2017), *Delineating digital markets under EU competition law: challenging or futile?*, in *Competition Law Review*, p. 131 ff.
- SURBLYTE (2015), *Competition Law at the Crossroads in the digital economy: is it all about Google?*, in *Journal of European Consumer and Market Law*, p. 170 ff.
- WITT (2012), *Public policy goals under EU Competition Law: Now is the time to set the house in order*, in *European Competition Journal*, p. 443 ff.
- WITT (2019*), The European Court of Justice and the More Economic Approach to EU Competition Law: Is the tide turning?*, in *The Antitrust Bulletin*, p. 172 ff.

Legal acts:

- Judgment of the Court of Justice of 21 February 1973, C-6/72 *Europemballage Corporation and Continental Can Company Inc. v Commission of the European Communities.*
- Judgment of the Court of Justice of 14 February 1978, C-27/76, *United Brands v. Commission.*
- Judgment of the Court of Justice of 13 February 1979, C-85/76, *Hoffmann La Roche & co. AG v. Commission.*
- Judgement of the Supreme Court of the United States of 8 June 1992, 594 U.S. 451 *Eastman Kodak v. Image Technical Services Inc.*
- Judgment of the Court of Justice of 6 April 1995, Joined cases C-241/91P and 242/91 P, *RTE & ITP vs. Commission.*
- Judgment of the Court of Justice of 26 November 1998, C-7/97 *Oscar Bronner GmbH Co KG vs. Mediaprint.*
- Judgment of the Court of Justice of 30 September 2003, Joined cases T-191/98 and T-212-14/98 *Atlantic container line and others v Commission.*

- Judgment of the Supreme Court of the United States of 13 January 2004, LLP, (02-682), 540 U.S. 398, 305 F3d 89, *Verizon Communications v. Law Offices of Curtis V. Trinko.*
- Decision of the European Commission of 24 March 2004, C-3/37.792, *Microsoft Corporation*.
- Judgment of the Court of Justice of 29 April 2004, C-418/01 *IMS Health GmbH & Co.OHG v NDC Health GmbH & Co .KG*.
- Judgment of the Court of Justice of 15 March 2007, C-95/04 P, *British Airways v. Commission.*
- Judgement of the Court of 17 September 2007, T-201/04, *Microsoft Corp v Commission.*
- Judgement of the Court of Justice of27 March 2012, C-209/10, *Post Danmark A/S v Konkurrencerådet.*
- Judgement of the European Commission of 27 June 2017, AT.39740, *Google Search (Shopping).*
- Decision of the European Commission of 18 July 2018, AT40099 *Google Android.*

Monographs:

- AUTORITÀ GARANTE DELLA COMPETIZIONE E DEL MERCATO (2018), *Interim report nell'ambito dell'indagine conoscitiva di cui alla delibera n. 217/17/CONS*, Rome.
- AUTORITÁ GARANTE DELLA CONCORRENZA E DEL MERCATO (2020), *Indagine Conoscitiva Sui Big Data*, Rome.
- KARRY (2019), *Antitrust regulators struggle with big data*, London.
- NAZZINI (2016), *Unequal treatment by online platforms: a structured approach to the abuse test in Google*, Brussels.
- REINSEL, GANTZ, RYDNING (2017), *Data Age 2025: The Evolution of Data to Life-Critical. Don't Focus on Big Data; Focus on the Data That's Big*, Framingham
- WALLER, WEBER (2008), *Areeda, Epithets, and Essential Facilities*, Chicago.

Online articles:

- CARR (2020), *How does Pay Per Click work? A complete guide*.
- CLEMENT (2020), *Alphabet: global annual revenue 2011-2019*.
- DRIVAS (2019), *Reassessing the Chicago School of Antitrust Law*.
- FEDERALTRADERESERVE (2020), *Federal Trade Commission Act, Section 5: Unfair or Deceptive Acts or Practices.*
- KOVACIC (2020), *Roads not taken: The Federal Trade Commission and Google*.
- MULLINS, WINKLER, KELLER (2015), *Inside the U.S. antitrust probe of Google*.
- PARTINGTON (2017), *What is behavioral economics?*

- PICHAI (2018), *Android has created more choice, not less*.
- RUADHAN (2014), *Android forks: Why Google can rest easy, for now*.
- THOMPSON (2019), *Google's Mission Statement and Vision Statement (An Analysis)*.
- USLEGAL (2020), *Monopoly Leveraging Law and Legal Definition*.
- WAKEFIELD (2020), *Google starts appeal against £2bn shopping fine*.
- WARIO (2019), *Enforce effective competition in online markets* in *Business Daily*.
- WORDSTREAM (2020), *Google Ads vs. AdSense: What's the Difference?*
- WYATT (2013), *A victory for Google as F.T.C. takes no formal steps*.

Abstract

La società moderna è caratterizzata da processi di globalizzazione e digitalizzazione, che sono sempre più presenti ed estremamente interdipendenti. Da un punto di vista economico la globalizzazione è quel fenomeno che ha permesso alle imprese di ottenere significato ed importanza a livello internazionale. Allo stesso tempo tale globalizzazione non sarebbe stata possibile senza il progresso in ambito tecnologico e lo sviluppo dei mercati digitali, che hanno causato, con il loro avvento, una metamorfosi dei delicati equilibri che governano le relazioni tra diverse imprese.

L'obiettivo che questa tesi si pone è quello di esplorare le dispute ed i dilemmi legali che i mercati digitali hanno causato nel diritto europeo della competizione, in particolare analizzando come l'articolo 102 del Trattato sul Funzionamento dell'Unione Europea (TFUE), creato come mezzo di contrasto all'abuso di posizioni dominanti nei mercati, sia stato implementato dalla Commissione Europea nei casi Google, tenendo anche conto delle controversie che sono emerse da questi celebri casi.

Il primo capitolo offre un'introduzione generale riguardo ai problemi che possono emergere dalle interazioni tra i mercati digitali ed il diritto della competizione. A livello europeo, ad oggi, non sono stati presi specifici provvedimenti legali per la regolazione dei mercati digitali, in quanto generalmente si crede che l'imposizione di leggi apposite possa compromettere l'innovazione in ambito digitale[222]. Di conseguenza sono molteplici le sfide che le autorità di competenza si trovano ad affrontare nella regolamentazione dei mercati digitali, in quanto, alcune loro caratteristiche rendono l'applicazione delle norme legali esistenti estremamente ardua. Questo genere di mercato rende il successo delle aziende fortemente dipendente dalla loro capacità di innovare, il che significa che esse sono costrette ad affidarsi a brevi cicli di vita dei loro prodotti e di conseguenza ad essere soggette alla loro vasta differenziazione. Tutto ciò rende la definizione di mercato rilevante da parte delle autorità garanti della competizione particolarmente difficile. Inoltre, i mercati digitali possono essere spesso conformati nelle cosiddette multisided platforms, piattaforme multilaterali caratterizzate per loro natura dalla mancanza di confini chiari e definiti.
Le aziende attive nei mercati digitali hanno come loro fondamento l'utilizzo dei big data per incrementare i processi produttivi, migliorare la capacità decisionale degli amministratori, prevedere con precisione le tendenze del mercato ed influenzare in modo efficace la pubblicità ed i diversi suggerimenti commerciali[223]. Ma come può tutto ciò spiegare e contribuire alla creazione di posizioni dominanti? Newman sostiene che l'informazione è diventata

[222] MANNE, WRIGHT (2011: 5).
[223] AGCOM (2018: 22-24).

abbondante, mentre l'attenzione scarseggia[224]. Non sorprende quindi che i consumatori si affidino sempre più alle fonti di informazione online[225] per scegliere quali prodotti acquistare, generando a loro volta dati che vengono collezionati dalle aziende ed utilizzati per il loro sviluppo. Tali dati, però, acquisiscono significato solo se organizzati e resi comprensibili agli esseri umani. Di conseguenza diventano i cosiddetti re dei mercati digitali coloro che sono in grado di offrire questo tipo di servizio con il minor carico cognitivo[226] per gli utenti. Quindi, più le aziende sono in grado di filtrare le informazioni in modo efficiente, più esse possono riuscire ad aumentare il loro potere di mercato. Tutto ciò contribuisce alla creazione di posizioni dominanti, poiché, per garantire il successo nel mercato dei prodotti digitali, sono necessari anni di ricerca, numerose risorse informative (come la raccolta dei big data) ed anche ingenti capitali, che ne consentano il loro pieno sviluppo, il loro lancio e la loro persistenza sul mercato. Queste sono caratteristiche delle quali soltanto poche aziende possono beneficiare. Un altro possibile ostacolo all'ingresso di nuovi attori nei vari mercati digitali può essere rappresentato da effetti positivi di rete, ovvero i network effects, sia diretti che indiretti. Essi descrivono l'effetto che un utente supplementare di beni o servizi ha sul valore di tale prodotto per gli altri utenti. Quando è presente un effetto di rete, il valore di un prodotto o servizio aumenta in base al numero di altri utenti che lo utilizzano e una volta raggiunto un certo livello di popolarità, è molto difficile che vengano scelti prodotti digitali alternativi.
Inoltre, il primo capitolo analizza l'articolo 102 del TFUE, fondato sull'idea che le posizioni dominanti non sono di per sé punibili. Difatti, le imprese possono diventare dominanti anche per loro semplice merito, ma, in seguito, la posizione privilegiata da loro acquisita comporta necessariamente una particolare responsabilità nei confronti dei concorrenti, in quanto tali aziende dominanti potrebbero potenzialmente danneggiare la concorrenza in generale, o perlomeno influenzarla a loro favore, in virtù del potere ottenuto.
In questo contesto viene esaminata anche l'essential facilities doctrine. Essa nasce negli Stati Uniti e rappresenta l'idea che chi detiene una posizione dominante e possiede una struttura indispensabile per i suoi concorrenti ha l'obbligo di concedere loro l'accesso[227]. Nell'Unione Europea la riluttanza a concedere l'accesso ad uno strumento essenziale è stata considerata di competenza dell'ambito di applicazione dell'articolo 102 TFEU, in quanto essa potrebbe essere intesa come abuso di posizione dominante, ma l'essential facilities doctrine ha ricevuto molte critiche e, di conseguenza, il suo utilizzo è ancora controverso.

Il secondo capitolo è incentrato sui casi Google, che offrono un esempio pratico dell'applicazione dell'articolo 102 TFUE in ambito digitale. Google viene generalmente descritta come una piattaforma digitale bilaterale, che dà

[224] NEWMAN (2019: 1505)
[225] PATTERSON (2017: 97).
[226] NEWMAN (2019: 1506).
[227] RASPAUD (2014: 68).

la possibilità ai suoi utenti di svolgere gratuitamente ricerche su Internet, offrendo al contempo ad inserzionisti l'opportunità di posizionare i loro annunci accanto ai risultati di ricerca degli utenti e/o sulle pagine web collegate a questi vari risultati[228].

Il primo caso Google esaminato, ovvero il caso *Google Search (Shopping)*, è nato nel 2010 a seguito di reclami da parte di fornitori di servizi di ricerca concorrenti, che hanno portato la Commissione Europea a scegliere di avviare indagini antitrust nei confronti di Google. L'origine delle rimostranze dei concorrenti era da attribuire all'aggiunta di una nuova caratteristica al servizio di ricerca di Google, che vedeva comparire tra i suoi risultati generali, detti orizzontali, anche uno "Shopping Unit", che mostrava all'utente risultati specializzati provenienti da uno dei motori di ricerca verticali dell'azienda. La giustificazione fornita da Google per questa sua condotta è stata che questo servizio specializzato aveva come obiettivo un incremento della funzionalità della ricerca, ma la percezione generale era che Google lo stesse usando per favorire i propri servizi di ricerca specializzati e per estendere il proprio potere di mercato[229]. Il caso si è concluso nel 2017, quando Google e la sua società madre Alphabet sono stati multati dalla Commissione Europea per un totale di 2.424.495.000 euro. La decisione attribuisce a Google una posizione dominante nel mercato per ricerche generiche ed identifica un abuso della stessa, perseguito posizionando più favorevolmente rispetto ai concorrenti il proprio servizio di confronto-shopping[230]. Infatti, i servizi di confronto-shopping offerti da Google non erano tenuti ad essere sottoposti agli stessi algoritmi a cui invece i servizi di confronto-shopping concorrenti dovevano sottostare per poter figurare tra le ricerche generali di Google.

Anche la Federal Trade Commission (FTC), ovvero l'autorità garante della competizione degli Stati Uniti, ha analizzato la stessa condotta di Google che la Commissione Europea ha ritenuto abusiva, ma questa indagine ha portato ad un risultato diametralmente opposto. Infatti, nel 2013 l'FTC ha stabilito in una dichiarazione di quattro pagine, che, sulla base delle prove acquisite, non vi era alcuna necessità di presentare una denuncia contro Google o di perseguire legalmente quest'azienda, in quanto il suo comportamento andava interpretato come un consueto effetto collaterale della concorrenza di merito[231]. Questa posizione è sembrata essere in forte contrasto non soltanto con le idee della Commissione Europea, ma anche con la posizione iniziale che la stessa FTC aveva preso nell'avvio delle indagini. Ciò che può essere affermato con sicurezza è che i diversi provvedimenti e le soluzioni contrastanti intraprese rispettivamente dalla Commissione Europea e dalla FTC lasciano la porta aperta alle discussioni su quale dei due approcci sia stato il migliore nell'affrontare eventuali abusi da parte di aziende dominanti nei mercati digitali. Allo stesso tempo è importante considerare che Google non è stato l'unico gigante tecnologico oggetto di accuse antitrust riguardo

[228] BERGQVIST (2019: 3).
[229] BERGQVIST (2019: 6).
[230] EUROPEAN COMMISSION (2017b: 2).
[231] FEDERAL TRADE COMMISSION (2013: 2)

eventuali abusi di posizioni dominanti. Tra gli anni '90 e i primi anni 2000 anche la multinazionale di software e sistemi operativi Microsoft è stata indagata, sia dall'autorità antitrust europee, sia da quella statunitense. Questi casi offrono un interessante termine di paragone con il caso *Google Search*, in quanto, anche in quest'occasione, le decisioni prese dalla Commissione Europea e dalla FTC sono risultate essere in antitesi. Negli Stati Uniti Microsoft è stata accusata di pratiche di vendita abbinata, il cosiddetto tying dei prodotti, e di aver tentato di espandere la sua posizione dominante nel mercato dei sistemi operativi anche ad altri mercati digitali limitrofi. È stato però ritenuto sufficiente imporre rimedi comportamentali. Al contrario, la Commissione Europea nel 2004 ha rilevato una violazione da parte di Microsoft dell'articolo 102 TFUE. In particolare, è emerso che l'azienda aveva danneggiato i consumatori limitando lo sviluppo tecnologico attraverso il rifiuto di fornire ai suoi concorrenti informazioni sull'interoperabilità del suo sistema operativo Windows. Inoltre, è stato anche affermato che Microsoft aveva abusato del suo potere di mercato applicando la vendita abbinata di Windows Media Player e del sistema operativo Windows generale[232]. Nel 2007 la Corte Europea di Giustizia ha confermato ed appoggiato questa decisione da parte della Commissione. Il giudice ha anche riconosciuto che le circostanze eccezionali descritte in *Magill* e *IMS Health*, che possono essere riassunte nel concetto di essential facilities doctrine, erano state soddisfatte nonostante le informazioni identificate come necessarie fossero protette da diritti di proprietà intellettuale[233].

Microsoft, analogamente a Google, è anch'essa una piattaforma per definizione, ma queste due piattaforme si differenziano nel loro funzionamento. Nel caso di Microsoft la piattaforma è il suo sistema operativo Windows ed esso consente agli utenti, che pagano per ottenere il software, di scaricare diverse applicazioni capaci di eseguire varie funzioni, cosa che rappresenta essenzialmente il punto di forza dell'azienda, rendendo il prodotto Microsoft attraente agli occhi dei consumatori[234]. Nel caso di Google, invece, la piattaforma è il servizio di ricerca che opera direttamente su Internet ed è fornito gratuitamente agli utenti[235]. Questo potrebbe essere uno dei motivi per cui la Commissione, nell'esprimere la propria opinione sul caso *Google Search (Shopping)*, non ha preso in considerazione l'essential facilities doctrine come aveva fatto in precedenza per Microsoft.

Il secondo capitolo, inoltre, analizza il caso *Google Android*. Questo prodotto è molto simile a *Google Search* in quanto anch'esso è una piattaforma digitale il cui utilizzo è gratuito, ma la differenza principale sta nel fatto che è un prodotto open source, ovvero che il codice sorgente di Android è a disposizione di chiunque, consentendo di effettuare eventuali modifiche e/o

[232] EZRACHI (2018: 305).
[233] Sentenza del Tribunale del 17 Settembre 2007, T-201/04, *Microsoft Corp c. Commissione*, paragrafo 318.
[234] LANG (2016: 7).
[235] LANG (2016: 9).

miglioramenti a chiunque abbia le capacità di farli[236]. Per differenziare il prodotto originale dalle sue versioni modificate, queste vengono poi chiamate Android fork. Al fine di creare un dispositivo munito sia di Android che delle applicazioni di Google (come Gmail, Google Maps, Youtube, etc.), i produttori di dispositivi mobili devono comunque soddisfare alcuni requisiti specifici, come sottoscrivere un Mobile Application Distribution Agreement (MADA) ed anche un Anti-Fragmentation Agreement (AFA)[237]. Nell'aprile del 2015 la Commissione Europea ha deciso di aprire indagini formali su Google Android per verificare la presenza di un possibile abuso di posizione dominante con violazione dell'articolo 102 TFUE[238] e nel 2018 è stata presa la decisione finale, con conseguente multa di 4.342.865.000 di euro[239]. In particolare, Google è stata giudicata colpevole a causa di tre diverse pratiche[240]. La prima è stata individuata nella vendita abbinata di Android e dei servizi mobili di Google, quali ad esempio il servizio di ricerca di Google, il browser Google Chrome e l'applicazione Google Play. La seconda pratica identificata come illegale dalla Commissione è stata l'uso da parte di Google di incentivi finanziari ai produttori ed operatori di rete mobile per l'installazione esclusiva di Google Search sui dispositivi Android; la terza pratica, invece, è emersa dalla richiesta da parte di Google ai produttori di dispositivi mobili di impegnarsi a non sviluppare o vendere dispositivi basati su degli Android fork.

Sia nel caso *Google Search (Shopping)* che nel caso *Google Android* sono state appurate violazioni dell'articolo 102 TFUE, anche se differenti nella loro forma. Come esposto sopra, in *Google Search* la Commissione ha sviluppato una sua ipotesi di danno alla concorrenza, che dipendeva principalmente dallo sfruttamento della posizione dominante per acquisire potere in altri mercati limitrofi, mentre in *Google Android*, invece, il danno alla concorrenza rilevato era principalmente, ma non unicamente, attribuito alla vendita abbinata dei prodotti e all'imposizione di restrizioni ai produttori di dispositivi mobili. Alcuni studiosi ritengono però che, oltre alla condotta di Google nel caso *Android*, anche il caso *Google Search* possa essere analizzato in un contesto di vendita abbinata illegale. Difatti Google, aggiungendo ulteriori informazioni specializzate ai suoi risultati di ricerca, in realtà presenta due diversi prodotti, ovvero la ricerca generale e quella specializzata, come un unico servizio. Allo stesso tempo occorre considerare però che i mercati digitali e le imprese che vi operano, essendo il loro sviluppo estremamente dipendente dall'innovazione, devono essere continuamente in grado d'integrare ai loro prodotti nuove funzionalità ed opzioni. Di conseguenza, diventa sempre più difficile distinguere tra caratteristiche aggiuntive, servizi complementari e prodotti separati. Questa è l'ennesima conferma di quanto

[236] MASSAROTTO (2018: 411).
[237] EDELMAN, GERADIN (2016: 165-166).
[238] EUROPEAN COMMISSION (2015a: 1).
[239] Decisione della Commissione europea del 18 luglio 2018, AT40099, *Google Android*, paragrafo 32.
[240] EUROPEAN COMMISSION (2018a: 3-6).

sia difficile mantenere un giusto equilibrio tra innovazione ed applicazione del diritto europeo della competizione.

Proprio la tematica del mantenimento di questo giusto equilibrio viene poi affrontata nel terzo capitolo, che rappresenta un tentativo di valutazione generale delle prospettive future del diritto della competizione e dell'eventuale necessità di modificarne l'applicazione e la forma. La questione che si pone è la seguente: le autorità garanti della concorrenza saranno in grado di applicare le disposizioni esistenti ai mercati digitali in modo efficiente, o sarà necessaria l'adozione di nuovi standard giuridici al fine di garantire uno sviluppo equo delle condizioni di mercato e di conseguenza della competizione stessa? Infine, si pone il dubbio se, a lungo termine, il ruolo del diritto della competizione e la sua applicazione diventeranno obsoleti, favorendo dunque un approccio incentrato unicamente sugli equilibri di mercato dipendenti dall'innovazione digitale. Questa problematica può essere affrontata solo dopo un'attenta valutazione degli obiettivi principali del diritto europeo della competizione e di come essi si siano evoluti nel tempo. I casi Google sono l'esempio cardine di questo dibattito, in quanto quest'azienda è l'innovatrice per eccellenza, la cui posizione dominante può essere giustificata dai vari investimenti, nelle cose giuste ed al momento giusto, che ha attuato. Proprio in virtù di ciò, alcuni studiosi hanno sostenuto che l'obiettivo principale perseguito dalla Commissione Europea con questi casi fosse in realtà la protezione dei concorrenti, piuttosto che la protezione dei consumatori e che, quindi, nella decisione finale, non fosse stato dato il giusto peso ai vantaggi ed ai benefici goduti dai consumatori. Il diritto della competizione europeo però, a differenza del diritto antitrust degli Stati Uniti, ha seguito un percorso tortuoso nel suo sviluppo. Difatti, l'Unione Europea non nasce con il solo obbiettivo di integrazione economica, ma soprattutto come strumento di catalizzazione dell'integrazione europea in generale. Nel tempo, l'obiettivo di integrazione è diventato meno rilevante e la Commissione Europea, nel suo ruolo di autorità garante della concorrenza, ha scelto di dare più peso all'obiettivo generico della promozione della competizione, ma, in una certa misura, lo sviluppo dei mercati digitali ha indirettamente causato nuovamente la necessità di integrare i mercati dei vari membri dell'Unione. Di conseguenza, le decisioni prese sulla condotta di Google nei casi *Google Search (Shopping)* e *Google Android* potrebbero essere in parte giustificate da questa necessità di trovare un percorso comune per l'applicazione del diritto della competizione da parte degli Stati membri e delle autorità nazionali garanti della concorrenza in materia di abuso di posizione dominante da parte dei giganti della tecnologia. Il terzo capitolo prende inoltre in considerazione l'importante ruolo che la teoria economica svolge in materia di diritto della competizione. Nel 2009 la Commissione Europea ha pubblicato un documento chiamato Guidance Paper, al fine di offrire un orientamento generale all'applicazione ed interpretazione dell'articolo 102 TFUE secondo un approccio più economico, ovvero il More Economic Approach, (MEA). Il MEA prevede che le corti diano una maggiore

importanza ad analisi economiche complete e dettagliate delle conseguenze che un eventuale abuso da parte di un'azienda dominante possa avere sul mercato e si affida inoltre a valutazioni individuali effettuate caso per caso, piuttosto che ad un approccio basato sulla forma dei singoli provvedimenti legali.
Di fatto, però, i paradigmi ed i modelli economici tradizionali spesso non riescono a spiegare appieno i casi antitrust, soprattutto quelli incentrati sui mercati digitali. Di conseguenza alcuni studiosi hanno proposto l'adozione di politiche a favore della sana concorrenza, basate sull'economia comportamentale, proprio al fine di renderle più efficaci e per, in qualche modo, innovare il diritto della competizione. L'economia comportamentale è una disciplina che incorpora lo studio della psicologia umana nell'analisi del processo decisionale che si cela dietro ad un risultato economico[241]. Il diritto della competizione attuale, però, sembra essere costruito secondo un approccio economico più tradizionale, che dà per scontato il fatto che le scelte degli individui siano governate dalla razionalità, fenomeno che molto spesso non rappresenta la realtà effettiva. Come analizzato in precedenza, una delle forme più ricorrenti che i mercati digitali possono assumere è proprio quella della piattaforma multilaterale, il cui successo molto spesso viene fortemente influenzato dalla presenza di effetti di network, che in alcuni casi possono essere presenti indipendentemente dalla qualità dei prodotti. Il sistema competitivo di una piattaforma multilaterale, comunque, deve tener conto delle proprie varie parti e si divide principalmente in due livelli: il primo è regolato da una concorrenza inter-piattaforma, ovvero tra le differenti piattaforme multilaterali, mentre il secondo livello è invece caratterizzato dalla competizione intra-piattaforma, ovvero da quel tipo di concorrenza che sorge tra imprese all'interno della piattaforma stessa[242]. Di conseguenza l'economia comportamentale diventa di difficile applicazione in quei casi che vedano il coinvolgimento di piattaforme multilaterali e digitali.

Tutto sommato appare che le piattaforme multilaterali nella loro funzione e forma di manifestazione dei mercati digitali hanno drasticamente cambiato la concorrenza e la competizione tra aziende, sia nella loro definizione economica[243], che a livello giuridico, ma il diritto della competizione in generale non sembra essere stato radicalmente modificato ed adattato a questi cambiamenti. Resta da vedere, però, se e come il diritto della competizione nei mercati digitali di domani verrà modellato dalla futura giurisprudenza.

[241] PARTINGTON (2017:1).
[242] KIRCHNER, BEYER (2016: 330).
[243] KATZ, SALLET (2018: 2144).