The application of EU antitrust law to (dominant) online platforms

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2 The Challenges of Applying EU Antitrust Law to Online Platforms

This chapter is based on the two articles Applying EU Competition law to Online Platforms: The Road Ahead- Part 1 and Part 2, which were published in the European Competition Law review in 2017.

2.1 Introduction

Over time, the legal concepts and economic considerations in the context of EU competition law have been adjusted and modified so as to resolve countless anti-competitive issues in various distinct markets.[1] In the case of digital markets, developments are still at the initial phase wherein the Commission and the national competition authorities try to discover how competition law should apply.[2] Online platforms currently constitute a focal point of these legal developments, which include research and adaption initiatives in the context of EU competition law.[3] The growing attention to online platforms is a result of the vast economic opportunities that they facilitate.[4] The current online platform 'giants' such as Facebook and

1 A good example the overhaul that the system experienced with the Modernization in 2004, on this matter see the competition new letter at: <http://ec.europa.eu/competition/publications/cpn/2004_2_1.pdf>; The application of the essential facility doctrine' to cases concerning IP protected rights in the cases of Case T-201/04 *Microsoft* [2007] ECLI:EU:T:2007:289 and Case C-241/91 P *Magill* [1995] ECLI:EU:C:1995:98; The application of the concept of tying to free goods or services in Case T-201/04 *Microsoft* [2007] ECLI:EU:T:2007:289 ; The application of margin squeeze to network cases C-52/09 *TeliaSonera Sverige* [2011] ECLI:EU:C:2011:83; As well as the Commission's online database for the numerous Regulations, Guidelines and Notices dealing with general aspects of competition law and the application specific sectors.

2 Pieter Ballon and Eric Van Heesvelde, 'ICT platforms and regulatory concerns in Europe' (2011) 35(8) Telecommunications Policy 702, 709-710; See also the rapport from the DG for internal policy on online platforms online at:< http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542235/IPOL_STU(2015)542235_EN.pdf>.

3 See Commission Staff Working Document on Online Platforms SWD(2016) 172. Available online at:< https://ec.europa.eu/digital-single-market/en/news/commission-staff-working-document-online-platforms>.

4 Ibid, online platforms in the EU account for a total value of over 26 billion Dollars. Purchases within the 28 EU member states through use of online platforms were over 270 billion Euro and the time saved through the use of such platforms for purchases was over 140 billion EU; See also Commission Staff Working Document on online platforms SWD(2016) 172, pp. 9-16. < https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-288-EN-F1-1.PDF>.

Google have achieved extravagant market valuations in relatively short periods of time. Their economic and societal potential lies in the fact that online platforms have succeeded in creating new markets and disrupting the well-established. Based on market studies, online platforms are likely to become even more prominent with the recent increase in the use of portable devices such as smartphones and tablets that allow for continuous Internet access.[5] With such a significant increase in use, there will undoubtedly be more occasions that will require competition law scrutiny.

On the regulatory front, it would appear that the main concern with the increasing prevalence of online platforms, is whether specific regulation is needed rather than the complexity of application of the current system.[6] The inquiry for new forms of regulation has led to an agreement that the application of the established case law, legal tools and economic theories may require some adjustments in the context of online platforms.[7] Nevertheless, although the need for specific regulation has been dismissed, the complexity and extent of the desired adjustments to the current framework seem to have been underrated. Adapting the current system to high technology markets and, more specifically, to the case of online platforms, will not be a simple task as almost none of the developments in these markets have been foreseen or considered until recently.

Online platforms are part of a highly dynamic and competitive markets, which is sufficient in order to reconsider whether intervention is even desired and whether it can be done adequately.[8] A key challenge is the economic model that online platforms are based upon, namely the 'two- or multi sided market'.[9] Reliance on this market model will have a bearing on essential aspects of an assessment under either Art. 101 or 102 of the Treaty on the Functioning of the European Union (TFEU).[10] Similarly, the provision of zero priced goods or services and the way in which personal data has become an aspect of trade, will also be relevant for such assessments

5 David S. Evans, 'Mobile Advertising: Economics, Evolution and Policy' (2016) < http://ssrn.com/abstract=2786123 >.

6 Ibid.

7 See rapport of the German national competition authority available online at:< http://www.monopolkommission.de/images/PDF/SG/s68_fulltext_eng.pdf>; See also the rapport from the DG for internal policy on online platforms online at:< http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542235/IPOL_STU(2015)542235_EN.pdf>; and the OECD Round table on two sided markets DAF/COMP/WD/(2009)69 available online at: < https://www.oecd.org/daf/competition/44445730.pdf>.

8 See the case of the Court order shutdown of Whatsapp in Brazil which led to millions of clients stepping over to the competing app Telegram within 48 hours < http://money.cnn.com/2015/12/17/technology/telegram-whatsapp-brazil-suspension/>.

9 David S. Evans, 'Mobile Advertising: Economics, Evolution and Policy' (2016) *supra* (n 5).

10 Dirk Auer and Nicolas Petit, 'Two-Sided Markets and the Challenge of Turning Economic Theory into Antitrust Policy' (2015) 60(4) Antitrust Bulletin 426.

and are likely to increase complications.[11] Furthermore, market transparency, algorithmic trading and online interaction between competitors participating in online platforms will challenge the discovery and prohibition of coordination between competitors.[12] These factors and others will form challenges throughout the entire application process of Art. 101 and 102 TFEU, namely consisting of the application thresholds, qualification of practices and justification grounds. In the context of this article, application thresholds refer to the instance wherein certain behavior is considered as falling under the scope of Art. 101 or 102 TFEU. Qualifications of practices refer to the assessment of an investigated behavior and the finding of an abuse of dominance or a restriction of competition through coordination by object or effect. Finally, challenges concerning justification grounds in the context of this paper refer to the feasibility of relying on the justification grounds of Articles 101 and 102 TFEU.

This chapter provides an initial overview that is intended to serve as the starting point for an extensive study that will address the challenges of applying art. 101 and 102 TFEU (EU antitrust law) to online platforms, and the modifications that are required to enable this process. The focus of this article as well as the extensive study will be the compatibility assessment of the legal criteria of art. 101 and 102 TFEU and the application thereof to online platforms.

In order to provide a coherent overview, this chapter will be structured as follows. Following this introduction, the first section will discuss the concept of online platforms. The second section will address the difficulties encountered in applying Art. 101 TEFU to online platforms, specifically when the existence of coordination or collusion is uncovered, the qualification of such a coordination as having its object or effect to restricting competition and applying the cumulative criteria of Art. 101(3) TEFU. Similarly, the third section will examine the applicability challenges of Art. 102 TFEU, primarily concerning the concepts of dominance and the abuse of such together with specific aspects of online platforms that can be relevant for justification purposes. Each section will provide an initial compatibility evaluation between current practice and its application to online platforms. The final section will provide conclusions regarding the findings of the previous sections, as well as some remarks concerning subsequent research and practice in the case of online platforms.

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11 Ibid note n. 5; See also Andres V. Lerner, 'The Role of 'Big Data' in Online Platform Competition' (2014). Available online at: < http://ssrn.com/abstract=2482780> and Inge Greaf, 'Market Definition and Market Power in Data: The Case of Online Platforms' (2015). Forthcoming in World Competition: Law and Economics Review, Vol. 38, No. 4 (2015). Available online at: < http://ssrn.com/abstract=2657732>.

12 Andreas Heinemann and Aleksandra Gebicka, 'Can Computers Form Cartels? About the Need for European Institutions to Revise the Concertation Doctrine in the Information Age' (2016) 6 7) Journal of European Competition Law & Practice 431, 432-440.

2.2 Online platforms

Online platforms as a concept is one that is hard to define accurately. The difficulty arises as a result of a lack consensus on clear guidelines indicating the existence of an online platform,[13] while in practice this term is freely used with regard to existing businesses.[14] In this sense, one can compare it to light: we are all aware of it, use it and can provide examples of it yet its definition remains a complex matter.[15] It remains to be seen whether, similar to light, online platforms can also be subject to regulation and enforcement in the absence of a precise definition. The concept of a platform is not new; markets and newspapers are example of more traditional platforms. However, the application of this concept in the context of Internet technology increases its potential from a business perspective. While physical platforms are faced with physical expansion constraints, online platforms have more potential to expand. Nonetheless, this potential is not unlimited.[16] Studies of online platforms have taken various approaches with regard to the definition of this concept.[17] At the moment, it would appear that the most common approach to this concept is an economic one.[18] According to this approach, online platforms are primarily identified based on the characteristics of two- or multi sided markets, which can later be divided into *transaction* and *non-transaction* markets.[19] Consequently, within the context of this article, platforms or online platforms refer to two-or multi sided markets. Based on the two-or multi sided market model, online platforms generally operate on multiple markets and facilitate interaction between multiple parties for a fee.[20] Economic literature on two- or multi

13 Commission staff working document on online platforms accompanying the document Communication on online platforms and the digital single market {COM(2016) 288} , SWD(2016)172, at 1-9;

14 Ibid; David S. Evans, 'Multisided Platforms, Dynamic Competition, and the Assessment of Market Power for Internet-Based Firms' (2016). University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 753 < https://ssrn.com/abstract=2746095>.

15 For a discussion on this dispute see a short instructional video of Colm Kelleher, 'Is light a particle or a wave?'. Available online at: < http://ed.ted.com/lessons/is-light-a-particle-or-a-wave-colm-kelleher>.

16 Bertin Martens, 'An Economic Policy Perspective on Online Platforms', Institute for Prospective Technological Studies Digital Economy Working Paper 2016/05, 12 < https://ec.europa.eu/jrc/sites/jrcsh/files/JRC101501.pdf >.

17 Winston James Maxwell and Thierry Pénard, 'Regulating Digital Platforms in Europe – A White Paper' (2015) 1, 7-10 < https://ssrn.com/abstract=2584873>.

18 Bertin Martens, (2016) *supra* (n 16).

19 Commission staff working document on online platforms n. 13, 1-9; Bundeskartellamt, 'The market power of platforms and networks' (2016) working paper executive summary. 1-2; Lapo Filistrucchi, Damien Geradin, Eric van Damme, Pauline Affeldt, 'Market Definition in Two-sided Markets: Theory and Practice' (2014) 10(2) Journal of Competition Law & Economics 293.

20 Pieter Ballon and Eric Van Heesvelde (2011) *supra* (n 2) at 702–708.

sided markets offers various definitions of this model,[21] which in practice may result in different findings with regard to online platforms.[22] The seminal works of Tirole, Evans, Raysman and other scholars vary in the scope of inclusiveness with regard to which features are required to be identified in order to establish the existence the a two-multi sided market.[23] Despite the differences between these studies, there is some agreement with regard to several core characteristics of such two- or multi sided markets. Accordingly, there must be an interaction between two groups of customers via the platform; the value obtained by one group of customers increases with the numbers of customers by the other group; and an intermediary is necessary for internalizing the externalities created by one group for the other group.[24] The relevance of the two- or multi sided market character for the purpose of competition law analysis then depends on: indirect network externalities; pricing structure; and multi-single homing.[25] These characteristics and their materialization can also be observed in the case of online platforms.

Network effects or externalities are a key aspect of two- or multi sided markets and also consequently, in the case of online platforms.[26] Indirect network effects are present when the utility or value of a service or good in a market for a group of customers depends on the consumption of the same good or service by a different group of customers.[27] By contrast, direct network effects are present when the value of the good or service for a group of customers is dependent on the consumption of the good or service by members of the same group. Online platforms will always exhibit a degree of indirect network effects.[28] A good example is an online marketplace such as Amazon. The more sellers Amazon has on its platform the more buyers it will attract and vice versa. In some cases, online platforms will also exhibit direct network effects such as in the case of Facebook or any other social communication platforms.[29] It is important to note that such effects work both ways. Thus, if an online platform conducts business well, it may grow relatively quickly, but if it fails to do so it will lose its

21 Bertin Martens (2016) *supra* (n 16) at 10-18.
22 Dirk Auer and Nicolas,Petit (2015) *supra* (n 10) at 438-450.
23 For an overview of these works see Bertin Martens (2016) *supra* (n 16) at 10-18.
24 OECD Round table on two-sided market, (2009), DAF/COMP/WD(2009)69, 3 < http://ec.europa.eu/competition/international/multilateral/2009_jun_twosided.pdf>.
25 Ibid.
26 Jean-Chalres Rochet and Jean Tirole,' Two-sided markets: An overview', (2004), at 5-6 <https://pdfs.semanticscholar.org/1181/ee3b92b2d6c1107a5c899bd94575b0099c32.pdf>.
27 Ibid.
28 Inge Graef, 'Market Definition and Market Power in Data: The Case of Online Platforms' (2015) 38(4) World Competition: Law and Economics Review 473.
29 This is due to the fact that in the case of social communication online platforms users are not only searching for the content provided from the business side of the platform but also in the option of interacting with other users.

profitability just as fast if not faster.[30] The intensity of the indirect network effects will also have an influence on the pricing structure on the market or platform.[31] Accordingly, the more a member of a customer group values the participation of a member of the other group the higher the price the customer will pay to access the market.[32] This relationship between network effects and pricing structure often results in a skewed structure where one side of the market pays little or nothing while the other side pays substantially more.[33] Such pricing schemes are common for online platforms where it is often the user or consumer side that gains access to the online platform free of charge.

Finally, multi-and single homing refers to the participation patterns of customers in cases where several two- or multi sided markets or platforms co-exist. In such instances, customers on each side of the platform or market chose to do business with a single provider on such markets (single homing) in order to have access to the other side of the market or to multiple providers (multi-homing). These preference patterns depend on the characteristics of the specific market, the business model, differentiation on the market and switching costs.[34] The single-multi homing patterns of customers will, in turn, influence the division of the price structure of a two- or multi sided market.[35] Accordingly, if one side of the market is characterized by single homing, the only way to reach those customers is via their favorite platform. Consequently, the platform in such cases has monopoly over the access to its single-homing customers. Under such circumstances, a competitive bottleneck arises that will allow the platform to charge higher prices to the multi-homing customers on the other sides of the platform.[36] The incentive of the platform is then, of course, to have at least one group of customers on one of its sides to single home. Similar to the previous characteristics of two-multi sided markets, single-and multi homing patterns, as well as their effect on pricing schemes, can be seen in the case of online platforms.[37] A good example of such evidence can be seen with regard to social communication platforms such as Google+ and Facebook, where consumers use a single platform for social

30 David S. Evans and Richard Schmalensee, 'Failure to Launch: Critical Mass in Platform Businesses' (2010), 3-4 < https://ssrn.com/abstract=1353502> .

31 Marc Rysman,' The Economics of Two-sided Markets', (2009) 23(3) Journal of Economic Perspectives 125, 129-131.

32 Ibid.

33 Ibid; OECD Roundtable on two-sided markets (2009) *supra* (n 24) at 8.

34 OECD Round table on two-sided markets (2009) *supra* (n 24) at 10-12.

35 David S. Evans (2016) *supra* (n 14) at 8-9.

36 David S. Evans and Richard Schmalensee, 'The Antitrust Analysis of Multi-Sided Platform Businesses ' (2013) in Roger Blair and Daniel Sokol, (eds.) *Oxford Handbook on International Antitrust Economics*, Oxford University Press, Forthcoming; University of Chicago Institute for Law & Economics Online Research Paper No. 623, at 15-16 < https://ssrn.com/abstract=2185373>.

37 Commission staff working document on online platforms, *supra* (n 13) at 32-43.

communication, while advertisers looking to contact these consumers will be active on both platforms. With these characteristics in mind, it is necessary for the online platform to optimize its business model and pricing scheme so as to achieve the minimal threshold of profitability – also referred to as 'critical mass'.[38] Once critical mass has been achieved, the online platform is considered viable and well positioned to grow further, while failure to meet this threshold will result in exiting the market.

In light of the information mentioned above, it is not surprising that the Commission, while acknowledging the various approaches to two- or multi sided markets, seems to focus on the similar characteristics of two- or multi sided markets and online platforms that may be taken into account in the context of a legal analysis.[39] In addition to these characteristics, the Commission also accentuates the importance of the data processing practices and accumulation by online platforms, which may give raise to privacy and competitive law concerns.[40] All the above-mentioned characteristics will inevitably complicate the competition law assessment, however, these cannot be assessed in an abstract manner. An adequate assessment requires acknowledging the entire legal and economic context of each case.[41] Consequently, specific platform characteristics and the dynamics of the online markets in which online platforms play a prominent role, must also form part of future assessment concerning potential violation of EU competition law.[42] An assessment of such market dynamics should always consider the high intensity of competition and the constant repositioning of online platform businesses. The intensity of competition can be witnessed in the changes that have occurred in the online market since the early 2000's. Online platforms that were considered dominant by competition law authorities were, in reality, heading towards failure and were eventually replaced by new, more innovative players.[43] The intensity of competition is constantly growing with the development of Internet technology, which allows for lower launching costs for businesses, often in combination with low switching costs by consumers. Companies that were once unique in

38 David S. Evans and Richard Schmalensee (2010) *supra* (n 30).

39 OECD Round table of two-sided markets (2009) *supra* (n 24) at 5; Commission staff working document on online platforms *supra* (n 13) at 2-8.

40 Bertin Martens (2016) *supra* (n 16) at 30-43.

41 Case C- 32/11 *Allianz Hungaria Biztosito Zrt and Others v Gazdasagi Versnyhivatal*, [2013] ECLI:EU:C:2013:160, para. 36.

42 Preliminary findings in this regard can be seen in the Commission staff working document on online platforms (n. 13) and in Special Report by the Monopolies Commission pursuant to section 44(1)(4) of the Act Against Restraints on Competition, 'Competition Policy: the challenge of digital markets', (2015) special report n 68 < http://www.monopolkommission.de/images/PDF/SG/s68_fulltext_eng.pdf>.

43 For example AOL instant messaging platform, Myspace, AltaVista; See Daniel O'Connor, 'understanding online platform competition: common misunderstandings', (2016) Internet Competition and Regulation of Online Platforms, Competition Policy International, 1, 13-14 < https://ssrn.com/abstract=2760061>.

their market must now compete with multiple competitors.[44] Such intense competition results not only from newcomers to the market, but also from established players that choose to expand their business operations. Google is known, for example, for its search engine, Amazon for its e-commerce platform and Microsoft for its PC OS and yet they now all compete on cloud services.[45] Additionally, in some cases online platforms can be stacked upon or linked to each other in a new model in order to provide a new type of platform. These circumstances make the assessment of competition on the market blurry compared to offline markets that are often more static. Additionally, online platform businesses may often not only compete for an existing market but also for future markets that have yet to fully materialize. Such competition will only intensify with the development of faster mobile Internet technology, which will allow for more online platforms to gain increased access to consumers.[46] With these initial findings taken into consideration, it remains to be seen which challenges can be expected when attempting to apply EU competition law to online platforms.

2.3 Article 101 TEFU – Restrictions of competition

Art. 101 TFEU prohibits restrictions of competition through coordination between competitors, regardless of their form. The prohibition applies to both vertical and horizontal relations,[47] as well as to relations with parties that are active outside the market where the prohibited behavior occurs but that contribute to the infringement.[48] Prohibited practices under Art. 101 TFEU are qualified as restrictions of competition by object or effect. In absence of exceptions or justification grounds, prohibited practices that are discovered are subject to substantial penalties depending on their character and gravity.[49] The application of Art. 101 TFEU based on the abovementioned division of application threshold, qualification of practices and justification, requires initially the existence of coordination in the form of agreement, decision or concerted practices. Once coordination has been discovered, the qualification phase consists of establishing whether the

44 See an overview of the development in the market dynamics of online platform in Evans, David S., Attention Rivalry Among Online Platforms (2013) University of Chicago Institute for Law & Economics Online Research Paper No. 627 < https://ssrn.com/abstract=2195340 >.

45 See Barb Darrow, 'Shocker! Amazon remains the top dog in cloud by far, but Microsoft, Google make strides', (Fortune, May 2015)< http://fortune.com/2015/05/19/amazon-tops-in-cloud/>.

46 On this process see David S. Evans, 'Mobile Advertising: Economics, Evolution and Policy' (2016) < https://ssrn.com/abstract=2786123 >.

47 Joined cases 56/64 and 58/64 *Consten and Grundig* [1966] ECLI:EU:C:1966:41.

48 Case C-194/14 P *AC-Treuhand AG v Commission* [2015] ECLI:EU:C:2015:717.

49 Commission Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003, (2006) OJ C 210/02, paras. 2, 19-20.

coordination has the object or effect to restrict competition. The conclusion in the qualification phase has later bearing on the final phase concerning justification possibilities under Art. 101 TFEU, as restrictions of competition by object are less likely to be justified under Art. 101 (3) TFEU.[50] Although this three-phase process under Art. 101 TFEU has been applied by the Commission and NCAs in over a hundred cases, its application to online platforms will pose challenges throughout the entire analysis process.

2.3.1 Establishing collusion

The prohibition of restricting competition under Art. 101 TEFU applies to agreements, concerted practices or a decision of an association of undertakings. When coordination between undertakings takes one of these forms, Art. 101 TFEU is applicable in principle. The concept of agreement within the meaning of Art. 101 TFEU has been stated by the General Court (GC) in *Bayer AG v Commission*.[51] According to the GC, there must be a concurrence of wills between at least two parties. The way in which such an agreement manifests is irrelevant as long as at it represents the faithful expression of the parties' intentions.[52] In the context of online platforms, agreements between undertakings are conceptually similar to agreements concerning other business sectors, however, these require a thorough understanding of online platform structures and management. A common form of agreement that would fall under Art. 101 TFEU would be one that occurs between two online platforms such as an interoperability agreement,[53] particularly if the two were considered competitors.[54] Similarly, the platform terms of use and management agreement where parties, often competitors, will come to an agreement on their participation on the platform will also fall under the scope of Art. 101 TFEU.[55] An example of a problematic participation agreement is one including a price parity clause,[56] or one that requires a

50 Commission Guidelines on vertical restraints (2010) OJ C 130/1, para. 47.

51 Case T-41/96 *Bayer AG v Commission* [2000] ECLI:EU:T:2000:242.

52 Ibid, para. 69.

53 A recent regulatory development in this direction has been introduced in Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (2014) OJ L 257/73.

54 An example can be mutual sign-in / user identification or interoperability options such as in the case of Facebook and Instagram where a Facebook account can be used to long into Instagram and Instagram photos can be shared directly on Facebook.

55 See for example Amazon's participation agreement available at:< https://www.amazon.co.uk/gp/help/customer/display.html?nodeId=3216781> .

56 On this use of such clauses in the online travel booking industry see Simonetta Vezzozo, 'Online Platforms, Rate Parity, and the Free Riding Defense' (2016) <https://ssrn.com/abstract=2802151> .

specific pricing scheme.[57] Additionally, the administration of an online platform, particularly in the case of online marketplaces, involves extensive exchanges of information and monitoring between the administrator and the participants. The exchange of such information becomes considerably more sensitive when the administrator is also a competitor on the platform.[58] In the matter of decisions of associations of undertakings, the application of this threshold under Art. 101 TFEU will remain unchanged, as the conceptual meaning of this threshold is unlikely to be altered by the mere fact that it concerns online platforms.[59] Consequently, the assessment of such decisions can still rely on the established case law concerning decisions of associations of undertakings.

Although coordination through agreements and decisions of associations of undertakings can be translated to the context of online platforms with relative ease, it must be noted that their application is limited to cases involving a form of human decision-making process. In absence of the human aspect, these thresholds cannot be met.[60] The only remaining possibility in such cases is to rely on the concerted practices threshold wherein the required intensity of collusion is less demanding.[61] However, as will become evident, even the flexibility and extensive scope of the criteria of which this threshold consists may be circumvented through recent technological developments.[62]

57 Elai Katz,' Uber-algorithm alleged to constitute price-fixing', (2016) 225 New York Law Journal < https://awards.concurrences.com/IMG/pdf/uber_algorithm_alleged_to_constitute_price-fixing.pdf>.

58 Such issues were already considered in the context of B2B platforms, see Joachim Lücking, 'B2B E-Marketplaces: A New Challenge to Existing Competition Law Rules?'(2001)< http://ec.europa.eu/competition/speeches/text/sp2001_030_en.pdf>; The Commission has also dealt with a number of such B2B marketplaces. However the matters were settled informally so they may not offer sufficient guidance in cases concerning B2C platforms. See e.g. Commission clears the creation of the Covisint Automotive Internet Marketplace Press Release IP/01/1155, 31 July 2001; Commission clears electronic multi-bank trading platform for foreign exchange products Press Release IP/02/943, 27 June 2002.

59 In the context of online platforms the most relevant decisions taken as those taken by associations such as EDiMA and EMOTA that specifically seek to represent online platforms as well as standard setting organizations in this filed.

60 Ariel Ezrachi and Maurice E. Stucke, 'Artificial Intelligence & Collusion: When Computers Inhibit Competition', (2015) Oxford Legal Studies Research Paper No. 18/2015; University of Tennessee Legal Studies Research Paper No. 267, at 8-10 < https://ssrn.com/abstract=2591874>.

61 Alison Jones and Brenda Sufrin, ' EU Competition law – Text, Cases and Materials (6th edt. OUP, 2016), 153.

62 Andreas Heinemann and Aleksandra Gebicka, 'Can Computers Form Cartels? About the Need for European Institutions to Revise the Concertation Doctrine in the Information Age', (2016) 6 Journal of European Competition Law & Practice 1, 3-11.

The inclusion of the term 'concerted practices' in Art. 101 TFEU is intended to cover the remaining undesired coordination practices not in the form of a decision of an association of undertakings or that do not exhibit sufficient intensity to fall under the accepted terms of an agreement. The definition of what constitutes concerted practices was first provided in the case *ICI v Commission*, where the Court of Justice (CJEU) considered it to be a form of coordination without reaching the stage of a proper agreement.[63] In order to conclude that concerned practices occurred, a form of contact must be proven as well as common conduct on the market resulting from such contact.[64] Establishing the existence of all of these factors in the case of online platforms will result in both practical and conceptual challenges.

The link of cause and effect between contact and common conduct on the market indicates that there is a certain degree of awareness that is associated with the existence of contact or a meeting of the minds.[65] This requirement is met if it can be proven that the communication has been received by the other party.[66] Once that is established, the requirement of proving a causal link between the contact and subsequent conduct on the market has been met by way of a rebuttable presumption that coordinated market conduct will or has already followed.[67] Contact by way of meetings or public announcements meet the above-mentioned criteria quite easily, however, in the case of digital contact the story is more complex. The recent *Eturas* case proves that establishing contact and awareness of it in a digital environment such as an online platform can be a daunting task from a practical point of view.[68]

The case involved travel agencies that were active on an online booking platform, and the administrator of the platform had capped the reduction prices that agents could give on its platform. The capping occurred after sending all the agents a notification on this decision via the platform's internal communication system. The problem was that it was not clear whether the agents actually read the notification and were aware of the coordination of reduction percentages.[69] Although the capping was a result of a survey taken by an unknown number of members of the platform and the fact that the system was modified and all reduction rates were capped automatically was not sufficient to prove participation in concerted prac-

63 Case 48/69 *ICI v Commission* [1972] ECLI:EU:C:1972:70, para. 64.
64 Case C-8/08 *T-Mobile Netherlands BV v Raad van bestuur van de Nederlandse Mededingingsautoriteit* [2009] ECLI:EU:C:2009:343.
65 Joined Cases T-25/95 *Cimenteries and Others* [2000] ECLI:EU:T:2000:77 , para. 1849; Alison Jones and Brenda Sufrin (2016) *supra* (n 61) at 153.
66 Joined Cases T-25/95 *Cinmenteries CBR and Others v Commission* [2000] ECLI:EU:T:2000:77.
67 Case C-199/92 P *Huls v Commission* [1999] ECLI:EU:C:1999:358.
68 Case C-74/14 *Eturas and others* [2016] ECLI:EU:C:2016:42
69 Ibid, paras. 44-45.

tices.[70] Considering the difficulty of proving the existence of awareness of the contact in the *Eturas* case despite the very sensitive evidence that was available, one may wonder whether this burden of proof requirement is workable in the context of digital communication. At the same time, removing the requirement of awareness from the equation would imply that any form of contact between competitors is sufficient to lead to a presumption that participation in concerted practices has taken place when the dispatch of digital messages between competitors can be traced. Such an approach would be problematic, as an undertaking would be required to rebut the presumption actively by publicly distancing itself or reporting the matter to the Commission or the NCA.[71] This would be an unreasonable burden for undertakings, particularly when these are truly unaware of any sensitive information being exchanged via means of digital communication. Consequently, the aspect of awareness or conscious contact between undertakings via means of digital communication will require reconsidering the procedural rules, which determine whether the burden of proof has been met on grounds of direct or indirect evidence.[72]

Admittedly, this problem is not isolated to online platforms as communication via digital means, as it occurs outside this context as well. However, communication within the context of online platforms will predominantly occur via digital means of communication. Any changes to such procedural rules should take into account the balance between the effectiveness of (EU) competition law and the presumption of innocence.[73] Beyond this practical difficulty concerning the burden of proof in concerted practices cases[74], lays a far more complex conceptual problem resulting from recent technological developments.

The developments concern automatic pricing and monitoring software that are used to instantly react to market circumstances including the market behavior of competitors. The use of such tools can, in certain instances, lead to the same result as a cartel while not taking the form of an agreement or a decision by an association of undertakings.[75] Consequently, it should be considered whether the term 'concerted practices' could encompass such practices so as to enable the application of Art. 101 TFEU. The gist of such

70 Ibid.
71 Ibid, paras. 46-47.
72 Ibid, paras. 36-38.
73 Ibid, paras. 38-40.
74 Ibid, para. 34. The Court in this case notes that the factor of awareness is related to the burden of proof with regard with concerted practices rather than being part of the concept of ' concerted practices'. The practical meaning of this distinction is however not entirely clear.
75 Ariel Ezrachi and Maurice E. Stucke (2015) *supra* (n 60); Salil K. Mehra,' US v. Topkins: can price fixing be based on algorithms?',(2016) 7(7) Journal of European Competition Law and Practice 470.

new software is rather simple, namely, it monitors the conditions on the market and instantly adapts the price automatically according to circumstances within the framework of the programmed limits of the software.[76] The use of such software in the case of online platforms has been recognized by the Commission in its recent e-commerce sector inquiry and practice has shown that such tools can lead to problematic outcomes.[77] In order to apply the threshold of concerted practices to such tools, it should be considered whether the requirements of contact followed by common or parallel market conduct can cover such situations.

The first step in establishing the existence of concerted practices should consist of evaluating whether interaction between software programs could be considered a form of contact. Furthermore, it should be established what kind, as well as, what degree of awareness or meeting of the minds concerning contact is then required. The interaction between software programs is, however, different from contact in the sense of concerted practices. This interaction is, in essence, a series of unilateral decisions resulting from monitoring the market and competitors, which is considered legitimate practice. In contrast to human monitoring and decision-making, this automated process can provide instant reaction to every change on the market. The simultaneous use of such software reduces the incentives to lower prices due to eliminating the possible benefit of first mover advantage, which can result in reduced competition in the long run.[78] This, however, does not change the problem of establishing the existence of contact. If anything, such software only makes the requirement of finding contact even more crucial in cases exhibiting a high degree of parallel behavior. It is settled case law that parallel behavior such as pricing is not sufficient to conclude that concerted practices are taking place.[79] However, in the absence of other explanations, such parallel behavior may still serve to trigger a presumption that concerted practices occurred.[80] The problem is that the parallel pricing would then be the result of a series of unilateral decisions taken by various software in the context of a very transparent

76 Two examples of such software are Prisync and Competitormonitor. Each of these allows undertaking to monitor the market and their competition and if desired adapt their prices automatically. The monitoring results are updated in intervals of 1-3 hours, which allows for an almost instant opportunity for reaction to the circumstance on the market.

77 See Commission Staff working document- Preliminary Report on the E-commerce Sector Inquiry SWD(2016) 312 final, at 174-176; SUTTER, J. D. Amazon seller lists book at $23,698,655.93 – plus shipping. (CNN, April 2011) < http://edition.cnn.com/2011/TECH/web/04/25/amazon.price.algorithm/>; See also Decision of the CMA in the case of online sale of posters and frames, Case 50223. In this case the CMA managed to discover automatized pricing and monitoring software that was intended to digitally manage the functioning of a price fixing cartel on Amazon.

78 Ariel Ezrachi and Maurice E. Stucke (2015) *supra* (n 60); Salil K. Mehra, (2016) *supra* (n 75).

79 Case 48/69 *ICI v Commission* [1972] ECLI:EU:C:1972:70 paras. 64-66; Case C-89/85 *A. Ahlström Osakeyhtiö and others v Commission* [1993] ECLI:EU:C:1993:120, paras. 70-72.

80 Ibid.

market rather than an outcome of contact between competitors. The more popular the use of such developments becomes, the less valuable evidence of parallel pricing, as undertaking should be allowed to intelligently adapt to the conditions on the market.[81] As long as these unilateral decisions taken by computer software are not considered to be a result of contact in the form interaction between monitoring software, the entire practice will not meet the threshold of concerted practices for the purposes of applying Art. 101 TFEU. The parallel pricing will then be a result of legitimate practices in light of market transparency, which could not trigger the presumption that concerted practices have occurred. This applies to parallel prices on particular platforms as well as across platforms. This is a problematic outcome, as these undesired effects are identical to those of collusion and could not be caught under concerted practices nor by the other forms of coordination in Art. 101 TFEU.

In light of these circumstances, it would appear that concerted practices would lose relevance when dealing with parallel pricing resulting from monitoring and automatized pricing software. It then remains to be seen whether the criteria for establishing the existence of concerted practices should be changed in this context. This is particularly relevant in situations where the future parallel behavior as a result of computer software processes can be predicted by those who make use of it. It is unclear whether such cases could ever be considered concerted practices in the manner this term is defined by current practice. A possible approach is to focus on the awareness and predictability of the use of such software on price competition. If is proven that such software will reduce price competition based on empirical studies, then contact concerning the intention to use such tools may bring such use of software within the scope of concerted practices.[82] This will primarily concern undertakings participating on e-commerce platforms as well as platform administrators.[83] However, in the absence of such circumstances, covering the use of digital monitoring and pricing software on online platforms may require introducing a new threshold for collusion under Art. 101 TFEU.

At the same time, even if such practices will not be prohibited, price competition is only one aspect of competition and perhaps the only one that can be subjected to automatized decision-making process. Thus, evidence of common or parallel market conduct which cannot be a result of automa-

81 Ibid.

82 Such an exchange can be considered to have an adverse effect on price and thus would fall under the scope of Art. 101 TFEU according to the Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2011) OJ C 11/1, paras. 68-74.

83 By analogy such cases would then be handled similar to the Case C-74/14 *Eturas and others* [2016] ECLI:EU:C:2016:42 and Case C-194/14 P *AC-Treuhand AG v Commission* [2015] ECLI:EU:C:2015:717.

tized unilateral decision making, such as terms and conditions or privacy settings, will remain relevant for establishing the existence of concerted practices.[84]

The evaluation of parallel behavior based on non-price criteria will be critical in such cases as well as in cases concerning non e-commerce online platforms that offer zero- priced access to users. In such cases, all competing platforms charge consumers a price of zero for their services, thus finding the existence of coordination in the form of concerted practices with regards to the consumer side is only possible based on non-price parameters.[85] Such parameters can be described as the quality aspect of the service that the platform provides to consumers.[86] Although quality parameters can be compared in principal, such parameters will often lack the transparency and objectivity of price comparisons.[87] Privacy, for example, has been recognized as a quality aspect for which there is competition on the market.[88] Furthermore, privacy requirements on the consumer side will also impact the pricing on the other side of the platform and as such, on competition between platforms on the paying side. Comparing privacy settings with the purpose of finding concerted practices between online platforms can, however, be very difficult as platform competition often occurs across platforms that offer very different services. An additional burden would be to prove that platforms that offer different services to consumers are in fact in competition. However, even if a relation of competition can be established, modifications in privacy settings may appear different while having the same effect or vice versa. Although collusion on non-price parameters may affect the pricing structure or level of the online platform, it cannot be expected that such effects will be parallel and similar. Nonetheless, as the paying side and the user side of online platforms are interrelated, parallel price changes on the paying side of competing platforms can serve

84 The recognition of such non-price aspects of competition such as privacy can be seen in *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014, paras. 87, 102; *Microsoft/LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016, paras. 349-352.

85 This is true with regard to agreements and decisions of associations of undertakings as well. The complexity in such cases concerns establishing whether the contents of such agreements or decision may restrict competition rather than the existence of a form of coordination.

86 *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014, paras. 87, 102; *Microsoft/LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016, paras. 349-352.

87 See Inge Graef, 'Stretching EU competition law tools for search engines and social networks' (2015) 4 Internet Policy Review 1, 2-3. Innovation is a key aspect of competition in social media application – measurement of such quality is highly complex and often subjective.

88 *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014, paras. 87, 102; *Microsoft/LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016 paras. 349-352.

as additional evidence for establishing the existence of concerted practices on the user side. Accordingly, it can be said that in the absence of evidence concerning contact, triggering the presumption that such contact occurred based on common conduct on the market will be a herculean task.

In light of the above-mentioned, it can be seen that the jurisdictional thresholds of Art. 101 TFEU are not fully compatible in the case of online platforms and the introduction of an additional threshold for collusion is necessary. The use of digital communication tools, monitoring and pricing software, and collusion based on non-price parameters will entail the primary challenges in this respect. The thresholds of collusion are the first challenge in the process of applying Art. 101 TFEU. The difficulty surrounding online platforms continues with regard to all forms of coordination when qualifying the practice as a restriction of competition by object or effect.

2.3.2 Restrictions by object or effect

Once a form of coordination between undertakings has been established, an unavoidable following step is to determine whether such form of coordination restricts competition by object or effect.[89] Although both qualifications concern prohibited practices, the choice between the two determines multiple aspects of the enforcement process. Restrictions by object are practices that by their very nature have the potential to restrict competition.[90] Consequently, once agreements, decisions or concerted practices are found to restrict competition by object it is no longer necessary to prove the anti-competitive effects of such practice, which provides obvious advantages from an enforcement point of view.[91] Furthermore, restrictions by object are always considered to have an appreciable effect on competition. Additionally, establishing the existence of an object restriction will likely have an aggravating effect on the amount of the fine imposed and reduce the chances of success with regard to the justification of the practices under Art. 101(3) TFEU.[92] Practice shows there is a degree of variation concerning practices that may or may not constitute a restriction by object. First, are the 'obvious' object restrictions, which are considered highly undesirable and include price fixing, output limitation and market sharing.[93] Second,

89 See Richard Wish and David Bailey, *Competition law* (8th edn, OUP, 2016) 373, the term 'object' in article 101 TFEU refers to the objective meaning and purpose of the practice in the economic context in which it is applied.

90 Case C- 209/07 *Competition Authority v Beef Industry Department Society and Barry Brothers (Cargimore) Meats* [2008] ECLI:EU:C:2008:643 para. 16.

91 Case C- 56/65 *Societe Telchnique Miniere v Maschinen Ulm* [1996] ECLI:EU:C:1966:38 paras. 235, 249.

92 Commission Guidelines on the application of Article 81(3) of the Treaty (2004) OJ C 101/97, para 46.

93 Ibid , paras. 21 and 24.

there are practices that do not seem to contain an obvious object restriction, however, when assessed in it the specific circumstances of the case reveal such a character in the context of their application.[94] Finally, there are also practices that seem to restrict competition by object, however, when analyzed within their specific context prove to have no anti-competitive object.[95] The latter two options can be said to constitute the borderline cases concerning object restriction rather than restriction by effect. Such cases inherently require more analysis than the obvious object restrictions. Consequently, in order to maintain the separation between the two qualifications it is important that the analysis that is necessary in cases concerning object restrictions is not as elaborate as the analysis required in cases concerning restrictions of competition by effect.[96] This may prove a difficult task in the case of online platforms, particularly those involving vertical restraints.

The case law on the separation between restrictions by effect and non-obvious object restrictions is, however, unclear when considering *Allianz Hungraria*.[97] In this case, the CJEU required an analysis that seems more suitable for the finding of a restriction by effect rather than an object restriction.[98] The CJEU seemed to require the analysis of additional aspects beyond the objectives of the practices as well the economic and legal context thereof.[99] According to the CJEU, practices should also be considered in the light of their legal and economic context to determine whether the practices are sufficiently injurious to competition on the market so as to amount to an object restriction.[100] The effects base tendency is further confirmed by the suggestions made by the CJEU with regard to the elements of the assessment.[101] In addition to blurring the line between object restriction and restrictions by effect, such an approach is capable of extending the scope of object restriction beyond the wide definition of the CJEU in *T-mobile*.[102] This approach is hard to reconcile with the later findings of the CJEU in *Groupement Cartes Bancaires*, wherein the CJEU stated that the assessment must be made with consideration to the legal and economic context of the

94 Ibid, para 22.
95 See as example Case C- 27/87 *SPRL Louis Erauw-Jaquery v La Hebignonne SC* [1988] ECLI:EU:C:1988:183 paras. 10-11.
96 On this see Case C-8/08 *T-mobile Nethterlands BV and Others* [2009] ECLI:EU:C:2009:110, Opinion of AG Kokott, paras. 46-48.
97 Case C- 32/11 *Allianz Hungaria Biztosito Zrt and Others v Gazdasagi Versnyhivatal* [2013] ECLI:EU:C:2013:160.
98 J. Faull and A. Nikpay (eds) *The EU Law of Competition* (3rd edn, OUP, 2014) 241-243.
99 Case C- 32/11 *Allianz Hungaria Biztosito Zrt and Others v Gazdasagi Versnyhivatal* [2013] ECLI:EU:C:2013:160 paras. 36-38.
100 Ibid, para. 46.
101 Ibid, para. 48.
102 See C-8/08 *T-mobile Nethterlands BV and Others* [2009] ECLI:EU:C:2009:343 para. 31. According to the Court it is sufficient that the practices have the potential of having a negative effect on competition.

investigated practice.[103] When determining the legal and economic context, consideration must be given to the nature of the goods or services affected as well as to the real conditions of the functioning and structure of the market or markets in question.[104] In order to then ascertain that a practice restricts competition by object, the coordination facilitated by it must reveal, according to the CJEU, a sufficient degree of harm to competition within that legal and economic context.[105] Such assessment in the case of online platforms – which are inherently two-multi sided markets – makes the finding of non-obvious object restrictions troublesome. This is confirmed by the CJEU's findings on the two-sided market character of the payment system market.[106]

According to the CJEU, once the GC observed that the practices of the undertakings in the case produced an indirect network effect, the finding of an object restriction could not be made.[107] The practices in the case sought to establish a certain ratio between the two sides of the payment system market through a measure that had as its object, the imposition of a financial contribution on some of the members in the payment system.[108] Such an object could not be by its very nature harmful to competition as is required to establish in the case of an object restriction.[109] Nonetheless, the CJEU noted that such practices could hinder competition. However the finding of such consequences should be part of the effects analysis of the practices and not the examination of their object.[110] Although the CJEU in *Groupement des Cartes Bancaires* takes a stricter approach to object restrictions than in *Allianz Hungraria*, the reliance on either approach in the case of online platforms will lead to an effects-based analysis in most cases concerning the restriction of competition between participants on the platform.

Online platforms are two-multisided markets, which operate on a business model that primarily revolves around the ability to facilitate interactions between multiple parties for a fee.[111] As mentioned previously, such interconnection in the context of two- or multi sided markets will exhibit direct- and indirect network effects between the sides of the platform. The more intense the network effects, the more complex the analysis will become because every action on one side of the platform will impact the other

103 Case C-67/13 P *Groupement des cartes bancaires v Commission* [2014] ECLI:EU:C:2014:2204 para. 53.
104 Ibid.
105 Ibid, para. 57.
106 Ibid, para. 73.
107 Ibid, para. 74.
108 Ibid, para. 75.
109 Ibid.
110 Ibid, paras. 80-81.
111 Pieter Ballon and Eric Van Heesvelde (2011) *supra* (n 2) at 702–708.

side.[112] Consequently, the so-called 'quick test' that is undertaken before qualifying a practice as an object restriction will become more elaborate.[113] The elaborate test suggested by the CJEU in *Allianz Hungraria* will therefore become even more extensive as object of the practices must be observed with regard to all the sides of the platform while taking into account the network effect between them.[114] The more extensive the test, the blurrier the line between restrictions by object or effect becomes in terms of qualification. At this stage, there are still very few studies devoted to theories of harm for the two- and multi sided market models,[115] consequently limiting the possibility to conclude that a certain practice has the object of limiting competition without extensive analysis.[116] Under such circumstances, it becomes more difficult to conclude, without going into a form of an effects analysis, that a certain practice has the object of restricting competition. Such a situation is unlikely to change before more knowledge and consensus is established on the matter of the two- or multi sided market theories of harm and the online market on which platforms are active.

Reliance on the CJEU's findings in *Groupement des Cartes Bancaires* allows for two approaches in the case of online platforms. First, a broad interpretation of the case that excludes the possibility of qualifying many practices as object restrictions. According to this approach, the finding of object restrictions in the case of practices that seek to improve the balance between the sides of the platform in light of network effects is not possible.[117] The second approach to the CJEU's findings in *Groupement des Cartes Bancaires* would be to treat the findings as relevant only to this specific case and circumstances. Consequently, this approach will still allow for an attempt at the stricter and more limited test of object restriction based primarily the assessment

112 See discussion on the complexity of the analysis for collusion and vertical restraints in David S. Evans and Richard Schmalensee,, (2013), n. 36; David S. Evans, 'Economics of Vertical Restraints for Multi-Sided Platforms' (2013). University of Chicago Institute for Law & Economics Online Research Paper No. 626 < https://ssrn.com/abstract=2195778 >.

113 Richard Wish and David Bailey (2016) *supra* (n 89) at 133.

114 See by analogy *Allianz Hungaria Biztosito Zrt and Others v Gazdasagi Versnyhivatal* [2013] ECLI:EU:C:2013:160, para 42.

115 David S. Evans and Richard Schmalensee, 'The Antitrust Analysis of Multi-Sided Platform Businesses' (2013) *supra* (n 36) at 28.

116 Examples of such studies Massimo Motta & Helder Vasconcelos, 'Exclusionary Pricing in a Two-sided Market' (2012) Centre for Econ. Pol'y Research, Discussion Paper No 9164 < https://cepr.org/active/publications/discussion_papers/dp.php?dpno=9164#>; David S. Evans, 'Economics of Vertical Restraints for Multi-Sided Platforms' (2013) *supra* (n 112).

117 Supported by the findings in Case C-67/13 P *Grupemant des Cartes Bancaires* [2014] ECLI:EU:C:2014:2204 paras. 74-75; Javier Ruiz Calzado, Andreas Scordamaglia-Tousis, 'Groupement des Cartes Bancaires v Commission: Shedding Light on What is not a 'by object' Restriction of Competition (2015) 6(7) Journal of European Competition Law & Practice 495.

of the legal and economic context of the case.[118] This approach will offer a more stringent attitude towards the finding of an object restriction than is suggested by the CJEU in *Allianz Hungraria.* However, it is still likely to blur the line between object restrictions and restriction by effect.

Finding an object restriction is cumbersome in the absence of established theories of harm and experience with practices that are known to be harmful to competition in two- or multi sided markets. Consequently, it is only when practices exhibit obvious evidence of harmful interference with competition that they should be considered to be restricting competition by object. In the absence of such evidence, there is a risk that the quick test associated with object restriction would then be stretched as seen in *Allianz Hungraria.* Such an outcome must be avoided. If finding that a practice constitutes a restriction by object is not possible without going into a quasi-effects analysis, it might be better to adopt an effects-based approach for two- or multi sided market settings such as in the case of online platforms.

This approach need not be permanent, however, it must be sufficient for studying such markets and allowing for the development of clear theories of harm. Over the course of this process, all cases concerning two- or multi sided markets can be relevant for discovering new obvious object restrictions as well as restrictions that are presumed to be object restrictions and yet fall outside of such qualification.[119] Accumulating experience in this context is necessary in order to avoid the creation of a hybrid qualification test that has not been included in the treaty.[120] Namely, an object restriction based on an effects test, which contradicts the alternative nature of the two approaches in the context of Art. 101 TFEU. At the same time, it will provide for a better understanding of two sided markets and the relevance of such theories in the investigation and assessment process, as they may not always be relevant or useful in every case.[121] In some cases, reliance on two- or multi sided market models will not affect the outcome but will only complicate the process.[122] Obtaining a better understanding of such markets and the dynamic character thereof in the case of online platforms will evidently benefit the process of application regardless of the qualification chosen.

118 Case C-67/13 P *Grupemant des Cartes Bancaires* [2014] ECLI:EU:C:2014:2204 para. 53.

119 See for example Case C- 345/14 *SIA Maxima Latvija v Konkurences padome* [2015] ECLI:EU:C:2015:784. The case concerned vertical restrictions in rental agreements for shopping mall tenants. From an economic perspective shopping malls can be considered similar to a certain extent with online platforms as both exhibit tendencies of two-sided markets.

120 On the risk of mixing the two qualifications into one see Case C-8/08 *T-Mobile Netherlands BV and Others* [2009] ECLI:EU:C:2009:110 Opinion of AG Kokott paras. 41-49.

121 For an overview of such past cases see Dirk Auer and Nicolas Petit (2015) *supra* (n 10).

122 Ibid.

Challenges concerning the establishing of a form of collusion and qualification of practices as discussed above will primarily concern the Commission and the various NCA's. The challenges with the application of Art. 101 TFEU will, however, also affect the undertakings concerned as reliance in Art. 101 (3) TFEU may prove to be a theoretical rather than a practical possibility.

2.3.3 Justification criteria

Art. 101(3) TFEU provides for important justification grounds for practices that are considered prohibited under Art. 101(1) TFEU irrespective of the qualification given.[123] In order to benefit from such a justification, practices must fulfill the four cumulative criteria of Article 101(3) TFEU.[124] The burden of proof lies initially with the undertakings concerned and is shifted once convincing evidence has been provided in support of the view that the investigated practices comply with all four criteria.[125] According to Article 101(3), in order for the justification to apply, an agreement, decision or concerted practices:

a) Must contribute to improving the production or distribution of goods or to promoting technical or economic progress;
b) consumers must receive a fair share of the resulting benefit;
c) The investigated restrictions are indispensable to the attainment of these objectives; and
d) do not afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

The fulfillment of the four criteria in the case of online platforms will likely be more cumbersome than in other instances due to their two- or multi sided market character and the highly competitive market setting in which they operate. The difficulties concern the fulfillment of the first two criteria which deal with the welfare of consumers and the fourth criterion which concerns the competitive process on the market.[126]

The challenge of fulfilling the first and second criteria result from the efficiencies that are accepted for the purpose of relying on Art. 101(3) TFEU and the manner in which these are assessed. The first criterion requires undertakings to provide proof of objective efficiencies directly resulting

123 Case T-168/01 *GlaxoSmithKline Services Unlimited* [2006] ECLI:EU:T:2006:265 para. 233.
124 Case C- 68/12 *Protimonopolný úrad Slovenskej republiky v Slovenská sporite a a.s.*, [2013] ECLI:EU:C:2013:71, para. 31.
125 Ibid, para 32; Case T-168/01 *GlaxoSmithKline Services Unlimited* [2006] ECLI:EU:T:2006:265 para. 82.
126 See Commission Guidelines on the application of Article 81(3) *supra* (n 92) para. 84. Consumers in the context of Art. 101(3) TFEU criteria include commercial parties as well and end consumers.

from the practices that were initially prohibited under Art. 101(1) TFEU.[127] The second criterion of Article 101(3) TFEU requires that consumers receive a fair share of the efficiencies that can be achieved through the potentially anti-competitive practice.[128] The meaning of 'fair share' in this context is that consumers that are affected by the restrictive practices are compensated by the efficiencies gained by the practices.[129] The application of these two criteria in cases concerning two-multi sided markets is problematic.

On this matter the Commission Guidelines on the application of Article 101(3) TFEU state that the efficiencies must be achieved in the same relevant market as where the restrictive practice takes place.[130] In the case where two markets are related, efficiencies in these separate markets could be considered only when the consumers on both markets are the same.[131] Meeting these requirements in the case of online platforms will often be difficult if not impossible because online platforms will always entail a two- or multi sided market setting.[132] Therefore, the parties on the different sides of the platforms will not be the same, as the whole idea of online platforms in general is to facilitate the interaction between two or more customer groups in an efficient manner.[133] Consequently, in some cases the implementation of restrictive measures on one side of the platform may lead to benefits on the other side of the platform.[134] Under such circumstances, a strict interpretation of the Commission guidelines would essentially indicate that relying on Article 101(3) TFEU is not possible since the two or more sides of the platform do not consist of the same group of consumers.[135] Fortunately, the recent case law of the CJEU in *Mastercard* relaxed this requirement to a certain extent but not sufficient so as to resolve the complexities resulting from this requirement in the cases of two-or multi sided markets such as online platforms.[136]

The case concerned MasterCard's four-party payment system, which includes the acquiring bank, issuing bank, merchant accepting the payment cards and the cardholder. In this case, the GC, later confirmed by the

127 Ibid, paras. 48-54.
128 Ibid, para. 83.
129 Ibid, para. 85.
130 Ibid, para. 43.
131 Ibid.
132 Commission staff working document on online platforms n. 13, at 1-9.
133 David S. Evans (2016) *supra* (n 14) at 6-15.
134 OECD Roundtable on two-sided markets (2003) *supra* (n 7) para. 52.
135 Ibid, para.54-55; Gönenç Gürkaynak, Öznur Ínanılır, Sinan Diniz, Ayşe Gizem Yaşar, 'Multisided markets and the challenge of incorporating multisided considerations into competition law analysis' (2017) 5 Journal of Antitrust Enforcement 100, 125; Alfonso Lamadrid de Pablo, 'The Double Duality of Two-Sided Markets' (2015) 64 Comp Law 5, 9-15 < https://antitrustlair.files.wordpress.com/2015/05/the-double-duality-of-two-sided-markets_clj_lamadrid.pdf>
136 Case C-382/12 P *MasterCard Inc and Others v Commission* [2014] ECLI:EU:C:2014:2201.

CJEU, held that the agreement to set intra-EEA multi-lateral interchange fees (MIF) for cross border transactions paid by the acquiring banks to the issuing banks for payment transactions was in violation of Article 101 TEFU.[137] The Commission identified three different product markets within this four-party system. The relevant market in the case was found to be the national acquiring markets, also referred to as the merchant market.[138] According to the GC, and later confirmed by the CJEU, the restrictive effects of the contested agreement were identified in this market. In the process of relying on Art. 101(3), MasterCard had evidence of the possible advantages in the acquiring market but not in the merchant market.[139] Accordingly, the evidence provided concerned a separate but connected market to the market affected by the observed restriction. In light of these circumstances, the GC found that evidence of such advantage is not sufficient to satisfy the requirements of Article 101(3) TFEU.[140] In the appeal, the CJEU provided more clarity on the matter of proving the existence of objective advantages. Accordingly, in the case of two-or multi sided markets, evidence of consumer advantages is not necessarily limited to the relevant market where the infringement took place but can be considered in combination with advantages in related markets.[141] Even when the advantages on the relevant market are not sufficient in themselves to comply with Article 101(3) TFEU, the combination of such advantages with others found in the observed related market may sway the balance towards a justified practice.[142] However, in order to do so there must be proof of efficiencies firstly on the relevant market where the infringement took place, only then can the efficiencies in the related market be considered for the purpose of Article 101(3) TFEU. Relying on efficiencies solely obtained in separate although related markets will not suffice for this purpose.[143]

The findings of the CJEU in this case relax the requirement found in the Guidelines yet these are not sufficient to resolve the issue completely. In a case concerning an online platform where multiple separate but related markets are identified, proof of efficiencies must first be provided with relation to the market where the restriction has been established. Only once such proof has been provided, can the efficiencies on other related markets be considered. Consequently, when dealing with online platforms, the choice between defining the relevant market with regard to the platform will undoubtedly have an impact on the burden of proof concerning efficiencies. If the relevant market entails all the sides of the platform, then

137 Case T-111/08 *MasterCards Inc and Other v Commission* [2012] ECLI:EU:T:2012:260.
138 Ibid, paras. 21-22.
139 Ibid, paras. 222-230.
140 Ibid.
141 Case C-382/12P *MasterCard Inc and Others v Commission* ECLI:EU:C:2014:2201 paras. 236-240.
142 Ibid, para. 241.
143 Ibid, para. 242.

any evidence of efficiency is equally useful for the purpose of an Art. 101(3) assessment. If, however, the case entails multiple interrelated relevant markets corresponding with the various sides of the platform, the burden of proof will still form a substantial obstacle in future cases.

The choice between the two market definition methods depends on the type of the platform. Transaction platforms that seek to facilitate specific mutual interaction between the various sides of the platforms, such as online marketplaces, can be defined within one relevant market. Non-transaction platforms where the interest in the interaction on the platform lies primarily with the participants on one side of the platform, such as advertisement platforms will, however, likely entail several relevant interrelated markets.[144] Accordingly, defining the relevant market for the platform as whole will not offer a solution for this issue in all cases concerning online platforms or other two-or multi sided market settings for that matter. In the case of such platforms, it will still be necessary to provide evidence of objective efficiencies firstly in the market where the restriction has been observed, otherwise reliance on Art. 101(3) TFEU is not possible according to the MasterCard case. In the absence of such evidence, undertakings would not be able to comply with the second criteria of 101(3).[145]

Resolving the difficulty created by the consumer communality requirement calls for reevaluating the evidentiary status given to network effects in relation to providing proof of efficiencies. Accordingly, the matter will depend on whether efficiencies in a related market that are transferred via network effects into the relevant market can be sufficient for complying with the first two criteria of 101(3) TFEU. This will, of course depend on the feasibility of such a relationship between the separate markets in the case and the efficiencies exchanged based on the intensity of the network effect they exhibit. A more comprehensive solution would be to simply balance off all the efficiencies and anti-competitive effects in a specific case regardless of the markets in which they occur, with an emphasis on the consumer side. Accepting such evidence as compatible for the purpose of relying on this exception would allow for a more adequate assessment of efficiencies in the case of two-or sided markets including online platforms. Such a change in approach would admittedly be inconsistent with the Commission guidelines, however, such a document would not have a binding legal status for the EU Courts and the wording of Art. 101(3) TFEU is neutral in this regard. Therefore, the change in approach, while being substantial is relatively easy to attain, as it would essentially be one of policy rather than legislation.

144 Lapo Filistrucchi, Damien Geradin, Eric van Damme, Pauline Affeldt, (2014) *supra* (n 19) at 323; Budeskartellamt, working paper (2016) *supra* (n 19) at 5-6.

145 In such cases it could not be possibility to hold that the parties that are affects by the restrictive practices are not worse off as is required to prove according to para 85 of the Commission Guidelines on the application of Article 81(3) n. 92.

Similar to the first two criteria of Art. 101(3) TFEU, the fourth criterion requires taking into consideration some aspects of analysis that are relevant specifically to online platforms. The fourth condition of Article 101(3) TFEU is aimed at protecting the competitive process on the market. According to this condition, the restrictive practice should not provide the undertakings concerned with the possibility to eliminate competition in a substantial part of the market of the products concerned.[146] The rationale is that the protection of the competitive process is more important than the efficiencies that can be obtained by any kind of practice. The Art. 101(3) Guidelines do not provide for a threshold for quantifying the restriction of competition that is not acceptable for complying with the fourth criteria. The findings in this regard depend on the specific circumstances of the market in each separate case.[147] In the case of online platform assessing the elimination of competition as such is a rather complex concept. On one hand, online platforms concern two- or multi sided market settings meaning that the network effects associated with this type of business models could eventually tip the market and create a monopoly.[148] This outlook would require an assessment of whether the market where the analyzed restriction of competition occurs is prone to tipping. Predicting the likelihood of tipping in the case of online platforms requires assessing the intensity of network effects, scale economies, congestion limits, differentiation and multi-homing possibilities.[149] The result of such assessment will provide essential insight into the risks involving the restriction of competition in each case with regard to long-term consequences.

On the other hand, the market dynamics of online platforms are characterized by intense competition that will make the elimination of competition and establishment of monopolies very difficult.[150] Proponents of this view rely the developments of the past years in the online markets to dismiss as concerns with regard to elimination of competition and monopolization.[151] Alternatively, both approaches can be combined and viewed as a process, namely that market dynamics in the case of online platforms in combination with network effects can lead to a type of rotation system where one 'giant'

146 Commission Guidelines on the application of Article 81(3) *supra* (n 92) para. 105.
147 Ibid, paras. 107-114.
148 Michael Katz and Carl Shapiro 'Systems Competition and Network Effects' (1994) 8(2) Journal of Economic Perspectives 93; David S. Evans and Richard Schmalensee, 'The Industrial Organization of Markets Based on Two-Sided Platforms' (2007) 3(1) Competition Policy International 151, 164-165.
149 Special Report by the Monopolies Commission (2015) *supra* (n 42) at 21-23; David S. Evans and Richard Schmalensee, (2007) *supra* (n 148), at 164-165.
150 Ibid.
151 Daniel O'Connor (2016) *supra* (n 43).

is replaced by another.[152] The question in future cases concerning online platform will then be to determine how the relationship between tipping tendencies resulting from the two- or multi sided nature of online platforms and the market dynamics thereof is expected to materialize on the market. Accordingly, it remains to be seen whether, in light of these characteristics, potential restrictions of competition should be met with more austerity or lenience depending on the characteristic that is granted primacy.

In view of the above, it can be seen that the application of Art. 101 TFEU to online platforms will involve various challenges. Resolving the challenges throughout the all three application stages of Art. 101 TFEU will require primarily changes in the application practice. It appears that only in the case of establishing a form of collusion in order to bring certain practices under the scope of Art. 101 TFEU is the introduction of a new legal basis necessary. In the absence hereof, the increasing use of monitoring and pricing software will reduce the intensity of price competition in a manner comparable to collusion based on unilateral decisions falling outside the scope of Art. 101 TFEU.

The need for similar adaptations to the two- or multisided market character of online platforms and the dynamics of online markets will also play in the context of Article 102 TFEU. Such adaption will be crucial to the correct finding of dominance, abuses thereof and under exceptional circumstances reliance on the possible justification grounds.

2.4 Article 102 TEFU – Abuse of dominance

Article 102 TFEU deals with the restrictions of competition resulting from unilateral behavior of undertakings having a dominant position. The objectives of Art. 102 TFEU are in principle similar to those of 101 TFEU, however, it seems that its primary aim is the protection of competition on the market. Consumer welfare is then considered to be attained as a result of achieving this primary aim.[153] The prohibition found in Article 102 TFEU applies only to undertakings that have a dominant position. Accordingly, the finding of dominance entails the jurisdictional threshold for the purpose of applicability. The qualification of prohibited practices under Article 102 TFEU is that of abuse, which is divided into exclusionary and exploitative

152 Ibid; Leslie Daigle, 'On the nature of internet', (2015) Global Commission on internet Governance, Paper series no.7, 8-9 < https://www.cigionline.org/sites/default/files/gcig_paper_no7.pdf> ; *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014 paras. 118,125 and 132.

153 J. Faull and A. Nikpay (2014) *supra* (n 98) at 332-335.

abuses of dominance, however combinations of the two are also possible.[154] In practice, priority is given to cases concerning exclusionary abuses as these are considered more damaging.[155] Although Article 102 TFEU does not have a specific justification provision as in the case of Art. 101(3) TFEU, the possibility of specific behavior that may restrict competition exists nonetheless.[156] Accordingly, in the context of Art. 102 TFEU concerned undertakings can provide evidence of the objective justification and efficiencies arguments .[157] Similar to the case of Art. 101 TFEU, the application of Art. 102 TFEU to online platforms will require overcoming multiple challenges throughout these three stages of application.

2.4.1 Establishing dominance

The finding of dominance is the determinant threshold for applying Article 102 TFEU to a certain practice of behavior, in the absence of which Article 102 TFEU would simply not be relevant. The finding of dominance entails a two-stage process, starting with the definition of the relevant market followed by an assessment of the market power the concerned undertaking has within the relevant market. Implementing this two stage process in the case of online platforms requires taking into account, among others: the two- or multi sided character of online platforms, the dynamics of the market and the interchangeability between online platforms and the offline world. These aspects and others will not only complicate the process of uncovering dominance but will also require a reevaluation of the concept of dominance as such. Failing to acknowledge the existence of such aspects will likely lead to multiple assessment errors with regard to both the finding of a dominant position as well as abuses thereof.[158]

A. Defining the relevant market

Defining the relevant market in the case of online platforms will entail complications that have not been clarified or dealt with by current practice. The fact the online platforms are two- or multi sided markets has a bearing on the way the market is defined in each case. Accordingly, the first question

154 For example a vertically integrated undertaking can charge excessive prices on downstream competitors which eventually will lead to a margin squeeze and impede such parties to offer competitive price to consumers which on a long term basis will force downstream competitors out the market.

155 Commission Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009) OJ C 45/2, paras. 6-7.

156 J. Faull and A. Nikpay (2014) *supra* (n 98) at 333.

157 Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155), paras. 28-31.

158 Julian Wright,' One-Sided Logic in Two-Sided Markets' (2003) AEI-Brookings Joint Center Working Paper No. 03-10 < https://ssrn.com/abstract=459362>.

that must be addressed is whether the relevant market should include all the sides of the platform as a whole, or whether a market should be defined for each of its separate sides.[159] The current literature on this issue indicates that that the choice between a single and multiple relevant markets depends on whether the case concerns a transaction or non-transaction platform.[160] Accordingly, when the case concerns a transaction platform, the relevant market should include the entire platform.[161] An alternative for the transaction criteria is the specific matching function platform as provided by the Bundeskartellamt,[162] which provides that the customers of the platform participate on the platform with the purpose of mutual discoverability. While both approaches will likely overlap to a large extent in practice, the second approach leaves more room to deal with the ever-changing business models of online platforms.[163] In cases where no transaction or a specific matching function is facilitated, it is required that multiple relevant markets are defined.[164] It is important to note, however, that these approaches seem to divide online platforms into two types based on a core functionality. However, this division does not seem to fit with practice. Online platforms will often bring together multiple users and facilitate interaction on all of its sides. The relationship between those sides can be one of transaction or matching but also one of non- transaction. It is thus unclear whether these approaches should be executed based on a general classification of the platform or, rather, on the relationship between the sides and the perspective chosen for the purpose of the assessment. In the case of YouTube, for example, one may say that it is a transaction platform between consumers and content uploaders and a non-transaction platform between consumers and advertisers. This matter requires clarification in order to avoid erroneous findings with regard to the existence of dominance.

When assessing the scope of the relevant market, the traditional concepts of the market definition process – namely the demand and supply-side substitution – remain relevant. Generally, substitutability in the context of online platforms will focus on the functionality of the platform.[165] Accordingly, if

159 Lapo Filistrucchi, Damien Geradin, Eric van Damme, Pauline Affeldt (2014) *supra* (n 19).

160 Although most literature is focused on two sided markets in general the insights are equally relevant to online platforms.

161 Supra note 159.

162 Bundeskartellamt, working paper (2016) *supra* (n 19) at 5-6;

163 TripAdvisor for example would be difficult to cover with the concept of a transaction platform since consumers do no always go on TripAdvisor to make a booking however they will always go on it in order to receive information with regard to future bookings from other consumers or operators. The criteria of matching platform is thus in this case and similar one better suited.

164 Supra note (n 159) and (n 162).

165 See analysis of closeness of competition in *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014 and *Microsoft / LinkedIn* (Case COMP/M.8124) Commission decision of 6 December 2016.

a single relevant market is defined for the platform as a whole, the relevant product market should include the alternatives, which offer the same functionality with regard to all the sides of the platform that are considered for the purpose of the competition law assessment.[166] In a case where multiple relevant markets are being defined, the same exercise will be conducted for each of the sides, separately.

Despite the conceptual relevance of demand and supply side substitutability that remains unchanged, establishing which options can truly be a substitute for the platform or for one of its sides requires a change of approach. A rather unaddressed challenge in the process of establishing interchangeability is the competitive relation between online platforms and the offline brick and mortar alternatives. This matter is relevant to both transaction and non-transaction platforms. There is currently limited practice examples on how the assessment of such a competitive relationship will be exercised.[167] Evidently, however, the existence or absence of such a relationship will have a great impact on the eventual market power of an online platform. Furthermore, in the case of non-transaction or specific interaction platforms, difficulties with interchangeability can also concern the competitive relationship amongst online platforms. This is expected in the case of advertisement online platforms.[168] On the advertisement placing side, such platforms compete on the search or non- search based advertisement market.[169] Interchangeability for the advertisement side can then be assessed in terms of advertisement functionality. Interchangeability on the consumer or user side is, however, more challenging in the case of such platforms. Yet a consumer or user perspective platforms will often not be considered interchangeable as they offer very different services.[170] A functionality-based assessment of interchangeability on the consumer side risks the finding of a very narrow product market due to the high degree of differentiation in the online platform market.[171] In such cases, one side of the platform may exhibit characteristics of a wide and competitive market while other side, in most cases unpaid, entails a narrow and highly concentrated market. This is a characteristic of two- or multi sided markets where one side is often open for multi-homing while the other side of the market is prone to single homing due to differentiation. However, it is currently

166 Bundeskartellamt, working paper (2016) *supra* (n 19) at 5-6.

167 The most relevant example in the case of online platforms can be seen in *Google / DoubleClick* (Case COMP/M.4731) Commission decision of 8 Mar. 2008, section 6.

168 David S. Evans (2016) *supra* (n 14).

169 Florence Thépot, 'Market Power in Online Search and Social Networking: A Matter of Two-Sided Markets' (2013) 36(2) World Competition 195.

170 This is true when platforms are asymmetric for example see David S. Evans and Richard Schmalensee (2013) *supra* (n 36) at 16-17.

171 Inge Graef (2015) *supra* (n 87) at 5-6.

unclear what role such findings will have in the finding of dominance in the future and what solutions can be offered.[172]

Beyond the substantive and conceptual challenges of the market definition process, the tools used to confirm such choices require a change in application. The widely used SSNIP test will require some tweaks in light of the price structure and two-sided market character of online platforms.[173] Applying the SSNIP test to a two- or multi sided platform will require that the theoretic rise in price be applied to all sides while taking into consideration the impact network effects. Although there is agreement about this general modification in the application of the SSNIP test, discussions remain on how the test and its application should be changed in practice.[174] The debate primarily concerns the use of this tool in zero-priced markets, the application of the test to the entire price structure of the platform or per side and whether the test should take into account the possibility of price structure modifications.[175] Although the difficulties concerning the SSNIPP test are less critical than in the case of substantive aspects of the market definition process as mentioned above, this matter too must be clarified in order to ensure a sound application of the SSNIP test and avoid false conclusions.

Finally, in the context of defining the relevant market it must also be considered what role data plays in an Art. 102 TFEU assessment of an online platform. Most online platforms do not sell the data gathered from their users, normally consumers, but rather use it to improve and expand the range of services they provide and ideally gain a competitive edge on the market.[176] However, to the extent that the concepts of data and privacy are not considered synonyms, it has been argued that there are good reasons to consider whether a relevant market should also be defined for data despite the absence of direct trade therein.[177] In practice, it appears that defining a separate market for data is considered mainly in cases concerning mergers.[178]

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172 An option would be to consider all consumer sides as interchangeable with regard to consumers as these are all free and focus particularly at getting user to make use of the platform. See David S. Evans, 'Multisided Platforms, Dynamic Competition, and the Assessment of Market Power for Internet-Based Firms' (2016) at 20-22.

173 Sebastian Wismer, Christian Bongard, Arno Rasek, ' Multi-Sided Market Economics in Competition Law Enforcement', (2017) 8(4) Journal of European Competition Law & Practice 262, 263-270.

174 David S. Evans and Richard Schmalensee (2013) *supra* (n 36) at 21-23.

175 Ibid; Lapo Filistrucchi, Damien Geradin, Eric van Damme, Pauline Affeldt (2014) *supra* (n 19) at 329-339.

176 Joint report of the Bundellekartelamt and Autorite de la concurrence, Çompetition law and data (10th of May 2016), 11-25 < http://www.autoritedelaconcurrence.fr/doc/reportcompetitionlawanddatafinal.pdf>.

177 Inge Graef (2015) n. 28.

178 *Google/DoubleClick* (Case COMP/M.4731) Commission decision of 8 Mar. 2008; *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014; *Microsoft/LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016.

In the context of an Art. 102 TFEU case, it would seem more suitable to assess data in the process of market power assessment as will be discussed in the following section.[179]

B. Assessing Market power

The core assessment criteria of market power in the case of online platforms remain unchanged in principal. Accordingly, the assessment will still include the elements of actual competition, future competition and countervailing buying power in accordance with the Commission's guidance on the enforcement priorities in applying Art. 102 TFEU. The substance and relevance of these three pillars of assessment may, however, require certain adaptations.

Market shares are traditionally used to provide a first indication of the actual market structure and competitive relations on the market.[180] The existence of high market shares is not sufficient to establish dominance,[181] however, under certain circumstances it may be sufficient in order to serve as a presumption or otherwise an indication of dominance.[182] The relevance of market shares in the case of online platforms is likely to diminish due to the difficulty of calculating such market shares and the dynamic character on online markets.[183] Additionally, online platforms will often be active on more than one market where the market shares may differ, which complicates the comparison with competitors both individually and cumulatively.[184] Further, it is important to consider how asymmetric competition will affect the outcome of such assessment, as online platforms may also have different positions in overlapping as well as distinct related markets.[185] Moreover, the relevance of market shares will be limited even when calculated correctly, as the dynamics of the online and technology markets have shown drastic changes of market shares in short periods of time. An approach to obtaining an overview of the actual competition on the market would be to measure the number of unique users that online

179 Bundeskartellamt, working paper (2016) *supra* (n 19) at 16-17; However it was also recognized as a potential factor that can materialize in an abuse of a dominant position see Joint report of the Bundellekartelamt and Autorite de la concurrence, *supra* (n 176).

180 Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155), para. 13.

181 Richard Wish and David Bailey (2016) *supra* (n 89) at 192.

182 Case C- 62/86 *AKZO v. Commission* [1991] ECLI:EU:C:1991:286, para. 60; Case T-340/03 *France Télécom v Commission* [2007] ECLI:EU:T:2007:22, paras. 100-111; J. Faull and A. Nikpay (2014) *supra* (n 98) at 365.

183 Special Report by the Monopolies Commission (2015) *supra* (n 42) at 24.

184 David S. Evans and Richard Schmalensee,(2013) *supra* (n 36) at 20-21; J. Faull and A. Nikpay (2014) *supra* (n 98) at 367-368 .

185 David S. Evans and Richard Schmalensee (2013) *supra* (n 36) at 16-17.

platforms considered to be competitors receive.[186] The statements made by online platforms in their corporate annual reports as well as in their tax report may at times provide a better understanding on the actual competition on the market.[187] Furthermore, acquisition patterns may also provide further insight into the present and future competition on the market. Unfortunately, there has been little discussion of the aspects that are crucial for determining actual competition in the case of online platforms. Rather, it would appear that the high pace of development on the online platform market has directed the focus of the assessment towards the barriers of entry of potential competition.[188] It is important, however, that such a shift is not so extensive so as to make the finding of dominance primarily dependent on discovering future competitive constraints. A clear indication of substantial market power in the present must first be found. Whether such indication in the case of online platforms entails findings different from those accepted by common practice remains to be considered.

Assessing potential competition and the extent of constraints experienced by the concerned undertaking as a result thereof requires looking primarily into the barriers for entry to the market.[189] The common categories of barriers to entry established by practice and academic work remain largely relevant in the case of online platforms.[190] The importance of these will of course vary depending on the type of online platform being assessed.[191] According to the Bundeskartellamt, the entry barriers that would be important to consider in the case of online platforms are: direct and indirect network effects, economies of scale, multi-homing and differentiation, access to data and the innovation potential of digital markets.[192] The criteria overlap extensively with those defined by economic literature as indicators of markets with tipping potential as well as ones used in EU practice.[193] From the five criteria put forward, the latter two are new to

186 Bundeskartellamt, working paper (2016) *supra* (n 19) at 9-10

187 See for example the information with regard to competition in Amazon's 10-K form. Available online at: < https://www.sec.gov/Archives/edgar/data/1018724/000101872416000172/amzn-20151231x10k.htm> .

188 Bundeskartellamt, working paper (2016) *supra* (n 19) at 10; See Inge Graef, 'Stretching EU competition law tools for search engines and social networks'(2015) *supra* (n 87) at 7.

189 OECD Round Table on Barriers to Entry DAF/COMP(2005)42, at 9-11 < https://www.oecd.org/competition/abuse/36344429.pdf>; A market exhibiting low entry barriers will limit the possibility of finding one online platforms as having a dominant position even when actual competition is still limited. At the same time the presence of such barriers will simplify the finding of dominance even in the absence of a market share based analysis.

190 Ibid; J. Faull and A. Nikpay (2014) *supra* (n 98) at 368-276.

191 Platforms that facilitate monetary transaction will be far more concerned with reputational aspects of their business than compared to platforms that do not facilitate such transactions.

192 Bundeskartellamt, working paper (2016) *supra* (n 19) at 9-17.

193 Ibid; *supra* (n 190).

the list of known barriers and will likely be disputed in practice. Despite being indisputably important, it is unclear how the innovation potential can be measured in an industry that is prone to disruptive developments, which are by their very nature hard to predict. Furthermore, the value of big data and the access to it for the purposes of competition is still intensely debated.[194] Although access to large amounts of data can contribute greatly to the success of an online platform, its value diminishes significantly in the absence of other essential input including monetization strategies and effective processing algorithms.[195] Further, there seems a reluctance to accept that specific undertakings can have a dominant position with regard to access to data.[196] The former list of criteria is not exhaustive nor intended to replace existing practice, but rather to complement it.[197] Additional potential barriers to entry will likely be discovered once a more thorough study of the online platform markets has been concluded. Together with the definition of new barriers to entry for online platforms, there is also a need for clarity regarding the concrete measurement and assessment of such criteria. Accordingly, while the aforementioned criteria can be justified from a theoretic point of view, it is unclear how the practical assessment thereof will be carried out.

The final section of the market power assessment concerning the countervailing buying power has not yet been discussed in the context of online platforms. However, at first glance it can be assumed that buying power will likely have limited relevance in the case of online platforms due to their interaction facilitating character. In order for concrete countervailing power to exist there must be proof of a powerful buyer that can constrain price increases by the concerned undertaking for the entire market.[198] This would require a credible alternative to the concerned undertaking to which an important buyer could switch, or otherwise a new entrant that would be sponsored by such a buyer. In the case of online platforms, this is a difficult picture to paint, as the inherent purpose of online platforms is to facilitate interactions between two or more parties in a better manner than they would be able to do themselves.[199] Consequently, in many cases, particularly e-commerce, online platforms will facilitate interactions between consumers and multiple smaller rather than bigger players. A more

194 Andres V. Lerner (2014) *supra* (n 11); Inge Graef (2015) *supra* (n 28).

195 Ibid; Justus Haucap and Ulrich Heimeshoff, 'Google, Facebook, Amazon, eBay: Is the Internet driving competition or market monopolization?' (2014) 11 Int Econ Econ Policy 49.

196 *Facebook/WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2014 para. 187-189; *Microsoft/ LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016, para. 180.

197 Supra (n 192) at 10.

198 Commission Guidance on the Commission's enforcement priorities in applying Article 82, n. 155, para. 18.

199 Bertin Martens (2016) *supra* (n 16) at 20-25.

conceivable scenario might take place in the context of online advertisement online platforms if the advertisements are bought in a concentrated manner by larger advertisement agencies. Beyond this initial impression there is a need for further study of buyer power in the context of online platforms.

The challenges concerning the finding of dominance paint a complex picture. On one hand, it appears that the legal test for this jurisdictional threshold of Article 102 TFEU generally consists of the common concepts and definitions. Consequently, the required adaptations concern primarily the application of such concepts and definitions. On the other hand, the combination of the seeming application hardships regarding establishing dominance, result in a fundamental question that has yet to be answered, namely: what is dominance in the case of online platforms?

In cases concerning transaction or matching platforms where the platform is part of a single relevant market, the analysis might resemble common practice to a great extent. The difficulty in such cases lies primarily in establishing the competitive relation with asymmetric platforms and the offline world needs to be clarified. However, in cases concerning multiple relevant markets the situation is far less clear. In such cases, the relation between the degree of market power, the number of defined relevant markets in each case and the threshold of dominance remains to be clarified. The difficulty of finding the threshold for dominance in each case will increase, in addition to the discrepancy in market power between such relevant markets.[200] Such reality makes the transition from market power that is a matter of degree to the finding of dominance, which is a binary conclusion even more problematic than in traditional cases. Currently, it is not clear how such diversity in market power across multiple interrelated markets should be addressed. Clarification is required not only for the purposes of establishing dominance but also for legitimizing possible remedies. If dominance is established based on an average of market power in a collection of relevant markets, the finding of dominance might not be consistent with the specific situation in each of those markets. Consequently, remedies concerning the markets or platform sides with lower market power may mean that an online platform might be subject to Art. 102 TFEU scrutiny earlier than a single sided business on such markets. Alternatively, requiring dominance by the online platform on all the sides for which a relevant market was defined will increase the difficulty of establishing dominance for the purposes of applying Art. 102 TFEU. However, once such absolute dominance has been established, intervention gains legitimacy which is critical in the case of online platforms considering that remedies are highly likely to have an extraterritorial effect. These uncertainties show that it is not only the manner that dominance should be established that requires adapta-

200 In practice this will occur where one side of the online platform is characterized by single homing while the other sides exhibit strong indications of multi-homing patterns.

tion, but also the concept of dominance as such in the context of online platforms. In the process of adaption, it may be useful to consider whether adopting the common practice is workable or whether an alternative, less conventional approach might be more suitable.

The difficulty encountered in adapting current practice and concepts to online platforms is also applicable to the qualification of certain practices as abuses of dominance. Although the rationale behind the general concept of abuse and in the case of specific types of abuses remains unchallenged, an adequate application thereof may require significant alterations. Furthermore, the skewed pricing structure combined with the common requirement that users provide their personal data to the platform could justify devoting more attention to exploitative abuses.

2.4.2 Abuse of dominance or legitimate practice

Once the threshold of dominance has been met it then remains to be assessed whether the practice of the concerned undertaking constitutes an abuse. The distinction between legitimate practices and abuses of dominance is a difficult one to make according to current practice[201], and will not be easier in the case of online platforms. The concept of abuse in Art. 102 TFEU does not have a clear definition but is a rather general term encompassing an unexhausted range of practices that can be divided into exclusionary and exploitative abuses.[202]

The jurisprudence on Art. 102 TFEU provided several general indications as to what would constitute an abusive behavior on the part on the concerned undertaking. In *Michelin I* the CJEU spoke of a special responsibility that dominant undertakings not to allow their conduct to impair genuine undistorted competition.[203] Later, in *Hoffman- La Roche* the CJEU of Justice defined abuse as: conduct that hinders competition through recourse to methods different than those of competition on the merits.[204] This was later sharpened in *Post Denmark* by the CJEU adding that Art. 102 TFEU applies *in particular* to the conduct of a dominant undertaking that hinders competition *to the detriment of consumers*.[205] Despite these various contributions, the process of finding an abuse of dominance still leaves room for

201 Robert O'Donghue and Jorge Padilla, 'The law and Economics of Article 102 TFEU' (2nd edn, Hart, 2013), 217.

202 J. Faull and A. Nikpay (2014) *supra* (n 98) at 387.

203 Case 322/81 *NV Nederlandsche Banden Industrie Michelin v Commission* [1983] ECLI:EU:C:1983:313, para. 57.

204 In this case the CJEU referred to the normal conditions of competition- see Case 85/76 *Hoffmann-La Roche & Co. AG v* Commission [1979] ECLI:EU:C:1979:36 para. 91. See also reference to competition on merits in Case C-280/08 P *Deutsche Telekom v Commission* [2010] ECLI:EU:C:2010:603 para.177.

205 C-209/10 *Post Danmark v Konkurrencerådet* [2012] ECLI:EU:C:2012:172, para. 24.

improvement regarding legal certainty.[206] The general definitions serve as a guideline when it comes to the focus of enforcement, namely exclusionary abuses, rather than a genuine definition of a single concept of abuse in Art. 102 TFEU.[207] In practice, the finding of an abuse entails an analysis within the framework of multiple tests that have been developed over time in order to understand the strategic choices of undertakings. These include: the profit sacrifice test, no economic sense test, equally efficient competitor test and consumer welfare test, each with its strengths and weakness.[208] The extent to which such tests remain relevant for cases concerning online platforms depends on their compatibility with multisided markets, which has yet to fully explored. Nonetheless, the concept of abuse as such remains unchanged and unchallenged in the case of online platforms, yet finding abuses requires a correct understanding of exclusionary and exploitative behavior in a new legal and economic context. Failing to consider the reality of the online platform business and the economics behind their organizational form when investigating suspicious practices will very likely lead to false conclusions.[209]

Generally, the success of online platforms will depend on their ability to achieve and maintain critical mass. It is within this general framework that the search for possible exclusionary abuses should take place. Consequently, in the context of online platforms this should translate to observing whether dominant platforms prevent competitors from achieving critical mass.[210] Similarly, where exclusion from the platform occurs it should be considered whether this is an anti-competitive practice or a form of exclusion that is inherent in the business model of the online platform, thus crucial for the maintenance of critical mass. Similar parallels can be drawn to practices that could be otherwise considered to be exploitative. Beyond this initial change of perspective with regard to the concept of abuse, the following overview of specific abuses provides an introductory illustration to the range of difficulties that have yet to be fully explored in the case of online platforms.

A. Tying and Bundling

The concepts of tying and bundling are formally located in Article 102 (d) TFEU. The legal test for finding such an abuse is found in the Commission's guidance on the enforcement priorities in applying Art. 102 TFEU and was later clarified by the GC in *Microsoft*.[211] The test criteria for tying are: (i) the concerned undertaking must have a dominant position in the tying market,

206 Robert O'Donghue and Jorge Padilla (2013) *supra* (n 201) at 219.
207 Ibid, at 217.
208 Ibid, at 227-231.
209 Julian Wright (2003) *supra* (n 158).
210 David S. Evans and Richard Schmalensee (2013) *supra* (n 36) at 29-30.
211 Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289.

(ii) the undertaking must be tying two distinct products, (iii) the consumer is coerced into purchasing both the tying and tied products, (iv) the tie has an anti-competitive effect and (v) there is not objective justification. In the case of bundling the same criteria apply in principle with the exception of consumer coercion.[212] The test is apprehensible but when applied to online platforms that provide user the access to an eco-system or a complex interface for free, it could be difficult to follow. In this context, Google services can provide a good example.

The Commission considers two products to be distinct in three particular cases. Firstly, the tied products will be considered distinct if there is proof that in the absence of the tie, consumers would buy the tying product without the tied product from the same supplier.[213] In the case of Google services, if one wants to use Gmail or GoogleDrive, he or she must create a Google account. The account grants the user automatic access to all of Google's separate services. Thus, by subscribing to one service the user get access to multiple services in which he was not necessarily interested.[214] These can be considered different products as there is no necessity for all these services to be offered together by nature or based on commercial usage.[215] In fact, on handheld devices all of these features can be used only when all the separate apps are downloaded and installed.[216] Thus, there is evidence from Google itself to support the finding that the services are distinct. At the same time, all Google services are subject to a single user policy contract linked to the Google account, which makes the separation less genuine.[217] Beyond evidence from Google's practices there is evidence of many competitors that offer such services on an individual basis, which is the second kind of evidence relevant in tying cases according to the Commission.[218] Consequently, one may assume that the two-product test can be met. Alternatively, it has been accepted that multiple products can in the course of time, become part of a single offer.[219] Evidence of such

212 Supra (n 201) at 616.

213 Commission Guidance on the Commission's enforcement priorities in applying Article 82, n. 155, para. 51.

214 When logging into the Google account users that are on the search page off Google get automatic access to all the services that Google offer via scroll down menu on the top right corner.

215 Consider the link made by the account between Google Docs, YouTube, and Google Calendar.

216 However as it has be claimed by the Commission in its investigation into Google's practices in the context of Android OS, these separate applications are often pre-installed by the OEMs. Similar however more complex constructions can be seen at LinkedIn and Facebook where desktop functionalities are separated for handheld devices.

217 See Google service policy page. Available online at: < https://www.google.com/policies/privacy/>.

218 Supra (n 212); OpenOffice, Dropbox, Vimeo and GMX all provide some of the individual services offered by Google.

219 Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289, para. 913.

developments can be seen in the case of Microsoft which offers a comparable package to that of Google for both computer and handhelds. They are however the only two undertakings that offer such extensive packages and evidently both undertakings have substantial market power thus evidentiary value of these practices might be limited.[220]

The difficulty in the case of the packages offered by Google and Microsoft is, however, far more complex than conflicting evidence. In such cases one may also have to question the identities of the tied and the tying products as all products are linked through a user account but the account itself is not a product as such. Does this mean that the tying product can be any of the services that users choose to use first, and as such, is it potentially different in the case of different users? The answers impact the finding of dominance and as such determine the possible finding of tying practices under Art. 102 TFEU. It is important to note that in the services offered by Google for personal computer or desktops, the only one where Google was found to have a dominant position is that of the search engine which does not require the user to have a Google account. Nonetheless, the Google search page always includes the digital tray for the rest of the Google services, which cannot be removed. Additionally, Android smartphone users have little choice but to create a Google account in order to make full use of their smartphones. Thus, in practice, in the smartphone market where Android has a dominant position, all users will have a Google account and thus automatically receive access to all Google services even when logging in from a personal computer. It remains to be considered how this relation might affect the finding of dominance with regards to any of the services linked to the Google account.

The matter of consumer coercion may also be difficult to conclude in a market where downloading is perhaps the most common form of distribution and consumer access to online services is predominantly without cost. When considering the above-mentioned example of Google, both the tying and the tied products, no matter the combination, are provided for free as is also found in most competitor alternatives. It is unclear whether this affects the relevance of the GC's findings in Microsoft involving free tied products, as the circumstances are different and consumer behavior may have also changed. Nonetheless, the core concept of coercion, namely that users cannot have an account to access one service without having automatic access to the other services which includes the creation of a profile for each of the services, will likely hold. Alternatively, one may consider such practices to be a form of pure bundling whereby the Google services are offered together on personal computers and to some extent separately in case of handheld devices. This would allow to avoid the difficulty of

220 Supra (n 212).

deciding which of the services is the tying or tied one but rather evaluate them as an entire bundle. Consequently, dominance for the purpose of bundling can be established with regard to any of the services rather than a specific combination as in the case of tying.

Regardless of the qualification chosen, it remains to be seen how these practices influence the incentives of consumers to use competing services while having a Google account. Indication with regard to the existence or absence of such incentives will determine the extent of the foreclosure effect of such practices, which will determine whether such practices are prohibited under Art. 102 TFEU.[221] Although there are indications that the Commission may assume the existence of the foreclosure effect in some cases of tying, the decision in the case of Microsoft clearly indicates that such effect must be proven, particularly when it concerns online platforms.[222] The circumstances based on which the Commission was inclined to undertake an effects assessment rather than assume the anti-competitive foreclosure effect will predominately be present in cases concerning online platforms .[223] Namely, new unexplored markets exhibiting network effects and positive feedback loops.[224] It can therefore be argued that in the case of tying, previous practice may not offer an adequate framework to deal with such practices in the case of online platforms and thus requires multiple adaptations in its application. Bundling may in some cases serve as an alternative safety-net however the scope of this concept require further study as online platforms will often offer a variety of functionalities in a single package.

B. Predatory pricing

Investigating predatory pricing in the case of online platforms will require adapting the application of the legal test for this abuse. The legal test for establishing the existence of predatory pricing in the EU was established in *AKZO v. Commission*.[225] In this case the CJEU established two standards for determining whether pricing methods should be considered predatory. Accordingly, when a dominant undertaking is charging under AVC it is presumed to be acting in violation of Article 102 TFEU. When a dominant undertaking is pricing its products or services above AVC but under ATC it could be considered to be violating Art. 102 TFEU if there is proof of intent to eliminate competition.[226] When applying these criteria to online platforms, it is critical that the entire pricing structure of the platform is taken into account and not only the side that exhibits the suspicious pricing

221 Robert O'Donghue and Jorge Padilla (2013) *supra* (n 201) at 623-624.
222 Ibid.
223 *Microsoft* (Case COMP/C-3/37.792) Commission decision of 24 Mar. 2004, para. 841.
224 Ibid.
225 Case C- 62/86 *AKZO v. Commission* [1991] ECLI:EU:C:1991:286.
226 Ibid, paras. 70-72.

scheme. In the case of online platforms, skewed pricing structures are commonly used for optimizing the balance between the demand on the various sides in a manner that maximizes profit. In the online world, it is regular practice that access for the consumers to the platform is free of charge.[227] The costs needed of this offer to potential consumers are retrieved from the users on the other sides of the platform.[228] Applying the Akzo test solely to the consumer side of an online platform would automatically bring it within the scope of the presumption of unlawfulness since zero priced access to the platform will always be under AVC.[229] Such an application is flawed since providing the consumer side with free access to the platform does not mean that the platform is providing its services at a loss. Instead, the Akzo test should only be attempted if applied to the entire pricing level of the online platform. Accordingly, one can speak of below AVC predatory pricing if the sum of the compensation coming in from all the sides is not sufficient to cover the costs incurred by the online platform.[230] All sides of the platform should similarly be taken into account when observing that prices are above AVC but below ATC. In such cases, if clear intent of exclusionary behavior is found, the analysis remains as is accepted by previous practice, however, in the absence of such evidence the analysis may require additional caution.

According to the CJEU in *Post Danmark*, in such situations intent can be inferred if the pricing scheme is likely to exclude an equally efficient competitor.[231] It remains to be seen how the Post Danmark test will be applied to online platforms in light of various possible price structures that can be chosen by such undertakings. Accordingly, it must be decided whether the equally efficient competitor test should be applied to the pricing on each side of the platform or to the total pricing on the platform with a possibility to adapt the price structure. The Commission approaches the matter of predatory pricing based on an assessment of deliberate incurrence of short-term losses as a strategy to obtain or maintain dominance on the market and to foreclose it in the long term.[232] While the logic is similar to that found in the Akzo test, the calculation is different and it remains to be seen which of the two approaches is better suited for the case of online platforms.[233] The mentioned adjustments and considerations are relevant to all two-multi sided markets. In the case of online platforms however, the

227 See Commission staff working document on online platforms, *supra* (n 42) at 5.
228 Ibid, pp. 4-5.
229 Julian Wright (2003) *supra* (n 158); David S. Evans and Richard Schmalensee (2013) *supra* (n 36) at 33-35; Amelia Fletcher,' Predatory pricing in two-sided markets: a brief comment' (2007) 3(1) Competition Policy International, 1.
230 Ibid.
231 Case C-23/14 *Post Danmark* [2015] ECLI:EU:C:2015:651 para. 66.
232 Commission Guidance on the Commission's enforcement priorities in applying Article 82, n. 155, para 63.
233 Ibid, paras. 59-69.

complexity will increase substantially due to dynamic and discriminatory pricing possibilities that online platform have. The possibility to adapt price offers to different costumers at every given moment means that in theory prices with regard to some costumers may be predatory and while other costumers will receive non-predatory price offers. Discovering and proving the existence of such abusive practices will require highly intrusive and complex monitoring by the Commission or NCAs as the predation character thereof is all but evident.

In addition to predatory price levels, there might be a possibility for online platforms to predate via their price structure.[234] Accordingly, once online platforms have successfully launched and obtained critical mass can they change their pricing structure in a manner that eliminates competitors or deters new entrants to the market. In this sense, the switch from a user paid model to a zero-priced model can constitute such a strategy.[235] Comparable predatory price structures could take many forms and will be difficult to discover when the price level of the platform will be above ATC, thus presumed to be lawful. In such instances, finding an infringement would require showing that the adopted structure is predatory rather than the optimal pricing structure to correspond with circumstances of the case. This will be however very difficult to prove with regard to pricing structures in case of asymmetric competition where competition platforms do not have the same number of sides or do not compete on all sides.

C. Data related abuses: refusal to supply and excessive pricing

Data-related abuses within the scope of Art. 102 TFEU are perhaps the most difficult types of infringements that the application of this article will bring about. Such infringements require not only a different form of application but also a conceptual change of approach with regard to the role and value of data within the competitive process. Two possible abuses in this context include refusal to supply and excessive pricing.

Refusal to supply cases in the sphere of online platforms concern access to the personal data the online platforms accumulate through the participation of users on the platform.[236] Due to the important role that data plays in the development and improvement of online products and services, there

234 Amelia Fletcher (2007) *supra* (n 229).

235 Zero priced services goods can constitute a barrier of entry to the market as well as tool to overcome other barriers of entry. See John M. Newman,' Antitrust in Zero-Price Markets: Foundations' (2014) 164 University of Pennsylvania Law Review < https://ssrn.com/abstract=2474874 >; Gal, Michal S. and Rubinfeld, Daniel L., The Hidden Costs of Free Goods: Implications for Antitrust Enforcement (January 2015). UC Berkeley Public Law Research Paper No. 2529425, NYU Law and Economics Research Paper No. 14-44< https://ssrn.com/abstract=2529425>.

236 Special Report by the Monopolies Commission (2015) *supra* (n 42) at 29-31.

has been some discussion on whether denial of access to such data can be considered an abuse. The assessment of such refusals would be based on the essential facilities case law.[237] Critics oppose this possibility as they seriously doubt that data possesses the required qualities to qualify it as an essential facility.[238] The main critique concerns the non-rivalrous and non-exclusive nature of data, the mere secondary importance of data in the development of products or services and the fast-diminishing value of data.[239] Accordingly, these aspects would make it difficult for data to pass the essential facility test that has been developed in the EU case law.[240] The essential facility test, with regard to IP related matters, was clarified in IMS Health indicating that (i) a refusal is only abusive when it concerns input that is indispensable for carrying out business on a related market; (ii) the refusal excludes any effective competition; (iii) the refusal prevents the emergence of new products for which there is potential consumer demand; and (iv) the refusal is not objectively justified.[241]

When applying such criteria to data accumulated by online platforms, it seems like the indispensability criteria represents the main hurdle for the finding of abuse.[242] Accordingly, finding an abuse would require proving that the data to which access is denied is unique and cannot be obtained from other sources.[243] This is a high burden of proof considering that data is non-rivalrous, non-exclusive and non-exhaustive. At the same time, not all online data forms are comparable. Online platforms gather data in a manner that is suitable for their business purposes and the services they provide.[244] Thus in theory, if not yet in practice, there is no reason why a specific data set should not be unique at a particular given moment. The challenge with the indispensability criteria would then be to decide whether such data could be reproduced or otherwise replaced by a different data set.[245] In theory, the answer is easily yes, but in practice this may not be the case. If certain types of databases are linked to specific types of platforms,

237 Inge Graef and Yuli Wahyuningtyas and Peggy Valcke,' Assessing Data Access Issues in Online Platforms' (2015) 39 Telecommunications Policy 375.
238 Andres V. Lerner (2014) *supra* (n 11).
239 Ibid.
240 Supra (n 236).
241 Case C-418/01 *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG*. [2004] ECLI:EU:C:2004:257, para. 38. These are similar to the ones found in the Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155), para. 81.
242 In Case T-201/04 *Microsoft* [2007] ECLI:EU:T:2007:289 the GC has criteria of indispensability and new product have been relaxed to a certain extent, however it is unclear which criteria are applicable law. On this aspect see supra (n 236).
243 Joint report of the Bundeskartellamt and Autorite de la concurrence, *supra* (n 176) at 18.
244 The data sets of LinkedIn and YouTube cannot really be considered to be comparable.
245 Even if such data is less compatible it may not meet the indispensability criteria based on the findings of the Court in Case C-7/97 *Oscar Bronner v. Mediaprint* [1998] ECLI:EU:C:1998:569, paras. 41-47.

reproducing the data set of a competitor might mean reproducing its businesses to a certain extent. The possibility of reproducing an online platform depends on whether the market has tipped and on multi-homing possibilities, which can indicate the existence of feasible alternatives. However, even in cases where tipping has not taken place, reproducing a data set might not be feasible due to the required volume.[246] If reproducing a data set would require several years, it is highly questionable whether such an option can serve as an alternative in the age of Internet even in the sense of *Bronner*.[247] Data portability may mitigate this difficulty however, data portability alone cannot eliminate the time factor involved in reproducing a data set.[248] Consequently, although the application of the essential facilities cannot be applied easily to online platforms to find an abuse, it cannot simply be dismissed due to the characteristics of data as such.

The use of skewed pricing schemes and the extensive reliance on data by online platforms also introduces new risks for exploitative pricing practices and difficulties with regards to their discovery and prevention. The primary risk concerns excessive pricing, which is found in Article 102 (a) TFEU. Excessive pricing refers to situations where an undertaking with a dominant position on the market imposes unfair or excessive prices on its customers to make profits it would not be able to make in the absence of such market power. Despite the valid points of critics against intervention in cases concerning excessive pricing, the EU practice has developed limited case law on the matter. The legal test for assessing excessive pricing has been formulated by the CJEU in *United Brands v. Commission*. According to the CJEU, prices are excessive when they have no reasonable relation to the economic value of the product supplied.[249] The difficulty in this qualification lies in evidently establishing the economic value of a product of service.[250] The assessment of this relation has been conducted in *United Brands* based on a cost price assessment and a comparison with competitor prices.[251] In doing so, the CJEU formulated a two-stage test for establishing whether a price is excessive in relation to its economic value. First, it addresses if the price is excessive in comparison to the production costs and

246 Consider Facebook's dataset in its refusal to grant access to Admiral. Available online at: < http://www.bbc.com/news/business-37847647>.

247 Case C-7/97 *Oscar Bronner v. Mediaprint* [1998] ECLI:EU:C:1998:569, paras. 41-47.

248 Data portability is currently dictated by Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) OJ L 119/1. Data portability must however take into account also matter of interoperability that might make the process very slow and impractical. See Special Report by the Monopolies Commission (2015) *supra* (n 42) at 73.

249 Case 27/76 *United Brands v. Commission* ECLI:EU:C:1978:22, para. 250.

250 Richard Wish and David Bailey (2016) *supra* (n 89) at 762.

251 Case 27/76 *United Brands v. Commission* [1978] ECLI:EU:C:1978:22 para. 252.

second, if that is the case whether the price is also excessive in comparison with competing products. While the two-stage test has been useful in the case of *United Brands*, economic value consists of more than just production costs. Furthermore, the economic value of a certain product or service will also depend on the demand for such a product or service. This has also been recognized by the Commission in *Port of Helsingborg*.[252] Consequently, assessing whether the price is unfair in itself and with regard to competitors will likely be far more complex than portrayed by the test at first glance.

Online platforms are two-or multi sided businesses, thus excessive prices can in principle occur with respect to all the sides of the platforms. The application of the *United Brands* test to such cases will, however, require overcoming several conceptual hurdles. First, the pricing structure of online platforms often involves a subsidy side, usually end user, and a subsidizing side usually consisting of commercial parties.[253] Accordingly, the price that the subsidizing side will pay must cover the costs of the subsidy side as well. So prices for that side will be higher from the start regardless of whether the online platform adopts an abusive pricing strategy, as it must cover the access to the platform of subsidy side. The price on the subsidy side is influenced greatly by the value the parties on the subsidizing side attach to the ability to access the end user on the other side of the platform. The value that is attached to the interaction by the subsidizing as well as subsidized sides determines the balance in price scheme of the platform. In many online platforms, the pricing model entails zero priced access to end users with the requirement to provide a variety of personal data and full subsidizing of their costs by the other sides of the platform. Accordingly, assessing whether a price is excessive on the subsidizing side may require an analysis of the cost of running the entire platform minus the cost covered by the subsidy side. This assessment should then also take into account the additional non-price aspects that determine the willingness of the users on the subsidizing side to interact with the other sides of the platform. Such aspects will later complicate the comparison of such prices with offers made by competitors. Competing platforms might have different pricing schemes, which reflect different balances in the value that the various users of the platforms attach to the interaction facilitated by the platform. Consequently, similar to the matter of predatory pricing, excessive pricing will require a more elaborate assessment in the case of online platforms due to their two-multi sided nature and often skewed pricing schemes.

The complexity and uncertainty of the assessment will increase dramatically if applied to the end user side of the platform when its access is granted without monetary charge and only dependable upon sharing personal

252 *Scandlines Sverige AB v Port of Helsingborg* (Case COMP/ A.36.568/D3) Commission decision of 23 Jul. 2004, para. 232.

253 See Commission staff working document on online platforms, *supra* (n 13) at. 5

data with the platform. The question that must be answered is whether a price of zero in combination with a requirement to share personal data can be excessive. The United Brands two stage test would imply that zero priced cannot be excessive or unfair as zero will always be lower than cost prices. However, can it truly be maintained that the requirement to share personal data can never be excessive in relation to getting access to the service offered by the platform? Surely not. In fact there is rather a greater risk for excessiveness.[254] Establishing the existence of excessive prices will be challenging as it requires an evaluation of the relation between personal data and the economic value of access to the platform. This relation will be difficult to measure not only because it is onerous to put a monetary value on personal data, but also due to the fact the users are not likely to perceive this exchange in a similar manner as in the case of monetary exchange.[255] These difficulties are also a reason for competition law authorities to try and label such practices as matters concerning privacy or consumer protection legislation.[256] It does not mean, however, that such matters cannot or should not be assessed in context of competition law as other fields of law have their own shortcomings for such cases. The is particularly so when considering the data shared by the end user is likely to have an effect on the prices paid in transactions with the other side or with third parties that have purchased the data from the online platform.[257] Thus, the zero-priced access has personal data as a cost, which may later translate to a price surplus in future transactions and consequently a reduction in consumer welfare.

2.4.3 Objective justifications

Although Art. 102 TFEU does not have a derogation possibility explicitly mentioned in the provision itself, the possibility of objective justification exists nonetheless.[258] The application thereof was however subject to various doubts. First, there was no clarity with regard to the scope of the objective justification and the possible arguments that were to be considered

254 See John M. Newman (2014) *supra* (n 235) at 172-195.

255 Ibid.

256 Special Report by the Monopolies Commission (2015) *supra* (n 42) at 117-121; Preliminary Opinion of the European Data Protection Supervisor- Privacy and competitiveness in the age of big data: The interplay between data protection, competition law and consumer protection in the Digital Economy (March 2014). Available online at: < https://edps.europa.eu/sites/edp/files/publication/14-03-26_competitition_law_big_data_en.pdf>.

257 See Commission staff working document on online platforms, *supra* (n 13) at 20-21; David S. Evans, 'The Online Advertising Industry: Economics, Evolution and Privacy' (2009) 23 Journal of Economic Perspectives 37, 55-59.

258 See e.g. Case 27/76 *United Brands v Commission* [1978] ECLI:EU:C:1978:22; Case 311/84 *CBEM v CLT* [1985] ECLI:EU:C:1985:394; Case T-30/89 *Hilti v Commission* [1991] ECLI:EU:T:1991:70.

suitable under this category.[259] Second, it was not clear which party was responsible for baring the burden of proof, as the structure of the provision does not provide any indication in that respect. Accordingly, some believed an abuse by the Commission was to be established once the Commission has proven the existence of a *prima facie* abuse and the absence of any objective justifications.[260] While practice indicated that there must first be a finding of an abuse by the Commission, which occurs later, contested by the concerned undertaking based on proof of a possible objective justification.[261] Finally, even if the undertaking had to discharge the burden of proof it was also not clear whether an abuse could even be justified, as the finding of an abuse itself implies the absence of any justification.[262] These concerns and others were later clarified through case law as well as Commission's publications. Accordingly, case law indicated that objective justification includes efficiencies arguments, objective necessity and the protection of commercial interests.[263] Similarly, case law clearly indicated that the burden of proof was on the concerned undertaking.[264] Both issues were also confirmed by the Commission's notices on the application of Art. 102 TFEU.[265] Furthermore, the case law as well as the Commission's communication indicates the justification is indeed a possibility yet in practice is very hard make use of, as it has never been successfully applied.

The three possibilities for an objective justification have different substantive tests and standard of proof.[266] First, the undertaking may justify its practices by proving that it consists solely of legitimate business behavior

259 A Albors-Llorens, 'The Role of Objective Justification and Efficiencies in the Application of Article 82 EC', (2007) 44(6) CMLRev. 1727, 1745-1746.

260 Ibid, at. 1747; R Nazzini, 'The wood began to move: an essay on consumer welfare, evidence and burden of proof in Article 82 EC cases', (2006) 31(4) European Law Review 518, 520-522.

261 Case C-395/87 *Ministere Public v Jean-Louis Tournier* [1989] ECLI:EU:C:1989:319, para. 38; Case C-163/99 *Portuguese Republic v Commission* [2001] ECLI:EU:C:2001:189 para. 52.

262 A. Albors-Llorens (2007) *supra* (n 259) at 1742-1745; Robert O'Donghue and Jorge Padilla (2013) *supra* (n 201) at 283.

263 See e.g. Case T-30/89 *Hilti AG v Commission* [1991] ECLI:EU:T:1991:70; Joined Cases C-468/06 to C-478/06 *Sot. Lélos kai Sia EE and Others v GlaxoSmithKline AEVE Farmakeftikon Proïonton, formerly Glaxowellcome AEVE* [2008] ECLI:EU:C:2008:504 ; Case C-95/04 P *British Airways v Commission* [2007] ECLI:EU:C:2007:166.

264 See eg Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289, paras. 688 and 1144.

265 See DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses. Available online at: < https://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>; Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155) paras. 28-30.

266 Tjarda van der Vijver, 'Article 102 TFEU: How to Claim the Application of objective justification in the case of prima facie dominance abuses?' (2013) 4(2) Journal of Competition law and Practice 121, 128-130.

even if such practices resulted in a competitor exiting the market.[267] This possibility is rather obvious and is in fact a reconfirmation that competition on merits is always compatible with the objectives of competition law including cases concerning dominant undertakings.[268] The second category of objective justification consists of objective necessity where dominant undertakings are limited in their practice choices due to factors external to the undertakings.[269] Such external factors can include general public interest such as health or safety of consumers,[270] as well as situations involving exceptional business circumstances.[271] Both possibilities for justification require that the practices be proportionate with regard to the objectives pursued and potential negative effect on competition.[272]Finally, undertakings can also attempt and justify their practices based on efficiencies arguments,[273] which was introduced in a form more suitable for a test in *British Airways*.[274] The criteria for such arguments were later reformulated by the Commission in a manner very similar to the criteria of Art. 101 (3) TFEU.[275] Accordingly, the criteria that must be met for such a justification are: (i) the efficiencies have been or are likely to result from the conduct of the dominant undertaking; (ii) the conduct is indispensable to the realization of such efficiencies; (iii) the efficiencies outweigh any negative impact on competition and consumer welfare in the affected markets; (iv) the conduct does not eliminate effective competition, by removing all or most existing sources of actual or potential competition. These reformulated criteria seem to also have been accepted by the CJEU in *Post Danmark*.[276]

Despite the objective justification not being a successful possibility in the past, its application in the context of online platforms may prove to make the objective justification more than theoretical. `recent technological developments can give rise to interesting situations in this regard. In light of the increased transparency in the pricing of online marketplaces and price comparison tools, the use of monitoring software could be justified. Monitoring software can be programmed for automatic price cuts

267 See eg Case C-209/10 *Post Danmark v Konkurrenceradet* [2012] ECLI:EU:C:2012:172, paras. 20-22.
268 Ibid.
269 Commission Guidance on the Commission's enforcement priorities in applying Article 82, n. 155, para. 29.
270 Case T-30/89 *Hilti AG v Commission* [1991] ECLI:EU:T:1991:70, paras. 33, 108-109.
271 Case 77/77 *BP v Commission* [1978] ECLI:EU:C:1978:141, paras. 19, 26-36.
272 Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155), para. 28; Case 27/76, *United Brands Company and United Brands Continentaal BV v Commission* [1978] ECLI:EU:C:1978:22, paras. 198-191; *BBI/ Boosy & Hawkes- Interim measures* (Case IV/32.279) Commission decision of 29 Jul. 1987.
273 Case T-228/97 *Irish Sugar v Commission* [1999] ECLI:EU:T:1999:246, para. 189
274 Case C-95/04 P *British Airways v Commission* [2007] ECLI:EU:C:2007:166, para. 86.
275 Commission Guidance on the Commission's enforcement priorities in applying Article 82, n. 155, para.30.
276 Case C-209/10 *Post Danmark v Konkurrenceradet* [2012] ECLI:EU:C:2012:172, para. 42.

based on online pricing information and still be allowed even if it leads to the market exit of competitors.[277] Evidently, such price cuts should be proportionate and not turn into predatory pricing. By eliminating the first mover advantage, the use of such software by dominant undertakings can easily eliminate less efficient competitors that cannot match prices. This is true for both competition on a specific platform such as an app store or a price comparison site as well competition between platforms. Similarly, the protection of business interests that also falls under the same form of justification, exclusionary behavior might be considered necessary. The protection of correct balance in the volume of customers on the various sides of the concerned platform may be distorted by participants that may undermine the business model of the platform; thus justifying their removal.[278] A good example is the removal of the Disconnect Mobile app from the Google Play store, as it would inevitably interfere with the functioning of the other apps made available in the app store.[279] Similarly, participants placing fake reviews on platforms might also be removed to prevent the decline of interest in the platform. Such self-regulation by the platform can be mistaken for exclusionary behavior so must be justifiable provided its true purpose is the maintenance of the viability of the platform. Such exclusionary actions, if truly without anti-competitive purposes, will often have basis in the participation agreements of the online platforms, which are often known to the participants prior to the exclusion.[280]

In the case of objective necessity where it comes to the protection of public interests, online platforms may currently have quite an important role. Online platforms can be key actors in the protection of consumer privacy as well as prevention of IP rights violation due to counterfeit goods.[281]Although the Commission states in its communication that public interests are normally a matter to be regulated and dealt with by public authorities, not all such matters have been regulated adequately for the

277 This is to the extent that such practices will not be considered under the scope of Art. 101 TFEU as discussed in the section concerning the jurisdictional threshold of Art. 101 TFEU.

278 David S. Evans,' The Antitrust Analysis of Rules and Standards for Software Platforms' (2014) 10 *Competition Policy International*; University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 708 <https://ssrn.com/abstract=2520860>

279 Aaron Mamiit, 'Google removes Disconnect, other privacy apps from Android Play store' (Tech Times 29 August 2014)<http://www.techtimes.com/articles/14379/20140829/google-removes-disconnect-mobile-other-privacy-apps-from-android-play-store.htm>; On necessity of certain refusal or exclusion from a market that is inherent in conducting a business in a specific market see Case 311/84 *Centre belge d'études de marché — Télémarketing (CBEM) SA v Compagnie luxembourgeoise de télédiffusion SA, and Information publicité Benelux SA* [1985] ECLI:EU:C:1985:394, para. 26.

280 Supra (n 277); See eg Amazon's guidelines for participating on the platform. Available online at: < https://sellercentral.amazon.com/gp/help/external/G1801?language=en-US&ref=efph_G1801_cont_200386250>.

281 See Commission staff working document on online platforms, *supra* (n 13) at. 7.

online markets nor can traditional procedures be always adequate for the dynamics of online interaction.[282] Furthermore, the protection of such interests will often be entwined with the legitimate business purposes of the platforms themselves.[283]

The possibility to rely on the objective justification based on efficiencies arguments will be crucial to online platforms, as their existence inherently revolves around and depends upon the creation of efficiency.[284] The application of the efficiencies criteria has yet to be successful in the course of current practice. Although efficiencies claims have been made, the Commission and EU Courts have found the evidence of efficiencies insufficient or an absence of necessity between practices and claimed efficiencies.[285] Accordingly, there is no indication as to the manner in which efficiencies will be balanced with the anti-competitive effects of the practices entailing a *prima facie* violation of Art. 102 TFEU. As in the case of Art. 101(3) TFEU the manner in which efficiencies are considered will influence the chances of success in the case of two-multi sided markets.[286] In consideration of Art. 101 (3) TFEU, the Commission and EU Courts clearly indicate that evidence of efficiency is required primarily in the relevant market where the anti-competitive effects are present.[287] If the same is true with regard to Art. 102 TFEU, then the same difficulties will occur when multiple interrelated relevant markets will be defined. In such cases, the absence of clear evidence of efficiencies in the affected market will lead to an impossibility to justify such practices.[288] However, unlike with Art. 101 (3) TFEU the situation with regard to Art. 102 TFEU is yet to be determined. The provision itself does not provide any indication on the matter. The discussion paper on the application of Art. 102 TFEU does, however, indicate that the focus is on the efficiencies passed on to consumers.[289] Accordingly, regardless of

282 Bertin Martens (2016) *supra* (n 16) at 31-35.

283 A lack of privacy protection or sales of counterfeit goods can be observed as by consumers as a lack of quality on behalf of the platform and reduces its competitiveness; See e.g. Myspace's quality problem with regard to the screening of sexual predators in Marlon A. Walker, 'Myspace removes 90,000 sex offenders', CNBC News (2 march 2009) available online at: < http://www.nbcnews.com/id/28999365/ns/technology_and_science-security/t/myspace-removes-sex-offenders/#.WM0WVFUrKUk>.

284 See Commission Staff Working Document on online platforms SWD(2016) 172, at 12-15.

285 Hans W. Friederiszick and Linda Gratz, 'Hidden efficiencies: The relevance of business justifications in abuse of dominance cases', (2015) 11(3) Journal of Competition law and Economics 671, 681-688.

286 Case C-382/12 P *MasterCard Inc and Others v Commission* [2014] ECLI:EU:C:2014:2201 paras. 236-243; The question is primarily whether the findings will apply by analogy to efficiencies arguments under 102 TFEU in the case of two-multi sided markets.

287 Ibid; Commission Guidelines on the application of Article 81(3), *supra* (n 92) para. 43.

288 Gönenç Gürkaynak, Öznur İnanılır, Sinan Diniz, Ayşe Gizem Yaşar, (2017) *supra* (n 135); Alfonso Lamadrid de Pablo (2015) *supra* (n 135).

289 See DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, *supra* (n 264) at 26-27.

the market where the anti-competitive exclusion takes places, the efficiencies passed on to the consumers could justify the practices provided that competition is not eliminated.[290] This would allow for an overall balancing of efficiencies and anti-competitive effects on all the relevant markets concerned in a specific case. However, the section of efficiencies arguments in the Commission's communication on Art. 102 TFEU refers to the Guidelines on the application of Art. 101(3) TFEU.[291] This would indicate that the intention of the Commission would be to apply both options in a similar manner. From a legal consistency and certainty perspective, this would be a desired outcome as both provisions may in some cases be simultaneously applied.[292] Unfortunately, in the case of two-multi sided markets such practice reduces the feasibility of a successful justification. The previous practice has little guidance to offer in this regard, as two-multi sided markets have been only discussed in the case of *Microsoft* where no findings in this matter were made or accepted.[293] Furthermore, the formulation of the criteria concerning efficiency arguments in the guidance of the Commission incentivize putting forward any possible efficiency argument held by undertakings.[294] Thus, until a decision is made by the Commission or the EU Courts on this specific matter, this lack of clarity will remain unresolved. With regard to the last criteria of the assessment, the situation is again dependent upon whether the market has tipped or shows signs of foreseeable tipping. Finally, the balancing of the positive effects and the negative effects of the practice as well as the aspect of indispensability require no substantive modification. The application of these criteria should of course take the legal and economic context of online platforms into account.

In light of the above-mentioned information, it appears that the reliance on the business practices and the objective necessity justification possibilities remain open also for online platforms. A study of the platform participation rules and evidence of previous exclusionary behavior by platforms is required to provide a better insight into the success chances in this regard. Furthermore, it is unknown whether online platforms will receive more room for the protection of public interests that have yet to be regulated within the online context. The reliance on efficiency arguments will depend

290 Ibid, see para. 90 on page. 27. If the exclusionary behavior results in a monopoly situation efficiencies passed on to consumers would not suffice.

291 See Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155) para. 30 concerning efficiencies arguments makes reference to 101(3) Guidelines in footnote n. 3.

292 C-395/96 P *Compagnie Maritime Belge Transports and Others v Commission* [2000] ECLI:EU:C:2000:132, paras. 33-34; Case 85/76 *Hoffmann-La Roche & Co. AG v Commission* [1979] ECLI:EU:C:1979:36 para. 116; Case T-51/89 *Tetra Pak Rausing SA v Commission* [1990] ECLI:EU:T:1990:41, paras. 25-29.

293 Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289, paras. 1158-1160.

294 See Commission Guidance on the Commission's enforcement priorities in applying Article 82, *supra* (n 155) para. 30.

on the Commissions' approach to the assessment of the four criteria. Here, an overall balancing of the positive and negative effects resulting from the behavior of the dominant undertaking will allow online platforms to have an equal chance of success as a single-sided business from a legal point of view.

2.5 Conclusion and final remarks

The overview provided in this chapter illustrates that the application of EU competition law to online platforms will be a complex matter. Most cases appear to primarily require changes in application methodologies when concerning online platforms. This is particularly true in the qualification of practices under both Art. 101 and Art. 102 TFEU as well as with regard to the justification possibilities that undertakings have under these provisions. However, when considering the adaption for the jurisdictional thresholds for both provisions, the application adaptions seemingly bring a requirement for reconsideration of fundamental aspects of EU competition law. Such aspects include the concepts of collusion and dominances within the context of Art. 101 and Art. 102 TFEU as well as translating the objectives of these provisions in the context of online platforms. This is, however, unsurprising as the application of such criteria is primarily determinant for the scope of the respective provision. Consequently, changing the application of such criteria and as such modifying the scope of the provisions, will require far more intricate considerations than is seemingly communicated by current discussion on this matter. Thus, although previous studies finding no need for specific regulation appear to be correct, the difficulty of adapting current practice to online platforms will not likely prove much easier. Furthermore it is also the question whether such adaption will only apply to the case of online platforms or whether broad application may be more suitable. In the latter case the considerations related to the respective adaptions will evidently be more elaborate.

The challenges identified in the scope of this chapter formed the background to the research that was further refined and narrowed down in the consecutive chapters of this dissertation. This chapter provide an answer to the sub-question: *What are the challenges posed by the inherent characteristics of online platforms for the application of the current EU antitrust law to these actors and what is the nature of the adjustments required in order to tackle them?*

The discussion and exploration of the various challenges covered by this chapter show, similar to the findings in the remainder of the chapters, that the current framework of both art. 101 and 102 TFEU is in principle suitable for applying to online platforms. It would appear that the wording of both provisions offers sufficient room for legal interpretation and application. This means that the multi sided nature of online platforms does not, in itself,

impede the application of these provisions. The main reason behind this is that the wording of the provisions as such does not seem to reflect any specific choices with regard to the specific economic context of that cases that are expected to fall under the their scope. Accordingly, these provisions are indifferent to the economics behind the circumstances of a given case in the sense that these provisions are capable of applying under all circumstances. The challenges caused by online platform arise then from the practice of the EU Commission and courts that has restrained this neutral character of the provisions by making their mode of application more concrete and standardized. Contrary to the wording of the provisions their application in practice involved many specific choices that presupposed rather specific economic contexts which, unfortunately, did not include the possibility of multi sided markets or platforms. Consequently such choices made by previous practice entail a more visible challenge for the application of art. 101 and 102 TFEU to platforms that the provisions themselves.

The subsequent chapters that focus predominantly on the framework of art. 102 TFEU further display the limitations and difficulties following from the choices of previous practice throughout the entire application process of this provision.