

1. Introduction

1.1 THIRST FOR INFORMATION AND ITS IMPACT ON COMPETITION LAW

This book addresses the question of when, and under which conditions, access to information (which can be a good, an input, etc.) can be granted under EU competition law. The need for such research arose from the current state of affairs whereby extended and deeper access to information has gained an increased importance in the era of the Internet, since it enables competition to respond to user preference and leads to innovation and development.¹ Consequently, global society is transforming from an industrial era to an information one, as the economy is becoming more information-intensive.²

Wu notes that the importance of information in our society is skyrocketing, where

... our thirst for information has grown to a level seemingly unquenchable. We are unlikely to reverse our evolution into a society for which electronic information is the substrate of much daily life. But just as our addiction to the benefits of internal combustion led us to a demand for fossil fuels we can no longer support, so, too, has our dependence on our smartphones, tablets, and other devices delivered us to a moment when our insatiable demand for bandwidth – the new black gold – left us vulnerable. Let us, then not fail to protect ourselves from the will of all who might seek domination of those resources we cannot do without. If we do not take this

¹ Monopolkommission, ‘Competition Policy: The Challenge of Digital Markets. Special Report by the Monopolies Commission pursuant to Section 44(1) (4) of the Act against Restraints on Competition. Summary’ (2015) 1 http://www.monopolkommission.de/images/PDF/SG/SG68/S68_summary.pdf accessed 21 February 2016; see also Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, ‘Competition Policy for the Digital Era. Final Report’, European Commission Reports, Directorate-General for Competition <http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf> accessed 3 July 2019.

² Thomas Mandeville, ‘An Information Economics Perspective on Innovation’ (1998) 25(2/3/4) *International Journal of Social Economics* 357, 357; see also Justus Haucap and Ulrich Heimeshoff, ‘Google, Facebook, Amazon, eBay: Is the Internet Driving Competition or Market Monopolization?’ (2014) 11(1–2) *International Economics and Economic Policy* 49; Tim Wu, *The Curse of Bigness: Antitrust in the New Gilded Age* (Columbia Global Reports 2018).

moment to secure our sovereignty over the choices that the information age has allowed us to enjoy, we cannot reasonably blame its loss on those who are free to enrich themselves by taking it from us in a manner history has foretold.³

As pointed out by Benkler, the changes occurring in technological and economic areas, as well as in organisation transformation, affect not only the production of information, but very importantly also the core liberal values of freedom and justice. Therefore, the policy choices we will make will affect the outcome of these changes, as they are in fact social and political choices.⁴ Because of this holistic transformation in society, the way in which policies are created could in fact affect transition into a fully information-based society.

The role of information intermediaries has grown significantly in recent years, due to an increased importance of information as an industry input. However, it is also because they perform some public services.⁵

First, they facilitate public participation in art, politics, and culture. Second, they organize public conversation so that people can easily find and communicate with each other. Third, they curate public opinion through individualized results and feeds and through enforcing terms-of-service obligations and community guidelines.⁶

Consequently, because of taking on these public services, we could impose on them norms against abuse, threats and harassment.⁷ Therefore, a number of information intermediaries become something more than just dominant companies – they become *de facto* standards – which are widely used by society and therefore form an inseparable part of that society.

Information society is then facing several challenges, many of which relate to the control that dominant information intermediaries entrench over information. We can talk here about the behaviour of search engines, social platforms, online merchants, and others. Here, competition law could be seen as one of the rare tools (except maybe privacy regulations and corporate governance) by which (fair) distribution of information in society could be achieved. What is more, it may be a tool combined with other regulations to add strength to the

³ Tim Wu, *The Master Switch: The Rise and Fall of Information Empires* (Vintage Books 2011) 321.

⁴ Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (Yale University Press 2006) 27.

⁵ Jack M Balkin, 'Fixing Social Media's Grand Bargain' A Hoover Institution Essay, 1814 Aegis Series Paper 9 https://www.hoover.org/sites/default/files/research/docs/balkin_webready.pdf accessed 22 February 2019.

⁶ *Ibid.*

⁷ *Ibid.*

enforcement in digital markets. However, competition law lacks a theoretical background exactly because of the transition to information-based economy. This is especially true in the case of the so-called information-based abuses that involve refusal of access to information, misuse of information, or using information in an anticompetitive way.⁸ Cases concerning abuse of dominance related to handling information, especially big data, are the most common recent competition concerns. This can be seen when reviewing investigations into Google,⁹ Facebook¹⁰ and Amazon.¹¹

As search engines or social media platforms are one of the main channels through which information is accessed, and they have a tendency to dominate, monitoring their behaviour is a wise choice from the perspective of competition law. Nevertheless, it is argued that monopolies in the information economy are often temporary and are under constant threat of being challenged by new technologies.¹² The role of information intermediaries has grown significantly in recent years. It seems that posting any information or advertisements, independently of using a dominant online platform, may be detrimental to one's business. Such companies may be considered as unavoidable trading partners,

⁸ Beata Mäihäniemi, 'Are Tech Giants (Mis)using Information for Anti-Competitive Purposes?', in Rosa M Ballardini, Petri Kuoppamäki and Olli Pitkänen (eds), *Regulating Industrial Internet through IPR, Data Protection and Competition Law* (Kluwer Law International 2019) 341–342.

⁹ *Google Search (Shopping)* (Case AT.39740) Commission Decision [2017]. The limited version of the full decision that can be found here https://ec.europa.eu/competition/antitrust/cases/dec_docs/39740/39740_14996_3.pdf. This text is made available for information purposes only. Parts of this text have been edited to ensure that confidential information/personal data is not disclosed. Those parts are shown as [...] or replaced by a non-confidential summary, or ranges, in square brackets.

A summary of this decision is published in all EU languages in the Official Journal of the European Union here. In the official journal we can only find a summary of the case, see, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0112\(01\)&qid=1573036317317&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0112(01)&qid=1573036317317&from=EN).

¹⁰ Bundeskartellamt, 'Preliminary Assessment in Facebook Proceeding: Facebook's Collection and Use of Data from Third-Party Sources Is Abusive' (Press Release, 19 December 2017) https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2017/19_12_2017_Facebook.html accessed 16 January 2019.

¹¹ Margrethe Vestager confirmed on 19 September 2018 the opening of a (competition law) probe against Amazon, see 'Amazon investigated by EU Commissioner Margrethe Vestager' <https://www.youtube.com/watch?v=VLVNNjl5teE> accessed 30 December 2019; see also Thibault Schrepel, 'The (Coming) Amazon Probe Proves Antitrust Hipsters to be Wrong' (*Revue Concurrentialiste*, 19 November 2018) https://leconcurrentialiste.com/2018/11/19/amazon-hipsters/?mc_cid=7a6a7d3cbc&mc_eid=7078790309 accessed 1 January 2019.

¹² Björn Lundqvist, *Standardization under EU Competition Rules and US Antitrust Laws: The Rise and Limits of Self-Regulation* (Edward Elgar 2014) 16.

which may enable them to manipulate information and possibly exclude or damage effective competition.

A digital monopoly that is also acting as an information intermediary can start behaving anticompetitively in at least three ways. We could call such behaviour ‘information-based abuses’. The information intermediary could therefore: (1) exclude competitors by refusing/blocking access to interoperability information, for example; (2) bias the quality of information it is offering in order to self-prefer its own vertical services; or (3) gather users’ data in an anticompetitive way while providing its services. The first abuse is clearly exclusionary, the second seems more exploitative, but this is not clear-cut, and the third seems more exploitative.

Where a company is blocking access to the market or leveraging its position into adjacent markets by means of offering complementary services, making consumers directly worse off, this behaviour can be classified as abusive. It denotes that they have fewer available choices, and they are not offered new or better products. Such behaviour would then be rightfully analysed under the consumer welfare standard. However, when it comes to biasing the quality of information, it does not seem to directly affect consumers (on the contrary, it may benefit them, as, for example, search results are biased to answer consumers’ specific needs). Therefore, such biasing can actually be justified by means of the ‘convenience argument’. This is where consumers use certain digital services on a daily basis, such as a search engine, and consequently prefer not to change it to any other one as this may incur switching costs. Biasing access to information could also be considered to be unfair, however, as information intermediaries offer not only advertised content but also information that could be seen as ‘commons’ and should be publicly available. What is more, gathering large amounts of information by a monopolist, for example big data, without users’ ‘voluntary’ consent can be seen as an abuse of dominance, as has been found by the Bundeskartellamt in Germany.¹³ However, as the decision has now been suspended by the Highest Regional Court of Dusseldorf, time will show whether this precedent will spread into European practice.

The main point of this book is to show that information is a crucial input as well as an output of business in digital markets, and the way it is handled/mis-

¹³ Facebook/Bundeskartellamt. The Decision of the Higher Regional Court of Düsseldorf (Oberlandesgericht Düsseldorf) in interim proceedings, 26 August 2019, *Case VI-Kart 1/19 (V)*, 6. A non-official translation into English, <https://www.d-kart.de/wp-content/uploads/2019/08/OLG-D%C3%BCsseldorf-Facebook-2019-English.pdf> accessed 30 October 2019.

The official German version of this decision is available at:

http://www.olg-duesseldorf.nrw.de/behoerde/presse/Presse_ak-tuell/20190826_PM_Facebook/20190826-Beschluss-VI-Kart-1-19-_V_.pdf accessed 30 October 2019.

handled by large information intermediaries affects not only its competitors but also the whole digital market and society at large. Consequently, there is a need to understand both the concept of information as well as the environment of digital markets where the situations of handling/mishandling information occur. What are these situations, and how could we tackle them by law?

This book will show how the incentive to gather even more information, in particular in the form of users' data (the so-called 'big data') can lead to behaviours whose impact goes well beyond the distortion of the market. This will primarily be done through the example of the investigations into Google Search performed by the European Commission that ended up with a large fine, imposed on Google's parent company Alphabet, since the case raises important questions related to the specification and scope of Article 102 TFEU. These are, for example, how to overcome problems related to the assessment of the market power where the dominant undertaking is both the intermediary and the competitor of its rivals, and where it offers its services for free to its users. For example, is there a need to apply the hypothetical monopolist test in such digital markets? It is also unclear whether information intermediaries should be placed under a stricter special responsibility test due to their important role in society, or should they be allowed objective justifications due to, for example, the nature of the machine-learning algorithms they use?

To some extent, however, national decisions, for example on Facebook as well as on-going investigations into the behaviours of other information intermediaries such as Amazon, are pondered upon. This could be seen as proof of an interplay between competition law at the EU and national level. To assess the extent to which these two will affect each other in the future requires further research. This book is concerned with how EU competition law addresses the anticompetitive behaviours of information intermediaries on a wider scale. These could perhaps be classified as types of information-based abuses of dominance. Therefore, this book aims at identifying more clearly what actual problems and gaps are raised by the application of Article 102 TFEU to digital markets, and proposing specific reforms.

1.2 CHALLENGES TO THE 'CONVENTIONAL' APPLICATION OF ARTICLE 102 TFEU TO INFORMATION-BASED ABUSES

'Conventional' analyses of abuses of dominance, which could be defined as those applied to brick-and-mortar businesses, have undergone some significant changes as the law on abuse in Europe does not seem to be apt to address abuses that concern access to information. In light of the challenge that the European Commission is facing in digital markets, the current state of EU

competition law must be re-evaluated to accommodate fast-moving markets and the problems that arise in the information society.

One might approach these problems from the point of view of competition law, which will need to undergo some transformations to accommodate the transition towards a full-blown information society. This book aims to contribute to the field of competition law in several ways.

Firstly, this book points out the problems raised by two-sided markets related to market definition and assessment of abuse of dominance in new technology markets. Here, dominance may be the outcome of consumer preference. For that reason, behavioural economics could be applied to the analysis of market power; additionally, economics of networks should also be considered. Especially where goods are offered for free (which derives directly from the design of a two-sided platform), it may be difficult to assess the market power of an online platform. In the environment of online platforms, lower prices could be substituted with higher quality, however. Therefore, where a rival online platform might be able to offer higher volumes of service, also of higher quality, a competition authority could potentially intervene in the behaviour of a dominant platform. Nonetheless, an assessment of the quality of information goods would be quite challenging, despite the fact that the importance of quality-based competition in digital markets cannot be underestimated.

The problem with assessing the quality of search results derives largely from the characteristics of information. Information is often a credence good, which denotes a good the quality of which the user is unable to assess even after consuming the good. This may lead to the situation where users continue using services or goods offered by a dominant undertaking, unaware of other alternatives, which may be of a higher quality. Users may also be unaware of the fact that information provided to them may be biased. Bias may not be visible where the user is searching for information that has intrinsic value, however, it affects the search for information of instrumental value, which is later used to create more information or to purchase a product on the basis of that information. Moreover, as information-based products are heterogeneous, identifying substitutes to define the relevant product market may be challenging.

Fast-changing technology markets tend to evolve rapidly due to innovation, application development capability, and relatively low entry barriers.¹⁴ As a result, some technologies may converge and products that were once complements become substitutes,¹⁵ which poses an obvious challenge to market

¹⁴ Pamela Jones Harbour and Tara Isa Koslov, 'Section 2 in a Web 2.0 World: An Expanded Vision of Relevant Product Markets' (2010) 76 *Antitrust Law Journal* 769, 772.

¹⁵ *Ibid.*

definition. Moreover, as some digital companies may expand and start offering a larger variety of services, borders between markets become blurred.¹⁶ This may constitute a difficult task in digital markets, as here products are heterogeneous and have multiple uses. Additionally, products in the new economy are often technologically complex. While some products in such markets are substitutable based on price, they may not be substitutable based on other factors. This leads to the situation where an assessment of product substitutability would define a narrower market than in reality.¹⁷ Products can therefore differ in terms of quality or other features, such as popularity. Consequently, the protection of incentives to invest and innovate in the environment of digital markets should be assigned increased importance.

As digital platforms need to constantly innovate, innovation is more like a component of an industry, and Research and Development can be considered to be an important element of production. For example, to be able to continue competing in the search engine market, even companies such as Google are forced to continuously update their algorithms.¹⁸ Digital products and services are constantly updated, not only by the companies that created them, but also by customers who come up with new ways of using digital platforms.¹⁹

Secondly, this book confirms that in digital markets, consumer welfare is still the main focus of an economic approach²⁰ to Article 102 TFEU. Such an approach, according to Gual et al.,

avoids confusing the protection of competition with the protection of competitors and it stresses that the ultimate yardstick of competition policy is in the satisfaction of consumer needs. Competition is a process that forces firms to be responsive to

¹⁶ 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. Preliminary Opinion of the European Data Protection Supervisor' (2014) https://secure.edps.europa.eu/EDPSWEB/webdav/shared/Documents/Consultation/Opinions/2014/14-03-26_competition_law_big_data_EN.pdf accessed 20 October 2015.

¹⁷ Jonathan Faull and Ali Nikpay, *Faull and Nikpay: The EU Law of Competition* (3rd edition, Oxford University Press 2014) 386.

¹⁸ Howard Shelanski, 'Information, Innovation, and Competition Policy for the Internet' (2013) 161(6) *University of Pennsylvania Law Review* 1663, 1685.

¹⁹ *Ibid.*

²⁰ On economic approach see e.g. Anne C Witt, *The More Economic Approach to EU Antitrust Law* (Harvard University Press 2016); see also Anne C Witt, 'The European Court of Justice and the More Economic Approach to EU Competition Law – Is the Tide Turning?' (2019) 64(2) *The Antitrust Bulletin*, 172.

consumers' needs with respect to price, quality, variety, etc.; over time it also acts as a selection mechanism, with more efficient firms replacing less efficient ones.²¹

For that reason, assessing whether consumers are harmed by actions of dominant undertakings is of the utmost priority in the analysis of cases on abuse of dominance. The impact of much of the behaviour of information intermediaries goes beyond conventional harm to consumers, however, in the form of higher prices, less and worse alternatives, and less innovative products (these indicators do not work so well in digital markets any more). Competition law must acknowledge and tackle this by offering alternative, or at least accompanying, goals of competition law – such as fairness or protection of privacy.

It would seem that adding new goals to competition law²² complicates issues too much, as digital platforms are already problematic due to challenges with assessing their market power, for instance. However, enriching competition law with supporting goals (which are not that new after all – think of unfair practices that are in fact about unfairness), would make it easier for authorities to explain anticompetitive behaviours regardless of whether these would be explained under new kinds of abuses of dominance or older doctrines.

Which of the theories of harm would be most suitable for addressing the issue of refusal to access information in digital markets also remains ambiguous. Dominant undertakings can infringe Article 102 TFEU by refusing to supply an input, be it a product, service, information or access right to an infrastructure or platform essential for competing in a downstream or complementary market where the dominant firm is also present.²³ A non-exhaustive list of the kinds of refusals to supply consists of refusal to new or existing consumers, refusal to license an IPR, refusal to license interoperability information and refusal to allow access to an essential facility or network.²⁴

As a rule, a dominant undertaking is not obliged to supply; however, in certain circumstances such a refusal will amount to an abuse. In its Guidance Paper,²⁵ the Commission deals only with vertical refusals to supply, that is,

²¹ Jordi Gual et al., 'Report by the EAGCP: An Economic Approach to Article 82', 26 Munich Discussion Paper, Department of Economics University of Munich (2005) 2 http://ec.europa.eu/dgs/competition/economist/eagcp_july_21_05.pdf accessed 17 March 2016.

²² See e.g. Ioannis Lianos, 'Polycentric Competition Law' (2018) Current Legal Problems https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3257296 accessed 3 July 2019.

²³ Faull and Nikpay (n 17) 464.

²⁴ Guidance on its Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings [2009] OJEU C45/02, para 78.

²⁵ *Ibid.*

situations where an upstream firm refuses to supply its downstream competitors.²⁶ The refusal to supply is therefore anticompetitive where the input refused is indispensable for competitors to be able to compete effectively on a downstream market, where it is likely to lead to elimination of effective competition on a downstream market and where there is no objective justification for such a refusal.

Regarding refusals to license, the mere ownership of an intellectual property cannot confer a dominant position.²⁷ Only in exceptional circumstances will a refusal to license an intellectual property right amount to an abuse of dominance. These circumstances include general circumstances for refusal to deal plus an additional requirement that the refusal to deal prevents the appearance of a new product or service.²⁸

The dominant undertaking can refuse access to an essential facility. The essential facility is a special kind of a monopolistic bottleneck. These occur in a number of network industries such as energy, rail or telecommunications. Network access is in these cases a crucial input for enterprises operating in these industries in order to compete on downstream markets. The essential facility could take the form of any input; therefore, it could also possibly take the form of information.

Refusal to provide access to an essential facility has been tackled by the, so-called, *essential facilities doctrine*. The essential facilities doctrine is applied to situations of a refusal to supply where the ‘bottleneck monopolist’ is involved in illegal behaviour and refuses access to a particular facility. The essential facilities doctrine is often applied where there are two related activities that consist of an upstream and a downstream component, which are crucial for the production of the final work and the services themselves.

The doctrine has been proposed as a separate theory of harm that points out when the owner(s) of an ‘essential’ or ‘bottleneck’ facility is (are) obliged to provide access to that facility at a ‘reasonable’ price.²⁹

²⁶ Alison Jones and Brenda Sufrin, *EU Competition Law: Text, Cases, and Materials* (Oxford University Press 2014) 510.

²⁷ Joined Cases C-241/91 P and C-242/91 P *Magill – Radio Telefis Eireann v Commission* [1995] ECR I-743, para 46.

²⁸ This requirement was later broadened in the Microsoft case to denote limiting technical development.

²⁹ Organisation for Economic Co-operation and Development, ‘The Essential Facilities Concept’ (OECD Policy Roundtable 1996) 7 <http://www.oecd.org/competition/abuse/1920021.pdf> accessed 18 March 2016; see also Michael F Martin, ‘Natural Monopolies in Antitrust, Patent, and Copyright Law: The Essential Facilities, Reverse Doctrine of Equivalents, and Originality Doctrines as Triggers for a Compulsory Licensing Remedy’ (2006) 24–25 <http://ssrn.com/abstract=1123575> accessed 5 August 2016.

However, as the essential facilities doctrine is recommended to be applied to public-owned entities, it could also be applied to information intermediaries that exhibit some characteristics of public infrastructure and network effects since networks and natural monopolies share some common features.³⁰ However, natural monopolies and network effects differ in the way that in the case of natural monopoly we can observe scale economies of supply, which means that the marginal and average costs of production decline throughout the demand curve for a particular market. On the contrary, in the case of network effects, demand-side economies of scale can be found, which means that the shape of the demand curve is affected by existing demand.

Finally, some of the behaviours of digital monopolies could be analysed under the theory of harm of an exclusionary discrimination (also known as ‘the theory of self-preferencing’). This would be concerned with the problem of where a dominant undertaking prefers its own downstream services to those of its rivals where it acts as an intermediary. The doctrine would require the dominant undertaking to treat all services equally and would possibly denote stretching the borders of Article 102 TFEU. However, as correctly pointed out by Akman, a professor of competition law:

Discrimination – in the context of competition law and policy – is a practice inherently difficult to define since it is necessary to determine the conditions under which two transactions may be deemed equivalent and thus comparable. In addition, it requires the assessment of criteria which render the treatment of the two transactions dissimilar.³¹

The case law on discrimination in competition law is mainly related to price-based discrimination and not to the self-preferencing of one’s own services. Therefore, although there is no direct case law existing that refers to such self-preferencing, this does not mean that the Commission or the Courts cannot offer new doctrines to tackle the problem of exclusionary discrimination that is also known as the ‘theory of self-preferencing’.³² The term exclusionary discrimination may however be slightly deceiving because all abuses that involve discrimination (whether price-based or not) are in their scope and

³⁰ Ibid 26–27.

³¹ Pinar Akman, *The Concept of Abuse in EU Competition Law: Law and Economic Approaches* (Hart Publishing 2012) 235.

³² See Bo Vesterdorf, ‘Theories of Self-Preferencing and Duty to Deal – Two Sides of the Same Coin?’ (2015) 1(1) *Competition Law and Policy Debate* 4, 5 <http://www.cprsouth.org/wp-content/uploads/2015/08/PA-article-Vesterdorf-on-equal-treatment-demands-2015-1-31-final-CLPDcon....pdf> accessed 22 March 2016, research done for Google; Nicolas Petit, ‘Theories of Self-Preferencing under Article 102 TFEU a Reply to Bo Vesterdorf’ (2015) 2 <http://ssrn.com/abstract=2592253> accessed 26 March 2016.

intent exclusionary. Still, as there is no case law available on this new kind of abuse,³³ one could perhaps consider this practice as a specific kind of a refusal to deal.³⁴

Moreover, in digital markets, an increased vertical foreclosure instead of a horizontal one can be observed. Many dominant companies are also vertically integrating. In such markets, most of this happens probably due to rapid technological development and the fact that companies need to constantly innovate and explore other markets to keep up with their competitors. Such ‘defensive leveraging’ is one of the most popular strategies of companies operating on the Internet. Due to an increased specialisation of products and services in digital markets, one may stumble upon difficulties when trying to assess substitutes for products and services due to very elastic demand substitution. This is because products change rapidly and can also be substituted by future products – both potential competition and potential foreclosure that is likely to eliminate all competition are of increased importance in digital markets. For that reason, competition authorities in digital markets should encourage follow-on innovation.

Thirdly, as this book analyses the field of competition law, it is important to point out that the popularity of a dominant company should not indicate subjecting it to a stricter antitrust scrutiny. Consequently, the legal criterion of business justifications in digital markets should increasingly be taken into account, which would denote that companies are able to defend themselves by claiming that the abuse is the result of their competition on the merits. Article 102, unlike 101 TFEU, does not state explicitly that a dominant undertaking could try to justify its allegedly anticompetitive behaviour.³⁵ However, the European Commission allows the use of justification, as it had stressed in its Guidance on Article 82 [now 102].³⁶ Objective justification can play an important role in an assessment of the possible effects of a practice in question. Objective justification can be submitted by a dominant undertaking to the Commission, but it would be up to the Commission to assess its validity.³⁷ Business decisions made in the early stages of development and production

³³ Vesterdorf (n 32) 4, 5.

³⁴ The only case law one could link to exclusionary discrimination is the one that refers to pure discrimination. See e.g. Case C 209/10 *Post Danmark A/S v Konkurrencerådet* [2012] para 20.

³⁵ Tjarda van der Vijver, ‘Objective Justification and Article 102 TFEU’ (2012) 35(1) *World Competition* 55, 55.

³⁶ ‘Guidance on the Commission’s Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings’ [2009] OJ C45/02.

³⁷ *Ibid* para 31.

will later affect competition in the relevant markets, however this impact is often indirect and of a remote nature.³⁸

Finally, this book analyses which of the procedural choices and remedies address the environment of new technology markets in an optimal way. Are commitments indeed a more effective and faster tool, or is there a need for a prohibition decision or even judgments of the Courts, for example, that could be used as a precedent for future cases?

This book focuses primarily on the decision of the Commission on Google Search and the investigations that have preceded it. However, it also refers to the anticompetitive behaviour of Facebook that has been condemned by the Bundeskartellamt. It also refers to the allegations raised by the European Commission with regard to Amazon.

1.3 *PER SE* RULE OR THE EFFECTS-BASED APPROACH TO INFORMATION-BASED ABUSES

As noted by Hovenkamp:

[A]ntitrust is too blunt an instrument to detect and remedy every anticompetitive act. Some practices will effectively be immune because our institutions are not up to the task of identifying them without producing an unacceptable number of false positives. ... the social cost of false negatives is very likely much less than the social cost of false positives. The antitrust case law is filled with examples of practices that may very well have been anticompetitive, but one can never be sure enough to risk the public costs of condemnation that might deter beneficial conduct.³⁹

Thus, competition authorities often err in deciding whether a given practice is anticompetitive or not. Type I error is false positive, it is therefore detecting an effect that is not present. Here, although some behaviours are in accordance with the law, they are prohibited. Type II error is a false negative, it is therefore failing to detect an effect that is present. Here, although some anticompetitive behaviour should be analysed as anticompetitive, it is not.⁴⁰ Type I denotes

³⁸ Josef Drexl, 'Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation without a Market' (2012) 8(3) *Journal for Competition Law & Economics* 507, 514.

³⁹ Herbert Hovenkamp, *The Antitrust Enterprise: Principle and Execution* (Harvard University Press 2005) 50.

⁴⁰ Timothy J Muris, 'Antitrust Law & Economics: Exclusionary Behavior, Bundled Discounts, and Refusals to Deal' http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Muris_Slides.pdf accessed 15 April 2012.

over-enforcement (when the null agreement is pro-competitive or neutral), while Type II denotes under-enforcement.⁴¹

In the case of Type I errors, transaction costs are high as courts and competition authorities incur work to decide on cases that are actually not supposed to be taken into consideration. By transaction costs which derive from these errors, one could mean costs such as those related to search and information, negotiation and implementation and the enforcement of resulting agreements.⁴²

Here, it is argued that it would be more efficient to not detect some of the anticompetitive practices (Type II errors) than to condemn those that are in fact pro-competitive (Type I errors). Type II errors lead to losses, which result from anticompetitive conduct, such as those deriving from strategies that raise rivals' costs or reduce rivals' profits, which may force competitors to exit the market or to produce at a lower scale.⁴³ Type I errors may, on the other hand, cause opportunity losses as they prevent the incumbent from implementing a strategy that would in fact lead to an increased allocative or productive efficiency. Type I errors can also lead to dynamic inefficiencies, however.⁴⁴ Furthermore, they generally lessen the incentive to strive for dominance, which would lead to loss in dynamic efficiency and would be especially damaging in markets in which firms compete through innovation. The negative effects on dynamic innovation would be overrun by the benefits of market power.⁴⁵ Still, the effects of Type I errors in dynamic markets can be more damaging to consumers than in conventional antitrust cases.⁴⁶

In digital markets, Type II errors which denote under-enforcement seem to be less harmful than Type I errors which denote over-enforcement. This is especially so since the Commission did not fully evaluate and establish the theory of harm. In digital markets, new kinds of behaviours arise and the characteristics of these markets are also novel. Therefore, unclear establishment of the elements of the theory of harm in such markets may lead to over-enforcement, yet acting to avoid errors should not prevent the Commission from intervening in digital markets. Nevertheless, the above-mentioned argument seems to hold from the consumer-welfare perspective and to be correct only when referring

⁴¹ Ibid.

⁴² Roger van den Bergh and Peter D Camesasca, *European Competition Law and Economics: A Comparative Perspective* (2nd edition, Sweet and Maxwell 2006) 94.

⁴³ Thorsten Käseberg, *Intellectual Property, Antitrust and Cumulative Innovation in the EU and US* (Hart Publishing 2012) 82.

⁴⁴ Ibid 83.

⁴⁵ Ibid 84.

⁴⁶ Geoffrey A Manne and Joshua D Wright, 'Innovation and the Limits of Antitrust' (2010) 6(1) *Journal of Competition Law and Economics* 153, 195.

to exclusionary conduct as in such a behaviour, unlike in exploitative conduct, no consumer welfare is directly impeded.

Manne and Wright propose ‘a rule of *per se* legality for new product introductions’.⁴⁷ A *per se* rule with low transaction costs, even when it is leading to over-enforcement, could be applied to abuses in digital markets instead of an advanced rule of reason that has high transaction costs. *Per se* prohibition denotes that whether some behaviour is anticompetitive or not is predefined beforehand (it would be then the so-called abuse ‘by object’ not ‘by effect’) without the need to prove whether an undertaking involved in such a practice is dominant or not and the negative effects of the practices are already assumed from it.⁴⁸ Conditions for its application as well as the consequences of non-compliance are then pre-defined.⁴⁹ The use of the *per se* rule lowers the transactions costs in connection to the rule of reason. In addition, the application of the *per se* rule does not exclude the possibility of the dominant undertaking defending itself on the basis of efficiency justifications.⁵⁰

The application of the *per se* approach could undermine the (successful?) attempts of the European Commission to implement a more economic-based approach,⁵¹ however, and consequently place the focus increasingly on the effects of practices instead of grouping them into categories. As pointed out by Akman,⁵² there are doubts as to whether the Commission has managed to move to an economics-based approach to Article 102. The excessive application of commitments decisions to novel competition issues, in particular, can be seen as a threat as these kinds of decisions are usually poorly argued for, on a legal and economic basis, and such a situation cannot compensate for the increased speed of procedures.⁵³ Therefore, it seems that even though the Commission had, through its modernisation process, encouraged a more

⁴⁷ Ibid 196.

⁴⁸ Herbert J Hovenkamp, ‘The Rule of Reason’ (2018) 70 Florida Law Review 81, 83.

⁴⁹ Lawrence B Solum, ‘Legal Theory Lexicon: Rules, Standards, Principles, Catalogs, and Discretion’ (*Legal Theory Blog* 24 December 2017) <https://lsolum.typepad.com/legaltheory/2017/12/legal-theory-lexicon-rules-standards-principles-catalogs-and-discretion.html> accessed 15 March 2018.

⁵⁰ Judgment of the Court (Grand Chamber) of 6 September 2017, Case C-413/14 P *Intel v Commission* [2017] ECLI:EU:C:2017:632.

⁵¹ See e.g. Don Henk, Ron Kemp and Jorig Van Sinderen, ‘Measuring the Economic Effects of Competition Law Enforcement’ (2008) 156(4) *De Economist* 341, 342–343.

⁵² Pinar Akman, ‘The Reform of the Application of Article 102 TFEU: Mission Accomplished’ (2016) 81(1) *Antitrust Law Journal*, 145 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2654679 accessed 12 July 2019.

⁵³ Ibid 63–64.

economics-based approach, this is unachievable where the Commission is using a commitments procedure in novel cases. Thus, there is a need to question how an economic-based approach serves the environment of information intermediaries and whether consumer welfare is still a valid welfare standard in this novel environment.⁵⁴

Moreover, although the *per se* approach emphasizes the nature of the conduct and organizes conduct into categories, such as predatory pricing, discrimination, fidelity rebates and tying, nevertheless, in some cases, alternative conducts may serve the same purpose. This is especially the case in digital markets where practices are new and may fall under several categories of conduct. Therefore, in order to avoid the possibility of error with defying a practice as a particular kind of behaviour, the effects-based approach could be used. This analysis is often supported by the application of economic theories and concepts.

However, although the economics-based approach to competition policy and looking at the effects of the abuse instead of condemning them *per se* is now a standard in the EU, at least in the academic literature, the EU Courts do not always follow it. The on-going discussion on this matter involves *Post Danmark I*⁵⁵ on one hand, and *Post Danmark II*⁵⁶ with *Intel*^{57 58} on the other. This is because the Commission's Guidelines bind only the Commission and not the Courts, as we have seen many times in case law and as directly stated in the Guidelines. Despite its shortcomings, the economics-based approach, along with the application of general economic principles has brought more consistency to the EU competition policy.⁵⁹ An assessment of the effects of the conduct has served a number of purposes. It has not only helped in the evaluation of competition law enforcement, but also influenced the choice of priorities in fighting anticompetitive practices or proved helpful in establishing the size of damages to be paid in compensation for concrete anticompetitive

⁵⁴ On the choice of welfare standard see Guido Calabresi and A Douglas Melamed, 'Property Rules, Liability Rules, and Inalienability: One View of the Cathedral' (1972) 85(6) Harvard Law Review 1089.

⁵⁵ Case C-209/10 *Post Danmark A/S v Konkurrencerådet* [2012] ECLI:EU:C:2012:172.

⁵⁶ Case C-23/14 *Post Danmark A/S v Konkurrencerådet* [2015] ECLI:EU:C:2015:651.

⁵⁷ Case T-286/09 *Intel Corp. v European Commission* [2014] OJ C 245, 28.7.2014.

⁵⁸ See Björn Lundqvist, 'Post Danmark II, Now Concluded by the ECJ: Clarification of the Rebate Abuse, but How Do We Marry Post Danmark I with Post Danmark II?' (2015) 11(2–3) European Competition Journal 557.

⁵⁹ Luc Peepkorn, 'Commission Publishes Discussion Paper on Abuse of Dominance' (2006) 1 Competition Policy Newsletter 1 http://ec.europa.eu/competition/publications/cpn/2006_1_4.pdf accessed 17 March 2016.

practices.⁶⁰ To assess the extent to which negative effects of the conduct are able to outweigh the positive ones, a lawyer does need to apply a complex economic or econometric analysis. Actual or likely negative effects can be proved by an analysis of factual developments of the conduct, as well as by assessing the ways in which it is likely to affect the market. Nevertheless, the application of economic and econometric models to support the analysis of competition law should be applied on a wider scale.⁶¹ Economics of competition law, which in the analysis denotes taking into account some (case-specific) economic theories and models, as well as the effects-based approach, should therefore remain an important part of such an analysis in digital markets.

Focusing on the effects of the practices could then (a) guarantee that companies do not escape legal provisions by attempting to achieve the same end results through the use of different commercial practices, as well as (b) by assessing the outcome of the practice, the effects-based approach provides a comparable treatment of similar practices which lead to the same result.⁶² For example, a firm which is in control of an essential facility may distort competition in a downstream market and this can be achieved by: (1) refusing to deal with independent downstream firms; (2) engaging in exclusive dealing arrangements; or (3) engaging in explicit or implicit price discrimination.⁶³ This can only be caught by the effects-based approach, and not by focusing on naming the abuse in question but by looking at whether its effects are anticompetitive.

The effects-based approach assesses how the conduct at issue is likely to harm consumers. This can be done for example by adopting an ‘as efficient competitor test’.⁶⁴ Intervention, even in digital markets, should take place only ‘where the conduct concerned has already been or is capable of hampering competition from competitors which are considered to be as efficient as the dominant undertaking’.⁶⁵ Nevertheless, although sometimes the effects on consumers can be observable (e.g. the product’s price has risen, the quality of

⁶⁰ Henk, Kemp and Van Sinderen (n 51) 344.

⁶¹ Damien Neven and Miguel de la Mano, ‘Economics at DG Competition 2008–2009’ (2009) 35(4) *Review of Industrial Organization* 317, 337.

⁶² Gual et al. (n 21) 3.

⁶³ *Ibid* 6.

⁶⁴ Philip Marsden and Lisa Gormsen, ‘Guidance on Abuse in Europe: The Continued Concern for Rivalry and a Competitive Structure’ (2010) 55(4) *The Antitrust Bulletin* 887.

⁶⁵ European Commission (2009) *Communication from the Commission – Guidance on the Commission’s Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings*. Official Journal of the European Union (2009/C 45/02), para 22 [http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0224\(01\):EN:NOT](http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0224(01):EN:NOT) accessed 24 June 2019.

the product is lowered, or a specific group of consumers is harmed), however, often there are no observable findings on the effects on consumers and they are based on ‘a consistent theory of consumer harm’. This theory is empirically validated, and grounded in a statement that the findings should be consistent with factual observations (*ex ante* validation) and that ‘the market outcomes should be consistent with the predictions of the theory’, probable or likely non-observable effects (*ex post* validation).⁶⁶ For example, in digital markets the negative effects on consumers would be manifested by the loss of privacy or receiving the biased information that is of a lower quality.

The effects-based approach⁶⁷ would seem to lead us to a situation where the Commission would only look at the effects of the conduct in question to decide whether it is anticompetitive or not. However, this is only partly correct, since, in order to prove that there has been anticompetitive conduct, one needs to introduce a theory of harm – that is, lay down the reason why the dominant undertaking would decide to act anticompetitively. For example, does it wish to keep its dominant position in the market that it presently occupies and that is why it aims at excluding its competitors? Or does it want to leverage its market power from the market it dominates into some adjacent markets? Therefore, the change towards the full application of the effects-based approach can only succeed if a classification of conduct categories, which is an essential ingredient of legal thinking, were to be combined with the economic analysis and objectives of EC competition law. The Commission understands this need and continues to support the classification of a conduct, for example a distinction between price and non-price discrimination can be found in the Guidance Paper.⁶⁸ Other types of categorized conduct include often applied distinctions between exploitative and exclusionary abuses; unilateral and collusive behaviour; and dominant and non-dominant firms.⁶⁹

It seems that applying the effects-based approach is the best way to proceed in digital markets as it allows the enforcers a larger margin of choice as to the theory of harm they choose. Therefore, there would be no need to classify a particular behaviour as a particular kind of established abuse of dominance; instead, it would be enough to prove its anticompetitive effects.

⁶⁶ Penelope Papandropoulos, ‘Implementing an Effects-based Approach under Article 82’ (2008) 1-2008 Concurrences Review, Art. N° 15435, 3 www.concurrences.com accessed 24 June 2019.

⁶⁷ See e.g. Pablo Ibáñez Colomo, *The Shaping of EU Competition Law* (Cambridge University Press 2018) 154.

⁶⁸ Ioannis Lianos, ‘Categorical Thinking in Competition Law and the Effects-Based Approach in Article 82 EC’, in Ariel Ezrachi (ed), *Article 82 EC Reflections on Its Recent Evolution* (Hart Publishing 2009) 49.

⁶⁹ *Ibid.*

Nevertheless, a possibility exists that the application of stricter *per se* rules to abuses of dominance that arise in digital markets could make the application of competition law in this area less complicated and less prone to errors. However, this would denote that digital monopolies would be put under a higher threshold of special responsibility than regular brick-and-mortar monopolies, which could be questioned.

As noted by Christiansen and Kerber, the increased application of the rule of reason instead of *per se* rules in the EU is the result of an application of the more-economic approach and the fact that many previously ambiguous practices can now be approached with findings from industrial economics. According to the authors, such an approach of favouring the rule of reason may have negative welfare effects and lead to increased enforcement costs, rent-seeking problems and legal uncertainty.⁷⁰ Consequently, the authors promote *per se* rules:

depending on the costs and the benefits of additional differentiation – the optimal complexity (or precision) of competition rules varies between different types of business behaviour. Simple *per se* rules, intermediate solutions (as structured rules of reasons or quick look rules) as well as, in presumably rare cases, a traditional rule of reason (as full-scale market analysis) can be the preferable kind of rule.⁷¹

However, an additional differentiation of rules (as they see it, optimally differentiated rules) achieved through a deeper assessment could also reduce Type I and II errors.⁷²

The so-called ‘error-cost approach to enforcement’ stands on the premise that the enforcement of competition policy is imperfect and that decision errors cannot be avoided. This premise holds, especially in dynamic markets based on innovation, because in such an environment it may be difficult to decide whether it is more advisable to intervene or not. The error-cost analysis assumes that false positives are costlier than false negatives. This is the case because markets’ self-correction mechanism can fix false negatives, but not false positives. Moreover, since deciding what is anticompetitive and what is not is a difficult task, both kinds of errors are inevitable.⁷³ The error-cost

⁷⁰ Arndt Christiansen and Wolfgang Kerber, ‘Competition Policy with Optimally Differentiated Rules instead of “*per se* Rule vs Rule of Reason”’ (2006) 2(2) *Journal of Competition Law & Economics* 215, 215.

⁷¹ *Ibid* 228–229.

⁷² *Ibid* 215.

⁷³ Geoffrey A Manne and Joshua D Wright, ‘Innovation and the Limits of Antitrust’ (2010) 6(1) *Journal of Competition Law and Economics* 153, 157.

approach is considered to be one of the most influential contributions to anti-trust law and economics.⁷⁴

Since innovation (dynamic efficiency) is inherently connected to uncertainty and, consequently, errors, practices that are new and involve innovation considerations may therefore lead to errors. As innovation involves new business practices and products, it is important to point out that novel business practices have usually been treated quite kindly by antitrust authorities. Some authors, including Manne and Rinehart, argue that economists tend to treat new forms of conduct which are not well understood as anticompetitive.⁷⁵ However, uncertainty should not be the reason for not condemning cases that are concerned with new kinds of abuses. This is because it is common in a legal practice to make decisions based on predictions.⁷⁶ This may depend on the legal jurisdiction regarding how much risk will in fact be taken.⁷⁷ This could also perhaps explain why there are differences in the way similar cases are handled in the EU and in the US, for example in the famous Google case.

Shelanski⁷⁸ points out that some criticism has been introduced regarding whether antitrust should intervene in digital markets without causing harm and leading to errors. He distinguishes between scholars that dissuade the application of antitrust in almost all cases and recommend leaving the markets to themselves and ones that warn about the errors connected to over-enforcement and the impact of this over-enforcement on incentives to invest and innovate.⁷⁹ However, Shelanski himself nevertheless recommends the (cautious) application of antitrust to digital markets also.

This is because 'even if some aspects of digital industries render competition enforcement less appropriate, other aspects might make it important'.⁸⁰ In particular, where concerns are related to innovation and consumer information, which arise in such markets and raise concerns as to the conduct of undertakings or a future merger, such conduct should be put under antitrust scrutiny despite the danger of false positives.⁸¹ Refocusing on innovation and customer

⁷⁴ Ibid 157.

⁷⁵ Ibid 164.

⁷⁶ Joseph Drexler, 'Real Knowledge is to Know the Extent of One's Own Ignorance: On the Consumer Harm Approach in Innovation-Related Competition Cases' (2009) Max Planck Institute for Intellectual Property, Competition and Tax Law Research Paper Series 4 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1517757 accessed 29 August 2016.

⁷⁷ Ibid 5.

⁷⁸ Howard Shelanski, 'Information, Innovation, and Competition Policy for the Internet' (2013) 161(6) *University of Pennsylvania Law Review* 1663.

⁷⁹ Ibid 1666.

⁸⁰ Ibid.

⁸¹ Ibid 1667.

information would allow the avoiding of conducts and transactions that might ‘block the very innovation that antitrust critics invoke to argue against competition enforcement’.⁸² These issues are explained further in Chapter 2.

Nevertheless, many decisions in digital markets are still undertaken with uncertainty and such a situation cannot be avoided. As will be discussed in Chapter 4, digital markets are based on potential competition, which involves hypothetical assessment of product substitutes as well as consumer preferences.

Finally, some of the allegedly anticompetitive behaviours may be solved with the use of other legal regimes, such as intellectual property rights like copyright law. This brings us to the issue of the relationship between competition law and IPR, which has been the subject of legal debate for decades now. Nevertheless, it is not entirely clear whether they are complementary to each other or not.

1.4 NEW KINDS OF ABUSES

Digital markets bring along new kinds of behaviours that have not been the subject of an earlier case study. Thus began a discussion of whether there is a need for the creation of new kinds of abuses that would address previously unknown anticompetitive behaviours. To be an abuse of dominance it is enough that a behaviour fulfils the general criteria for an abuse of dominance that can be found in Article 102 TFEU. The first layer of the conventional approach denotes the general test for abuse of dominance illegal conduct under Section 2 of the Sherman Act and Article 102 TFEU used by courts and suggested in the literature.⁸³ This first interpretive layer constitutes a common standard that allows the equal treatment of conduct-specific rules and avoiding situations where companies would try to escape liability by adopting strategies with the same anticompetitive effect and benefits, but which would fall under rules that are more lax.⁸⁴ Therefore, at least in theory, it would seem enough for the purpose of finding an abuse of dominance that the allegedly anticompetitive behaviour falls under the first interpretive layer of Article 102 TFEU.

Article 102 is created on purpose in the form of a non-exhaustive list of anticompetitive abuses that are designed to be only examples of a possible variety of different abuses. Therefore, the original idea behind the creators of this regulation was not to aim towards a closed legal rule but more towards

⁸² Ibid 1686.

⁸³ Thorsten Käseberg, *Intellectual Property, Antitrust and Cumulative Innovation in the EU and US* (Hart Publishing 2012) 69.

⁸⁴ Ibid 69–70; see also Spencer Weber Waller and Matthew Sag, ‘Promoting Innovation’ (2015) 100 *Iowa Law Review* 2223.

an open standard. An attempt to focus on a form-based approach to competition law and systematise abuses, for example each of the kinds of refusal to deal as a separate category, is a constant element of competition policy. The Commission seems to be right where it stressed in its recent Google decision that ‘the legal characterisation of an abusive practice does not depend on the name given to it, but on the substantive criteria used in that regard’.⁸⁵

When talking about the second layer in the traditional approach to an abuse of dominance, we are referring to conduct-specific rules such as refusal to supply or tying. These are broadly recognised as theories of harm. This is mostly due to experience and relevant case law that led to the creation of a number of legal rules and therefore different lines of injury. These can be considered as types of shortcuts.⁸⁶ However, as it is fairly difficult to decide on a prevailing theory of harm, one should take a close look at the nature of the conduct, for example whether it is closer to refusal to deal or tying cases.⁸⁷ One way to decide on the relevant theory of harm is to think of a possible remedy before setting out the legal test. This approach may be particularly useful in new technology markets, since in such an environment conduct can be qualified under a number of different theories of harm and these conducts can also be addressed with a number of remedies.⁸⁸

Another problem that arises when attempting to find a valid theory of harm is the fact that there is a thin line between some theories or that some of them may be also considered as complementary strategies. For example, leveraging, that is, a situation where a dominant company aims at excluding competitors from adjacent markets and transfers its dominant position to that new market, can in fact be considered as an element of many theories of harm, such as tying or refusal to deal, instead of being treated as a separate theory of harm. Moreover, a complementary refusal to deal is also especially tricky as it includes or overlaps with a wide range of conduct that is usually classified within different boxes under antitrust law, such as technical and contractual tying; bundling and multi-product discounts; and exclusive dealing.⁸⁹ That is

⁸⁵ *Google Search (Shopping)* (n 9) para 335.

⁸⁶ Carl Shapiro, ‘Exclusionary Conduct. Testimony Before the Antitrust Modernization Commission, Summary of Testimony’ (2005) 3 <http://faculty.haas.berkeley.edu/shapiro/amcexclusion.pdf> accessed 17 March 2016.

⁸⁷ Pablo Ibáñez Colomo, ‘How to Distinguish between Tying and Refusal to Deal Cases (Hint: it’s Not Just Words)’ (*Chillin’ Competition*, 24 April 2015) <http://chillingcompetition.com/2015/04/24/how-to-distinguish-between-tying-and-refusal-to-deal-cases-hint-its-not-just-words/> accessed on 20 April 2015.

⁸⁸ *Ibid.*

⁸⁹ Shapiro (n 86) 8–9.

also why the ‘refusal to deal’ category of conduct is not easy to distinguish from several other categories of conduct in antitrust law.⁹⁰

As ‘Article 102 does not indicate what theory of harm it embodies’,⁹¹ theories of harm may become more specific and new theories of harm may also arise. The first situation is especially vivid with regards to a refusal to deal and its specific types. In this case, besides the main criteria for refusal to deal, additional specific circumstances that better fit the particular refusals to deal are available, such as when access to information, for example IPRs or any other form of bottleneck, is refused. Refusal to deal can be divided into a few more specific types that lack clear classifications, and this may create confusion for dominant undertakings. In the latter case, one can distinguish between the concept of a refusal to deal and then other, special types of it, such as (1) terminating an existing supply relationship, (2) refusing to start supplying an input, including where this input is covered by intellectual property rights, or (3) where this input is information necessary for interoperability.⁹²

Since Article 102 TFEU includes a non-exhaustive list of abuses of dominance, the Commission and the Courts are free to add new kinds to it, as it is attempting to achieve with the addition of so-called exclusionary discrimination. Therefore, for example, the introduction by the Commission of a brand new theory of harm in the form of exclusionary discrimination or the theory of self-preferencing in Google Search investigations – the situation where a dominant undertaking is favouring own goods and services over those of consumers, where it operates as an information intermediary – could fall under the second category. The situation where new theories of harm arise is quite ambiguous, since the current competition policy aims at an increasingly effects-based approach to competition cases; however, new theories of harm are still created – that is conduct-specific rules, which fall under a form-based approach to competition law instead. Moreover, adding to a variety of refusals to deal, for example, creates confusion among the companies that are already holding a dominant position in the market and lowers legal certainty.

It may be better that the Commission and Courts do not define which standard and which test is relevant in cases of foreclosure of access to an input. Therefore, although one could argue about the legal certainty, flexibility is what European competition law is aiming at. This may be a good choice in particular in new technology markets, where sometimes it may be relevant

⁹⁰ Ibid 9.

⁹¹ Jones and Sufrin (n 26) 367.

⁹² DG Competition, ‘Discussion Paper on the Application of Article 82 [now 102 TFEU] of the Treaty to Exclusionary Abuses’ (Staff Discussion Paper) [2005] para 215 <http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf> accessed 26 August 2018.

to refer to the so-called ‘new product requirement’ as a necessary criterion for the access, and sometimes this requirement can be omitted, for example where interoperability information is required. Therefore, the choice of a test is secondary, as long as the Commission is able to prove that a dominant company is abusing its dominant position and the test criteria are fulfilled. One cannot forget, however, to focus first on a relevant standard, and this should be consumer welfare, as is often stressed by the Commission. Nevertheless, this does not change the fact that the Commission’s stance on this matter, as well as the opinion of the Courts, as seen in case law, varies to a certain extent, and this creates a situation where even firms are not sure whether their business practices can be deemed anticompetitive or not.

The Commission has aimed at clarifying the most common theories of harm as well as efficiencies that can lead to the discarding of these theories in the Communication from the Commission – the DG Competition discussion paper on the application of Article 82 (now Article 102 TFEU) of the Treaty to exclusionary abuses and the Guidance on the Commission’s enforcement priorities in applying Article 82 (now Article 102) of the EC Treaty to abusive exclusionary conduct by dominant undertakings.

What is more, does the fact that these kinds of information behaviours are new and difficult to comprehend denote that new kinds of abuses of dominance should be created? Not necessarily; however, this could indicate that there is a need to assess these abuses from a different angle. One way to do that would be to introduce social goals, such as fairness, to accompany goals of competition law. This will be discussed in detail in Chapter 6, section 6.5.

1.5 CONCLUSIONS

It seems that posting any information (e.g. advertisements), independently of using a dominant online platform, may be detrimental to one’s business. Such companies can be considered as unavoidable trading partners, which may enable them to manipulate information and possibly exclude or damage effective competition. Consequently, the information society is now facing a number of challenges, some of which relate to the control that dominant information intermediaries exert over information. These intermediaries may block access to, or bias, the quality of information. In such circumstances, information becomes a ‘commodity’, a private good. This idea is in sharp contrast with a vision of information as ‘commons’, a public good, which is popular in the environment of the information society. However, in the current design of the Internet, known as ‘Web 2.0’, information as ‘commons’ and information as a ‘commodity’ co-exist more or less peacefully. Therefore, although some of the information is publicly available, in return for being able to access such common information, users of Web 2.0 usually must provide

their personal data and reveal their preferences (this is done more or less consciously by these users). Data from these users contribute to larger data sources and create databases – the so-called ‘big data’ that provides a competitive advantage to the company that possesses it. The big data becomes richer as more people use it and it constitutes a strong barrier to entry. Where this unique and hard-to-recreate data is controlled by a dominant company and is constantly enriched due to positive network externalities,⁹³ it further reinforces the dominant position of an online platform.

Therefore, competition lawyers and officers of competition authorities should acknowledge the characteristics of digital markets, as this phenomenon is not a temporary trend, but more like a 180-degree change for the entire EU competition law. The abuse of dominance that occurs in digital markets does not always fit into the criteria that were created for physical inputs, as the thirst for information creates new kinds of abuses of dominance that cannot be found in previous case law. This is so as these abuses may manifest themselves, for example by degrading the quality of services or products of rivals in order to self-prefer monopolists’ own services or imposing unfair terms and conditions on users to harvest their personal data.

It then seems that applying the effects-based approach is a way to go in digital markets as it allows the enforcers a larger margin of choice as to the theory of harm they choose. There would then be no need to classify a particular behaviour as a particular kind of an established abuse of dominance and resort to the *per se* approach.

The aim of this book is to analyse whether access to business information can be granted in digital markets when such information has been denied and when the company denying this information is a monopolist that acts anticompetitively. This book is particularly concerned with the ways that are available under competition regimes to address the refusal to provide access to such business information. In particular, could the category of refusal to supply be suitable as a way of approaching the issue? Under which specific theory of harm could access to information be granted, for example? Would the essential facilities doctrine address the problem of access to (essential) business information? These questions gain an increased importance as competition authorities all over the world assess the allegedly anticompetitive behaviour of online platforms, such as Google, Amazon and Facebook.

⁹³ See Tim O’Reilly, ‘What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software’ (2007) 65, 1st Quarter Communications & Strategies, 36–37 <http://ssrn.com/abstract=1008839> accessed 22 October 2016.

However, the main focus of this book is on the recent decision of the European Commission on Google,⁹⁴ where Google has been fined €2.42 billion for abusing its dominant position as a search engine by granting an illegal advantage to another of its products – its own comparison shopping service.⁹⁵

This book confirms the Commission's findings on Google's dominance; however, it offers alternate arguments for the appropriate theory of harm as to the abusive practice of search bias. In particular, the decision of the European Commission provides new insights into the assessment of market power without the need to use an SSNIP test, and into the (in the author's opinion insufficient) arguments behind Google's self-preference.

This book is divided into three parts. Part I focuses on the theory of law and abuse in digital markets, and Part II on the analysis of anticompetitive abuses in Google Search investigations. The first, more theoretical Part I analyses the role of the information in digital markets (Chapter 3); characteristics of digital markets and their implications on the assessment of market power (Chapter 4), dominance of online platforms (Chapter 5), and law on abuse of dominance and access to information (Chapter 6). Part II is practical and applies the findings from Part I to Google Search investigations. This is achieved by first introducing the EU investigations on Google Search (Chapter 8) and then by assessing its alleged dominance (Chapter 9). Thereafter, two abuses are analysed in detail: contractual restrictions on the portability and management of online advertising campaigns (Chapter 10); and search bias (Chapter 11). The possible choices of legal procedures and actions the Commission is facing in these investigations are also explored (Chapter 12).

Part III focuses on policy recommendations on abuse of dominance by information intermediaries. This includes assessing the borders of intersection between digital markets and competition law by offering practical solutions to the problems that arise from this intersection (Chapter 14). This book concludes in Chapter 15, which sums up the findings and offers a way forward.

⁹⁴ *Google Search (Shopping)* (n 9); see also European Commission, 'Antitrust: Commission Fines Google €2.42 Billion for Abusing Dominance as Search Engine by Giving Illegal Advantage to Own Comparison Shopping Service' (Press release, Brussels, 27 June 2017) http://europa.eu/rapid/press-release_IP-17-1784_en.htm accessed 20 July 2018.

⁹⁵ *Google Search (Shopping)* (n 9) para 2.