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ANTI-COMPETITIVE ASPECTS OF INTER AND INTRA-PLATFORM LEVERAGING.

By

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THE LIST OF KEYWORDS

Inter-platform leveraging | Intra-platform leveraging | Google Android | Google Shopping | Self-favouring | Cross-subsidization | User traffic | Comparison shopping services | Bidding auction

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Chapter 1. INTRODUCTION

1.1. The context

EU Competition law enforcement has limited means to accomplish its goals. In all cases, it is done through intervention performed in ex ante or ex post manner. Ex ante intervention occurs in mergers which are assessed as to their compatibility with EU competition law under the EU Merger Regulation.[1] Ex post intervention is applied in respect of Art. 101 of the Treaty on the Functioning of the European Union (TFEU)[2] which is aimed at preventing anticompetitive agreements and Art. 102 TFEU which concerns anticompetitive unilateral conduct of dominant undertakings. The two Treaty articles and the Merger Regulation comprise the three existing routes for EU competition law enforcement. Each one is designed for a particular kind of situation, while jointly they are supposed to cover the whole spectrum of anticompetitive conduct on any given market. However, there is a growing number of practices that might have a negative impact on consumer welfare while technically falling outside of the scope of any of the above-mentioned provisions. Situations like this are known as enforcement gaps[3]. Although it is a well-known problem of competition law enforcement, there is no quick solution. Enforcement gaps occur due to two fundamental reasons. First, in general, the EU's competition law system is built on an inductive approach. It formulates its position in respect of new market practices mainly through case law. Judges in their turn often avoid relying on new economic theories in their decisions whilst the former are still in dispute. Limited by the parties' pleas, they also might not have a chance to discuss a new theoretical approach long after it was developed in academic writings. As a result, case law development often trails behind market novelties. The other reason can be found in a long-lasting fundamental confusion which goes back to an unresolved question, namely what is the objective of competition

[1] Council Regulation (EC) 139/2004 on the control of concentrations between undertakings (EC Merger Regulation) [2004] OJ L24/1 [hereinafter Merger Regulation].

[2] Consolidated Version of the Treaty on the Functioning of the European Union art. 102, 2012 O.J. (C 326) 47 [hereinafter TFEU].

[3] On the enforcement gap under art. 102 see Federico Etro and Ioannis Kokkoris, Competition Law And The Enforcement Of Article 102 (Oxford University Press 2011) 139. On enforcement gap in merger control see 'Summary Of Replies To The Public Consultation On Evaluation Of Procedural And Jurisdictional Aspects Of EU Merger Control' (Ec.europa.eu, 2017) <http://ec.europa.eu/competition/consultations/2016_merger_control/summary_of_replies_en.pdf> accessed 21 July 2018.

law.[4] Concepts of consumer harm and benefit that are central to this question are good examples to support the point. Understanding of a consumer benefit concept constantly changes as well as the interests of the consumer as an objective category.[5] The same is true in respect to the concept of competition on merit which remains pretty vague regardless of the amount of times it was used as an ultimate argument proving or excluding the infringement. Case law developments are also usually late in responding to new practices due to technical reasons.[6] Even when the harmful effect of a new practice becomes widely recognized, traditional competition law tools might be not entirely suitable for a new situation. Their blunt application may lead to under or over enforcement. A good example is externalities between different sides of platforms for which traditional quantitative tools do not account. An obvious solution to the problem would be a wider and, at the same time, more detailed interpretation of core concepts and adjustment of the enforcement tools to the new realities. The question of how to accomplish this task in the best way remains open. Academic literature makes suggestions in respect of both points but not much of it has yet found its application in relevant case law.[7] The present dissertation does not seek to resolve the long-standing debate on tools and concepts adjustments. Nevertheless, within the frame of the mentioned debate, the research question has gained its importance and actuality due to the new insight into the competition on merit phenomenon it provides.[8] The research question focusses the analysis on two presumably equivalent situations, similar in every aspect except for the type of

[4] The theory of consumer welfare regards allocative efficiency as a central issue while deontological theories are concentrated on dynamic efficiencies. See Ioannis Lianos, 'Some Reflections On The Question Of The Goals Of EU Competition Law' (2013) CLES Working Paper Series 3/2013 SSRN Electronic Journal 2. Also see Ariel Ezrachi, 'EU Competition Law Goals And The Digital Economy' [2018] SSRN Electronic Journal 6. On the critique of European Commission focusing on competition as an end and not as a mean to achieve higher efficiency or consumer welfare see Renato Nazzini, The Foundations Of European Union Competition Law (OUP Oxford 2014) 1. Laura Parret, 'The Multiple Personalities Of EU Competition Law: Time For A Comprehensive Debate On Its Objectives', in Daniel Zimmer (ed), The Goals of Competition Law (Edward Elgar Publishing Limited 2012).

[5] On static and dynamic efficiencies see Mark Blaug, 'Is Competition Such A Good Thing? Static Efficiency Versus Dynamic Efficiency.' (2004) 19 Review of Industrial Organization 37. On economic efficiency see Gregory T. Gundlach and Diana Moss, 'The Role Of Efficiencies In Antitrust Law' (2015) 60 The Antitrust Bulletin 91.

[6] For the average duration of proceedings in General Court and in the Court of Justice see Court of Justice of the European Union, 'Press Release No 36/18. Judicial Statistics 2017: The Number Of Cases Brought Has Once Again Exceeded 1 600.' (2018) <https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-03/cp180036en.pdf> accessed 7 September 2018.

[7] For a compilation of academic opinions on the adjustment of competition law enforcement tools see OECD, 'Rethinking Antitrust Tools For Multi-Sided Platforms.' (2018) <http://www.oecd.org/competition/rethinking-antitrust-tools-for-multi-sided-platforms.htm> accessed 29 August 2018 [hereinafter OECD, 'Rethinking Antitrust Tools For Multi-Sided Platforms' (2018)]. For OECD approach to the definition of competition on merit see OECD, 'Competition On The Merits (Best Practices Roundtable)' (2015) <http://www.oecd.org/dataoecd/7/13/35911017.pdf.> accessed 1 September 2018.

[8] Renato Nazzini, 'Google And The (Ever-Stretching) Boundaries Of Article 102 TFUE' (2015) 6 Journal of European Competition Law & Practice 301.

connections between the markets. That approach will allow the evaluation of the importance of externalities for competition law enforcement in isolation from any other complicating factors. For the purpose of this dissertation, the type of conduct subjected to analysis is not essential as long as it can be used by undertakings in a dominant position to promote their own products or services on related markets. The selected conduct for this dissertation is the extension of a dominant position onto adjacent markets since it is a very intuitive and attractive practice for platforms. The behaviour becomes increasingly popular due to the lack of regulation and to the significant competitive advantages it can provide when performed on a new unsaturated market. Choosing such behaviour as exemplary contested conduct will also allow the analysis and discussion to profit from an abundant body of case law and decisional practice on its most common forms.

1.2. Research question and methodology

The key research question of this dissertation is whether competition law enforcement should distinguish and treat differently leveraging practices that extend a dominant position from one platform to another and leveraging practices that are implemented to the same effect between two sides of the same platform. These two practices will be referred to as inter- and intra-platform leveraging respectively.

In order to answer the research question, the following structure has been adopted. As a first step, the main academic ideas on multisidedness, platforms and leveraging are summarised sketching the map of theoretical findings in the area. It allows the concepts of inter and intra-platform leveraging to be introduced in an appropriate context. Next, a coherent line of case law reflecting the judicial position on platform leveraging and the way in which it has developed is identified and analysed. By comparing the key elements of conduct assessment in the selected case-law and the relevant academic literature, the interpretative differences are identified in respect of externalities between the markets. Furthermore, the dissertation then focusses on selected cases from the recent decisional practice of the European Commission (Commission) which fit the model of the research question as closely as possible. Luckily, the two recent and most discussed decisions of the Commission, namely *Google (Shopping)*[9] and *Google (Android)*[10] (Decisions)

[9] Case AT.39740 (*Google Search (Shopping)*), Commission Decision of 27 June 2017 [hereinafter *Google (Shopping)*].
[10] Case AT.40099 *Google (Android)* [hereinafter *Google (Android)*]. See European Commission, 'Antitrust: Commission Fines Google €4.34 Billion For Illegal Practices Regarding Android Mobile Devices To Strengthen

provide a perfect illustration for the suggested analysis. The main methodological approach can be briefly described as follows. The two Decisions will be evaluated in the light of the settled case law. The case law in its turn will be compared with the relevant theoretical findings in economic and legal literature. The comparison will help to isolate the ideas and solutions that have been offered in academic literature but absent in the case law. Introduction of those elements into the logic of the Commission Decisions will provide an answer to the research question.

The present research is predominantly monodisciplinary. It will be based on critical, qualitative analysis of legal materials supporting the formulated hypothesis performed in a legalistic manner. Three types of sources will be analysed, namely academic literature, case law and decisional practice of the Commission. A literal interpretation of these sources will provide the primary and secondary data necessary to answer the research question. The secondary data will include the facts of the cases, statistics, and data commented upon in academic writing. The primary data concerns the manner in which the law has been interpreted, and how the facts were evaluated. When a mere literal interpretation of a source proves insufficient, logical analysis will help to separate the argumentation or theories developed in a source into constituent elements. Later, such elements can be compared and weighed against each other. The general comparison method serves to identify different approaches to similar facts expressed at various levels of legal interpretation of the platform leveraging phenomenon. It also helps to define the key elements such as recourse to externalities, present in one source and omitted in another. Comparison of primary data will be used to identify the motives behind a particular approach. At this point, a hypothetical experiment can be conducted. The selected decisional practice will be analysed in the light of academic findings not incorporated in the relevant case law. At the same time, the original argumentative thread and logic of each decision will be preserved by using the method of analogy. The outcome of the experiment will be obtained through the deductive method. After a final comparison of the outcomes, a conclusion will be presented.

Dominance Of Google's Search Engine' (2018) <http://europa.eu/rapid/press-release_IP-18-4581_en.htm> accessed 25 July 2018 [hereinafter Press release *Google (Android)*].

1.3 Scope and structure

The scope of the research is limited to the European Union's legal framework. Occasionally references to national case law, legislation, and regulation in Europe and the US will be made for illustrative purposes.

The dissertation is divided into five chapters including the introduction (chapter 1) and conclusion (chapter 5). Chapters two and three summarise and analyse the relevant materials, striving to focus and compare the main ideas on platforms and leveraging developed by different types of sources. The purpose of these chapters is to create a system of coordinates framing and providing the measure to the actions of enforcement agencies and court decision. As it logically follows, the role of chapter four is to demonstrate the place of the selected decisional practice on the scale through an analytical experiment. Each chapter represents one step on the way to answering the research question.

In chapter two, a review of the relevant academic literature will be conducted in order to summarise the important factors in respect to how platforms and their multisided nature operate.

In chapter three the concept of leveraging and its elements and legal qualification are introduced. Leveraging practices falling outside of the reach of competition law in its current state are identified. Various solutions to the formulated problem will be outlined. In this chapter, the relevant case law of the Court of Justice of the European Union (the Court) will be reviewed and the judicial interpretation of leveraging will be analysed. The chapter will demonstrate that the case law does not resort to an in-depth analysis of correlations between the markets neither it distinguishes between its types. Academic commentators, on the contrary, insist that connections and externalities between the markets should be studied unless there are significant reasons to do otherwise.[11]

In chapter four the intersection of the two concepts is discussed. An explanation will be provided as to why platforms are particularly prone to leveraging and how leveraging can be an integral part of a legitimate advertisement-based monetization strategy in the modern digital economy. The chapter will analyse the recent decisional practice of the Commission in *Google (Shopping)* and in *Google (Android)* since it is submitted that a comparison of these cases provides an excellent

[11] See the OECD report (2018) Rethinking Antitrust Tools for Multi-Sided Platforms available at www.oecd.org/competition/rethinking-antitrust-tools-for-multi-sided-platforms.htm

opportunity to demonstrate the crucial role of externalities in competition law enforcement in the context of leveraging. The two cases have very similar facts concerning an extension of a dominant position from one market to another while in the manner of the preceding case law neither of them pays significant attention to externalities between the markets. Preserving the narrative of the Commission the element of externalities will be introduced into the analysis in order to see how it affects the outcome. In the concluding section of the chapter, the two outcomes will be compared, and the result will be summarised demonstrating the link between the research question and the question of competition on the merit.

In chapter five an answer to the research question will be proposed.

Chapter II. THE CONCEPT OF PLATFORMS

2.1. The concept

There is no agreement on the definition of a platform in academic literature.[12] Among many attempts to provide a definition, several deserve particular attention. Evans (2003) used the existence of externalities between customer groups as the test for identifying a platform.[13] Rochet and Tirole (2006) formulated an alternative approach and used the ability of cross-platform price structure to regulate overall transaction volume as an indicator of platforms.[14] Hagiu and Wright (2011) emphasized the role of the mediator between customer groups as a crucial element defining a platform. They specified that simple resellers merely facilitating the interaction stay outside of the scope of the concept.[15]

It can be observed that the three definitions complement each other rather than substitute. They represent a sequential reflection of discoveries made in economics, law and strategic management in respect of essential aspects of a platform phenomenon. Emerging theories of platforms were known to take advantage of previous achievements mainly in two research areas. Those areas were the analysis of complementary or clustering market behaviour and optimization of pricing strategies for related products.[16] The first group of studies explains the meaning and implications of externalities that appear within networks. Those studies inspired the approach to platforms in Evans (2003).[17] The second group analyzed effects of cross-subsidization among related markets and was used by Rochet and Tirole (2006).[18] Later Hagiu and Wright (2011) acknowledging the previous major findings defined multisidedness as a matter of degree.[19] The present chapter will resume the key theoretical findings in respect of platforms features, classifications and antitrust implications through the prism of the three mentioned approaches.

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[12] Michael Katz and Jonathan Sallet, 'Multisided Platforms And Antitrust Enforcement' (2018) 127 The Yale Law Journal 2142.
[13] David S. Evans, 'The Antitrust Economics Of Two-Sided Markets' (2003) 20 Yale Journal on Regulation 325.
[14] Jean-Charles Rochet and Jean Tirole, 'Two-Sided Markets: A Progress Report' (2006) 37 The RAND Journal of Economics 645.
[15] Andrei Hagiu and Julian Wright, 'Multi-Sided Platforms' [2015] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2794582> accessed 13 August 2018.
[16] A. V. Banerjee, 'A Simple Model Of Herd Behavior' (1992) 107 The Quarterly Journal of Economics 797.
[17] Evans (n 12).
[18] Rochet and Tirole (n 14).
[19] Hagiu and Wright (n 15).

2.2. Network effects

Network effects are responsible for special abilities and extra efficiencies available to platforms. This sub-section will introduce the concept of network effects in the light of the relevant research literature and present its most important classifications.

2.2.1. Research on network effects

The studies on clustering or complementary behaviour tried to explain behavioral patterns common for vaccination, bank runs, systemic risk, beauty contests, and analysts herding.[20] Within this field of studies Katz and Shapiro (1985)[21], Farrel and Saloner (1985)[22], Arthur (1989)[23] analysed the process of resources allocation in innovative industries. In the same vein, Karni and Schmeidler (1990) studied the reasons for rising and fall of fashion tendencies.[24] The studies have shown that often activities were more beneficial for individuals or companies when their peers were involved in a related activity.[25] This finding constituted a foundation of further studies on externalities appearing within a network also known as network effects. Studies on complementary behaviour have shown that network effects are a powerful factor in shaping market relationships.[26] Strong network effects can cause a market being "trapped" in an obsolete or inferior standard or tendency. Banerjee (1992)[27] in his work on "herd behaviour" demonstrated that network effects can persist despite being harmful to customers welfare due to informational asymmetry.[28]

A decade later the key theoretical studies on platforms agreed that network externalities were more than informational asymmetry effect, they were the key to the understanding of behavioral features

[20] Michael L. Katz and Carl Shapiro, 'Network Externalities, Competition, And Compatibility' (1985) 75 The American Economic Review 424.
[21] Ibid.
[22] Joseph Farrell and Garth Saloner, 'Standardization, Compatibility, And Innovation' (1985) 16 The RAND Journal of Economics 70.
[23] W. Brian Arthur, 'Competing Technologies, Increasing Returns, And Lock-In By Historical Events' (1989) 99 The Economic Journal 116.
[24] Edi Karni and David Schmeidler, 'Fixed Preferences And Changing Tastes' (1990) 80 American Economic Review 262.
[25] Ibid, supra notes 11-13.
[26] Ibid.
[27] A. V. Banerjee, 'A Simple Model Of Herd Behavior' (1992) 107 The Quarterly Journal of Economics 797.
[28] Ibid. According to the study, a customer would observe the peers' choices and assume that they were justified by information she does not possess. That would induce her to repeat the choice of the majority rather than choose based on her own consideration.

not well explained by the standard economics of the firm.[29] Parker and Van Alstyne (2000) pictured network effects as a perceivable interdependence in demand within networks consisting of one or several customer groups.[30] Following these works, it was widely accepted that a network could carry a separate value for its users. According to the new understanding, the demand expressed by one group depended not just on quality and price but also on the amount and quality of users within the same or another customer group.[31] This represented network effects as a quantifiable input in the final product. Gandal, Kende, and Rob (2000) measured network externalities in the CD industry.[32] They discovered that a 10% increase in software titles would have the same effect on demand for hardware products as a 5% drop in their price.[33] Finally, analysis of network effects' type and magnitude could provide a clearer perspective on the way in which platforms operated.

2.2.2. Types of network effects

Most theoretical studies distinguish between direct and indirect network effects.[34] Direct effects can be defined as externalities imposed by the members of one customer group on their peers. Indirect network effects can be defined as externalities imposed by one customer group onto another. The classic example of a platform relying on direct network effects is fax technology. The bigger the pool of its users the more attractive it is for the new members[35]. Indirect network effects lie in the foundation of advertising-based businesses. The classic example is newspapers that strive to accommodate readers, writers, and advertisers by using inter-group externalities.[36]

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[29] Bernard Caillaud and Bruno Jullien, 'Chicken & Egg: Competition Among Intermediation Service Providers' (2003) 34 The RAND Journal of Economics 309. Mark Armstrong, 'Competition In Two-Sided Markets' (2006) 37 The RAND Journal of Economics 668. Evans (n 12). Rochet and Tirole (n 13).

[30] Geoffrey Parker and Marshall W. Van Alstyne, 'Information Complements, Substitutes, And Strategic Product Design' [2000] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=249585> accessed 5 August 2018.

[31] Richard Schmalensee and David S. Evans, 'The Industrial Organization Of Markets With Two-Sided Platforms' (2007) 3 Competition Policy International 151.

[32] Neil Gandal, Michael Kende, and Rafael Rob, 'The Dynamics Of Technological Adoption In Hardware/Software Systems: The Case Of Compact Disc Players' (2000) 31 The RAND Journal of Economics 43.

[33] Ibid.

[34] See for example Schmalensee and Evans (n 30). Erik Hovenkamp, 'Antitrust Policy For Two-Sided Markets' [2018] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3121481> accessed 26 July 2018.

[35] Julian Wright, 'One-Sided Logic In Two-Sided Markets' (2004) 3 Review of Network Economics 44.

[36] Ibid. Advertisers value collaboration with platforms because they provide them with the audience. An increase of the audience causes growth in demand among advertisers due to positive indirect network effects. Readers on the other side usually buy newspapers because they value their journalistic component. Meanwhile, they might have negative, neutral or sometimes positive fillings towards advertising.

Rochet and Tirole (2003, 2006)[37] and Armstrong (2006)[38] distinguished between membership and participation network effects. The former arises from joining a platform like in case of pre-installation of certain features on a mobile device, while the latter arises from the act of use such as paying by card or sending a query to a search engine. Network effects can be positive as well as negative or exhibit different magnitude.[39] Rysman (2004) studied the market for yellow pages and has found significant positive cross-network effects between advertisers and readers.[40] Wilbur (2008) on the contrary, has found that an increase in an advertisement on TV decreases the audience due to negative cross-network effect.[41] This demonstrated that advertisers always value users, however, the value that users place on advertisers has to be estimated on a case-by-case basis.[42] Sriram et al. (2014) found that even when cross-network effects are reciprocal they really match in magnitude.[43] Reciprocal positive indirect network effects are common for transactional platforms that bring two parties together and serve as an intermediary in the transaction. Non-reciprocal positive indirect network effects are common for non-transactional platforms such as search engines. In this case, the transaction between the parties lies outside of the scope of the platform intermediation services. Among all classification of network effects,[44] the three mentioned above are fundamental for the understanding of platform inner mechanics.

2.3. Cross-subsidization

It is hard to underestimate the importance of network effects for platforms. Meanwhile, the size of the benefit platforms can internalize due to the use of network effects depends on cross-

[37] Jean-Charles Rochet and Jean Tirole, 'Platform Competition In Two-Sided Markets' (2003) 1 Journal of the European Economic Association 990.
[38] Mark Armstrong, 'Competition In Two-Sided Markets' (2006) 37 The RAND Journal of Economics 668.
[39] Matthew T. Clements, 'Direct And Indirect Network Effects: Are They Equivalent?' [2002] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=313928> accessed 5 March 2018.
[40] Marc Rysman, 'Competition Between Networks: A Study Of The Market For Yellow Pages' (2004) 71 The Review of Economic Studies 483.
[41] Kenneth C. Wilbur, 'A Two-Sided, Empirical Model Of Television Advertising And Viewing Markets' (2008) 27 Marketing Science 356.
[42] Ibid. Rysmon (29). See also Harikesh Nair, Pradeep Chintagunta, and Jean-Pierre Dubé, 'Empirical Analysis Of Indirect Network Effects In The Market For Personal Digital Assistants' (2004) 2 Quantitative Marketing and Economics 23. Daniel A. Ackerberg and Gautam Gowrisankaran, 'Quantifying Equilibrium Network Externalities In The ACH Banking Industry' (2006) 37 The RAND Journal of Economics 738.
[43] In online consumer-to-consumer platforms, an installed base of sellers was shown to have a much larger effect on the growth of buyers than vice versa. See S. Sriram and others, 'Platforms: A Multiplicity Of Research Opportunities' (2014) 26 Marketing Letters 141.
[44] For more classifications see Richard Schmalensee and David S. Evans, 'Markets With Two-Sided Platforms' [2008] SSRN Electronic Journal <http://Markets with Two-Sided Platforms> accessed 5 August 2018.

subsidization options available within the network. The present sub-section talks about the special role of cross-subsidization technique in platforms. On the one side, it is a powerful commercial instrument capable of providing flexibility and efficiency unavailable otherwise, on the other, cross-subsidization reduces transparency and provides additional opportunities for abuse.

2.3.1. Price structure

The ability of integrated companies to cross-subsidize between customer groups started to attract academic attention long before the emerging of a platform concept. Baxter (1983) has built one of the first theoretical models describing the multi-sided nature of a payment card network.[45] Parker and Van Alstyne (2005) have found that complementary products given away for free could increase overall profit.[46] Armstrong (2006) studied rationales behind cross-subsidizing one side of the market at the expense of the other and argued that such practices can enhance not just companies' gains but also consumer welfare.[47] Building on the previous findings Rochet and Tirole (2003) drew a first comprehensive model of platform competition on two-sided markets joining the ideas on cross-platform externalities and cross-subsidization.[48] They demonstrated that indirect network effects are an indicator of multi-sided markets. In order to reach maximum transaction volume players active on such markets had to adjust not only the price level but also a cross-platform price structure.[49] With the example of bank cards interchange fees, Klein et al. (2006) demonstrated that undistorted competition would force platforms to distribute the payment burden among the customer groups in the most efficient manner.[50] That creates a situation in which one platform side is always subsidized by another.[51] As a result, only total and not relative prices can be regarded as to indicate exercise of market power.[52]

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[45] William F. Baxter, 'Bank Interchange Of Transactional Paper: Legal And Economic Perspectives' (1983) 26 The Journal of Law and Economics 541.
[46] Geoffrey G. Parker and Marshall W. Van Alstyne, 'Two-Sided Network Effects: A Theory Of Information Product Design' (2005) 51 Management Science 1494.
[47] Armstrong (n 38).
[48] Rochet and Tirole (n 14).
[49] Ibid.
[50] Platforms normally would charge more to the customer group with lower price sensitivity. See Benjamin Klein and others, 'Competition In Two-Sided Markets: The Antitrust Economics Of Payment Card Interchange Fees' (2006) 73 Antitrust Law Journal 571.
[51] Empirical research showing that the average cost of a printed copy of a newspaper is higher than the average price at which it is offered to users. Jose M. Vidal-Sanz and Mercedes Esteban-Bravo, 'A Nonlinear Product Differentiation Model À La Cournot: A New Look To The Newspapers Industry' [2013] DEE - Working Papers. Business Economics. <https://ideas.repec.org/p/cte/wbrepe/wb132002.html> accessed 8 August 2018.
[52] Klein et al. (n 50).

This finding had important implications for competition law enforcement since it requires to change the way in which price-cost tests are applied [53] More generally, they had to develop a new approach towards competition law enforcement that would account to a possibility of pro-competitive cross-subsidization.[54]

2.3.2. Zero-price trade

In response to competitive pressure toward the optimal price structure,[55] platforms can choose to set a price for one side at zero. That would fully place the payment burden on the other side.[56] This strategy is widely employed by online companies since it allows them to create a sufficient customer base early in companies' life.[57] Its popularity induced the discussion of whether zero-price trade could and should be a subject of antitrust scrutiny.

2.3.2.1. Zero-price trade and the scope of competition law

Historically, competition law enforcement was methodologically grounded in the price theory.[58] Its logic suggested that there could be no market for free goods as well as no consumer harm.[59] As a consequence, the antitrust analysis did not have the means to overcome the positive price bias despite the evidence that goods and services offered to consumers for free can significantly affect competition and consumer welfare.[60] In the course of debate large online companies offering goods free of charge opposed enforcement agencies on many levels. Affected by the positive price

[53] For the summary on the application of competition law tools in the context of platforms see Bundeskartellamt, 'Working Paper Market Power Of Platforms And Networks' (BKartA 2016) <https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2> accessed 29 August 2018. See also OECD, 'Rethinking Antitrust Tools For Multi-Sided Platforms (2018).' Supra note 7.

[54] John M. Newman, 'Antitrust In Zero-Price Markets: Applications' [2015] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2681304> accessed 8 August 2018.

[55] Schmalensee and Evans (n 31).

[56] Kai Chen and Edison T. Tse, 'Dynamic Platform Competition In Two-Sided Markets' [2008] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1095124> accessed 8 August 2018.

[57] Sampsa Ruutu, Thomas Casey and Ville Kotovirta, 'Development And Competition Of Digital Service Platforms: A System Dynamics Approach' (2017) 117 Technological Forecasting and Social Change 119.

[58] For a price theory as a microeconomic principle that allowed to determine the appropriate price point for goods and services using the concept of supply and demand. See Léon Walras, Elements Of Pure Economics, Or, The Theory Of Social Wealth (2nd edn, American Economic Association and the Royal Economic Society by Allen and Unwin 1954).

[59] Newman (n 54).

[60] See for example Parker and Van Alstyne (n 46). David S. Evans, 'Antitrust Economics Of Free' [2011] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1813193> accessed 4 August 2018.

bias domestic courts initially supported the position of online companies.[61] Trying to create a friendly academic environment and maybe affect the approach of foreign courts the latter spent significant financial resources on favorable research.[62] Nowadays although some maintain that there can be no markets of free goods,[63] the majority of the academic commentators seems to agree that pricing at zero does not preclude competition law scrutiny.[64] Newman (2014) explains the confusion around zero-priced goods and services by the misleading rhetoric[65] and erroneous labeling of such goods and services as "free". [66] To define the real cost of so-called free goods and services he relies on the taxonomy of Sherman and Clayton acts,[67] that identify the scope of the US antitrust law through the concepts of "trade" and "commerce".[68] The idea of two-way exchange is fundamental for economic gains constituting the essential element of the latter concepts. The fact of exchange does not depend on the monetary form of consideration. Instead, the latter can be provided in the form of information or attention. When a customer shares her information or attention in exchange for something she wants, she incurs "market-signalling" type of costs. As opposed to "non-market-signalling", such costs are incurred in the course of "trade" or "commerce" and consequently fall in the scope of antitrust law.[69]

In the EU legal system, the concept of undertaking determines 'the categories of actors to which the competition rules apply'.[70] According to the settled case law, the concept of undertaking "encompasses every entity engaged in economic activity, regardless of the legal status of the entity

[61] See for example Stephen Jay Photography, Ltd. v. Olan Mills, Inc., 903 F.2d 988, 991 (4th Cir. 1990).); Kinderstart.com, LLC v. Google, Inc., No. C 06-2057 JF(RS), 2007 WL 831806 (N.D. Cal. Mar. 16, 2007).

[62] Google's Academic Influence In Europe' (Politico.eu, 2018) <https://www.politico.eu/wp-content/uploads/2018/03/GTP-European-Google-Academics-Final.pdf> accessed 13 August 2018.

[63] Christian Kersting and Sebastian Dworschak, 'Does Google Hold A Dominant Market Position? – Addressing The (Minor) Significance Of High Online User Shares' [2014] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2495300> accessed 4 August 2018. See also James D. Ratliff and Daniel L. Rubinfeld, 'Is There A Market For Organic Search Engine Results And Can Their Manipulation Give Rise To Antitrust Liability?' (2014) 10 Journal of Competition Law and Economics 517.

[64] See for example John M. Newman, 'Antitrust In Zero-Price Markets: Foundations' [2014] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474874> accessed 3 August 2018. For the summary of academic opinions on the matter see OECD, 'Rethinking Antitrust Tools For Multi-Sided Platforms.' (2018) Supra note 7.

[65] Herbert Hovenkamp, 'Rhetoric And Skepticism In Antitrust Argument' (1986) 84 Michigan Law Review 1721.

[66] John M. Newman, 'Antitrust In Zero-Price Markets: Foundations' [2014] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474874> accessed 3 August 2018.

[67]The Sherman Antitrust Act passed in 1890 (15 U.S.C. §§ 1-7) and amended by the Clayton Act in 1914 (15 U.S.C. § 12-27) [hereinafter The Sherman Act].

[68] Newman (n 66).

[69] Ibid.

[70] Opinion of Advocate General Jacobs, Case C-67/96 *Albany International BV(Albany) v Stichting Bedrijfspensioenfonds Textielindustrie* [1999] ECLI:EU:C:1999:28 [1-5751], para. 206.

and the way in which it is financed".[71] The central concept of economic activity in its turn is defined broadly in the relevant case law[72] as encompassing any activity concerning the offering of goods and services on the market[73] that, in principle, could be carried out by a private undertaking in order to make profits.[74] According to the case law non-economic activities excluded from the scope of Art. 101, 102 TFEU are defined as built on "the principle of solidarity" and "subject to the supervision of the State".[75] The fact that a good or service was provided in exchange for a remuneration does not affect the legal classification of such activity.[76]

A close reading reveals that in the definition of its scope EU competition law relies more on the substantive characteristics of activity such as whether it can be profitable.[77] Whereas the US antitrust law is focused on the form the activity is taking and whether there is an element of exchange in it. As a consequence, the interpretation of economic activity concept developed by the EU case law allowed to avoid major confusion in respect of free-of-charge goods and services. The US antitrust agencies on the other side had to demonstrate the presence of the exchange element in zero-price trade in order to establish their competence over the issue. They found a solution in interpreting consumers' information and attention as a new type of currency offering new insight on platforms.[78]

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[71] Case C-67/96, *Albany International BV(Albany) v Stichting Bedrijfspensioenfonds Textielindustrie* [1999] ECLI:EU:C:1999:430, para. 77. Case C-41/90 *Klaus Höfner and Fritz Elser v Macrotron GmbH* [1991] ECR I-1979 ECLI:EU:C:1991:161, para. 21.

[72] Okeoghene Odudu, 'The Boundaries Of EC Competition Law: The Scope Of Article 81' [2006] Oxford University Press 45.

[73] See Case C-475/99, *Firma Ambulanz Glöckner v Landkreis Südwestpfalz* [2001] ECLI:EU:C:2001:577 [hereinafter *Ambulanz*], para. 19. Case C-35/96 *Commission of the European Communities v Italian Republic* [1998] ECLI:EU:C:1998:303 para. 36. Case C-205/03 P, *Federación Española de Empresas de Tecnología Sanitaria (FENIN) v Commission of the European Communities* [2006] ECLI:EU:C:2006:453, para 25.

[74] Supra note 70, para. 311. Cases C-180-184/98 *Pavel Pavlov and Others v Stichting Pensioenfonds Medische Specialisten* [2000] ECLI:EU:C:2000:151, para 201.

[75] Case C-350/07, *Kattner Stahlbau GmbH v Maschinenbau- und Metall- Berufsgenossenschaft* [2009] ECLI:EU:C:2009:127, paras. 42-43. Case C-437/09, *AG2R Prévoyance v Beaudout Père et Fils SARL* [2011] ECLI:EU:C:2011:112, paras. 53-65.

[76] Case C-138/11 *Compass-Datenbank GmbH v Republik Österreich* [2012] ECLI:EU:C:2012:449, para 42.

[77] On why the provision of public goods and services cannot be profitable see Odudu (n 72).

[78] Cotton Delo, 'Here's My Personal Data, Marketers. What Do I Get For It?' (Adage.com, 2018) <http://adage.com/article/digital/web-data-startups-bank-consumers-controlling-data/231208/> accessed 13 August 2018. Nathan Newman, 'You're Not Google's Customer -- You're The Product: Antitrust In A Web 2.0 World' (HuffPost, 2018) <https://www.huffingtonpost.com/nathan-newman/youre-not-googles-custome_b_841599.html> accessed 10 August 2018.

2.3.2.1.1. Information costs

Consumer data and information are valuable and tradable goods that can generate profit in many ways.[79] Modern technological and analytical capacities allow to collect and structure big volumes of diverse consumer data at a high speed[80] opening new opportunities for its commercial use. The role of data in economic activities is highly significant. It can be used to explore new business opportunities, create targeted offers, predict consumers shopping patterns and spending capacity.[81] On the one side, access to consumers' information allows improving products and services and raising economic efficiency.[82] On the other side, collection and use of consumers' data raise numerous concerns in the field of privacy and data protection.[83] Ultimately, the risks connected with the latter define the true cost of the consideration paid by the consumer in exchange for a free good or service.[84]

2.3.2.1.2. Attention costs

Although consumer data can be marketed on its own, practically in most cases its value is derived from the value that can be created through the consumers' attention gained with the help of such data.[85] Not many people are truly capable of multitasking. As a result, they can devote their

[79] On the ways of marketing of consumer data see Federal Trade Commission, 'Data Brokers: A Call For Transparency And Accountability: A Report Of The Federal Trade Commission' (2014) <https://www.ftc.gov/system/files/documents/reports/data-brokers-call-transparency-accountability-report-federal-trade-commission-may-2014/140527databrokerreport.pdf> accessed 13 August 2018.

[80] Big data is often associated with the triple "V" monogram standing for its main characteristics: Velocity, Variety, and Volume. See Han Hu and others, 'Toward Scalable Systems For Big Data Analytics: A Technology Tutorial' (2014) 2 IEEE Access 652.

[81] See for example Joint Report of the French Competition Authority (Autorité de la concurrence) and the German Competition Authority (Bundeskartellamt) Autorité de la concurrence and Bundeskartellamt, 'Competition Law And Data' (2018) <http://www.autoritedelaconcurrence.fr/doc/reportcompetitionlawanddatafinal.pdf> accessed 13 August 2018. See also The Competition and Markets Authority (CMA), 'The Commercial Use Of Consumer Data' (2015) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/435817/The_commercial_use_of_consumer_data.pdf> accessed 1 September 2018.

[82] Economic research has shown that access to consumer information may intensify competition. See for example Rosa-Branca Esteves, 'Pricing With Customer Recognition' (2010) 28 International Journal of Industrial Organization 669. Rosa-Branca Esteves, 'Price Discrimination With Private And Imperfect Information' (2014) 116 The Scandinavian Journal of Economics 766.

[83] 'Little Brother' (The Economist, 2014) <https://www.economist.com/special-report/2014/09/11/little-brother> accessed 4 September 2018. Charles Duhigg, 'How Companies Learn Your Secrets' (Nytimes.com, 2018) <https://www.nytimes.com/2012/02/19/magazine/shopping-habits.html> accessed 4 September 2018.

[84] John Hagel III and Jeffrey F. Rayport, 'The Coming Battle For Customer Information' (Harvard Business Review, 2018) <https://hbr.org/1997/01/the-coming-battle-for-customer-information> accessed 13 August 2018.

[85] Brad J. Sagarin and others, 'Bartering Our Attention: The Distraction And Persuasion Effects Of On-Line Advertisements.' (2014) 8 Cognitive Technology 4.

attention to one thing at a time.[86] In the online economy companies vigorously compete for this limited resource of attention also known as 'traffic'.[87] It is well known that like data, traffic is a tradable good and an important input in most business models.[88] Meanwhile, platforms have taken the utility of online traffic on a new level. The possibility of cross-subsidization allows them to offer valuable and costly goods and services to the public free of charge generating an extraordinary amount of traffic that can be sold at a profit across the platform.[89] Companies that buy traffic usually pay for advertisement placement on the platform's website. According to Newman (2014), all advertising can be divided into three categories: unsolicited, directly solicited and indirectly solicited.[90] Bombarded with unsolicited advertising a consumer spends her attention and receives nothing, but annoyance[91], therefore, she incurs non-market-signalling costs. Since there is no element of exchange, such relationships fall outside of the scope of competition law. Two other cases fall within such scope. In the case of directly solicited advertising the consumer receives important information and incurs market-signalling costs in exchange for her attention and information. In the case of indirectly solicited advertising the consumer pays consideration by watching the advertising in exchange for unrelated good or service that is given to her free of ëcharge.[92]

What Newman (2014) describes as indirectly solicited advertising represents a tying practice. In that setup the tying product is a positively valued good or service that is given away free of charge while the tied product is advertising that has zero value for the consumer on its own but is valued negatively when information and attention costs are taken in account. Although some users might

[86] Tom Chatfield, 'The Attention Economy' (Aeon, 2013) <https://aeon.co/essays/does-each-click-of-attention-cost-a-bit-of-ourselves> accessed 14 August 2018.
[87] D. S. Evans, 'Attention Rivalry Among Online Platforms' (2013) 9 Journal of Competition Law and Economics. 313.
[88] US Federal Trade Commission (n 79).
[89] See section 2.3.1.
[90] Newman (n 66).
[91] WhatsApp wrote in 2012 before it was taken over by Facebook: "Advertising isn't just the disruption of aesthetics, the insults to your intelligence and the interruption of your train of thought". See 'Whatsapp Messaging App Applies New Way That Will Connect Users And Ad'S Companies On Facebook – Super Tech World' (Supertechinfo.net, 2018) <http://supertechinfo.net/2018/08/01/whatsapp-messaging-app-applies-new-way-that-will-connect-users-and-ads-companies-on-facebook/> accessed 4 September 2018.
[92] Ibid.

welcome tied advertising their amount, as a rule, is insignificant consequently those users are not taken into account by the pricing model.[93]

2.3.3. Platforms' dynamics

The ability to cross-subsidize significantly affects the dynamics of platforms growth and development.[94] As a rule, a customer will only engage in a transaction if in the aftermath her private benefits exceed her cost. Cross-subsidization platforms can lift the payment burden from price sensitive and volatile consumer groups increasing the attractiveness of the product or service to them. This strategy allows for creating a significant customer base in short terms. Due to direct network effects with each new user the value of the platform membership increases, so does the speed of its growth.[95] However, the correlation between the customer base size and the platform's growth speed is not linear. For each platform, there is a certain number of users after which its growth accelerates. This number is known as a critical mass.[96] Being a function of a network characteristics critical mass is different for every platform. Meanwhile, in a similar manner for each platform, it marks the point in its development when the adoption of innovation becomes self-sustaining.[97] That finding explains platforms' tendency to tipping and constitutes the base of 'the winner takes all' theory[98]. According to the latter theory, after a platform obtains a critical user mass it becomes a natural monopoly due to barriers to entry and growth raised by network effects and economies of scale.[99]

[93] On platform's pricing strategies for heterogeneous users such as the ones who welcome advertising and the ones who do not see E. Glen Weyl, 'A Price Theory Of Multi-Sided Platforms' (2010) 100 American Economic Review 1642.
[94] Michael L Katz and Carl Shapiro, 'Systems Competition And Network Effects' (1994) 8 Journal of Economic Perspectives 93.
[95] Ibid.
[96] Yannis J. Bakos and Chris F. Kemerer, 'Recent Applications Of Economic Theory In Information Technology Research' (1992) 8 Decision Support Systems 365. Francesco Castelli and Claudio Leporelli, 'Critical Mass Of Users Versus Critical Mass Of Services In A Multiproduct Information Service System' (1993) 5 Information Economics and Policy 331.
[97] For the definition of a critical mass of users see Alwin Mahler and Everett M. Rogers, 'The Diffusion Of Interactive Communication Innovations And The Critical Mass: The Adoption Of Telecommunications Services By German Banks' (1999) 23 Telecommunications Policy 719.
[98] David S. Evans and Richard Schmalensee, 'Some Economic Aspects Of Antitrust Analysis In Dynamically Competitive Industries' (2002) 2 Innovation Policy and the Economy 1.
[99] Antonio Capobianco and Anita Nyeso, 'Challenges For Competition Law Enforcement And Policy In The Digital Economy' (2017) 9 Journal of European Competition Law & Practice 19.

Although 'the winner takes all' scenario is very common, it is still not ubiquitous.[100] Meanwhile, network effects can cause platforms not just to dominate the market but also to spiral down. Building on that fact the critics of the theory assigns the main role in platforms' growth dynamic to the quality of the product or service rather than to the installed base including consumer network.[101] In each case, the question of whether tipping will occur, or can several monopolies coexist in equilibrium depends on characters of the market such as multi-homing.[102]

2.3.4. Multi-homing

Consumers are said to multi-home when they receive similar goods or services from different providers.[103] Multi-homing reduces market power and increases consumer welfare[104] in all kinds of markets.

In a market where multi-homing is not possible in order to appreciate a new product or service, a consumer needs to change the provider. This imposes one-time switching costs which cover uncertainty, search and learning costs in respect of the new product, costs of initiating relationships with a new provider, actual cost of a new product and its complements. It also often involves the loss of investments, benefits, and networks associated with the former provider.[105] These costs make consumers reluctant to change a provider unless the benefit offered by a new entrant compensates for it.[106] Importantly, a new entrant might also need to provide additional benefits to account for consumers' loss aversion.[107] Therefore, multi-homing prevents the consumer from

[100] For example, see 'Share Of Search Queries Handled By Leading U.S. Search Engine Providers As Of October 2018' (Statista, 2018) <https://www.statista.com/statistics/267161/market-share-of-search-engines-in-the-united-states/> accessed 1 August 2018.
[101] David S. Evans and Richard Schmalensee, 'Why Winner-Takes-All Thinking Doesn'T Apply To The Platform Economy' (Harvard Business Review, 2016) <https://hbr.org/2016/05/why-winner-takes-all-thinking-doesnt-apply-to-silicon-valley> accessed 1 August 2018.
[102] Mingchun Sun and Edison T. Tse, 'When Does The Winner Take All In Two-Sided Markets?' (2007) 6 Review of Network Economics 16. Roberto Roson, 'Two-Sided Markets: A Tentative Survey' (2005) 4 Review of Network Economics 142.
[103] Armstrong (n 38).
[104] Ibid. Schmalensee and Evans (n 31).
[105] Thomas A. Burnham, Judy K. Frels and Vijay Mahajan, 'Consumer Switching Costs: A Typology, Antecedents, And Consequences' (2003) 31 Journal of the Academy of Marketing Science 109.
[106] On markets for goods and services marketed free of charge new entrants are limited to quality competition only. Although quality must be interpreted in a broad sense. See Michal S. Gal and Daniel L. Rubinfeld, 'The Hidden Costs Of Free Goods: Implications For Antitrust Enforcement' (2016) 80 Antitrust Law Journal 521. On tying as a way to overcome non-negative price competition see Choi, Jay Pil, and Doh-Shin Jeon. "A Leverage Theory of Tying in Two-Sided Markets." (2016). Unpublished manuscript.
[107] Daniel Kahneman and Amos N. Tversky, 'Choices, Values, And Frames.' (1984) 39 American Psychologist 341.

being locked-in and lowering barriers to entry. However, this does not work in the same way if consumers multi-home in response to product differentiation.[108] The latter indicates that the products are not in direct competition.[109] For example, some commentators outline barrier-reducing role of multi-homing on markets for complements products[110] or advertising[111] where providers of the later goods multi-home between platforms in order to increase their consumer base. Merchants in such situation need to multi-home because consumers on the other side of the platform mainly single-home creating a setup known as 'competitive bottle-neck.[112] In a setup like this, the products of two platforms offering access to different unique single-homing sets of users can be seen as complements rather than substitutes. In that case, multi-homing is not an alternative to switching and has no effect on barriers to entry. This aligns with Armstrong's (2006) finding that in a situation of the competitive bottleneck the single-homing side is normally favoured by the platform while the multi-homing side is more likely to be mistreated.[113] Interestingly, multi-homing of customers on both sides is often used as a first-line defence by online platforms against allegations on their dominance and market tipping.[114] Therefore, the actual effect of multi-homing depends on the consumers' motives to multi-home in each particular case.

2.3.5. Platforms as a matter of degree

It became a common ground in the legal and economic literature that in the course of antitrust scrutiny externalities should be taken into account unless there are significant reasons to do otherwise.[115] However, not any integrated structure should be treated as a platform by default.

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[108] Commission Decision No. M.8124 (*Microsoft/LinkedIn*), 2016 O.J. C 388, 21.10.2016, p. 4–5., para. 40.

[109] OECD (2018) Rethinking Antitrust Tools for Multi-Sided Platforms. [online] Available a: http://www.oecd.org/competition/rethinking-antitrust-tools-for-multi-sided-platforms.htm [Accessed 27 Jul. 2018].

[110] Carmelo Cennamo, Hakan Ozalp and Tobias Kretschmer, 'Platform Architecture And Quality Trade-Offs Of Multihoming Complements' (2018) 29 Information Systems Research.

[111] Andres V. Lerner, 'The Role Of 'Big Data' In Online Platform Competition' [2014] SSRN Electronic Journal <https://papers.ssrn.com> accessed 26 July 2018.

[112] Armstrong (n 38).

[113] Ibid. For example, the Commission claimed that Google was imposing exclusive purchasing arrangements on online advertisers as a mean of abuse and attempt to restrict their multi-homing behaviour. See Google's commitments IP/13/317, MEMO/13/383 referred to in European Commission, 'Commission Seeks Feedback On Commitments Offered By Google To Address Competition Concerns – Questions And Answers' (2013) <http://europa.eu/rapid/press-release_MEMO-13-383_en.htm> accessed 25 April 2018.

[114] David Balto, 'In Antitrust Probe, Google's Critics Have It Wrong' (HuffPost, 2018) <https://www.huffingtonpost.com/david-balto/post_2155_b_884283.html> accessed 1 September 2018. Aurelien Portuese, 'Symposium On Google Search (Shopping) Decision · Fine Is Only One Click Away' (2017) 1 European Competition and Regulatory Law Review 198.

[115] OECD, 'Rethinking Antitrust Tools For Multi-Sided Platforms.' (2018). Supra note 7.

Instead, multi-sidedness should be considered a matter of degree.[116] It is reasonable to characterize an enterprise as a platform only when the effects of cross-platform externalities are strong enough to affect the behaviour of the customer groups.

This approach is supported by the fact that multi-sidedness can appear spontaneously or evolve over time due to natural reasons. An interesting example was provided by the United Kingdom's Director General of Fair Trading.[117] The case concerned two market segments for morphine sale. Demand for the medicine on the EU market was highly influenced by the demand on the hospital market. That dependence was strong enough to create an externality in the form of a perceivable cross-platform network effect. In order to profit from this effect, the producer of the medicine charged predatory prices in the hospital segment in order to weaken the effective competition on the market. This suggests that the list of situations where externalities should be taken into account is open and is not limited by advertisement-based business models.[118]

2.4. Conclusion on platforms

This chapter has provided a summary of the key academic findings on platforms and their multi-sided nature. Based on the analysed materials, it can be assumed that the legal content of the platform concept is deeply rooted in economic theory studying the phenomenon of multi-sided markets, network effects, and cross-subsidizing. As a result, the platform concept is likely to have a degree of flexibility as long as those theories are in development. Currently, a term platform is generally understood as an undertaking that serves several customer groups at the same time, among which at least one imposes strong positive indirect externalities on another, usually, but not necessarily,[119] in the form of network effects. In order to increase efficiency, platforms cross-subsidize the externality producing group at a cost of other customer groups. This represents a form of merit competition that allows platforms to access externalities-based efficiencies. The most important classification of platforms distinguishes transactional and non-transaction types. So far platforms ability to access extra efficiencies through cross-subsidization is not accounted for by traditional competition law enforcement practices. However, this may change with the new

[116] Michael Noel and David Evans, 'Defining Antitrust Markets When Firms Operate Two-Sided Platforms' (2005) 2005 Columbia Business Law Review 667. See also Evans and Schmalensee (n 31).
[117] Case 1001/1/1/01 *Napp Pharmaceutical Holdings Limited and Subsidiaries v Director General of Fair Trading* [2002] CAT 1.
[118] Ibid.
[119] See section 2.4.

cases concerning inter and intra-platforms leveraging in the new economy bringing a closer look into platforms' multi-sided nature.

Chapter III. LEVERAGING

This chapter will present the concept of leveraging through a brief comparison of the US and EU case law. It will also identify leveraging practices that despite best efforts of policymakers fall outside of EU competition law framework while nevertheless may distort competition on the market. For the purpose of the present dissertation, the term "leveraging" is used in the general sense. It refers to the extension of market power or its effects on another related market or market segment capable of restricting competition. Such behaviour in its turn might or might not be captured by the US leveraging doctrine or qualify as an abusive extension of dominance under Art. 102 TFEU. The term is chosen due to its concise phrasing, a helpful reference to principles of classical mechanics and popularity among business managers themselves.[120]

3.1. The concept

Extending of market power or its effects from one market to another is a long established and fairly common practice that raises serious competition concerns the essence of which often goes back to the unresolved conflict between perfect competition and dynamic efficiency.[121] To address the issue different legal systems adopted different strategies. The US legal system has developed the concept of monopoly power leveraging while the EU legal system operates with the concept of dominance extension[122] or abusive conduct with effects on a separate market.[123] In the European context, the term leveraging is used as a reference to a strategic behaviour aimed at dominance extension that combines several abusive practices.[124] Although both approaches address the problem, neither of them solves it. In the context of the new economy leveraging practices constantly increase in their diversity and intricacy. Legal development is continuously trying to catch up with economic advances often leaving certain types of market behaviour outside of legal qualification.

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[120] Internal Microsoft documents cited in *Microsoft*, Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289 [hereinafter *Microsoft*], para 1347.
[121] Philippe Aghion and others, 'Competition And Innovation: The Inverted-U Relationship' (2005) 120 The Quarterly Journal of Economics 701.
[122] Case 311/84 *CBEM v CLT and IPB* [1985] ECLI:EU:C:1985:394 [hereinafter *CBEM*], paragraph 27.
[123] Case C-333/94 P *Tetra Pak International SA v Commission* [1996] ECLI:EU:C:1996:436 [hereinafter *Tetra Pak II*], paragraph 25.
[124] *Microsoft*, supra note 120, para 1327.

3.1.1. Origin of the concept

In the US the term "leveraging" was coined by pre-Chicago case law concerning practices where a firm with market power would extend or attempt to extend such power to a related market effectively avoiding competition on merit.[125] The US Sherman Act was adopted in 1890 to protect competition and limit monopolization. Section 2 of the Act prohibits behaviour that amounts to monopolization or attempted monopolization of a new market.[126] In order to support a monopolization claim, a plaintiff is required to demonstrate that a company possesses a monopoly power on a relevant market and that such power was acquired by means other than a "superior product, business acumen, or historic accident".[127] In order to make a successful claim of attempted monopolization a plaintiff has to prove an intent to monopolize, predatory or anticompetitive conduct aimed at market monopolization and a high probability that monopolization will be successful.[128] In both cases, the standard of proof is relatively high.[129] Leveraging, on the contrary, is not linked to a monopolization objective. Instead, it maintains an attainable standard of a competitive advantage obtained on the market through the use of monopoly power on another market.[130] In *Berkey Photo* case leveraging was considered a separate claim under Section 2 of the Sherman Act.[131] The judgment rendered specific effects on the market and market shares irrelevant as long as some kind of advantage was obtained and therefore some degree of competition distortion was present. Neither did it concern the intent to monopolize the market, nor the probability with which such effect might occur. This made it significantly easier to prove an antitrust infringement. However, the judicial and academic acceptance of the leveraging doctrine was not universal[132] partially due to the Chicago School "single-monopoly-profit

[125] *United States v. Griffith* 334 U.S. 100, 107-09 (1948), where the court finds that the "use of monopoly power, however lawfully acquired, to foreclose competition, to gain a competitive advantage, or to destroy a competitor, is unlawful." *Int'l Salt Co. v. United States*, 332 U.S. 392, 396 (1947), where the court found that tying represented an attempt to leverage a monopoly in one market to another.
[126] The Sherman Act, Section 2.
[127] *United States v. Grinnell*, 384 U.S. 563, 570-71 (1966). For discussion on the elements of monopolization claim see Timothy J. Muris, 'The FTC And The Law Of Monopolization' [2000] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=235403> accessed 5 August 2018.
[128] *Alaska Airlines, Inc. v. United Airlines, Inc 948 F.2d 536 (9th Cir. 1991)* [hereinafter *Alaska Airlines*]. Muris (n 127).
[129] Roger D. Blair and Amanda K. Esquibel, 'Some Remarks on Monopoly Leveraging' (1995) 40 The Antitrust Bulletin 371.
[130] Willow A. Sheremata, 'Barriers To Innovation: A Monopoly, Network Externalities, And The Speed Of Innovation' (1997) 42 The Antitrust Bulletin 937.
[131] *Berkey Photo, Inc. v. Eastman Kodak Co*., 603 F.2d 263 (2d Cir. 1979), cert, denied 444 U.S. 1093 (1980).
[132] See for example, *Alaska Airlines*. *Fineman v. Armstrong World Industries, Inc.* 980 F.2d 171 (3rd Cir. 1992). For the Supreme Court position in support of a separate claim see for example *Kodak Co. v. Image Technical Services*,

theorem"[133] arguing that leveraging of monopoly power was neither profitable nor possible.[134] Post-Chicago academic literature identified that the single-monopoly-profit theorem holds only in a narrow range of circumstances.[135] This reopened the question of the leveraging doctrine relevance in the modern economy in particular in the context of multi-sided digital markets.[136] Modern Antitrust law approach to leveraging is increasingly characterized as effect-based and shifting towards a rule of reason.[137]

3.1.2. Leveraging as a prohibited strategy under Art. 102 TFEU

The form-oriented concept of discrimination referred to in Art. 102 (c) TFEU comes near the US understanding of leveraging. The vein in which the concept is presented in the Treaty makes it look very similar to the Berkey leveraging doctrine which leaves no space for effects assessment. Art. 102 (c) TFEU directly prohibits discrimination or "applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage".[138] However, the EU case law chose another route. The Court restated the requirement expressed in Section (c) in *British Airways* where it found that in order to be contrary to Art. 102 TFEU conduct needs not only to be discriminatory but also tending to distort competition.[139] In *Post Danmark I* the Court has clarified that price discrimination is not an abuse in itself[140] and in *Post Danmark II* it clarified that to be considered anticompetitive conduct does not need to be discriminatory as long as it is capable of producing an exclusionary effect.[141] In

Inc. 504 U.S. 451 (1992). For the opposite position see for example *Spectrum Sports v. McQuillan* 506 U.S. 447 (1993).

[133] Jennifer M. Clarke-Smith, 'The Development of The Monopolistic Leveraging Theory And Its Appropriate Role In Antitrust Law.' (2002) 52 Catholic University Law Review 179.

[134] Richard A Posner, Antitrust Law (University of Chicago Press 1976). Robert H Bork, The Antitrust Paradox (The Free Press 1978).

[135] See Einer R. Elhauge, 'Tying, Bundled Discounts, And the Death Of The Single Monopoly Profit Theory' (2009) 123 Harvard Law Review 399. For the response to critique on the article see Einer R. Elhauge, 'The Failed Resurrection of The Single Monopoly Profit Theory' [2010] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1551470> accessed 21 September 2018.

[136] Einer R. Elhauge, 'The Failed Resurrection of The Single Monopoly Profit Theory' [2010] SSRN Electronic Journal <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1551470> accessed 21 September 2018.

[137] See Evans discussing the case *Jefferson Parish Hospital District No 2 v. Hyde*, 466 U.S. 2, 104 S.Ct. 1551, 80 L.Ed. 2d 2 (1984) 86.

[138] Art. 102 (c) TFEU.

[139] Case C-95/04 P, *British Airways v Commission* [2007] ECLI:EU:C:2007:166 [hereinafter *British Airways*], para. 144.

[140] Case C-209/10P, *Post Danmark A/S v Konkurrencerådet* [2012] EU:C:2012:172 [hereinafter *Post Danmark I*], para. 30.

[141] Case C-23/14, *Post Danmark A/S v Konkurrencerådet* [2015] EU:C:2015:651 [hereinafter *Post Danmark II*], para. 36.

other words, despite its wording Art. 102 (c) TFEU does not give grounds to dismiss the effects of anticompetitive conduct form the analysis whenever discrimination is concerned. Being not able to offer a lower the standard of proof for anticompetitive behaviour Section (c) also did not provide useful guidance in respect of specific abuses that involve discrimination. Perhaps, that is one of the reasons why Section (c) is not so commonly relied upon by the Commission as well.[142] The Commission also does not employ discrimination in its latest *Google (Shopping)* Decision[143] where the facts of the case could support a convincing theory of harm and by doing so promote a concept of exclusionary discrimination.[144]

As a result, the EU approach towards leveraging or extension of market power has formed through a chain of key cases in the realm of Art. 102 TFEU, Section (b). The *Continental Can* emphasized general prohibition on the strengthening of a dominant position to the detriment of competition on the relevant market.[145] The *CBEM* included the extension of a dominant position in the scope of prohibited conduct.[146] *Tetra Pak II* revealed that the effects of abuse in order to be considered do not need to be apparent on the same market as the conduct itself. The Court defined at least three ways in which non-merit-based competition on multiple related markets can lead to an extension of dominance: through conduct on the dominated market with the effect on an adjacent market. Through conduct and effect both on an adjacent market and through conduct on an adjacent market with the effect on the dominated market.[147] This classification provided a foundation for future leveraging cases. The Court went further in *Microsoft* where it treated multiple episodes of abuse as a leveraging strategy imposing a single fine.[148] Although the judgment was criticised for its ordoliberal incline[149] it nevertheless marked the course of the EU policy in respect of leveraging as conduct in opposition to merit competition on multiple related markets.

[142] For example, discrimination was excluded from the ambit of Guidance Paper. See Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] O.J. C. 45, 24.2.2009, p. 7–20. [hereinafter Guidance Paper].
[143] *Google (Shopping)*, supra note 9.
[144] Ibid.
[145] Case 6-72, *Europemballage Corporation and Continental Can Company Inc. v Commission* [1973] EU:C:1973:22 [hereinafter *Continental Can*], paragraph 26.
[146] *CBEM*, supra note 122, para. 27.
[147] *Tetra Pak II*, supra note 123, para. 25.
[148] *Microsoft*, supra note 120, para. 1348.
[149] Christian Ahlborn and David S. Evans, 'The Microsoft Judgment And Its Implications For Competition Policy Towards Dominant Firms In Europe' (2009) 75 Antitrust Law Journal 887.

3.1.3. Comparison of the US and EU approach

A brief comparison of the EU and US approaches to the extension of market power provides valuable insights into the evolution of thought behind the leveraging concept. Convergence points can be found in attitude towards quantifiable nature of competition, intent, and probabilities.

3.1.3.1 Quantifiable nature of competition

The *Continental Can* made a clear distinction between distortion and elimination of competition.[150] This resembles the way in which US courts distinguish between leveraging, probable and actual monopolization.[151] Zero tolerance towards competition distortion unites the EU approach with the Berkey leveraging doctrine. In both cases, competition is seen as a measurable non-binary concept[152] susceptible to natural fluctuation and artificially caused distortion. While the former is a result of competition on merit, the latter is caused by the use of "methods different from those governing normal competition on the basis of the performance of commercial operators".[153] The suggested analogy seems to go in line with the general logic of the EU decisional practice[154] and case law on dominance abuse. The latter point is confirmed by the absence of an appreciabillity threshold for conduct falling under Art. 102 TFEU.[155] This demonstrates that the EU approach shares important conceptual similarities with the leveraging doctrine even outside of Art. 102 (c) TFEU. At the same time, where the EU case law has adopted a probabilistic approach to negative effects on consumer welfare[156] the Berkey doctrine assumes them.[157] Meanwhile, the question of whether non-merit-based advantages inevitably lead to consumer harm has never been answered in a negative way. On the contrary, it seems each non-merit advantage obtained by a market player should automatically put other players competing on merit at a disadvantage. This decreases the

[150] In the words of the Court: "institution of a system ensuring that competition in the Common Market is not distorted … requires a *fortiori* that competition must not be eliminated". See *Continental Can*, supra note 145, para 24.
[151] See section 3.1.1.
[152] The Court continuously uses the expression "the maintenance of the degree of competition still existing in the market or the growth of that competition". See *Post Danmark I*, supra note 140, para. 24. Case 85/76 *Hoffmann-La-Roche v Commission* [1979] ECLI:EU:C:1979:36, paragraph 91.
[153] *Post Danmark I*, supra note 140, para. 24.
[154] For example, in *Telekomunikacja Polska* the Commission stated that "for establishment of likely effects of refusal to supply … it is sufficient that rivals are disadvantaged and consequently compete less aggressively". See Commission Decision No. COMP/39.525 (*Telekomunikacja Polska*), 2011 O.J. C. 324, 9.11.2011, p. 7–10., para. 818, upheld in Case T-486/11 *Orange Polska S.A. v European Commission* [2015] ECLI:EU:T:2015:1002.
[155] *Post Danmark II*, supra note 141, para 73.
[156] See section 3.1.3.2.
[157] See section 3.1.1.

value of investments in efficiency on the market for everyone including the infringer[158] inevitably discouraging innovation and denying its benefits to consumers. It follows that non-merit advantage and consumer harm should be seen as the two sides of the same coin. Convincing as it may sound this logical model is not supported by case law under Section (b) or (c) Art. 102 TFEU[159] since it does not go in line with the probabilistic effect-based approach to exclusionary abuses proclaimed by the Commission Guidance paper.[160]

3.1.3.2. Probabilistic approach: likeliness, likelihood, and capability

The probabilistic approach towards negative effects brings Art. 102 TFEU closer to the US attempted monopolization claim rather than to leveraging doctrine. In the former, the standard is set at a dangerously high probability of monopolization.[161] The US case law maintains some vagueness regarding the precise meaning of dangerous probability.[162] So does the EU case law in respect of consumer harm probability required in order to establish abuse.

In the EU legal system, only conduct with actual or likely negative effects can be abusive.[163] There was no definition of likeliness until the Court clarified that practices were only caught by Art. 102 TFEU in so far as they were capable of having an anticompetitive effect.[164] The latter finding did not resolve the vagueness entirely since the notion of capability was left undefined by the Court in the same manner as the notion of likeliness before it.[165] Meanwhile, the conditions to consider include the position of the dominant firm on the market, the share of the market affected by the practice and conditions agreed with customers.[166] In case the capability is demonstrated it sets a

[158] In the same way as printing money causes a pick of inflation. This argument was used by the Commission in *Microsoft*, supra note 120, para 1125
[159] *British Airways*, supra note 139, para. 144.
[160] Ibid, note 142.
[161] *Commonwealth v. Peaslee*, 59 N.E. 55, 177 Mass. 267 (1901). *Swift & Co. v. United States*, 196 U.S. 375 (1905). See J Holmes Opinion.
[162]Neither it gives definitive guide on how to determine when "an act comes dangerously close to its consummation". Ibid, note 161. Meanwhile, the use of a literary and subjective characteristic such as "dangerous" in order to describe an inherently quantifiable mathematical concept of "probability" sends out a signal that courts are likely to avoid engaging in quantitative analysis and rely on qualitative approach instead.
[163] *Post Danmark I*, supra note 140, para 44.
[164] Case T-203/01, *Michelin v Commission* [2003] ECLI:EU:T:2003:250 [hereinafter *Michelin II*], para. 239. Case C-413/14 P, *Intel Corporation Inc v Commission* [2017] EU:C:2017:632 [hereinafter *Intel Appeal*], para 138. Guidance Paper, supra note 142, para. 23.
[165] Perhaps, that is why the Commission continues to refer to both standards in its decisions. See *Google (Shopping)*, supra note 9, para 341.
[166] *Intel Appeal*, supra note 164, para 139.

rebuttable presumption of abuse.[167] The Court did not set the standard of capability at its highest possible level. For example, it is lower than a standard of likelihood proposed by AG Wahl in his Opinion on the same case.[168] Wahl proposed a two-step framework where practices that reveal a "sufficient degree of harm" on competition would fall under the standard of likelihood and be presumed anticompetitive skipping case-by-case analysis. Practices below that standard would be marked as capable of causing harm to competition and should be evaluated on case-by-case basis. This logically aligns with the distinction that exists among restrictions by object and effect under Art. 101 TFEU.[169] The Court did not support that line of thought. Perhaps, because setting the standard of proof at a higher level would render meaningless the possibility of providing objective justification reinforced in *Intel*.[170] Instead, the Court simply stated that it is necessary to assess evidence provided by the defendant in support of the claim that the conduct was not capable to cause anticompetitive effects.[171] Where exactly lies the threshold of capability standard is left for the future case law to establish. How close would be the standard of capability to a simple assumption of negative effects on consumer welfare would determine the actual content of the effect-based approach. This question is particularly relevant for the legal assessment of practices favouring own business inherent in multi-sided digital markets and conditions under which such practices should be considered abusive.[172]

3.1.3.3. Role of intent

The perception of intent in the EU competition case law has formed in the course of the debate on object and effect abuses.[173] Under Art. 101 TFEU an agreement allegedly prohibited by object has to be tested for its wording, "the objectives" and the relevant economic context.[174] The parties' intention does not make a part of the test.[175] This can be interpreted as recognition of the fact that

[167] Ibid.
[168] Opinion of Advocate General Wahl, Case C-413/14 P *Intel Corporation Inc v Commission* [2017] EU:C:2016:788, para 117.
[169] Art. 101 (1) TFEU.
[170] *Intel Appeal*, supra note 164, para. 140.
[171] *Intel Appeal*, supra note 164, para. 144.
[172] This is the main issue of the *Google (Shopping)* decision. Supra note 9.
[173] Case 56/65, *Société Technique Minière (L.T.M.) v Maschinenbau Ulm GmbH* (M.B.U.) [1966] ECLI:EU:C:1966:38[hereinafter *STM*], p. 249.
[174] Case C-501/06 P, *GlaxoSmithKline v Commission* [2009] ECLI:EU:C:2009:610 [hereinafter Glaxo], para 58. Case C-8/08, *T-Mobile Netherlands BV, KPN Mobile NV, Orange Nederland NV and Vodafone Libertel NV v Raad van bestuur van de Nederlandse Mededingingsautoriteit*. [2009] ECLI:EU:C:2009:343 [hereinafter *T-Mobile*], para 27.
[175] Ibid.

intent is a subjective and individual category that becomes tangible only when expressed in an agreement. Meanwhile, intent can transform significantly. Reliance on the objective rather than intent simplifies the task from an evidential point of view.[176] Unlike in case with agreements, intent for unilateral conduct is rarely expressed in a consolidated form before implementation. This dissolves the difference between intent and objective in the meaning of Art. 101 TFEU.[177] Traditionally under Art. 102 TFEU intent constituted the second tire of the As Efficient Competitor (AEC) test applied in situations when pricing benchmark alone could not result in a presumption of pro- or anti-competitive behaviour.[178] Intent mainly lost its role when the Court switched to effect-based approach,[179] first, by adding likely effects as an alternative criterium to the AEC test[180] and then by declaring the AEC test only one of many available instruments.[181] The turn represented a logical step in line with the objective nature of abuse concept emphasized by the early case law.[182] In *Michelin II* the Court went further and equalized anticompetitive object and effect for the purposes of Art. 102 TFEU.[183] This rendered the element of intent non-compulsory bringing the EU approach closer to the US leveraging doctrine.

3.1.3.4. Conclusion on comparison

Sections above demonstrated conceptual parallels between Art. 102 TFEU and the Berkey doctrine in terms of zero tolerance to competition distortion and irrelevance of intent. Meanwhile, it is not clear exactly how far lie the two standards due to the undefined nature of capability under Art. 102 TFEU. It is likely that the future case law will not set the standard too high since it would upset the two-step abuse-justification scheme of Art. 102 TFEU. Setting the standard too low, on the other hand, would be contrary to the spirit of the effect-based approach proclaimed by the Commission. In any case, clarification of the standard would encourage reliance on objective justification under Art. 102 TFEU.

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[176] The opposite strategy would most likely require internal documents proving the intent often obtained during dawn raids.
[177] On difficulties of coherent application of the two articles due to their subject and structure see Lucas Peeperkorn, 'Coherence in The Application Of Articles 101 And 102: A Realistic Prospect Or An Elusive Goal?' (2016) 39 World Competition, 389.
[178] Case C-62/86, *AKZO v Commission* [1991] ECLI:EU:C:1991:286 [hereinafter AKZO], para. 65.
[179] Guidance Paper, supra note 142, para 5.
[180] *Post Danmark I* supra note 140.
[181] Case T-286/09 RENV, *Intel Corporation v Commission* [2014] ECLI:EU:T:2014:547 [hereinafter *Intel*], paras. 150-151, not overruled in this part by *Intel Appeal*, supra note 164. *Post Danmark II*, supra note 141, para 57.
[182] *Hoffman-La-Roche*, supra note 152.
[183] *Michelin II*, supra note 164, para 241.

3.2. Elements of abusive leveraging

Case law suggests that there are three key features that unite leveraging cases in a separate group. These features include involvement of a dominant firm in activities on several markets,[184] a close connection between those markets[185] and an associative link between dominance and abusive conduct.[186] At first sight, all three elements seem pretty uncomplicated. The first feature is not surprising when it comes to the extension of market power from one market to another. The question of multiple markets only gains complexity in the context of tying where it translates into a debate on several separate products vs one aggregated product.[187] The third element of the causal link between dominance and abuse is seen as naturally tied to the second element of connection between the markets.[188] However, the seeming simplicity of the two out of three elements is deceitful since in some cases the behavioral patterns similar to leveraging could be seen within only one market[189] and some types of inter-market connections seem to encourage leveraging more than others.

3.2.1. Multiple markets and connections between them

Case-law on leveraging often touches upon multiple markets and connections between them but rarely goes beyond defining main and adjacent markets.[190] Apart from some classificatory attempts[191] very little effort has been made to clarify the general principles according to which different kinds of connections affect consumer welfare when it comes to leveraging. Even less so, to test the general assumption that leveraging requires the involvement of multiple markets. This

[184] Joined Cases 6/73 and 7/73 *Commercial Solvents v Commission* [1974] ECLI:EU:C:1974:18 [hereinafter Commercial Solvents], para. 22. *CBEM* , supra note 122, para. 26
[185] Case T-219/99, *British Airways v Commission* [2003] ECLI:EU:T:2003:343, para 127, not overruled in *British Airways*, supra note 139.
[186] It is necessary to demonstrate a causal link when the conduct and its effect appear outside of the dominant market. See *Tetra Pak II*, supra note 123, para 27.
[187] *Microsoft*, supra note 120, para 944.
[188] In *Tetra Pak II* the Court found that it is due to this connection a dominant firm can enjoy a degree of freedom on an adjacent market that justifies the imposition of special responsibilities under Art. 102 TFEU. See *Tetra Pak II*, supra note 123, paras 24, 30.
[189] See for example *Post Danmark II*, supra note 141, *Intel Appeal*, supra note 164.
[190] For example, see *Tetra Pak II*, supra note 123.
[191] For the distinction between vertical and horizontal leveraging see Pietro Crocioni, 'Leveraging Of Market Power In Emerging Markets: A Review Of Cases, Literature, And A Suggested Framework' (2007) 4 Journal of Competition Law and Economics 449.

section will challenge the multiple market premise and suggest a general classification of connections between markets involved in leveraging based on case study.

3.2.1.1. Tying

Being one of the most studied forms of leveraging tying strongly affected the general view on the latter. Importantly, ting can be both an exploitative and exclusionary abuse. Exploitative tying harms the consumer directly by introducing a negatively valued element to the bundle. Since there is no demand for the tied good among the affected group in the first place, exploitative tying does not extend market power to the tied good market and therefore does not constitute a leveraging practice. Exclusionary tying, on the contrary, is a classic form of leveraging. It harms consumers indirectly by eliminating efficient competitors on the tied good market. The leveraging effect is achieved through the introduction of a positively valued good into the bundle and undermining demand for its substitutes on the tied market.[192] The strategy can only be effective when the affected consumer group expressed independent demand for the tying as well as for the tied good before they were bundled. In a situation like this, a shared consumer base connects the two markets serving as a fulcrum for market power leveraging. In most cases, the two markets share consumer base when they trade in direct supplements, but this is not always the case.[193] Although tying is one of the most intuitive forms of market power leveraging, nearly any exclusionary practice or a combination of them[194] can serve leveraging purposes.

3.2.1.2. Rebates, exclusive dealing, predatory pricing

In *Hoffmann-La-Roche* the Court concluded that the company acted contrary to Art. 102 TFEU by using a system of loyalty rebates linked to exclusivity arrangements.[195] Meanwhile, the reason why the company was able to force such a strategy on its customers, links to the fact that Roche was active in several markets and was dominant on most of them.[196] Most of its customers were large

[192] For example, Microsoft, supra note 120, para. 872.
[193] For examples of direct supplements see Case T-30/89, *Hilti v Commission* [1991] ECLI:EU:T:1991:70 [hereinafter *Hilti*] (guns and nails), *Tetra Pak II*, supra note 123, (machines and cartoon). For a case not including direct supplement see *Microsoft*, supra note 120, (Windows operating system and streaming media player).
[194] For example, in *Microsoft*, supra note 120, leveraging on two markets was achieved through a combination of abusive tying and refusal to supply.
[195] *Hoffmann-La-Roche*, supra note 152, paras. 90, 95.
[196] Ibid, para 68.

scale users that purchase entire range to vitamins.[197] Roche was able to use a shared consumer base and rebate strategy to bundle vitamins together and leverage demand for own product on the markets where its presence was not so strong.[198] In order to qualify Roche's actions as loyalty rebates incompatible with Art. 102 TFEU it was necessary to show dominance on all markets involved.[199] According to the formula devised in *Tetra Pak II* as leveraging Roche's conduct is incompatible with Art. 102 TFEU, regardless of dominance on all markets.[200] Dominance on only some of distinct but associated through shared consumer base markets provided Roche with a sufficient degree of freedom allowing it to raise switching costs and prevent multi-homing with an aim to exclude competitors. Leveraging elements could be recognized in many other cases on rebates and exclusive dealing. In *Post Danmark II*, the Court defined and considered only one relative market of bulk mail, weighting under 2 kg where Post Danmark abused its dominance by imposing potentially harmful retroactive rebates.[201] In case the, Court defined two markets, the contested conduct could be seen as an extension of a dominant position from the main market of direct advertising mail weighted under 50 grams where Post Danmark held a statutory monopoly to the adjacent market of other types of mail within the bulk mail segment.[202] Like in *Hoffmann-La-Roche* rebates allowed Post Danmark to leverage its market power by means of the "suction to itself of the contestable part of demand".[203] Similar to *Post Danmark II* rebates in *Intel* allowed the undertaking to leverage its economic power from non-contestable to contestable share of demand on a single CPUs market.[204] This shows that the premise of involvement of multiple markets being essential for leveraging[205] is not entirely accurate. In fact, in non-vertically integrated systems, it is the division of demand to contestable and non-contestable[206] shares within one consumer group that is essential for leveraging. At the same time, it is irrelevant whether the two parts of demand fall on different segments of one market or distinct markets. This leads to one

[197] Ibid, note 152, facts, (c), p. 466.
[198] Ibid, note 152, para. 68. The company was found dominant on markets of vitamins A, B2, B6, C, E, H, but not B3.
[199] Ibid, note 152, paras. 50-68.
[200] *Tetra Pak II*, supra note 123, paragraph 27.
[201] *Post Danmark II*, supra note 141, para. 14.
[202] In that case, the fact of statutory monopoly perhaps could justify a definition of direct advertising mail under 50 grams as a separate market.
[203] *Post Danmark II*, supra note 141, para. 35. Case C-549/10 P, *Tomra and Others v Commission* [2012] ECLI:EU:C:2012:221 [hereinafter *Tomra*], para. 78.
[204] *Intel*, supra note 181, para. 92.
[205] Ibid, note 189. *Tetra Pak II*, supra note 123, para. 25.
[206] The demand does not always have to be absolutely non-contestable like in case with a statutory monopoly. Low demand elasticity can serve the same end. Reference to non-contestability will be used for simplicity.

of the two possible conclusions. Either involvement of multiple markets is not a necessary condition for leveraging. Or in all cases concerning "suction of demand" where the Court defined only one relevant market it could be said to engage in simplification.[207]

Predatory pricing as well can serve leveraging purposes. In that case, it takes the form of cross-subsidization between related markets.[208] In *Tetra Pak II* the Commission alleged that the undertaking could afford predatory prices on the adjacent market due to its dominant position on the main market.[209] Although this argument was considered irrelevant by the Court[210] it nevertheless demonstrates that leveraging through shared consumer base can involve nearly any exclusionary practice. Interestingly, in the latter case, the strategy did not rely on a shared consumer base since price manipulation allowed to lure consumers rather than to force them into dealing like in case of tying.

3.2.1.3. Refusal to supply, margin squeeze

Practices like refusal to supply and margin squeeze serve the purpose of raising rivals' costs.[211] In that case, the connection between the markets is realized through a supply chain and the fulcrum over which market power can be leveraged is represented by input into the downstream product.[212] Based on how vital is restricted input for the downstream competitors the case law treats it as essential or non-essential.[213] Essential input can be subdivided into direct and indirect. Raw

[207] Application of the SSNIP test to a market with a statutory monopoly like in *Post Danmark II*, for example, should not be effective.
[208] *Ambulanz*, supra note 73, is a classical case on cross-subsidization as well demonstrates elements of cross-market leveraging.
[209] Commission Decision No. 92/163/EEC (*Tetra Pak II*), 1991 O.J. L L 072, paras. 117, 147.
[210] *Tetra Pak II*, supra note123, para. 186.
[211] Guidance Paper treats these practices as a broad range of refusal to supply actual or constructive. See Guidance Paper, supra note 142, paras. 78-80. According to the settled case law refusal to supply is a separate abuse from other abuses where product or service is supplied on disadvantageous terms such as margin squeeze. See case C-52/09, *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECLI:EU:C:2011:83 [hereinafter *TeliaSonera*], para. 56.
[212] Or buying power if dominance is leveraged up-stream.
[213] Or "indispensable" in the CJ terminology, see for example *TeliaSonera*, supra note 211, para. 82. Or "objectively necessary" in the terminology of Guidance Paper, supra note 142, see para. 83.

materials[214] and spare parts[215] fall within the first category while the second includes essential facilities such as interoperability info,[216] other IP rights[217] and networks.

3.2.1.4. Conclusion on elements

Leveraging can take place in vertically and non-vertically integrated systems.[218] The premise of multiple markets holds in vertical setups where upstream undertakings use their control over input and aim to inhibit the supply of downstream competitors. In that case, control over input connects the markets and serves as a fulcrum for leveraging. In non-integrated systems undertakings that enjoy control over the uncontestable share of demand[219] use it to suck to itself the contestable share by directly forcing the consumer to deal or price-manipulating him to the same end. In that case, leveraging can take place between separate markets or segments of the same market. Control over demand often can be obtained due to the shared consumer base[220] that connects the markets and serves as a fulcrum for market power leveraging. Although both vertical and non-vertical setups provide similarly abundant opportunities for abuse differences between them should be considered when it comes to objective justification.

3.3. Qualification of leveraging under Art. 102 TFEU

One of the problems of Art. 102 TFEU is that it does not cover all potentially harmful leveraging practices many of which are new and characteristic for the multi-sided digital economy. Analysis of standards of proof applied to different types of leveraging abuses helps to draw the line between practices falling under and out of the ambit of Art. 102 TFEU.

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[214] For the case law on raw materials see *Commercial Solvents*, supra note 184, *CBEM*, supra note 122.
[215] Case 22/78, *Hugin Kassaregister AB and Hugin Cash Registers Ltd v Commission* [1979] ECLI:EU:C:1979:138 [hereinafter *Hugin*]. Case 53/87, *CICRA and Others v Renault* [1988] ECLI:EU:C:1988:472 [hereinafter *Renault*]. Case 238/87, *AB Volvo v Erik Veng (UK) Ltd.* [1988] ECLI:EU:C:1988:477 [hereinafter *Volvo*].
[216] See *Microsoft*, supra note 120.
[217]See joined cases C-241/91 P and C-242/91 P, *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission* [1995] ECLI:EU:C:1995:98 [hereinafter *Magill*], case Case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG*. [2002] ECLI:EU:C: 2004:257 [hereinafter *IMS Health*].
[218] This sometimes means no integration at all. For example, see Case C-163/99, *Portugal v Commission* [2001] ECLI:EU:C:2001:189 [hereinafter *Portuguese Airports*]. In *Portuguese Airports* the airport authority applied a system of quantity discounts constructed to disproportionately favor Portuguese airlines in the absence of integration.
[219] Ibid, note 206.
[220] But not necessarily so like in the case with predatory pricing, see section 3.2.1.2.

3.3.1. Standards based on demand manipulation

The standard for tying has taken its modern shape[221] in *Microsoft*.[222] The Court has affirmed that tying practices can be considered contrary to Art. 102 TFEU if four elements are present. First, the practice concerns two separate products. Second, the infringer is dominant on the tying market. Third, the consumer is deprived of the choice to buy tying product separately from the tied one. Fourth, the practice is capable of foreclosing more efficient competitors.[223] The standard for predatory pricing was first defined in *AKZO*[224] and then updated in *Post Danmark I.* According to the standard pricing under the benchmark[225] capable of excluding competitors at least as efficient as the dominant firm were contrary to Art. 102 TFEU.[226] The standard for exclusive dealing was first formulated in *Hoffmann-La-Roche*, where the Court has stated that exclusive practices that constitute barriers to entry are abusive "by object".[227] The Guidance Paper later added to the test likely foreclosure effect.[228] The updated standard for loyalty rebates comes from *Intel*. It captures loyalty-forming practices that are capable of excluding equally efficient competitors.[229]

3.3.2. Standards based on supply inhibition

The standard for refusal to supply was shaped by the Court in *Bronner*[230] and *Magill* [231] and updated in *Microsoft*. The test requires to demonstrate indispensability of the refused input,[232] limited technical development to prejudice of the consumer as a result of the refusal to supply and

[221] In accordance with the effect-based approach. Supra note 179.
[222] *Microsoft*, supra note 120, para 859 supporting the Commission Decision No. COMP/C-3/37.792 (*Microsoft*), 2004 O.J. L 32, 6.2.2007 [hereinafter COMP/C-3/37.792 *Microsoft*], p. 23–28, para. 794. Also reflected in Guidance Paper, supra note 142, paras. 47-74.
[223] Ibid.
[224] *AKZO*, supra note 178, paras. 71,71.
[225] *Post Danmark* I, supra note 140, para. 37.
[226] *Post Danmark* I, supra note 140, para. 25. The first part of the test was formulated in more general terms in Compagnie Maritime Belge as an unproportionate response to competitors. Case T-24/93, *Compagnie Maritime Belge transports and Others v Commission* [1996] ECLI:EU:T:1996:139, para. 148. Reformulated in more precise terms as selective above cost price cutting designed to eliminate competitors in Cases C-395 and 396/96 P *Compagnie Maritime Belge Transports and Others v Commission* [2000] ECLI:EU:C:2000:132 [hereinafter *Compagnie Maritime Belge*], para. 137.
[227] *Hoffmann-La-Roche*, supra note 152, para. 90.
[228] Guidance Paper, supra note 142, paras. 20, 36, 40, 71.
[229] *Intel Appeal*, supra note 164, para. 140.
[230] Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG*. [1998] ECLI:EU:C:1998:569 [hereinafter *Bronner*], paras 45-46.
[231] *Magill*, supra note 217, paras. 52-56.
[232] *Microsoft*, supra note 120, para. 369.

that such behaviour is likely to eliminate competition.[233] In *Deutsche Telecom* the Court established a separate standard for margin squeeze.[234] It outlines nuances it in *Telefónica* and *Telia Sonera* formulating it as spread insufficient to cover costs of retail for the dominant undertaking[235] under the condition that such practice is capable of excluding efficient competitors by making new entry more difficult or impossible for them.[236]

3.3.3. Leveraging practices within and out of the reach of Art. 102 TFEU

Each standard under analysis demonstrates a similar two-folded stricture. It has a form and effect-oriented part. The former regards elements specific for a particular type of abuse such as loyalty forming arrangement[237] or consumer choice deprivation.[238] Whilew the later concerns capability to restrict competition and serves as a measure of gravity and a common denominator for all types of abuses. The two-folded structure of standards is a result of a shift towards more effect-based approach throughout the history of competition policy.[239] Indeed the emphasis moved from the form of abuse to its effect, but the case law did not abolish the formal analysis completely. As a result, it is not clear whether the form of abuse should retain any importance at all. And if so, what should happen with practices that do not technically fall under any formal standard but still are capable of restricting competition and therefore constitute new forms of abuses.

In fact, the recent case law suggests that the form is important.[240] While the effect-based standard defines whether a conduct should qualify as an abuse under Art. 102 TFEU, the formal standard classifies it within Art. 102 TFEU. Therefore, every time the Court pronounces that a particular behaviour constitutes a separate kind of abuse[241] it establishes a new formal standard adding it to the common effect-based part. The classification within Art. 102 TFEU in its turn defines the pool of remedies available to the Commission[242] and at the same time, possible objective justifications.

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[233] Ibid, paras. 560-564.
[234] Case C-280/08 P, *Deutsche Telekom v Commission* [2010] ECLI:EU:C:2010:603 [hereinafter *Deutsche Telekom*], para. 183.
[235] Or its competitors in certain cases. See *Telia Sonera*, supra note 211, paras. 32-33, 45-46, 73-74.
[236] *Telia Sonera*, supra note 211, paras. 63-64. Case C-295/12 P, *Telefónica and Telefónica de España v Commission* [2014] ECLI:EU:C:2014:2062 [hereinafter *Telefónica*], para. 124.
[237] Supra note 229.
[238] Supra note 222.
[239] Supra note 179.
[240] *Intel*, supra note 181, paras. 219-220.
[241] Supra note 234.
[242] *Commercial Solvents*, supra note 184, para 45.

The connection between the form of abuse and the remedies was first outlined in *Commercial Solvents.*[243] The Court stated that the Commission can either order to "make good" the effects of an abuse on the competitors through a certain action or just prohibit the continuation of the abuse.[244] For example, the imposition of a duty to deal would be a proper remedy for refusal to supply.[245] Therefore the remedy is encoded in the problem. The correlation between the classification of abuse within 102 TFEU and objective justification is strong as well. Among other things the standard for objective justification formulated in *Post Danmark I* requires to show that the contested conduct was necessary to achieve the benefit compensating for the consumer harm.[246] In other words, the standard requires to show that there is no better way to achieve the same benefit. In case the Commission identifies a better way that was not implemented by the undertaking it will assign it as a remedy. Therefore, the remedy and objective justification are two sides of one coin and therefore both are affected by the form of abuse.

While still recognizing the importance of the formal tests the Court sends out signals against the rigid necessity to fit contested conduct into a single settled form of abuse.[247] Meanwhile, the content and the scope of legal norms shift over time. Considering that, the best way to define the extent of Art. 102 TFEU reach is to picture a sum of all formal standards developed by the Court in respect of a particular group of abuses.[248] It can be said that in respect of leveraging abuses build on demand manipulation the coverage of Art. 102 TFEU is rather continuous. Meaning, not many practices that can potentially harm the consumer fall between the formal standards. The only exception is selective pricing above cost. It was found abusive in *Hilti*,[249] *Compagnie Maritime Belge*[250] and *Irish Sugar*.[251] Unfortunately, the facts of all these cases are highly specific and do not allow for any generalization in respect of how to deal with new forms of abuse. The situation is different in the context of leveraging abuses aiming at competitors' supply. The abuses of margin squeeze and refusal to supply are very close by their nature.[252] However, there is a significant gap

[243] Ibid.
[244] Ibid.
[245] Ibid, para. 46.
[246] *Post Danmark II* supra note 141, para. 42. Guidance Paper, supra note 142, paras 30,31.
[247] Supra note 148.
[248] In fact, that applies to any legal norm.
[249] *Hilti*, supra note 193.
[250] *Compagnie Maritime Belge*., supra note 226.
[251] Case T-228/97, *Irish Sugar v Commission* [1999] ECLI:EU:T:1999:246.
[252] In the Guidance Pater the Commission considers margin squeeze as a constructive refusal to supply. See Guidance paper, supra note 142, paras. 75-90.

between the two standards. It follows from the case law that a dominant firm cannot margin squeeze non-essential input but perhaps can refuse to supply it.[253] Meanwhile, the Bronner test[254] of what is essential is rather restrictive and may no longer reflect the reality of global markets. A narrow definition of the indispensable facility does not allow to qualify many potentially harmful practices favouring own business as a refusal to supply. By doing so it leaves them outside of any qualification within traditional forms of abuse entirely. Favouring one's business with exclusive access to Big data,[255] online traffic,[256] access to credit, reputation or other "soft" inputs that could not be considered indispensable according to *Bronner*[257] fall into this missing category.

3.3.4. Possible solutions

Competition policy outside of Art. 102 TFEU seems to lean towards including the "soft" input variable into the equation. For example, some countries insist on applying merger notification thresholds according to the market value of companies in mergers.[258] In that case, market value serves as a token for access to "soft" input. The same trend is likely to arise in the context of abuse. There are several possible routes that the practice might take to better reflect the realities of the market. The case law can either make formal requirements relevant but not necessary as it did with the requirement of indispensability in the context of margin squeeze.[259] This scenario can be implemented under Section (b) or (c) of Art. 102 TFEU. It can widen the Bronner criterium[260] and qualify new practices under one of the existing forms of abuse. Or it can define a new form of abuse creating a new formal standard. Which route prevails should become clear in the course of appeal against *Google (Shopping)* Decision that will be discussed in one of the following chapters.

[253] See section 3.3.2.
[254] Ibid, note 230.
[255] See section 2.3.2.1.1.
[256] See section 2.3.2.1.2. Self-favouring with traffic became an issue in *Google (Shopping)*, supra note 9.
[257] Ibid, note 230.
[258] See Bundeskartellamt, 'Guidance On Transaction Value Thresholds For Mandatory Pre-Merger Notification (Section 35 (1A) GWB And Section 9 (4) Kartg)' (2018) <https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitfaden/Leitfaden_Transaktionsschwelle.pdf?__blob=publicationFile&v=2> accessed 26 January 2019. For the comments see Andreas Bardong, 'Germany: The Bundeskartellamt's New Merger Guidelines' (2012) 3 Journal of European Competition Law & Practice.
[259] *TeliaSonera*, supra note 211, para. 69.
[260] Ibid, note 230.

3.4. Conclusion on leveraging

The concept of leveraging can be summarised as a potentially harmful extension of dominance from one related market or a market segment to another. The EU case law identifies the involvement of multiple connected markets as an essential element of leveraging. As it was demonstrated, a reference to multiple markets serves as tokens for contestable and non-contestable demand shares that can be expressed by one or several consumer groups and can fall on one or several markets. There are two main ways in which markets involved in leveraging can be connected. In vertically integrated systems it is control over input, while in non-vertically integrated systems it is control over the demand that is often acquired due to a shared consumer base. The US legal system opted to the form-based approach towards the concept of leveraging while the EU legal system, on the contrary, relies on effects. Meanwhile, the form still plays an important role in the evaluation of effects under Art. 102 TFEU since the standard of capability implies prediction of possible effects that can only be made based on the form of contested conduct. As a result, it is a combination of formal tests that defines the effective scope of Art. 102 TFEU. Reliance on formal test with significant gaps between them creates a classification problem and complicates qualification of new potentially harmful practices. The CJ may respond to this problem in three possible ways. Which of them will prevail may become clear from the appeals against *Google (Shopping)* and *Google (Android)* Decisions.[261]

[261] *Google (Shopping)*, supra note 9 and *Google (Android)*, supra note 10.

Chapter IV. INTER AND INTRA-PLATFORMS LEVERAGING WITHIN ART. 102 TFEU

By their nature platforms deal with several consumer groups and control input on at least one of its sides. Therefore, it can be said that they show elements of vertical integration and are capable of intra-platform market power leveraging. At the same time, several platforms can form a non-vertically integrated system by sharing one consumer groups. That provides them with a possibility of horizontal inter-platform market power leveraging. Distinguishing between vertical and horizontal leveraging might be a challenging task that lies with the Commission. The nature of a leveraging practice affects its classification within Art. 102 TFEU which in its turn plays a role in defining remedies and applying the objective justification test. This chapter will illustrate this premise using examples of *Google (Shopping)* and *Google (Android)*[262].

4.1. *Google (Shopping)*

In *Google (Shopping)* the Commission fined Google Inc. (Google) and its mother company Alphabet Inc. (Alphabet) for self-favouring.[263] Academic community mainly supported the Commission in its conclusion that the conduct constituted an abuse of dominance.[264] However, classification of the conduct under Art. 102 TFEU appeared to be problematic.[265] Judicial clarification of the matter may decide the future of the formal standards under Art. 102. TFEU and therefore is anxiously awaited.

4.1.1. The setup

Google is a classical non-transactional platform.[266] Its main business strategy implies offering general search services to users free of charge, gaining user traffic and monetising the latter

[262] Ibid.
[263] *Google (Shopping)*, supra note 9, para. 2.
[264] See for example Edward Iacobucci and Francesco Ducci, 'The Google Search Case In Europe: Tying And The Single Monopoly Profit Theorem In Two-Sided Markets' (2018) 47 European Journal of Law and Economics 15.
[265] Korbinian von Blanckenburg, 'Google Search Abuses Dominant Position To Illegally Favour Google Shopping: An Economic Review Of The EU Decision' (2018) 20 Digital Policy, Regulation and Governance. Beata Mäihäniemi, 'Lessons From The Recent Commission'S Decision On Google. To Favour Oneself Or Not, That Is The Question' (Law.nyu.edu, 2019) <http://www.law.nyu.edu/sites/default/files/upload_documents/Maihaniemi.pdf> accessed 27 March 2019.
[266] See Section 2.2.2. above.

through online advertising.[267] In other words, Google provides mediation between the consumer groups of general search users and online retailers. The system is characterised by asymmetrical indirect externalities[268] that allow the platform to cross-subsidize the costs of zero-price trade on the market for general search with the advertising revenue provided by the other side of the platform.[269] Advertising is a broad category covering multiple product markets located on the subsidising side of the platform. Extension of dominance to such markets allows increasing the overall platform's revenue [270] but may constitute an abuse under Art. 102 TFEU. *Google* (*Shopping*) provides an illustration in that regard.

After analysing of Google's market shares,[271] barriers to entry,[272] multi-homing patterns[273] and extent of countervailing buying power[274] the Commission concluded that Google is dominant on the general search market for desktop and mobile devices.[275] Its dominance allowed Google to engage in "more favourable positioning and display […], in its general search results pages, of its own comparison shopping service ("CSS") compared to competing comparison shopping services". [276] According to the Commission, the conduct was capable of having an anticompetitive effect on the relevant markets.[277] The Commission ordered to cease the abusive practice.[278] It adopted an open remedy approach allowing Google to choose the measure that would ensure that rival CSSs are treated as favourably as Google Shopping.[279] To comply with the Decision Google agreed to treat Google Shopping as a separate profitable business unit.[280] It introduced an auction-

[267] 'Alphabet Inc. Annual Report For The Fiscal Year Ended December 31, 2017' (2017) <https://abc.xyz/investor/static/pdf/20171231_alphabet_10K.pdf?cache=7ac82f7> accessed 25 March 2019 [hereinafter Alphabet Annual Report 2017].
[268] See Section 2.2.2. above.
[269] See Section 2.3. above.
[270] For the arguments of Post-Chicago school see Section 3.1.1. above.
[271] *Google (Shopping)*, supra note 9, paras. 273-284.
[272] Ibid, paras. 284-306.
[273] Ibid, paras. 306-316.
[274] Ibid, paras. 316-318.
[275] Ibid, paras. 186-190.
[276] Ibid, para. 2.
[277] Ibid, paras. 589-643.
[278] Ibid, para. 698
[279] Ibid, para. 699.
[280] Greg Sterling and Greg Sterling, 'Alphabet To Create Separate Business Unit In Europe To Run Google Shopping - Search Engine Land' (Search Engine Land, 2019) <https://searchengineland.com/alphabet-create-separate-business-unit-europe-run-google-shopping-283325> accessed 24 March 2019.

based mechanism allowing rival CSSs and Google Shopping to bid for placement in the Google Shopping Unit on equal footing.[281]

4.1.2. The Commission's approach to classification of the conduct

The Commission did not provide a clear classification of the contested conduct under Art. 102 TFEU apart from stating that it constitutes an extension of a dominant position to an adjacent market.[282] Meanwhile, the way in which the Commission conducted its analysis is somewhat confusing. It identified general search and CSSs as the two relevant product markets.[283] Since the products are offered to consumers simultaneously on the same web-page,[284] it could be assumed that the two markets are connected through a shared consumer base. Extension of market power through a consumer base represents a risk inherent in horizontal setups. For example, it could be classified under Art. 102 TFEU as exclusionary or exploitative tying.[285] However, the Commission chose an alternative approach concentrating on the role of traffic as input on the CSSs market.[286]

Traffic is the most valuable by-product of general search that originates from attention and information costs incurred by users.[287] It can be sold downstream to companies providing advertising services or directly to merchants. By concentrating on the input, the Commission treated CSSs as a type of advertising although it never explicitly mentioned that. On the contrary, it stated that unlike online search advertising consumers positively value CSSs.[288] This finding delineates comparison shopping from the neighbouring products, but at the same time, it obscures the connection defining a relationship between the two relevant markets. Considering the nature of such relationship the final consumer of CSSs should be seen in online retailers and not in individual users of general search. This shows that the two relevant markets constitute a vertically integrated system which can facilitate market power leveraging through the competitors' input

[281] Bo Vesterdorf and Kyriakos Fountoukakos, 'An Appraisal Of The Remedy In The Commission's Google Search (Shopping) Decision And A Guide To Its Interpretation In Light Of An Analytical Reading Of The Case Law' (2017) 9 Journal of European Competition Law & Practice 3.
[282] *Google (Shopping)*, supra note 9, para. 649.
[283] Ibid, para. 154.
[284] Ibid, para. 32.
[285] The conduct can be classified as exclusionary tying given both products have positive consumer value. In case one of the services has a negative value for the consumers the conduct could still be classified as exploitative tying. See Section 3.2.1.1. above.
[286] *Google (Shopping)*, supra note 9, paras. 444-451, 539-588.
[287] See section 2.3.2.1.1 and 2.3.2.1.2 above.
[288] *Google (Shopping)*, supra note 9, para. 198.

restriction. Based on the facts such restriction may be classified as a refusal to supply, margin squeeze or a third type of harmful practice. The following sections will test possible approaches to classification of the contested conduct in *Google* (*Shopping*) and see whether they offer any valuable insights in forms of platform market power leveraging.

4.1.3. Google's conduct as horizontal market power leveraging

The Commission described CSSs as services to general search users and not online retailers.[289] Therefore, markets for CCSs and general search are connected horizontally through a shared consumer base. This creates perfect conditions for tying suggesting the most obvious classification of the contested conduct. The test for abusive tying requires four elements, i.e. two products, dominance in the tying market, no opt-out possibility for consumers and foreclosure, to be present.[290] The Commission established that general search and CSSs form two separate product markets due to their limited substitutability[291] and therefore can be considered two separate products. The second condition is satisfied since Google was found dominant in the general search market.[292] The third condition is satisfied since general search users cannot opt out of received comparison shopping services when they make a general query. The fourth condition concerns the effect of the contested conduct and requires demonstrating that the behaviour in question is capable of excluding efficient competitors from the market.[293] The answer to this question depends on whether consumers assign a positive value to CSSs.

4.1.3.1. Exclusionary tying

According to the Commission, a positive consumer value distinguishes CSSs from indirectly solicited online advertising.[294] The statement appears to be highly speculative. The fact that users mostly navigate CSSs through the general search and not directly through the website[295] raises

[289] Ibid, para.191. CSSs are "specialised search services that: (i) allow users to search for products and compare their prices and […] and (ii) provide links that lead […] to the websites of such online retailers or merchant platforms".
[290] See Section 3.3.1. above. *Microsoft*, supra note 120, para. 859 confirming COMP/C-3/37.792 *Microsoft*, supra note 222, para. 794.
[291] The Commission did not go into discussing whether they may as well constitute two parts of one complex product as it would be required for establishing of abusive tying. See for example *Tetra Pak II*, supra note 123, para. 36, *Microsoft*, supra note 120, para. 933.
[292] *Google (Shopping)*, supra note 9, para. 264-330.
[293] Supra note 286.
[294] Supra note 284. Newman (n 66).
[295] Ibid.

doubts that they perceive the difference between CCSs and online advertising. However, if the statement is correct, then in *Google* (*Shopping*) the Commission is dealing with a classical example of exclusionary tying. By tying two positively valued services Google sucks to itself the demand from competing CSSs.[296] The question of whether such behaviour can be objectively justified comes into relevance.

Although the possibility of objective justification under Art. 102 TFEU was reinforced in case law[297] there was no example of a single successful pleading so far. The reason lies in the difficulty of drawing a line between justification and the initial finding of abuse.[298] The standard of objective justification requires a benefit to be demonstrated that can mitigate or outweigh the harm caused to consumer welfare.[299] The gains should result from the contested conduct, while the conduct should be necessary to achieve the gains. Most importantly the conduct should not eliminate effective competition.[300] Exclusionary tying is unlikely to provide consumer benefit that could compensate for the loss of competition and innovation on the CSSs market in the long run particularly when the positive value of services allows their separate marketing. Meanwhile, the last condition of the test is unlikely to be satisfied since tying by virtue of the initial test of finding an abuse[301] inherently threatens to eliminate all effective competition through demand suction. In other words, the gap between the effective standard for abusive exclusionary tying and the standard for objective justification is too small to accommodate any realistic factual setup.

To resume, the way in which the Commission identified the relevant markets and insisted on the positive value of CSSs introduced a strong bias towards categorising the conduct as an exclusionary tying with slim chances for objective justification. This classification has two problematic aspects. First, it might rely on the erroneous premise regarding positive consumer value of CSSs. Second, it deals with the conduct only in one dimension representing it as horizontal inert-platform leveraging and providing no valuable insights in its vertical intra-platform component.

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[296] See Section 3.2.1.2. above.
[297] *Intel Appeal*, supra note 164, para. 140.
[298] *Microsoft*, supra note 120, para. 659. Although the case concerned IPRs, the statement is true in respect of all abuse cases.
[299] Supra note 246.
[300] Ibid.
[301] *Microsoft*, supra note 222.

4.1.3.2. Exploitative tying

The same market definition may lead to a different outcome in the absence of assumption regarding positive consumer value of CSSs. In that case, the service can be considered a type of online advertising.[302] Positively valued by retailers on one side of the platform it would be valued negatively by general search users on the other side. Tying between a negatively and positively valued service could not destroy demand for the former.[303] Instead, such conduct may be classified under Art. 102 (a) TFEU as exploitative tying imposing unfair trading terms. Qualification under Art. 102 (a) TFEU requires a definition of what constitutes "unfair" and therefore appears to be challenging due to the lack of a solid body of case law supporting the matter.[304] Meanwhile, even if the abuse is established it is likely to be objectively justified. Since first, it is probable that free access to high-quality general search service outweighs information and attention costs. Second, these gains are specific to the conduct and cannot be achieved by means other than tying. Third, such conduct does not have any exclusionary effect. In a technical way, the objective justification test supports the premise stating that tying between positively and negatively valued products is essential for distribution of payment burden inherent in platforms relying on the advertising-based model.

The latter classification better suits the facts of the case then exclusionary tying[305] and provides important insights into externalities-shaped competition on multiple related markets through the application of classical tests. However, it does not grasp the exclusionary effects of vertical intra-platform leveraging on the market for CSSs.

4.1.4. Google's conduct as vertical market power leveraging

Despite setting the scene for horizontal leveraging analysis the Commission focused on Google's control of traffic which represents an essential element of market power leveraging in vertically integrated systems.[306] This analytical incoherence can be resolved if the market for CSSs is represented as a market for online user traffic. Being generated on one side it is resold across the

[302] Newman (n 66).
[303] See section 3.2.1.1. above.
[304] Case law is missing due to the prevalence of other legislative regimes such as consumer protection, unfair competition, contract, and tort law. For example, see Council Directive 93/13/EEC on unfair terms in consumer contracts [1993] O.J. L. 95, 21.4.1993, p. 29–34.
[305] See Section 4.1.3.1. above.
[306] Supra note 286.

platform to online retailers or intermediaries that structure and refine it according to the needs of their customers. CSSs constitute a market of such intermediaries located downstream of the market for general search. Google's control over user traffic can be seen as both control over the direct input or a facility through which it is accessed. In any case such control allows Google to inhibit competitors' supply[307] and leverage its market power vertically.

4.1.4.1. Classification

According to the settled case law, vertical market power leveraging can be classified as a refusal to supply or margin squeeze. All potentially harmful practices outside of these formal standards fall in the grey area and may constitute an abuse of a new type or not qualified as an abuse at all.[308] To see whether Google's self-favouring strategy[309] constitutes a new kind of abuse it is necessary to exclude traditional classifications first. The conduct affected two channels of user traffic distribution[310] and therefore can be analysed as two separate episodes. First Google introduced a ranking mechanism demoting websites with low original content. This significantly reduced traffic received by all CSSs.[311] Second, it created the Shopping Unit[312] by reserving to itself a slot above Google general search results for own CSS. By doing so it exempted the latter from ranking and allowed it to benefit from the rich display format.[313]

4.1.4.1.1. Ranking

Google's ranking mechanism is applied to all general search results based on the nature of the information they contain.[314] In that respect, it treats all CSSs participating in general search equally. Therefore, the first episode is unlikely to be abusive on its own and does not require classification under Art. 102 TFEU.[315]

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[307] *Google (Shopping)*, supra note 9, para. 591-607.

[308] See Section 3.3.3. above.
[309] *Google (Shopping)*, supra note 9, para. 379.
[310] Ibid, para. 551.The Commission operates with the term "distribution channel".
[311] Ibid, paras. 381-382.
[312] Ibid, para. 31
[313] Ibid, paras. 385, 388-389.
[314] See supra note 311.
[315] *Google (Shopping)*, supra note 9, para. 611. Following a similar logic, the Commission objected not the adjustment mechanism per se but the fact that Google exempted own CSS from it.

4.1.4.1.2. Shopping Unit

By introducing the Shopping Unit Google created an additional channel through which CSSs could access Google Search traffic. Reserving such channel to itself might constitute a refusal to supply.[316] Whether this is the case can be established through the formal test largely based on the indispensability or Bronner standard.[317]

4.1.4.1.3. The Bronner standard applicability

The Bronner criterium identifies a conduct as a refusal to supply by showing the indispensability of the input for efficient competitors that wish to remain viable on the market.[318] In reply to the Commission's chargers, Google insisted on its applicability.[319] The Commission dismissed the argument claiming that the Bronner criterium should only apply to the situations where a duty to supply is imposed as a remedy.[320] This statement is problematic since it violates the general logic of causality according to which the formal test is required to identify the type of abuse which in its turn defines the remedy. This is a one-way road in the sense that the Commission cannot change classification of the conduct within Art. 102 TFEU solely by altering the remedy in the same way as a doctor can not diagnose a patient based on her own prescription. The analogy is not absolute since the borders between the formal standards and types of abuse are not clearly defined and the Commission can influence the classification of the contested conduct through its different interpretations. For example, in *Microsoft,* the lawyers argued that the conduct in the part concerning the Windows Media Player had to be classified as a refusal to supply and not as tying.[321] Depending on the classification the outcome could range from alternative remedies to not finding an abuse at all.[322] By campaigning for a different classification of the contested conduct within Art. 102 TFEU Microsoft lawyers tried to change the outcome of the case. Although it was a resourceful attempt it is questionable whether they could ever succeed. The classification of the

[316] *TeliaSonera*, supra note 211, para. 55. Since It does not concern supplying of services on disadvantageous conditions the category of margin squeeze is irrelevant.
[317] Supra note 233.
[318] Ibid.
[319] *Google (Shopping)*, supra note 9, para. 645
[320] Ibid, para. 651.
[321] GS McCurdy and J—Y Art, 'The European Commission's Media Player Remedy In Its Microsoft Decision: Compulsory Code Removal Despite The Absence Of Tying Or Foreclosure' (2004) 25 ECLR 694. Guidance Paper, supra note 142, para.77. The Commission stated in the Guidance Paper that it will apply the refusal to supply standard in respect of the customers that did not accept tying arrangements.
[322] Supra note 308.

contested conduct naturally constitutes a part of the Commission's claim. When the latter discharges the burden of proof for the first time[323] it defines the course of the defence as well. For example, it would not make sense for a dominant undertaking to argue that it did not engage in refusal to supply if it was accused of tying. In *Google* (*Shopping*) the Commission dealt with the control over input in a vertical setup in the absence of transactions with the latter. Therefore, it had sufficient grounds to suspect a refusal to supply and apply the Bronner criterium. The fact that it refused to do so can be interpreted as a push against the high importance of the formal tests under Art. 102 TFEU. The Court may respond to this in three possible ways.

First, it may fully support the advance. In that case, the Commission would no longer be constricted by formal standards and could deal with any new potentially harmful practice solely based on its effects. This would be a big improvement in the Commission's challenge to accommodate new commercial practices with old enforcement tools.[324] On the other hand, this might give too much freedom to the Commission risking overenforcement in respect of practices that are not sufficiently studied.

Alternatively, the Court might support the initiative partially. In *Deutsche Telekom*, it has stated that margin squeeze represents a separate type of abuse and therefore should be subjected to a separate formal test.[325] In *Tetra Pak II* it relaxed the formal standard by admitting that effects of abuse can take place on a related market.[326] The same may happen in respect to self-favouring. In that context, the Court might establish principles according to which a new formal standard can be defined. This would represent a smaller but still a very important step towards the Commission's goal.

And finally, the Court might reject the suggestion. Formal standards are deeply entrenched in the case law on abuse. They preceded the effect-based standard and still define the latter to a great extent.[327] Taking this into account the Court might be reluctant to dismiss them or even reduce their role. Such position of the Court in the absence of clear conduct classification within the settled types of abuse and application of the relevant formal test might mean the loss of the case for the

[323] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, Art. 2.
[324] Supra note 7.
[325] Supra note 234.
[326] Supra note 200.
[327] See section 3.1.3.1. above.

Commission. The discussion on the importance of traffic for comparison shopping services and the absence of substitutes for it introduced into the Decision mitigates this risk by demonstrating that if the Bronner test was applicable it would be satisfied.[328]

4.1.4.1.4. Application of the formal test

Application of the indispensability standard often dominates the discussion in refusal to supply cases. Meanwhile, it represents only a part of the formal test which requires to identify a vertically integrated structure in which an indispensable input produced upstream is denied to competitors downstream.[329] The test can be completed in three steps establishing the input, its indispensability and the fact of refusal. In cases concerning supply of spare parts,[330] network facilities[331] or IP rights[332] in simple vertically integrated systems the first and the last steps are often obvious and do not require an extensive discussion. In the context of multi-dimensional platform competition where the indispensable input may be defined in several ways and refusal to supply may often be implicit all three elements of the formal test must be discussed.

In the context of *Google* (*Shopping*) it is not clear how narrow the input should be defined to satisfy the formal test. If the input is defined too broadly it would be easy to show indispensability but not the fact of refusal sine a wide category implies a wide variety of channels through which the input can be accessed. A too narrow definition will lead to the opposite effect by making the refusal obvious and obscuring the indispensability. The following subsections will suggest different approaches to the input definition and see whether they affect the outcome.

4.1.4.1.4.1. User traffic as the input

The Commission describes general user traffic as essential for CSSs.[333] And indeed it represents the direct input on the CSSs market in the widest possible sense. It cannot be substituted and therefore is indispensable. However, the contested conduct does not prevent Google's downstream competitors from accessing it completely leaving open such channels as other search engines,

[328] Supra note 286.
[329] *IMS Health*, supra note 217, para. 42.
[330] *Volvo*, Supra note 215. *Renault*, supra note 215.
[331] *Bronner*, supra note 230.
[332] *Magill*, supra note 217. *IMS Health*, supra note 217. *Microsoft*, supra note 120.
[333] Supra note 286.

mobile apps,[334] direct access through the website domain name[335] and social media.[336] This suggests that the category of user traffic is too broad to satisfy the refusal to supply formal test.

4.1.4.1.4.2. Traffic generated by Google general search as the input

Input indispensability in the second widest sense would mean that the traffic produced by Google general search must be necessary for its downstream competitors to remain viable on the market.[337] The Commission argued that there were no viable substitutes for Google general search traffic on the CSSs market.[338] Its analysis in that regard is rather convincing except for one element. The Commission treats AdWords as a potential substitute for Google's general search results.[339] Meanwhile, the former rather represents a sub-category of Google general search traffic and a channel through which the latter can be accessed. Apart from AdWords Google general search traffic can be accessed through organic search results and the Shopping Unit. Another possibility not considered by the Commission involves Google offering its organic search results to be placed on the third parties' web pages.[340] This allows competitors to bundle Google's organic search result with any advertising including CSSs on their own web pages. Google exercises control over all mentioned channels, therefore the input can be considered refused if either all of them are closed or if open channels[341] cannot offer a viable substitute for the closed ones. The Commission has established that this is the case in respect of AdWords.[342] If the same is true for all other channels the formal test would confirm refusal to supply. A natural remedy for it would be a requirement to allow competitors access to the Google Shopping Unit. In case available channels provide a viable substitute for the closed ones the input must be defined even narrower.

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[334] *Google (Shopping)*, supra note 9, para. 568.
[335] Ibid, para. 580.
[336] Ibid, paras. 585-588.
[337] Supra note 233.
[338] *Google (Shopping)*, supra note 9, para. 568-588.
[339] Ibid, paras. 543-567.
[340] For the principles underlining implementation of such option see 'Where Do Ecosia's Search Results Come From?' (Ecosia's FAQ, 2019) <https://ecosia.zendesk.com/hc/en-us/articles/206153381-Where-do-Ecosia-s-search-results-come-from-> accessed 27 March 2019.
[341] *Google (Shopping)*, supra note 9, paras 543-588. Remarkably, the Commission applies the substitutability test to each channel individually. This may lead to underestimation of viable competition on the market since open channels complement each other for the benefit of competitors. Therefore, it seems reasonable to evaluate alternative channels in conjunction.
[342] *Google (Shopping)*, supra note 9, paras. 534-567.

4.1.4.1.4.3. Traffic generated by Google Shopping Unit as the input

Indispensability in the narrowest sense would concern only the traffic produced by Google Shopping Unit. The input defined in that way is clearly denied to the competitors since they are not allowed to participate in the latter. The indispensability of the Unit depends on whether open alternative channels, namely AdWords or introduction of Google organic search results on the third parties' pages offer a viable substitute for the former. In the opposite case, the conduct might be found abusive. An effective remedy, in that case, would again be a requirement to allow competitors participating in the Shopping Unit.

4.1.4.2. Conclusion on the classification of the conduct as vertical leveraging

The previous sections have shown that in *Google* (*Shopping*) requirements of the formal test for refusal to supply can be fulfilled if the input is identified as Google general search traffic or Google Shopping Unit traffic. Therefore, grounds to classify Google's conduct as a new type of abuse might be insufficient. In that context, objective justification of the conduct as a refusal to supply comes into relevance.

4.1.4.3. Justification of the contested conduct

Although it was demonstrated that Google's conduct can be objectively justified as exploitative tying in the eyes of general search users[343] that does not automatically mean that the contested conduct would be justified in the eyes of online retailers as a refusal to supply. The test for objective justification requires to demonstrate that there is no better way to access the conduct-derived benefit capable of offsetting the harm.[344] In the present case, the benefit resulting from the conduct can be defined as access to the Shopping Unit traffic for online retailers at the current cost.[345] In that respect, the remedy assigned[346] by the Commission should always represent a better way to achieve the same result if only such a way exists. It follows that if the remedy does not provide the consumer with the same or bigger benefit as the conduct it could be assumed that the conduct could be objectively justified.

[343] See Section 3.2.1.1. above.
[344] See section 3.3.3. above.
[345] Before the remedy was implemented.
[346] Or not objected in case of open remedy approach.

Google's auction-based mechanism[347] as the remedy is problematic in that respect. The pay-for-placement system implemented by the auction does not incentivise CSSs to innovate and compete on the merit. Users on either platform side cannot influence which services get the placement based on their price and quality. The matter is decided unilaterally by Google based on the size of the bid.[348] Due to its vast resources, Google Shopping can often outbid its rival CSSs regardless of the commitment to operate at least at 20% "profit" margin.[349] This allows Google to compel rival CSSs to "bid away the vast majority of their profits"[350] and receive monopoly yield from the CSS market all the same. Meanwhile, placement in the Shopping Unit is often granted to advertising agencies certified by Google and not to genuine CSSs.[351] But the main problem of the auction remedy is that each participant that intends to win over Google Shopping would need to place a bid higher than the latter. And if the latter's bid represents the amount the Google would receive directly from online retailers in the absence of the auction, with the auction any rival CSSs would always need to charge retailers at least as much plus a bit more. In a sense, the auction sets up a race to the top increasing the bidders' costs that eventually are passed on online retailers. Therefore, it can be assumed that the remedy does not increase the benefit for the general search users and decreases it for online retailers. Taking that into account it can be concluded that the system without an auction benefits consumer on both sides of the platform to a greater extent than its alternative. Therefore, the contested conduct in *Google* (*Shopping*) can be objectively justified as a refusal to supply as well as tying. The contested conduct in *Google* (*Android*) on the other hand is not susceptible to the same argumentation.

4.2. *Google (Android)*

Roughly one year after Google (*Shopping*) the Commission has fined Google and Alphabet an even bigger amount for "illegal practices regarding Android mobile devices [designed] to strengthen dominance of Google's search engine".[352]

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[347] Supra note 281.
[348] Frédéric Lambert and others, 'Search Neutrality » Open Letter To Commissioner Vestager From 14 European Csss' (Searchneutrality.org, 2018) <http://www.searchneutrality.org/google/comparison-shopping-services-open-letter-to-commissioner-vestager> accessed 24 March 2019.
[349] Ibid.
[350] Ibid.
[351] Ibid.
[352] Press release *Google (Android)*, supra note 10.

4.2.1. The setup

Dominance in the markets for general search and application stores is particularly valuable for Google since these markets represent the main source of its revenue. [353] To cement the dominance, Google applied certain licensing conditions with respect to mobile manufacturers. The conditions allegedly aimed at preventing rival applications (Apps) from being pre-installed on Android-operated mobile devices and exclusion of rival OSs allowing pre-installation of such Apps from the market. The strategy has been found abusive by the Commission. [354] Unlike in *Google* (*Shopping*) where the Commission attempted to dismiss the formal test and treat a leveraging strategy as a new type of abuse, in *Google* (*Android*) it assigned the episodes of abusive conduct to traditional classifications.

Google was found dominant on the markets for general search, open mobile OSs, and App stores for Android. The conduct consisted of three episodes: tying Google Search and Chrome to Play Store; illegal payments to large manufacturers of mobile devices designed to ensure exclusive pre-instalment of Google Search on Android-powered devices; and illegal obstruction of development and distribution of competing Android OSs (Android forks).[355] Like in *Google* (*Shopping*) the Commission applied an open remedy approach, ordering to cease the conduct.

4.2.2. Qualification

Android forks compete with Android as alternative distribution channels for mobile Apps on the market for open-code mobile OSs. The competitors reach the final consumer though a vertically integrated system of mobile manufacturers[356] The latter pre-install OSs and proprietary Apps of their choice on mobile devices and offer the compounded product to the final consumer.[357] Since mobile manufacturers ensure communications between OSs and Apps producers and the final consumer, normally they are interested in following the preferences of the latter. Therefore, under undistorted competition, the demand among mobile manufacturers for particular OSs and Apps

[353] Bogdan Petrovan, 'How Does Google Make Money From Android?' (Android Authority, 2016) <https://www.androidauthority.com/how-does-google-make-money-from-android-669008/> accessed 25 March 2019. Google generated over 86% of its total revenues from advertising in 2017. See Alphabet Annual Report 2017, supra note 267.
[354] Supra note 352.
[355] Ibid.
[356] Ibid.
[357] Ibid. The Commission has established that in the majority of cases users would not change pre-installed features.

would reflect the final consumer demand. Google licensing conditions precluded mobile manufacturers from pre-installation of third-party Apps on Android operated devices or introducing devices powered by Android forks into their portfolio. By doing so it interfered with the users' ability to decide which Apps would get the placement on mobile devices based on their quality. In other words, it has deprived providers of the said products of the possibility to compete on the merit. The Commission argued that Google's conduct is capable of harming competition on the markets of search engines, mobile OSs and mobile browsers. The setup described above suggests that the Commission is likely to receive support from the Court in respect to its assessment of the conduct's effect. The following sections will analyse conduct classifications under Art. 102 TFEU and respective objective justifications.

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

Play Store is a transactional platform that brings together users and App producers. It is characterised by mutual positive externalities among the platform sides and low multi-homing rates among the content providers due to the high cost of the readjustment of Apps to other platforms.[358] These features make Google's dominance on the market for App stores self-propelling[359] while bundling leverages Google Search and Chrome browser with the market power of Play Store. The Commission has classified the conduct in this part as abusive tying.[360] Indeed, all three products are offered to the same consumer group. And unlike in *Google* (*Shopping*) all tied products have positive consumer value. This allows classifying the practice as horizontal inter-platform exclusionary tying. Such classification offers notoriously slim chances for objective justification and it brings the conduct as close to abuses "by object" as it is only possible under the effect-based approach.[361] The same applies to horizontal inter-platform leveraging though exclusive dealing and loyalty rebates constituting the second and the third abusive episode.

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

Due to their size and market power, big mobile manufacturers are less susceptible to the limiting aspects of the contested strategy. In order to incentivise them to pre-install Google Search on

[358] See Sections 2.2.2., 2.3.4.
[359] See Section 2.3.3. above.
[360] Supra note 352.
[361] See Sections 3.1.3.2., 4.1.3.1. above.

Android-operated devices, Google offered them payments.[362] A reference to *Intel* in Press release suggests that the Commission classified the conduct as loyalty rebates.[363] And indeed, the conduct is relying on demand manipulation and therefore represents a horizontal inter-platform market power leveraging offers no clear benefits and is unlikely to be justified.

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

Unlike Android, Android forks allow the pre-installation of third-party Apps. This makes them the main distribution channel for the latter. According to the Commission exclusion of Android forks from the market would leave such Apps producers without viable means to compete.[364] Google used its dominance on markets for proprietary mobile Apps to inhibit mobile manufacturer's demand for Android forks. This allowed Google to further "cement" its position on the mentioned markets. The conduct represents inter-platform horizontal leveraging and can be classified as exclusive dealing.[365] An objective justification attempt for such conduct would not be abetted by any special circumstances linked to intra-platform connections and efficiencies.

4.3. Conclusion on Google Decisions

Both *Google (Shopping)* and *Google (Android)* concern platform market power leveraging. In the first case, Google leverages its dominance from the general search market to the market of CSSs using its control over user traffic as a fulcrum. In the second case, it leverages its dominance from the market for App Stores to the markets of general search, browsers and mobile OSs over the fulcrum of the shared consumer base. Despite apparent similarities, the two cases are fundamentally different from the perspective of formal tests and objective justification under Art. 102 TFEU.

Google (Android) represents a linear case of horizontal inter-platform market power leveraging implemented through a set of classic abusive practices with no room for alternative interpretations and little changes for objective justification. *Google (Shopping)* on the other hand is two-dimensional. It concerns a potentially harmful conduct that simultaneously affects consumers on

[362] Supra note 352.
[363] Ibid. The reference to *Intel Appeal*, supra note 164.
[364] Supra note 352.
[365] See supra notes 227, 228.

both sides of the platform in two different way. The conduct can be interpreted as horizontal exploitative tying and as vertical intra-platform exclusionary market power leveraging. The latter interpretation can be classified under Art. 102 TFEU as a refusal to supply or a new type of abuse. Judicial support for the latter option could decrease the importance of formal standards under Art. 102 TFEU and simplify competition law enforcement in respect of new commercial practices. The classification of the contested conduct within Art. 102 TFEU sets the tone for a remedy choice and defines the outcome of the objective justification test. In the context of *Google (Shopping)* multidimensional nature of abuse requires to apply the latter test and the initial test of finding abuse to each conduct interpretation. Therefore, a platform strategy affecting multiple consumer groups can only be cleared if abuse is either not found or is justified in respect of each group. In *Google (Shopping)* combination of negatively and positively valued products allows justifying the conduct as tying, while the absence of a better option for the consumer may justify it as a refusal to supply. The facts of *Google (Android)* on the contrary are unlikely to support a possibility of objective justification.

Chapter V. CONCLUSION

Platforms' special features allow them to access extra efficiencies. At the same time, they make them more resourceful in abusing dominance. Often competition law enforcement does not account for these abilities creating a risk of under or over enforcement. To resolve this issue, case law needs to redefine the limits of merit competition on multisided markets. In particular, resolving the inconsistencies created by the gap between the formal standards under Art. 102 TFEU would narrow the category of merit competition and ensure effective enforcement in respect of new commercial practices such as "soft" input manipulations. At the same time, case law needs to expand the category of merit competition by accounting to the fact that certain practices considered abusive in most traditional setups may be justified as a part of multisided business strategies.

To illustrate this point, the present research divided practices of dominance extension into categories of inter and intra-platform leveraging and inquired whether they deserve a differential treatment in competition law enforcement. The answer to the research question was obtained through the comparative analysis of *Google (Android)* and *Google (Shopping)* as examples of the two respective categories. It has been shown that inter and intra-platform leveraging should be treated differently by competition law enforcement in two major ways. The first difference concerns interpretation and classification of the contested conduct, while the second concerns conditions that should be considered in the course of objective justification.

Inter-platform leveraging practices have a horizontal nature, concern one consumer group and do not support multiple interpretations. Classification of such practices under Art. 102 TFEU is uncomplicated since formal standards for exclusionary abuses based on demand manipulation are sufficient to cover modern potentially harmful strategies. In that context, no additional conditions needed to be considered under objective justification test. In practice, it is nearly impossible to provide objective justification for this kind of leveraging due to a very narrow gap between the effect-based standard of capability and the standard of objective justification. This can be best illustrated by case law on former "by object" abuses such as exclusive dealing and loyalty rebates.

Intra-platform leveraging practices, on the contrary, affect several consumer groups and support multiple interpretations. Each interpretation requires its own classification and justification under Art. 102 TFEU. Meanwhile, a conduct interpreted as vertical exclusionary abuse may either fall

under one of the two traditional formal standards or land between them. The latter outcome may lead to underenforcement. The issue can be resolved either by introducing new formal standards for vertical abuses or by distancing from the formal assessment of contested conduct. In that context, the appeal against *Google (Shopping)* is likely to define which route will be prevalent. The test for objective justification for intra-platform leveraging requires taking account of extra-efficiencies obtained by using externalities.

In a practical sense, findings made in the present dissertation allow to make a prognosis regarding Google's appeals against the Decisions. It is suggested that the conduct's susceptibility to objective justification and the fact that the Commission disregarded one alternative distribution channel in *Google (Shopping)* may provide Google with extra chances for successful appeal. *Google (Android)* on the other hand, does not concern any special circumstances discussed in the present research and therefore is unlikely to be successfully challenged.

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