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Application of the Essential Facilities Doctrine to data

The doctrine's applicability to data in relation to fundamental rights

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Abstract

The thesis examines the development of essential facilities doctrine in EU case law under Article 102 TFEU and further, *to what extent can refusal to supply, in particular the essential facilities doctrine, be applicable to data and how do fundamental rights* (the freedom to conduct business and the right to property) *relate to such extension.*

The analysis of the development of the case law, especially in the digital context, indicates some differences in interpretation and application of the EFD although the initial criteria of the EFD remains, at least in theory. Yet, the thesis raises some uncertainties regarding the relevance of, especially, the indispensability criterion and the application of the EFD in general, due to non-consistent case law.

As for the extent to which the EFD can apply to data, although a more complex and cautious application, an application of data to the EFD would be possible. However, the assessment of the EFD may require incorporating characteristics of data and data-driven markets. Yet, there are other sources indicating other developments of the application of accessing data. As such, it is not apparent whether the EFD will remain unchanged when applied to data.

The thesis thereafter presents an analysis regarding the relationship between the development of the EFD and the EU fundamental rights on freedom to conduct business in Article 16 CFR and right to property in Article 17 CFR. It is apparent that a development in the application of the EFD must ensure a balance of the fundamental rights and limit its interference. As such, what extent an application will interfere with fundamental rights depends on the route taken when applying the EFD to data. All things considered; some uncertainties remain which might be clarified through pending case law.

Sammanfattning

Förevarande uppsats analyserar utvecklingen av doktrinen om ’essential facilities’ i EU rättspraxis under Artikel 102 TFEU och vidare, *i vilken utsträckning kan leveransvägran, särskilt doktrinen om ’essential facilities’ vara applicerbar på data och hur relaterar de fundamentala rättigheterna* (näringsfrihet och rätt till egendom) *till sådan tillämpning*.

Analysen av utvecklingen i rättspraxis, särskilt angående den digitala marknaden, indikerar vissa skillnader i tolkning och tillämpning av EFD, även om de ursprungliga kriterierna för EFD kvarstår. Däremot, för uppsatsen fram vissa osäkerheter kring relevansen av specifikt ’indispensability’ kriteriet och även tillämpningen av doktrinen i allmänhet, på grund av icke-konsekvent rättspraxis.

Vad gäller i vilken utsträckning EFD kan tillämpas på data, anses det att även om det är en mer komplicerad och försiktig tillämpning, är en sådan tillämpning möjlig, åtminstone i teori. Men bedömningen kan dock behöva inkludera överväganden kring egenskaperna hos data och datadrivna marknader. Samtidigt finns det andra källor som indikerar en annan utveckling av tillämpningen av att ge åtkomst till data. Följaktligen, det är inte evident om EFD kommer att förbli oförändrad när den tillämpas på data.

Uppsatsens analyserar därefter förhållandet mellan utvecklingen av tillämpningen av doktrinen och EU-rättens fundamentala rättigheter, näringsfrihet i Artikel 16 CFR och rätt till egendom i Artikel 17 CFR. Det är uppenbart att en utveckling av tillämpningen av EFD måste säkerställa en balansering av begränsningen av EU:s fundamentala rättigheter. Således, i vilken utsträckning en tillämpning kommer att inverka på dessa rättigheter, beror på vilken riktning som tas när EFD tillämpas på data. Sammantaget; vissa osäkerheter kvarstår men dessa kan eventuellt klargöras av den rättspraxis som är under processer av överklagan och utredning.

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Now on to the following step of my legal journey.
Linn Månsson, 2022.

Abbreviations

AG	Advocate General
AI	Artificial Intelligence
Guidance Paper	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 45/7
CJ	Court of Justice, formerly known as the European Court of Justice (ECJ)
CJEU	The Court of Justice of the European Union
CFR	Charter of Fundamental Rights
EFD	Essential Facilities Doctrine
EU	European Union
GC	General Court, formerly known as the Court of First Instance (CFI)
GDPR	General Data Protection Regulation
IPR	Intellectual property right
ML	Machine learning
NCA	National Competition Authority
OECD	Organisation of Economic Co-operation and Development
SSNIP	Small but significant and non-transitory increase in price

TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union

1. Introduction

1.1. Background

Data has become an increasingly valuable asset and is considered to be an essential input. It is therefore an ever more important factor from a competition law perspective.[1] Data has been identified as an important input for specifically digital markets. As such, data can be used to target consumers, develop personalised pricing, harness network effects, improve the quality of the product, launch new products and when implementing a range of business strategies.[2] Since data is such a desirable input, the question, therefore, arises if a company can require another company, possibly a competitor, to supply data?

Refusal to supply can be seen as an abuse of a dominant position under Article 102 TFEU. The assessment to apply the affirmative obligation has developed through the years to contain an essential facilities doctrine (EFD).[3] The doctrine has developed through case law and applies to assess cases covering refusal to supply, which is also referred to as refusal to deal, hence here interchangeable.[4] Refusal to supply is categorised as an exceptional abuse since it contradicts some of the fundamental rights in the EU and a high threshold must therefore be met for EFD

[1] Nils-Peter Schepp and Achim Wambach, 'On Big Data and Its Relevance for Market Power Assessment' (2016) 7(2) JECLAP 120, 120.

[2] OECD, 'Abuse of dominance in digital markets' (2020) <www.oecd.org/daf/competition/abuse-of-dominance-in-digital-markets-2020.pdf> accessed 19 May 2022 27.

[3] Alison Jones, Niamh Dunne and Brenda Sufrin, *EU competition law* (7th edn, Oxford University Press 2019) 484; Case C-7/97 *Oscar Bronner v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG* ECLI:EU:C:1998:264 [1998] ECR I-7817, Opinion of AG Jacobs para 56; 3 European Commission, Directorate-General for Competition, Yves-Alexandre de Montjoye, Heike Schweitzer and Jacques Crémer, 'Competition policy for the digital era, Publications Office' (2019) <https://data.europa.eu/doi/10.2763/407537> ('Commission Report') 99.

[4] OECD is for example incorporating both refusal to supply and refusal to deal in the same acronym when assessing refusal to deal in OECD, 'Policy Round table Refusals to deal' (DAF/COMP(2007) 46 2007) <https://one.oecd.org/document/DAF/COMP(2007)46/en/pdf> accessed 18 May 2022 21.

to apply. The concerned fundamental rights are the freedom to conduct business in Article 16 CFR and the freedom of property Article 17 CFR.[5]

The legal test of the EFD has partially been interpreted differently in the more recent case law, as in the case of *Microsoft I*,[6] especially when applied in a digital context. The case of *Google Shopping*,[7] which of now is on appeal, further demonstrates the ongoing development and differentiations of the interpretations of the doctrine.

The application of EU competition law to data has *further* complicated the application of EFD.[8] The application of an already established concept such as refusal to supply to an input such as data, may require other factors in the assessment than in cases not concerning data. For example, by considering the impact of different types of data and characteristics of data-driven markets.[9] Additionally, there are discussions if data should be considered as a parameter when determining such concepts in EU competition law. As EU case law has not, as of now, acknowledged data as a parameter to be considered in regard to competition.[10] There are although other sources indicating the contrary.

There is, as presented, discussion regarding the development and interpretations of the EFD when assessing refusal to supply in the context of data. In addition to this, there is a further discussion if the concept of refusal to supply can even be applied to data. Moreover, if such application in accordance with the initial considerations of fundamental rights. This further leads to the thesis purpose and research question.

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[5] Jones, Dunne and Sufrin (n 3) 484; AG Jacobs in Case C-7/97 *Bronner* (n 3) para 56; Commission Report (n 3) 99; see section 2.3.

[6] Case T-201/04 *Microsoft Corp. v Commission of the European Communities* ECLI:EU:T:2007:289 [2004] ECR II-3601.

[7] Case T-612/17 *Google and Alphabet v Commission* ('Google Shopping') ECLI:EU:T:2021:763 [2021]; C-48/22 P *Google and Alphabet v Commission*, on appeal; *Google Search* (Shopping) (Case AT.39740) Commission Decision C(2017) 4444 final [2017] OJ C/9/08.

[8] Commission Report (n 3) 101.

[9] Richard Feasey and Alexandre de Streel, 'Data sharing for digital markets contestability: towards a governance framework' in Jan Krämer (ed), *Digital markets and online platforms New perspectives on regulation and competition law* (Centre on Regulation in Europe 2020) 92.

[10] *Facebook/WhatsApp* (Case COMP/M.7217) [2014] OJ C/297/13; *Google/DoubleClick* (Case COMP/M.4731) [2008] OJ C/184/06.

1.2. Purpose and research question

The purpose of this is to analyse the requirements of refusal to supply under Article 102 TFEU in the context of supplying data to competitors and its relationship with EU fundamental rights. The thesis will primarily examine the development of the essential facilities doctrine and the possible application of the doctrine to data and secondly discuss the rationale behind this development in relation to EU fundamental rights.

The research question is therefore *to what extent can refusal to supply, in particular the essential facilities doctrine, be applicable to data and how do fundamental rights relate to such extension.*

In order to answer the main research question the following sub-questions are required to be answered:

1. How have the concepts of refusal to supply and the essential facilities doctrine developed in the case law?

2. To what extent can the criteria of the essential facilities doctrine be considered applicable to data?

3. Which characteristics of data are relevant in the application of the essential facilities doctrine?

4. How do the fundamental rights, the freedom to conduct business (Article 16 CFR) and the right to property (Article 17 CFR), affect the essential facilities doctrine?

1.3. Methodology and material

1.3.1. Legal dogmatic method and EU legal method

The thesis will apply a legal dogmatic method, also referred to as a legal doctrinal method.[11] The author Smith presents that the legal dogmatic method has the goals of description, prescription, and justification.[12] The goal of *description* is referred to as describing the existing law. This will be applied in this thesis by describing existing legislation and case law for the concept of EFD and fundamental rights.[13] The goal of *prescription* is when the method is used to search for practical solutions and further examine which practical solution would fit the already existing system. This will be applied when assessing the different approaches of developing the EFD's application to data in the light of fundamental rights and legal certainty.[14] Lastly is the goal of *justification*.[15] This goal can be applied when the object is to systematically present the principles, rules, and concepts governing a legal field or institution. As such, when the doctrinal approach analyses the relationship between such sources through an objective account on law, independent from the work of legislators and courts. This goal will be applied in the context of the relationship between the development of the EFD's applicability to data and fundamental rights yet considering the rationale behind such sources and its application in case law.[16]

The doctrinal approach is also used to systematise the present law. It is considered crucial for a legal dogmatic approach to be able to incorporate new developments. New developments refer to recent case law and legislation in connection to societal change.[17] Smith emphasises the importance of not incorporating external viewpoints in the legal dogmatic method since it would then no longer be a legal

[11] Jan M. Smits, 'What is Legal Doctrine? On the Aims and Methods of Legal-Dogmatic Research' in Rob van Gestel, Hans-W. Micklitz and Edward L Rubin (eds), *Rethinking Legal Scholarship: A Transatlantic Dialogue* (Cambridge University Press 2017) 210.

[12] Smits (n 11) 213.

[13] Smits (n 11) 213-17.

[14] Smits (n 11) 217-19.

[15] Smits (n 11) 210.

[16] Smits (n 11) 210; 219-21.

[17] Smits (n 11) 212.

approach to the question. Such external viewpoints refer to economic, sociological, and historical etcetera.[18] The thesis will therefore use a legal approach yet acknowledging economic theories in the context of EU competition law.

The subject of the thesis relates to EU competition law and will therefore also apply the EU legal method. EU law is almost exclusively based on the CJ case law and the legal principles of the EU.[19] The essential when applying an EU legal method is that the interpretation of EU law is primarily based on considering the context and purpose, referred to as using predominantly contextual and teleological interpretation methods. Yet, there are also other interpretation methods relevant to EU law.[20] To further note is that the Commission's decisions and statements have more influence as a source when the thesis aims to assess EU competition law.

1.3.2. Material used for applied methodology

The relevant legal sources used in a legal dogmatic method are written and unwritten European, national, or international rules and legislation including principles, doctrines, overall concepts, case law, and annotations in the literature. Furthermore, this includes new developments as well.[21]

The relevant legal sources when applying EU law are primary sources and secondary sources referred to as hard law which are binding sources. Relevant legal sources also cover soft law and supplementary sources. Primary sources are TEU, TFEU and the Charter of Fundamental Rights in accordance with general principles of EU Law.[22] The secondary sources cover legislative, delegated, and implemented

[18] Smits (n 11) 211.

[19] Jörgen Hettne and Ida Otken Eriksson (ed), *EU-rättslig metod Teori och Genomslag i Svensk Rättstillämpning* (2nd edn., Norstedts juridik 2011) 40.

[20] Hettne, Eriksson (n 19) 36, 155, 168; Miguel Poiares Maduro, 'Interpreting European Law – Judicial adjudication in a Context of Constitutional Pluralism' (2008) Working Paper IE Law School WPLS08-02 5/2-2009 <https://ssrn.com/abstract=1134503> accessed 18 May 2022 3.

[21] Jan Vranken, 'Exciting Times for Legal Scholarship' (2012) 2(2) LaM 42 https://www.lawandmethod.nl/tijdschrift/lawandmethod/2012/2/ReM_2212-2508_2012_002_002_004.pdf accessed 17 May 2022 43.

[22] Paul Craig and Gráinne De Burca, *EU law: Text, Cases and Materials* (7th edn, Oxford University Press 2020) 141-42.; Article 1 subparagraph 3 and Article 6(1) TEU; Article 263 TFEU.

acts.[23] Soft law is on the other hand not binding and can be guidelines, declarations, recommendations, and opinions.[24] Supplementary sources thereafter cover opinions of AG, other legal literature, and preparatory documents.[25] To further note is that EU competition law is based on economic theory which will therefore partly add to the material.[26]

As the purpose and research question present, the thesis will focus on competition law in the EU as the specific jurisdiction. The specific material applied is therefore mainly Article 102 TFEU, the Guidance Paper,[27] case law, AG opinions and the Commission's report on abuse in digital markets[28] (hereinafter 'Commission Report'). Other sources such as legal literature and other supplementary sources will primarily be used in order to get various perspectives and arguments on the subject and when presenting the concepts of EU competition law and refusal to supply. The thesis further incorporates the Commission's decisions. To further note is that the use of commitment decisions is increasing which affects the application of jurisprudence.

1.4. Previous research

There is previous research covering the development of the EFD and its possible application to the digital market. However, these research papers merely cover the concept of the doctrines' possible application to data without focusing on the characteristics of data and the effects of fundamental rights nor analysing such

[23] Craig and De Burca (n 22) 140-152; Articles 288–91 TFEU.

[24] Article 288(4) TFEU; Craig and De Burca (n 22) 136-40; Jones, Dunne and Sufrin (n 3) 93.

[25] Eur-lex, 'The non-written sources of European law: supplementary law' (2018) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:l14533> accessed 18 May 2022; Article 19 TEU.

[26] David Bailey and Laura Elizabeth John, 'Competition Law and Policy in the EU' in David Bailey and Laura Elizabeth John (eds), *Bellamy & Child: European Union Law of Competition* (8th edn, Oxford University Press 2018) 11.

[27] European 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 45/02 ('Guidance Paper').

[28] Commission Report (n 3); The report does not present the Commissions view.

interaction.[29] Further, previous research discusses the application of the doctrine to data from a perspective of data protection or data interoperability, trade secrets directive or ownership rights of data.[30] This thesis, therefore, aims to address a combined study on the possibility of the application while also focusing on the characteristics of data and how such application relates to the EU fundamental rights and the rationale behind the imposed obligation. To further note, there are various opinions among scholars on each individual area which this thesis aims to analyse separately and thereafter present an in-depth analysis on the individual area's interaction, to cover a new perspective and answer the research question.

1.5. Delimitation

The thesis only examines refusal to supply in the context of EU Law. The thesis will therefore not cover the concept's application in other jurisdictions.[31]

Second, when assessing the application of refusal to supply will the thesis not focus on the concept of abuse nor its application. This is of relevance since an abuse requires bases of a clearly articulated *theory of harm,* e.g., barriers of entry.[32]

Third, the thesis focuses merely on whether data can be an input. The consequences of accessing data in terms of GDPR such as gathering or sharing personal data will not be covered.

[29] For example: Inge Graef, "Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (2019) 53(1) Revue Juridique Themis 33 <https://heinonline.org/HOL/LandingPage?handle=hein.journals/revjurns53&div=7&id=&page=> accessed 17 May 2022; Inge Graef, *EU Competition Law, Data Protection and Online Platforms: Data as Essential Facility* (Kluwer Law International 2016); Pablo Ibáñez Colomo, 'Indispensability and Abuse of Dominance: From Commercial Solvents to Slovak Telekom and Google Shopping' (2019) 10(9) Journal of European Competition Law & Practice 532 <https://ssrn.com/abstract=3502519> accessed 17 May 2022.

[30] Josef DrexI, 'Designing Competitive Markets for Industrial Data: Between Propertisation and Access' (2017) 8(4) JIPITECH 257 <https://www.jipitec.eu/issues/jipitec-8-4-2017/4636/JIPITEC_8_4_2017_257_Drexl> accessed 17 May 2022.

[31] See for example application in the US which has its own development of the EFD where the case law started with the case of United States v Terminal Railroad Association of St. Louis, 224 US 383 (1912); To note is although that the US Supreme Court has never been expressly embraced or rejected the EFD see OECD 'Policy Round table Refusals to deal' (n 4) 32.

[32] Jones, Dunne and Sufrin (n 3) 344-45, 576.

Fourth, the thesis scope is further delimited to not analyse the possible application of the Digital Markets Act[33] covering provisions against gatekeepers which can possibly be applicable to undertakings refusing to supply data.[34]

Fifth, the thesis will not discuss the relationship between the anti-competitive exchange of information and giving access, neither in the context of the Trade Secret Directive.[35]

Sixth, the thesis will cover refusal to licence an IPR to the extent it falls within the same criteria as refusal to supply.[36] Refusal to supply's application to IPR is one of the discussed interferences between competition law and intellectual property law.[37] Yet, there will be no further debate on this discussion of such tension.

Lastly, EU law is mainly concerned when vertically integrated undertakings that are dominant in an upstream market are refusing to supply to competitors downstream. This scenario is also the only considered in the Guidance Paper.[38] The OECD discussion on refusal to supply presents the possibility of both vertical or horizontal refusals to deal, and complementary.[39] However, their discussion aims to argue that the distinction of what falls into the definition of for example vertical refusals to deal is not crucial.[40] This discussion will not be covered to any further extent.

[33] Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on contestable and fair markets in the digital sector (Digital Markets Act) [2020] COM/2020/842 final.

[34] Feasey and Streel (n 9) 91-92.

[35] Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed knowhow and business information (trade secrets) against their unlawful acquisition, use and disclosure [2016] OJ L 157/1.

[36] Guidance Paper (n 27) para 82.

[37] Jones, Dunne and Sufrin (n 3) 503, 509, 522-23; C-418/01 *IMS Health GmbH & Co. OHG v NDC Health Gmbh & Co. KG* ECLI:EU:C:2004:257 [2004] ECR I-5039 para 34; Guidance Paper (n 27) para 78.

[38] Jones, Dunne and Sufrin (n 3) 484.

[39] OECD 'Policy Round table Refusals to deal' (n 4) 21, 23.

[40] OECD 'Policy Round table Refusals to deal' (n 4) 23.

1.6. Disposition

The second chapter of the thesis aims to present the concept of refusal to supply as an anti-competitive abuse of dominant position (section 2.1), while partly answering the first sub-question. While further providing the rationale behind the abuse (section 2.2). This chapter will also provide a foundation for answering the fourth sub-question by presenting the relationship between refusal to supply, specifically the EFD, and the fundamental rights (section 2.3).

The third chapter provides a presentation of the EFD and its criteria. The chapter aims to contribute to answering the first sub-question of the thesis, by examining the development of the EFD. Where emphasis is added on the application of the doctrine in a digital context (section 3.3).

The fourth chapter aims to answer the second and third sub-questions, by examining the criteria of the EFD's possible application to data (section 4.2) and further present the various characteristics of data and data-driven markets relevant for such application (section 4.3). The chapter begins with presenting the definition and uses of data (section 4.1).

The fifth chapter presents the main synthesis of the thesis. This chapter examines the EFDs development and its possible application to data. The analysis further gives an in-depth analysis of how such extension of the EFD relates to the fundamental rights.

The last chapter contains concluding remarks and a section regarding future research.

2. Refusal to supply as an abuse of dominance

2.1. Concept of refusal to supply under article 102 TFEU

Refusal to supply can be seen as an abuse of a dominant position, hence, an anti-competitive practice under Article 102 TFEU. Refusal to supply falls within the category of an *exclusionary* abuse, which refers to conduct where the undertaking hinders or prevents competition in the market by excluding (foreclosing) competitors.[41] Other exclusionary abuses are, tying, exclusive dealing, discounts and rebates and predatory pricing.[42] Where key inputs are not available for new entrants, refusal to supply can be seen as an entry-deterring behaviour and may in certain circumstances constitute an abuse of dominance.[43]

A refusal to supply does not require an outright refusal of supplying. Since the abuse also covers *constructive* refusal to supply. Meaning when the dominant undertaking is agreeing to a deal but only under unreasonable terms of supply that make it difficult for the purchaser to compete or delay negotiations to supply in a non-proportionate manner.[44] There is also a distinction between an *unconditional refusal* and a *conditional refusal,* where the first-mentioned covers refusal to supply in any situation and the latter an imposed refusal to supply unless the purchaser agrees to certain terms, for example, exclusivity.[45]

The assessment to apply the affirmative obligation has developed through the years to contain an essential facilities doctrine (EFD), presented in chapter 3.[46]

[41] Jones, Dunne and Sufrin (n 3) 277, 359, 362.

[42] Jones, Dunne and Sufrin (n 3) 359.

[43] Jones, Dunne and Sufrin (n 3) 344-45; see section 1.5 delimitation.

[44] Guidance Paper (n 27) para 79; Bailey and John (n 26) 954; Case T-301/04 *Clearstream v Commission* EU:T:2009:317 [2009] ECR II-3155 para 151; *Telekomunikacja Polska* (Case COMP/39.525) Decision of 22 June 2011 [2011] OJ C 324 paras 695; upheld by Case T-486/11 *Orange Polska v Commission* EU:T:2015:1002 [2015]; upheld by Case C-123/16 P *Orange Polska v Commission* ECLI:EU:C:2018:590 [2018].

[45] OECD 'Digital markets' (n 2) 25-26.

[46] Jones, Dunne and Sufrin (n 3) 484; AG Jacobs in Case C-7/97 *Bronner* (n 3) para 56; Commission Report (n 3) 99.

2.2. The rationale behind refusal to supply

2.2.1. General objectives and goals for EU competition law

EU competition law ensures that the competition is not distorted in the internal market.[47] There is established jurisprudence that Articles 101 and 102 TFEU shall aim to achieve the maintenance of effective competition.[48]

The possible goals and values of EU competition law constitute a further discussion on its own. Many scholars have advocated different views, and some even consider it meaningless to state what the primary aim of EU competition law is.[49] The discussions include goals of economic efficiency[50] which can be to maximising

[47] Protocol 27 TEU; Article 3(1)(b) TFEU; Jones, Dunne and Sufrin (n 3) 42.

[48] Case 6/72 *Europemballage and Continental Can v Commission* EU:C:1973:22 [1973] ECR 215 para 25.

[49] Jones, Dunne and Sufrin (n 3) 28; Ioannis Lianos, 'Some Reflections on the Question of the Goals of EU Competition Law' (2013) UCL CLES Working Paper Series 3/2013, <http://ssrn.com/abstract=2235875> accessed 19 May 2022.

[50] Konstantinos Stylianou and Marios Iacovides, 'The goals of EU competition law: a comprehensive empirical investigation' (2020) Legal studies <https://ssrn.com/abstract=3735795> accessed 19 May 2022 5-13 referring to Rex Ahdar and Julian Maitland-Walker (ed), *Consumers, redistribution of income and the purpose of competition law*, 23(7) (European Competition Law Review 2002) 341, 349-52; Guiliano Amato, *Antitrust and the Bounds of Power: The Dilemma of Liberal Democracy in the History of the Market* (Hart Publishing 1997) 95-129; Roger Van den Bergh and Peter D. Camesasca, *European Competition Law and Economics: A Comparative Perspective* (2nd edn, Sweet & Maxwell 2006) 18; Ariel Ezrachi, 'EU Competition Law Goals and the Digital Economy' (2018) Oxford Legal Studies Research Paper No. 17/2018, <www.ssrn.com/abstract=3191766> accessed 17 May 2022 4-21, 27; Herbert Hovenkamp, 'Antitrust Policy After Chicago' (1985) 84(2) Michigan Law Review 213 <https://repository.law.umich.edu/mlr/vol84/iss2/3> accessed 17 May 2022 213, 232-33; Damien Geradin, Anne Layne-Farrar, and Nicolas Petit, *EU Competition Law and Economics* (Oxford University Press 2012) 23-26; Giorgio Monti, *EC Competition Law* (Cambridge University Press 2007) 25, 51-52; Okeoghene Odudu, 'The wider concerns of competition law' (2010) 30(3) Oxford Journal of Legal Studies 559 <https://academic.oup.com/ojls/article-abstract/30/3/599/1530651> accessed 19 May 2022 559, 605-12; Laura Parret, 'Shouldn't We Know What We Are Protecting? Yes We Should! A Plea for a Solid and Comprehensive Debate about the Objectives of EU Competition Law and Policy' (2010) 6(2) European Competition Journal 339 < https://heinonline.org/HOL/LandingPage?handle=hein.journals/eurcompet6&div=20&id=&page= > accessed 17 May 2022 339, 346-58; Dina I. Waked, 'Antitrust as Public Interest Law: Redistribution, Equity, and Social Justice' (2020) 65(1) The Antitrust Bulletin 87 < https://journals.sagepub.com/doi/full/10.1177/0003603X19898624> accessed 17 May 2022.

welfare by promoting efficient markets either through total welfare or consumer welfare[51], fairness,[52] economic freedom,[53] protecting the structure of competition,[54]

[51] Jones, Dunne and Sufrin (n 3) 28; Stylianou and Iacovides (n 50) 5-13 referring to Ahdar (n 50) 341, 349-52; Pinar Akman, *The Concept of Abuse in EU Competition Law: Law and Economic Approaches* (Hart Publishing 2012) 182-84; Amato (n 50); Adi Ayal, *Fairness in Antitrust: Protecting the Strong from the Weak* (Hart Publishing 2016) 207-12; Van den Bergh and Camesasca (n 50) 18; Robert H. Bork, *The Antitrust Paradox: A Policy at War with Itself* (Basic Books Inc. Publishers 1978) 110-12; Ezrachi 'EU Competition Law Goals and the Digital Economy' (n 50) 4-21, 27; Hovenkamp (n 50) 213, 232-33; Allan Fels and Geoff Edwards, 'Working Paper III – Competition Policy Objectives', in Claus Dieter Ehlermann and Laraine L. Laudati (eds), *European Competition Law Annual 1997: Objectives of Competition Policy* (Hart Publishing 1998) 57; Geradin and Layne-Farrar, and N Petit (n 50) 23-26; Louis Kaplow, 'On the choice of welfare standards in competition law' in D. Zimmer (ed.), *The Goals of Competition Law* (Edward Elgar Publishing Ltd 2012) 7-25; John B. Kirkwood and Robert H. Lande, 'The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency' (2008) 84(1) Notre Dame Law Review 191 <https://ssrn.com/abstract=1113927> accessed 17 May 2022 191; Ioannis Lianos, 'The Poverty of Competition Law: The Long Story' (2018) CLES Research Paper Series No. 2/2018, <www.ucl.ac.uk/cles/sites/cles/files/cles_2-2018.pdf> accessed 17 May 2022 18-23, 61-62, 90; Frederic Marty, 'Is the Consumer Welfare Obsolete? A European Union Competition Law Perspective' (2020) GREDEG Working Paper No. 13/2020 <https://ideas.repec.org/s/gre/wpaper.html> accessed 17 May 2022; A. Douglas Melamed and Nicolas Petit, 'The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets' (2019) 54 Review of Industrial Organization 741 <https://link.springer.com/article/10.1007/s11151-019-09688-4> accessed 17 May 2022 741; Monti (n 50) 25, 51-52; Massimo Motta, *Competition Policy: Theory and Practice* (Cambridge University Press 2004) 21-22; Renato Nazzini, *The Foundations of European Union Competition Law: The Objectives and Principles of Article 102* (Oxford University Press 2011) 107-54; Damien Neven, Penelope Papandropoulos and Paul Seabright, *Trawling for Minnows: European Competition Policy and Agreements Between Firms* (Centre for Economic Policy Research 1998) 12; Parret (n 50) 339, 346-58; Christopher Townley, *Article 81 EC and Public Policy* (Hart Publishing 2009) 13-43; Waked (n 50) 87.

[52] Stylianou and Iacovides (n 50) 5-13 referring to Ayal (n 51) 207-212; Ezrachi 'EU Competition Law Goals and the Digital Economy' (n 50) 4-21, 27; Geradin and Layne-Farrar, and N Petit (n 50) 23-26; Lianos 'The poverty' (n 51) 18-23, 61-62, 90; Parret (n 50) 339, 346-58.

[53] Stylianou and Iacovides (n 50) 5-13 referring to Ezrachi 'EU Competition Law Goals and the Digital Economy' (n 50) 4-21, 27; Geradin and Layne-Farrar, and N Petit (n 50) 23-26; David J. Gerber, *Law and Competition in Twentieth Century Europe: Protecting Prometheus* (Oxford University Press 1998); Monti (n 50) 25, 51-52; Parret (n 50) 339, 346-58; Lianos, 'The Poverty (n 51) 18-23, 61-62, 90 referring to protecting smaller competitors.

[54] Stylianou and Iacovides (n 50) 5-13 referring to Ezrachi 'EU Competition Law Goals and the Digital Economy' (n 50) 4-21, 27; Marty (n 51); Oles Andriychuk, 'Rediscovering the Spirit of Competition: On the Normative Value of the Competitive Process' (2010) 6(3) European Competition Journal 575 <https://ssrn.com/abstract=1781512> accessed 17 May 2022 575, 579-80, 589-90; Eleanor M. Fox, 'The Efficiency Paradox' in Robert Pitofsky (ed), *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on US Antitrust* (OUP 2008) 79-88; Parret (n 50) 339, 346-58; Tim Wu, 'After Consumer Welfare, Now What? The "Protection of Competition' Standard in Practice' (2018) The Journal of the Competition Policy International <https://ssrn.com/abstract=3249173> accessed 17 May 2022 4-9.

protecting competitors[55] or market integration[56].[57] The goals have in addition been argued to include further considerations such as social or political goals.[58]

As this subchapter presents, the primary goal of competition law is an ongoing debate.[59] However, this merely presents an overview of the discussion regarding the goals of EU competition law and the following will focus on the goals of Article 102 TFEU and refusal to supply.

2.2.2. What is refusal to supply aiming to protect

Article 102 TFEU is generally applied in cases where the conduct impedes effective competition through *exclusionary* abuses.[60] Initially has the EU Court and Commission been seen to apply exclusionary abuses under Article 102 TFEU in a more *formalistic* way rather than focusing on the *effects* and applied in order to *protect competitors*.[61] However, the commission has now presented a more welfarist approach to Article 102 TFEU in comparison to EU Courts. Hence, directed to the *objective of consumers*.[62] Such an approach was motivated by the Guidance Paper.[63] The Commission's enforcement activity has the aim to prevent

[55] Stylianou and Iacovides (n 50) 5-13 referring to Lianos, 'The Poverty (n 51) 18-23, 61-62, 90.

[56] Stylianou and Iacovides (n 50) 5-13 referring to Amato (n 50) 95-129; Ezrachi 'EU Competition Law Goals and the Digital Economy' (n 50) 4-21, 27; Geradin and Layne-Farrar, and N Petit (n 50) 23-26; Gerber (n 53); Lianos 'The poverty' (n 51) 18-23, 61-62, 90; Parret (n 50) 339, 346-58.

[57] Jones, Dunne and Sufrin (n 3) 28-35; Stylianou and Iacovides (n 50) 5-13.

[58] Stylianou and Iacovides (n 50) 5-13.

[59] For a further elaboration on the goals of EU Competition Law se Jones, Dunne and Sufrin (n 3) 42-54; Parret (n 50) 339, 346-58, 339-376; Lianos 'Some Reflections' (n 49); Henrique Schneider, 'From Deontology to Pragmatism: Dynamicity in the Pursuit of Goals of Competition Law in the EU' (2017) 1(3) European Competition and Regulatory Law Review 245 <https://doi.org/10.21552/core/2017/3/11> accessed 19 May 2022.

[60] Jones, Dunne and Sufrin (n 3) 289.

[61] Jones, Dunne and Sufrin (n 3) 359; Case 85/76 *Hoffman-La roche & Co. v Commission* ECLI:EU:C:1979:36 [1979] ECR 461 para 90.

[62] Jones, Dunne and Sufrin (n 3) 576.

[63] Guidance Paper (n 27).

adverse impacts on consumer welfare, which could be through higher price levels then prevailed, through limiting quality or reducing consumer choice.[64]

The Commission's approach has later slowly been considered by the EU Courts as well, although with a greater attachment of the form-based approach and the impact of the effective competitive structure than advocated in the Guidance Paper.[65] Yet, in the case of *Intel* the CJ reaffirmed the form-based rule while also acknowledging effect-based considerations and a recent press release from the CJ also supports the effect-based approach to cases covering exclusionary abuse.[66] When establishing if the conduct constitutes a refusal to supply it has further been stated to be unnecessary to demonstrate that the refusal has been motivated by an intent that is anti-competitive, although this underlying objective can be taken into account if it has already been established.[67]

2.3. Refusal to supply and the fundamental rights

2.3.1. The freedom to conduct business and the right to property

The relevant charter rights for this thesis are the right to conduct business enshrined in Article 16 CFR and the right to property in Article 17 CFR. Article 16 CFR further includes three distinct rights i) the freedom to exercise an economic or commercial activity, ii) freedom of contract,[68] and iii) the right to free

[64] Ezrachi 'EU Competition Law Goals and the Digital Economy' (n 50) 5-6; Guidance Paper (n 27) para 19; *Microsoft* (Case COMP/C-3/37.792) Commission Decision 2007/53/EC [2004] OJ L 32/23 ('Microsoft I'); *Microsoft Tying* (Case COMP/C-3/39.530) Commission Decision of 16 December 2009 [2012] ('Microsoft II'); *Google Search* (Shopping) (Case AT.39740) (n 7).

[65] Jones, Dunne and Sufrin (n 3) 359, 576; shown by cases such as Case C-52/09 *Konkurrensverket v TeliaSonera Sverige AB* EU:C:2011:83 [2011] ECR I-564, Case C-209/10 *Post Danmark A / S v Konkurrensrådet* ('Post Danmark I') EU:C:2012:172 [2012]; For a further discussion and contrary opinions of such change se Jones, Dunne and Sufrin (n 3) 375-78.

[66] Case C-413/14 P *Intel v Commission* ECLI:EU:C:2017:632 [2017] paras 138-39; Court of Justice of the European Union 'Press Release No 84/22 Judgement in Case C-377/20 Servizio Elettrice Nazionale and Others' (2022) <https://curia.europa.eu/jcms/upload/docs/application/pdf/2022-05/cp220084en.pdf>.

[67] Jones, Dunne and Sufrin (n 3) 494; Case T-301/04 *Clearstream* (n 44) para 142.

[68] Joined Cases C-90/90 and C-91/90 *Jean Neu and others v Secrétaire d'Etat à l'Agriculture et à la Viticulture* ECLI:EU:C:1991:303 [1991] ECR I-03617 para 13; Case 44/79 *Hauer v Land*

competition[69].[70] The freedom of contract includes the freedom to enter into contract and also to refuse to enter a contract.[71] To note, the freedom to conduct business and right to property is not absolute. The freedom to conduct business has been overruled by rights such as the right to personal data in Article 8,[72] the right to be forgotten in Article 7,[73] and the right to information in Article 11[74].[75]

As a general remark, the rights enshrined in the CFR shall be recognised as EU law.[76] Article 52 (1) CFR entails that any limitation of the exercise of the fundamental rights enshrined in the charter must be provided by law and further respect the essence of those rights. In addition, this is subject to the principle of proportionality where limitations requires to *necessarily and genuinely* meet objectives of general interest that are recognised by the Union or through the need of protecting the rights and freedom of others.[77] It has been further discussed if such general interest recognised by the Union indicates the inclusion of economic objectives of the EU, which would nevertheless not be possible under most provisions in the CFR.[78]

Rheinland-Pfalz ECLI:EU:C:1979:290 [1979] ECR 3727 para 31-32; Case *265/87 Schraeder v Hauptzollamt Gronau* ECLI:EU:C:1989:303 [1989] ECR 2237 para 15.

[69] See also Article 119(1) and (3) TFEU.

[70] Xavier Groussot, Gunnar Thor Petursson, Justin Pierce, 'Weak Right, Strong Court - The Freedom to Conduct Business and the EU Charter of Fundamental Rights' (2014) Lund University Legal Research Paper Series No 01/2014 <https://ssrn.com/abstract=2428181> accessed 20 May 2022 4; Case C-426/11 *Mark Alemo-Herron v Parkwood Leisure* ECLI:EU:C:2013:82 [2013], Opinion of AG Cruz-Villalón paras 48, 50.

[71] Case C-441/07 *P European Commission v Alrosa Company Ltd.* ECLI:EU:C:2009:555 [2010] ECR I-05949, Opinion of AG Kokott para 227; Case T-24/90 *Automec Srl v Commission* [1992] ECR II-222.

[72] Case C-311/18 *Data Protection Commissioner v Facebook Ireland Limited and Maximillian Schrems* ECLI:EU:C:2020:559 [2020].

[73] Case C-131/12 *Google Spain SL and Google Inc. v Agencia Española de Protección de Datos (AEPD) and Mario Costeja González* ECLI:EU:C:2014:317 [2014].

[74] Case C-283/11 *Sky Österreich GmbH v Österreichischer Rundfunk* ECLI:EU:C:2013:28 [2013] para 45.

[75] For a discussion regarding the application of Article 16 and 17 in cases limiting the rights see Groussot, Petursson and Pierce (n 70).

[76] Article 51(1) CFR; Article 6 TEU.

[77] Article 52(1) CFR.

[78] Craig and De Burca (n 22) 431.

2.3.2. The fundamental rights effect on refusal to supply

The refusal to supply is categorised as an *exceptional* abuse.[79] This since refusal to supply conflicts with EU law principles, such as the freedom to conduct business.[80] The Guidance Paper states that any undertaking, irrespectively whether it is dominant or not, has the right to choose trading partners and freely dispose of its property.[81]

The rationale behind having a high threshold for imposing a duty to supply is due to it being detrimental to fundamental rights.[82] The interference with these rights requires careful balancing.[83] It is held that restrictions of the fundamental rights must be limited to scenarios where there are *no other* available means to tackle the abuse of dominance. Hence, it would otherwise constitute a disproportionate and unjustified restriction on fundamental principles.[84] Correspondingly, the view of only imposing a duty to supply when there are no other means to tackle the abuse is further noted in AG opinions, case law and legal documents.[85]

It is of importance to highlight that merely being an effective competitor is not considered anti-competitive conduct, which follows the fundamental right of the freedom to conduct a business.[86] This can be further seen when looking at the

[79] Jones, Dunne and Sufrin (n 3) 484.

[80] Jones, Dunne and Sufrin (n 3) 484; AG Jacobs in Case C-7/97 *Bronner* (n 3) para 56; Commission Report (n 3) 99; Article 16-17 CFR.

[81] Guidance Paper (n 27) para 75.

[82] Jose Rivas, 'How Indispensable is the Indispensability Criterion in Cases of Refusal to Supply Competitors by Dominant Companies? (Slovak Telekom, C-165/19 P)' (Kluwer Competition Law Blog 2021) <http://competitionlawblog.kluwercompetitionlaw.com/2021/04/01/how-indispensable-is-the-indispensability-criterion-in-cases-of-refusal-to-supply-competitors-by-dominant-companies-slovak-telekom-c-165-19-p/> accessed 19 May 2022 2; Case C-165/19 P *Slovak Telekom v Commission* ECLI:EU:C:2021:239 [2021] para 46.

[83] Commission Report (n 3) 99; AG Jacobs in Case C-7/97 *Bronner* (n 3) paras 56-57.

[84] Case T-24/90 *Automec Srl v Commission* [1992] ECR II-222 para 51.

[85] Armando Marrapodi, 'Freedom to Conduct Business and Abusive Refusal to Deal: Do dominant undertakings enjoy limited contractual freedom?' (Master thesis Lund University, 2018); AG Jacobs in Case C-7/97 *Bronner* (n 3) para 56; Case C-441/07 *P European Commission v Alrose Company Ltd.* ECLI:EU:C:2009:555 [2010] ECR I-05949, Opinion of AG Kokott para 225; Case C-240/97 *Kingdom of Spain v Commission* ECLI:EU:C:1999:479 [1999] ECR I-6571 para 99; Guidance Paper (n 27) para 75.

[86] Article 16 CFR.

rationale behind refusal to supply as an exceptional abuse that is also based on the discussion on *competition on the merits* or *anti-competitive conduct*, which has been relevant since *Hoffmann-La Roche*[87]. In regard to the notion of *competition on the merits*, the CJ has stated that Article 102 TFEU does not have the function of protecting less efficient competitors and exclusion of competitors is not necessarily detrimental to competition.[88]

2.3.3. Considering incentives to innovate and consumer harm

The fundamental right of freedom of contract aims to protect economic initiative and activity in the internal market. As presented, the freedom does not only pursue economic activity but also *commercial*, *contractual freedom* and the *principle of free competition*.[89] Interference with the fundamental rights may compromise the incentives for an undertaking to invest since it can increase competition in the short run but possibly reduce competition in the long run.[90] Colangelo and Maggiolino,[91] argue that an obligation to supply data would contribute to *free-riding* by new entrants and affect the incentives to innovate.[92] Free-riding refers to when an undertaking benefits from another actor's action or effort without paying or sharing the costs.[93] The issue of free-riding in this context is further mentioned in the Guidance Paper.[94]

Refusal to supply is furthermore considered to be an *exceptional* abuse due to the effects of undertaking's incentives to invest and innovate which further can harm

[87] Case 85/76 *Hoffman-La roche* (n 61).

[88] Jones, Dunne and Sufrin (n 3) 373-373; Case C-209/10 *Post Danmark I* (n 65) paras 21-22; Case C-52/09 *TeliaSonera* (n 65) para 43.

[89] AG Cruz-Villalón in Case C-426/11 *Mark Alemo-Herron* (n 70) paras 48, 50.

[90] Commission Report (n 3) 99; AG Jacobs in Case C-7/97 *Bronner* (n 3) paras 56-57.

[91] Giuseppe Colangelo and Mariateresa Maggiolino, 'Big data as misleading facilities' (2017) 13(2-3) European Competition Journal 249 <https://doi.org/10.1080/17441056.2017.1382262> accessed 19 May 2022 249.

[92] Jones, Dunne and Sufrin (n 3) 519; Colangelo and Maggiolino (n 91) 249.

[93] Shyam Khemani and Daniel M. Shapiro, 'Glossary Of Industrial Organisation Economics and Competition Law' (OECD 1993) 46.

[94] Guidance Paper (n 27) para 75; Jones, Dunne and Sufrin (n 3) 522.

dynamic efficiency and welfare.[95] Additionally, causing consumer harm.[96] A refusal may consequently lead to competitors being prevented from supplying innovative goods or services which may affect *follow-on innovation*. Hence affect new and improved goods from the competitors, where there is potential consumer demand, or affect technological development.[97]

In addition, an obligation to share the input can also be seen to undermine the incentives for any potential competitors to develop substitutes for the input. This is because the potential competitors may then also be subject to disadvantageous terms, which would worsen consumer welfare.[98] The economic rationale behind not having a lower threshold is that the companies would have no incentives to develop such input since the companies would not retain the full benefit of their innovative efforts.[99]

Exclusionary abuses are considered to have the possibility to cause consumer harm by their impact on competition.[100] The case of *Microsoft I*[101] further reflects the discussion on the effects on innovation.[102] It is further argued that the ruling of *Microsoft I* abandoned the balancing of exclusivity of ownership and incentives to innovate.[103]

[95] Jones, Dunne and Sufrin (n 3) 484.

[96] Guidance Paper (n 27) para 75; Jones, Dunne and Sufrin (n 3) 522.

[97] Guidance Paper (n 27) para 87.

[98] OECD, 'Digital markets' (n 2) 26; OECD 'Policy Round table Refusals to deal' (n 4) 27; AG Jacobs in Case C-7/97 *Bronner* (n 3) entailing criticism of using the essential facilities doctrine.

[99] Rivas (n 82) 2.

[100] Jones, Dunne and Sufrin (n 3) 361; Case C-209/10 *Post Danmark I* (n 65) para 20.

[101] Case T-201/04 *Microsoft I* (n 6).

[102] Jones, Dunne and Sufrin (n 3) 523; Case T-201/04 *Microsoft I* (n 6).

[103] Liyang Hou, 'The Essential Facilities Doctrine – What Was Wrong in Microsoft?' (2012) 43(4) IIC 251 <https://ssrn.com/abstract=2025777> accessed 19 May 2022 1.

3. Criteria of the essential facilities doctrine (EFD)

3.1. Origin of the essential facilities doctrine

The essential facilities doctrine is applied in cases of refusal to deal and refusal to supply. The application of the EFD started with a case in the US regarding railroads. Several railroad companies requested access to certain railroad bridges which the initial railroad company had acquired. The supreme court's concern with the case was that the competitors would not be able to offer their service beyond the Mississippi river without access to the railroad bridges and would have damaged consumers by limiting the choices for that service.[104] This case established the EFD which then has been adopted through various jurisdictions and further developed.[105]

Before assessing the different criteria of the EFD it is important to recognise that the use of the EFD is in general a debated topic. This is because some scholars considered the doctrine unnecessary, based on the argument that the doctrine does not add anything to the legal analysis of the case at hand since it is still necessary to show the breach of EU law.[106] AG Jacobs has criticised the relevancy of the doctrine for discouraging investment. He further held that a competitive market will be able to regulate competition anyway and broad application of the doctrine would be unworkable.[107] The criticism has thereafter been answered and been further discussed and there seem to be different views of the relevancy of the doctrine.[108] The following subchapter will contain an examination of the development of the essential facilities doctrine.

[104] United States v Terminal Railroad Association of St. Louis, 224 US 383 (1912).

[105] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 39.

[106] OECD 'Policy Round table Refusals to deal' (n 4) 34; Barry Doherty, 'Just What Are Essential Facilities?' (2001) 38(2) Common Market Law Review 397 <https://kluwerlawonline.com/journalIssue/Common+Market+Law+Review/38.2/71> accessed 19 May 2022.

[107] OECD 'Policy Round table Refusals to deal' (n 4) 34; C-7/97 *Oscar Bronner v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG* ECLI:EU:C:1998:569 [1998] ECR I-7817 paras 57-58, 69.

[108] OECD 'Policy Round table Refusals to deal' (n 4) 34.

3.2. Development of the essential facilities doctrine

3.2.1. Development in case law

The CJ has established five criteria which determine if a product or service qualifies as an essential facility: i) The incumbent must be *dominant* in the market for the supply of the facility (the product or service) in question,[109] ii) Access to the facility must be *indispensable*, [110] iii) Refusing access will *eliminate all competition*, [111] iv) Refusing access *cannot be objectively justified*,[112] v) In the case of an IPR, refusing access would hinder the appearance of *a new product* for which there is consumer demand[113].[114] The CJEU has however never referred to the doctrine as essential facilities doctrine, instead, it has referred to 'refusal to deal' or 'refusal to supply'.[115]

The EFD was first established through the case of *Commercial Solvents*[116]*,* the first case which assessed refusal to deal under EU competition law. The case concerned *Commercial Solvents*, a manufacturer of raw material. The raw material was required for producing ethambutol. The manufacturer stopped supplying the raw material to one of its customers which were also their competitors on a derivative market concerning ethambutol. The CJ found this refusal to constitute an abuse of dominant position.

[109] 6/73 and 7/73 *Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission* ECLI:EU:C:1974:18 [1974] ECR I-225.

[110] 6/73 and 7/73 *Commercial Solvents* (n 109); Case C-7/97 *Bronner* (n 107) paras 42-46; Case C-418/01 *IMS Health* (n 37) paras 42-43, 45.

[111] 6/73 and 7/73 *Commercial Solvents* (n 109).

[112] 6/73 and 7/73 *Commercial Solvents* (n 109).

[113] C-241/91 and C-242/91 *Telefis Eireann and Independent Television Publications Ltd v Commission of the European Communities* ECLI:EU:C:1995:98 [1995] ECR I-I-743 paras 52-56; See section 1.5 delimitations.

[114] John Temple Lang, *The Principle of Essential Facilities in European Community Law – The Position Since Bronner*, 1(4) (Journal of Network Industries, Kluwer Academic Publishers 2000) 375 376; Case C-7/97 *Bronner* (n 107); 6/73 and 7/73 Commercial Solvents (n 109); T-374/94 *European Night Services and Others v Commission* [1998] ECR II-3141; See delimitations in section 1.5.

[115] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 41.

[116] 6/73 and 7/73 *Commercial Solvents* (n 109).

Later came the case of *Magill*[117] which concerns an IPR. The case concerned three Irish broadcasting companies' refusal to give a copyright licence for the weekly listing of television programmes to a publishing company called Magill. Magill wanted to create a television listing containing all three channels. The CJ considered the conduct to be an abuse of dominance.

The most important case concerning the EFD can be seen to be the *Bronner*[118] case. The case was about a denial of access to a home delivery scheme (regulated by Mediaprint on a nationwide level) for a newspaper published by Oscar Bronner. The CJ however did not consider it an abuse of dominance. This is because there were several alternatives to distribute his newspaper, although less advantageous, and therefore was the newspaper home delivery scheme not considered *indispensable*.[119] AG Jacob's Opinion in the case of *Bronner,* argued that there should be no obligation to give access to the scheme, since although Bronner might not be able to duplicate such a scheme, he has *other alternatives* of distribution.[120] AG Jacobs also incorporates statements that even though other alternatives would be uneconomic, as Bronner argued, such an argument could not be considered accepted. AG Jacobs further explains that if such an argument would be accepted this would lead to detailed regulation of the Community markets by the court and authorities, entailing fixing prices and other conditions for supplying in large sectors. This is considered to not only be unworkable but also anti-competitive in the long run and not compatible with a free-market economy.[121]

The decisional practice also includes the case of *IMS Health*[122] where IMS refused to provide their data on regional sales of pharmaceutical products containing a brick

[117] C-241/91 and C-242/91 *Magill* (n 113).

[118] Case C-7/97 *Bronner* (n 107).

[119] Case C-7/97 *Bronner* (n 107) paras 43-46.

[120] AG Jacobs in Case C-7/97 *Bronner* (n 3) para 67.

[121] AG Jacobs in Case C-7/97 *Bronner* (n 3) paras 68-69.

[122] Case C-418/01 *IMS Health* (n 37).

scheme for each geographical area. More recent is the case-law of *Microsoft I*[123] and *Google Shopping*,[124] which is further discussed in respective sections.[125]

3.2.2. Indispensability criterion

The first condition, *indispensability,* can also be referred to as a criterion of 'objectively necessary' or 'essential facility'.[126] This criterion does not entail that, without this product or service, no competitor would have the possibility to enter or survive the market.[127] The criterion is rather applied to assess if an alternative source of supply would make it possible for competitors to exercise a competitive constraint.[128] In practice, the competitor, which seeks access to an input, has the most difficulty demonstrating this criterion. This is since the requirement does not merely entail that the input is useful or good to have for the competitor but *strictly* that the input has no actual or potential substitutes that could act as an alternative.[129]

The criterion consists of two elements. The first element aims to assess whether access to a specific input is considered objectively necessary.[130] The second element aims to assess if there exist actual or potential substitutes for the input. This assessment is similar to the market definition analysis since they both include an evaluation of the input's substitutability by alternative products or services.[131]

[123] Case T-201/04 *Microsoft I* (n 6).

[124] T-604/18 *Goggle and Alphabet v Commission* ('Google Android'), pending decision.

[125] Section 3.3.1; 3.3.2.

[126] Jones, Dunne and Sufrin (n 3) 522.

[127] Jones, Dunne and Sufrin (n 3) 522; Guidance Paper (n 27) para 83; Case T-201/04 *Microsoft I* (n 6).

[128] Jones, Dunne and Sufrin (n 3) 522.

[129] Rivas (n 82) 2; Case C-165/19 P *Slovak Telekom* (n 82) paras 48-49; Case C-418/01 *IMS Health* (n 37) para 28.

[130] Graef, 'EU Competition law, Data Protection and Online Platforms' (n 29) 217; Hou (n 103) 458.

[131] Graef, 'EU Competition law, Data Protection and Online Platforms' (n 29) 218; Case C-7/97 *Bronner* (n 107) para 34.

In the view of the CJEU, the indispensability criterion further works as a tool to determine if the dominant undertaking has power in the market because of the input to which competitors require access to.[132]

The need for applying the indispensability element has in recent years been discussed since the case law is not particularly clear on this point. After the case of *Slovak Telecom*, could a refusal to deal could only be seen as abuse, if the input is indispensable. However, the Commission concluded that this indispensability element should not be considered for all conducts which fall within the category of refusal to deal. This approach was later upheld by the more recent *Google Shopping* case and the recent take on this question is further discussed later in the thesis.[133]

3.2.3. Elimination of all competition criterion

The *Bronner* case required that the refusal must *likely eliminate all competition*. It is not sufficient that it merely gets harder, for the undertaking requesting the input, to compete.[134] It either does not require that competitors are actually forced to leave the market. However, it is sufficient that the competitors are disadvantaged and therefore will compete less aggressively.[135]

The criterion of elimination of effective competition is generally fulfilled when the previous criterion of *indispensability/objectively necessity* is shown. Consequently, if the input is objectively necessary will a refusal to supply generally eliminate effective competition immediately or over time.[136] The change to eliminate *effective* competition has been incorporated through the case of *Microsoft I*. Before the *Microsoft I* case, it required the elimination of *all* competition, based on

[132] Rivas (n 82) 2; Case C-165/19 P *Slovak Telekom* (n 82) paras 48-49.

[133] Ibáñez Colomo (n 29) 540, 550; Case T-851/14 *Slovak Telekom v Commission* ECLI:EU:T:2018:929 [2018]; *Slovak Telekom* (Case AT.39523) Decision of 15 October 2014 [2014]; Case C-165/19 P *Slovak Telekom* (n 82); *Google Search* (Shopping) (Case AT.39740) (n 7); See following section 2.2.3.3 for a discussion on the indispensability requirements relevance.

[134] Jones, Dunne and Sufrin (n 3) 499; Case C-7/97 *Bronner* (n 107).

[135] Jones, Dunne and Sufrin (n 3) 500; *Telekomunikacja Polska* (Case COMP/39.525) (n 44) para 815.

[136] Jones, Dunne and Sufrin (n 3) 522.

Commercial Solvents and *Bronner*. Nazzini[137] argues that such change in the criterion does not change the application, based on the rationale that a refusal that is capable of excluding one of the competitors must be capable of excluding all competitors.[138] The development of the *Microsoft I* case was based on *Commercial Solvents* where the CJ held that in order for the criterion to be fulfilled it required that the refusal to supply could be such abuse to the extent that it was likely to eliminate *all* competition.[139] Furthermore, this refers to an elimination of all competition from the undertaking that is requesting the input. This was further developed in the case of *IMS Health* where the Court held that it is sufficient if it excludes any competition in a *secondary* market. While in *Microsoft I* it refers to excluding *all effective competition* on a *neighbouring* market.[140]

3.2.4. Not objectively justified criterion

Objectively justified refers to that an abuse can be exempted from a prohibition under Article 102 TFEU by referencing to a defence for the conduct, based on an objective justification.[141] The burden of proof of claiming an objective justification is on the owner of the essential facility.[142] To note is that case law indicates that it is difficult to succeed in establishing the objective justification once the essential facilities doctrine's requirements have been met.[143] Objective justification can be divided into two categories, claims of *objective necessity* and claims of *countervailing efficiencies*. In the case of *Post Danmark I*,[144] the CJ referred to these

[137] Nazzini (n 51) 317–20.

[138] Jones, Dunne and Sufrin (n 3) 522; Guidance Paper (n 27) para 85; Nazzini (n 51) 317–20.

[139] 6/73 and 7/73 *Commercial Solvent*s (n 109) *para* 25. 6/73 and 7/73.

[140] Bailey and John (n 26) 956; 6/73 and 7/73 *Commercial Solvents* (n 109) para 25; see similarly Case C-7/97 *Bronner* (n 107) para 41; Case C-418/01 *IMS Health* (n 37) para 38; C-241/91 and C-242/91 *Magill* (n 113) para 93; Case T-201/04 *Microsoft I* (n 6) paras 332, 563; See section 3.3.1 on the application in *Microsoft I.*

[141] Jones, Dunne and Sufrin (n 3) 500.

[142] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 230.

[143] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 230.

[144] Case C-209/10 *Post Danmark I* (n 65)

two categories as 'particular' categories and did not rule out possibilities of other grounds of justifications.[145]

Based on the case law from the CJ may the following be considered accepted justifications. First, if there are *capacity constraints*, which refers to that the dominant undertaking does not have the capacity to meet the demand of the access seeker.[146] Secondly, if there are *technical or commercial requirements*.[147] Thirdly, if a request constitutes *improper commercial behaviour* and the order is considered *out of the ordinary* regarding for example the quantity requested.[148] Further defences can be considered to be *ex-ante* or *ex-post* efficiency defences. Where *ex-ante* efficiency defences refer to a justification claiming that the undertaking giving access to the input would not have invested in the input if it would have known that there would be an obligation to share the input. *Ex-post* efficiency defences refer to where an obligation to supply will disrupt the undertakings business operation by imposing an unreasonable cost.[149]

The Guidance Paper further present possible considerations of *efficiency* claims which were present in the case of *Microsoft I*[150].[151] The *Microsoft I* case presented various objective justifications, which were not considered applicable. Microsoft

[145] Jones, Dunne and Sufrin (n 3) 382; Case C-209/10 *Post Danmark I* (n 65) paras 41-42; To note is that it is discussed if objective necessity is a synonym for objective justification and if the defence of efficiency is a separate defence se Jones, Dunne and Sufrin (n 3) 382; Ekaterina Rousseva and Mel Marquis, 'Hell Freezes Over: A Climate Change for Assessing Exclusionary Conduct under Article 102 TFEU' (2013) 4(1) Journal of European Competition Law and Practice 32 <https://ssrn.com/abstract=2171693> accessed 17 May 2022 32 and *Telekomunikacja Polska* (Case COMP/39.525) (n 44) paras 873–74; upheld by Case T-486/11 (n 44); upheld by Case C-123/16 P (n 44).

[146] 6/73 and 7/73 *Commercial Solvents* (n 109) paras 27-28; Case 77/77 *Benzine en Petroleum Handelsmaatschappij BV and others v Commission* ECLI:EU:C:1978:141 [1978] ECR 1513 para 32.

[147] Case 311/84 *CBEM v CLT and IPB* ECLI:EU:C:1985:394 [1985] ECR 3261 para 26.

[148] Case 27/76 *United Brands Company and United Brands Continentaal BV v Commission* ECLI:EU:C:1978:22 [1978] ECR I-209 para 182; Joined Cases C-468/06 to C-478/06 *Sot. Lélos kai Sia EE and Others v GlaxoSmithKline AEVE Farmakeftikon Proïonton* ECLI:EU:C:2008:504 [2008] ECR I-7174 paras 70, 76, 959-60.

[149] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 235.

[150] Case T-201/04 *Microsoft I* (n 6).

[151] Jones, Dunne and Sufrin (n 3) 523; Case T-201/04 *Microsoft I* (n 6) para 659; Guidance Paper (n 27) para 89.

claimed justification based on their intellectual property right;[152] that the input was considered a secret, that it constrained innovation;[153] and that an obligation to give access would adversely affect Microsoft's incentives to innovate.[154] It has been further debated if the balancing of innovation incentives against an obligation should constitute a test on its own. However, it is argued in the doctrine that such a test should not be incorporated, at least not in the part covering the essential facility test. The reason behind this argument is that such a test would be difficult to apply because of practical application and unpredictability.[155]

3.3. The essential facilities doctrine in a digital context

3.3.1. Microsoft and its criticised application

The Microsoft case law consists of two relevant cases where the first case *Microsoft I*[156] concerns a refusal to licence necessary information for interoperability purposes. Microsoft refused to licence such information to an undertaking active in the downstream market. The requesting undertaking required access to this information for the purpose of making its produced service able to communicate with Microsoft's PC operating system Windows. The second case *Microsoft II*[157] concerned an abuse of tying when Microsoft's web browser (Internet Explorer) was considered tied to the Windows PC operating system. An interesting point is that after *Microsoft II*, scholars argued that the case was a refusal to deal case but in disguise.[158] The reason why the Commission did not use the EFD instead of using another theory of harm is argued to be based on a variety of plausible reasons. Where the authors' Petit and Neyrinck[159] argue one of the reasons being a fear from

[152] Case T-201/04 *Microsoft I* (n 6) 960.

[153] Case T-201/04 *Microsoft I* (n 6) 962-63.

[154] Case T-201/04 *Microsoft I* (n 6) 666-710.

[155] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29); 234-35 Case T-201/04 *Microsoft I* (n 6) 980.

[156] *Microsoft I* Case (COMP/C-3/37.792) (n 64); Case T-201/04 *Microsoft I* (n 6).

[157] *Microsoft* (tying) Case (COMP/C-3/39.530) (n 64).

[158] Ibáñez Colomo (n 29) 545.

[159] Nicolas Petit and Norman Neyrinck, 'Back to Microsoft I and II: Tying and the Art of Secret Magic' (2011) 2(2) Journal of European Competition Law & Practice 117 <https://doi-org.ludwig.lub.lu.se/10.1093/jeclap/lpq080> accessed 19 May 2022.

the Commission of failing to prove the abuse. The same authors further present that the Commission would have not been able to prove the *Bronner* criteria in the case. The authors conclude by stating that, using another theory of harm, and such fluctuating border of tying, is not in line with the need for legal certainty of firms in specifically fast-moving industries where such integration of products or software is pervasive.[160]

The case law before *Microsoft I* imposed a delicate balance of protecting the exclusivity of ownership and the incentives to innovate.[161] The previous case law was also consistent in the set conditions when applying EFD. The *Microsoft I* case did although alter the previous consistent case law by widening the conditions concerning the *elimination of all competition* and incorporated the condition of requiring it to be a *new product*. The condition of eliminating *all* competition was instead referred to as eliminating *all effective* competition.[162]

However, after the *Microsoft I* case the change to elimination of *all effective* competition was also referred to in the Guidance Paper as elimination of *effective* competition.[163] The rationale behind the change of the criterion in the *Microsoft I* case has been argued among various scholars. Some yet view it as merely an error by the GC.[164] The referral in the Guidance Paper may indicate that the interpretation of the criterion established by GC in *Microsoft I* remains.[165]

[160] Petit and Neyrinck (n 159) 121.

[161] Hou (n 103) 470-71.

[162] Bo Vesterdorf, 'Article 82 EC: Where do we stand after the Microsoft judgment?' (2008) ICC Global Antitrust Review <http://www.icc.qmul.ac.uk/media/icc/gar/gar2008/Vesterdorf.pdf> accessed 17 May 2022 8; Case T-201/04 *Microsoft I* (n 6) para 563; To note is that this judgement was done by the GC which therefore has a lower legal authority and cannot be referred to as a set precedent.

[163] Guidance Paper (n 27) 85.

[164] See different views in Hou (n 103) 17; Pierre Larouche, 'The European Microsoft case at the crossroads of competition policy and innovation' (2008) TILEC Discussion Paper No. 021/2008 <https://dx.doi.org/10.2139/ssrn.1140165> accessed 19 May 2022 22; Christian Ahlborn and David S. Evans, 'The Microsoft Judgment and its Implications for Competition Policy Toward Dominant Firms in Europe' (2009) Antitrust Law Journal 75(3) <https://ssrn.com/abstract=1115867> accessed 17 May 2022 909.

[165] Guidance Paper (n 27) para 85; Case T-301/04 *Clearstream* (n 44) para 148.

Furthermore, Hou[166] considered that the GC made two main mistakes in the *Microsoft I* case.[167] The first mistake was a too *broad market definition*, since the GC had difficulty justifying an increasing market share of the product in question and therefore changed the scope of eliminating all effective competition, as specified above. Secondly, it was considered that the GC *did not interpret the 'new product' requirement correctly* since they included scenarios where not only the competitor wants to require access to the input to create a new product but also when the competitor creates a new technical development on the already existing input. Hou,[168] further questions whether access would be granted even if it is just minor modifications to an already existing input.[169]

The Guidance Paper and the *Microsoft I* case both introduce the new product test, relevant mainly for refusal to licence cases. The test includes examining if the conduct of refusal to deal is likely to lead to consumer harm. Through assessing if the refusal would prevent innovative goods or services from being available on the market or would negatively affect follow-on innovation.[170] Generally, the Commission assesses the impact of refusal to supply on consumer welfare by determining if the likely negative effects of the refusal can outweigh the negative consequences of imposing a duty to supply, which can happen over time. If the negative consequences of the refusal outweigh the consequences of imposing such an obligation will the Commission normally pursue the case.[171]

3.3.2. Findings in Google Shopping and Google Android

The case of *Google Shopping*[172] concerned Google's search engine results and specifically in which order these results were presented. The case concerned whether Google discriminated against competitors in favour of its own affiliated

[166] Hou (n 103).

[167] Hou (n 103) 1, 10, 11.

[168] Hou (n 103).

[169] Hou (n 103) 1, 10, 11.

[170] Jonathan Faull and Ali Nikpay (eds.), *The EU Law of Competition* (3rd edn, Oxford University Press, 2014) 4.632; Guidance Paper (n 27).

[171] Faull and Nikpay (n 170) 4.632.

[172] *Google Search* (Shopping) (Case AT.39740) (n 7).

services, by presenting its own result at the top of the page and in a more attractive format. The competitors were also subject to a system of penalties which did not apply to Google's own affiliated results.[173]

Google Android[174] concerned Google using Android for their online search service, the Google search app. There were three conducts which were regarded as abusive.[175] First, requiring that manufacturers pre installed the Google search app and Google's browser Chrome on the devices as a condition for being able to licence the Google Play Store.[176] Secondly, granting significant financial incentives to some manufacturers and mobile network operators on the condition that they exclusively pre-installed the Google Search app on their produced android devices.[177] Thirdly, preventing manufacturers from selling if they wish to pre-install Google apps that were not approved by Google.[178]

The Commission considered the first conduct by Google constitute a form of tying. Author Graef[179] further notes that the Commission has, on other occasions, acknowledged Google's licensing conditions' consequences on manufacturers' possibilities to pre-install other applications.[180] Google has as of present time, a pending appeal to the GC, seeking annulment of the Commission's decision in October 2018.[181]

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[173] *Google Search* (Shopping) (Case AT.39740) (n 7) 343, 370.

[174] *Google Android* (Case COMP/AT.40099) [2018] OJ C/402/08.

[175] *Google Android (*Case COMP/AT.40099) (n 174) para 1339; European Commission, 'Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine' (Press release 2018) <https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581>; Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 61.

[176] *Google Android* (Case COMP/AT.40099) (n 174) paras 752-53.

[177] *Google Android* (Case COMP/AT.40099) (n 174) paras 1192-94.

[178] *Google Android* (Case COMP/AT.40099) (n 174) paras 1015-18.

[179] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29).

[180] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 62; 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 2017) <https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1784>.

[181] T-604/18 *Google Android* (n 124), pending decision; The representatives of Google further raised six pleas concerning the alleged infringements, including the Commission's assessment of market definition and dominance, the calculation of fines and the Commission's procedure see Cleary

Furthermore, Graef[182] argues that, based on what outcome the Commission was aiming to achieve, this case is more similar to an essential facilities claim.[183] It is further argued that the case may resemble a refusal to deal case since the manufacturers are asking to *access* the Google Play Store while pre-installing other third-party applications. However, the reason the Commission did not categorise it as such is argued to be because of the stricter condition of the EFD would then be applied.[184]

It is also suggested that the Commission applied remedies that are similar to essential facilities cases in the cases of *Google Shopping*[185] and *Google Android*,[186] even though it applied other theories of harm such as tying and non-discrimination under less strict conditions.[187] This application by the Commission raises the question if the Commission is bypassing the stricter application of the requirements under EFD by expanding the possible scope of other abuses. As argued by Graef,[188] is not a desirable evolution of the law in the context of internal consistency of the application of competition law. This is especially if the remedies applied are thought to be similar to those that are usually applied under the EFD.[189] Graef further expresses that the cases presented could instead be addressed through EFD. In addition, the EFD would fit more with the EU digital economy if the doctrine would

Gottlieb 'The Google Android Hearing Before The General Court Of The European Union' (Gleary Gottleib EU Competition Law Newsletter 2021) <https://www.clearygottlieb.com/-/media/files/eu-competition-newsletters/european-competition-newsletter-oct-2021.pdf> accessed 17 May 2022 1.

[182] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 61.

[183] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 61; Pinar Akman, 'A Preliminary Assessment of the European Commission's Google Android Decision' (2018) Competition Policy International Antitrust Chronicle <https://ssrn.com/abstract=3310223> accessed 17 May 2022; Konstantinos Stylianou, 'Help Without Borders: How the Google Android Case Threatens to Derail the Limited Scope of the Obligation to Assist Competitors' (2016) <https://ssrn.com/abstract=2766062> accessed 17 May 2022.

[184] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 62; European Commission, 'Antitrust: Commission fines Google 2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service' (n 180).

[185] *Google Search* (Shopping) (Case AT.39740) (n 7).

[186] *Google Android* (Case COMP/AT.40099) (n 174).

[187] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 56, 72.

[188] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29).

[189] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 56, 72.

be applied to cases such as cases of Google by aligning the application to the underlying economic interest of refusal to supply through assess characteristics of the digital economy.[190] However other scholars argue that the case concerning 'self-preferencing' as in *Google Shopping* may be better addressed through margin squeeze or bundling and tying theories. This is because such conduct may not fit within a refusal to deal framework.[191]

3.3.3. The indispensability criterion's relevance in recent case law

The relevance of the requirement of indispensability in the EFD is further discussed since the recent case *Google Shopping*.[192] There is an ongoing debate about the indispensability requirement and its relevance. This was also incorporated in the case of *Slovak Telecom*[193] while referring to the case of *TeliaSonera*[194] and *Bronner*[195]. One important finding made in these rulings was that it is only necessary to satisfy the indispensability requirement when there is an outright explicit refusal to deal. However, this finding might be a misjudgement.[196]

The indispensability requirement has been argued to be relevant since it provides a necessary filter for cases where intervention would have harmed an undertaking's incentives to innovate and invest. Therefore it is a meaningful and administrable proxy.[197] Furthermore, an abuse and refusal to deal cannot be assessed from an ex-post perspective because if an ex-post application would be considered, every refusal to deal would be considered anti-competitive since it reduces competition

[190] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 55-56, 72.

[191] OECD 'Digital markets' (n 2) 29; Edward Iacobucci and Fransesco Ducci, 'The Google search case in Europe: tying and the single monopoly profit theorem in two-sided markets' (2019) 47(1) European Journal of Law and Economics 15 <https://link.springer.com/article/10.1007/s10657-018-9602-y> accessed 17 May 2022; Friso Bostoen, 'Online platforms and vertical integration: the return of margin squeeze?' (2018) 6(3) Journal of Antitrust Enforcement 355.

[192] *Google Search* (Shopping) (Case AT.39740) (n 7).

[193] Case T-851/14 *Slovak Telekom* (n 133) paras 123-28.

[194] Case C-52/09 *TeliaSonera* (n 65) paras 55-56.

[195] Case C-7/97 *Bronner* (n 107) paras 41, 48-49.

[196] See discussion in Jones, Dunne and Sufrin (n 3) 495-99.

[197] Ibáñez Colomo (n 29) 546.

in a neighbouring market.[198] An assessment under Article 102 TFEU, therefore, requires both an *ex-ante* and *ex-post* dimension.[199] The indispensability requirement is considered to be of special importance since the ex-ante and ex-post dimension is quite complex when assessed.[200] The indispensability criterion has also a valuable function in the context of the assessment and balancing of imposing structural remedies or not.[201]

When assessing the findings of the *Google Shopping* case it is proposed that the indispensability requirement could be seen as an appropriate device for limiting competition authorities' exposure to the complexity of the application where remedies can be imposed that are ineffective or remedies that are too far-reaching where the undertaking does not obtain a fair return on their investments.[202]

However, it appears that claimants and competition authorities aim to circumvent the indispensability requirement and water down the requirement.[203] The cases of *Slovak Telecom* and *Google Shopping* suggest that the Commission can possibly use a variety of arguments to state that the criterion of indispensability is only of relevance if there are the same factual circumstances as in *Bronner*, *Magill* and *IMS Health*. Moreover, there are indications that the indispensability requirement might not then even be considered relevant.[204]

In the context of *Google Shopping*, the Commission referred to the case of *CBEM Télémarketing*[205].[206] However, the Commission did not acknowledge the required condition of indispensability which was incorporated in the test of the *CBEM*

[198] Ibáñez Colomo (n 29) 546.

[199] Ibáñez Colomo (n 29) 546; Einer Elhauge, 'Defining Better Monopolization Standards' (2003) 56 Stanford Law Review 253.

[200] Ibáñez Colomo (n 29) 546.

[201] Ibáñez Colomo (n 29) 546-47.

[202] Ibáñez Colomo (n 29) 547; *Google Search* (Shopping) (Case AT.39740) (n 7).

[203] Ibáñez Colomo (n 29) 547.

[204] Ibáñez Colomo (n 29) 547.

[205] Case 311/84 *CBEM Télémarketing* (n 147).

[206] *Google Search* (Shopping) (Case AT.39740) (n 7) paras 334, 649.

Télémarketing case.[207] Google was fined and required to apply the principle of equal treatment in their search engine.[208] Google claimed that this outcome required that it was shown that the search engine is *indispensable*.[209] The Commission however rejected this argument and claimed that the indispensability criterion, based on *Bronner,* would not be applicable. This is because the decision did not require Google to transfer an asset nor have a duty to enter into an agreement with whom it has not chosen to contract with.[210] The Commission's argument was in line with the Court's position in *Van den Berg Foods*.[211] Such a view has also been confirmed by the GC, hence, an assessment must not always be done in the light of the criterion set out in *Bronner*. This is even when it relates to accessing a facility.[212]

Nevertheless, the Commission has shown that although they might not dispute the relevance of the criterion, they are attempting to reinterpret the condition's meaning. This can be seen in *Microsoft I* where the Commission instead of relying on the criterion of indispensability used as an economic viability test that did not focus on the possibility of entering the market but instead on the competitors' possibility to remain in the market and still impose effective constraints.[213]

According to Ibáñez Colomo,[214] there are two possible routes for the criterion. The *first route* is that the EU Courts abandon the existing case law on the criterion and instead focus on the application made in *Slovak Telecom* and *Google Shopping* where it is not required to show indispensability. This even in the context of a

[207] Ibáñez Colomo (n 29) 547.

[208] *Google Search* (Shopping) (Case AT.39740) (n 7) article 2 and article 3.

[209] *Google Search* (Shopping) (Case AT.39740) (n 7) para 645.

[210] *Google Search* (Shopping) (Case AT.39740) (n 7) para 651.

[211] Ibáñez Colomo (n 29) 541; Commission referred to Case T-65/98 *Van den Bergh Foods Ltd v Commission* EU:T:2003:281 [2003] ECR II-4653 para 161; Case C-552/03 P *Unilever Bestfoods (Ireland) Ltd v Commission* EU:C:2006:607 [2006] ECR I-9091 paras 113 and 137.

[212] General Court of the European Union 'Press Release No 197/21 Luxembourg, 10 November 2021 Judgment in Case T-612/17 Google and Alphabet v Commission (Google Shopping)' (Press release 2021) <https://curia.europa.eu/jcms/upload/docs/application/pdf/2021-11/cp210197en.pdf>.

[213] Ibáñez Colomo (n 29) 547; Case T-201/04 *Microsoft I* (n 6) paras 337-47; Vesterdorf (n 162).

[214] Ibáñez Colomo (n 29) 548.

refusal to deal, as the authorities suggested.[215] In addition, the requirement of elimination of all competition should not be necessary.[216]

The same author presents two main consequences of abandoning the indispensability requirement. *As a first consequence*, it would give the authorities discretion to decide, and the issue would then be driven by policy instead of law with limited judicial review. *The second consequence*, as the indispensability requirement is a difficult threshold to meet and a larger number of cases regarding accessing an input would be granted by authorities and brought by claimants. This would then possibly expose the system to difficulties because of the greater load of managing implementation and monitoring proactive remedies. This is because an abandonment of the criterion which creates such a difficult threshold may create a larger number of cases from authorities and claimants.[217] The *second possible route* is a clarification of the case law and perhaps an application of another legal test when the indispensability is not considered relevant for a refusal to deal. This route is considered to have the key advantage that the legal categories, used by mostly commentators, are not considered useful or reliable and that it would be beneficial if the principles on which the case law is based, would be presented more clearly.[218]

[215] Ibáñez Colomo (n 29) 548; *Slovak Telekom* (Case AT.39523) (n 133) para 365.

[216] Ibáñez Colomo (n 29) 548; C-241/91 and C-242/91 *Magill* (n 113) para 56; Case C-7/97 *Bronner* (n 107) para 40; Case C-418/01 *IMS Health* (n 37) paras 40–47.

[217] Ibáñez Colomo (n 29) 548-49.

[218] Ibáñez Colomo (n 29) 548-49.

4. Application of essential facilities doctrine to data

4.1. EU competition law and data

4.1.1. Definition of data and possible uses

The following subchapters present an overview of the relationship between EU competition law and data. However, to apply an analysis focusing on data one needs to define what data is and what it can be used for. Data can in a very broad sense be defined as, that every piece of information is 'data'. It can thereafter be divided through different types of data.[219]

Data has been identified as an important input for specifically digital markets. Data can be used to target consumers, develop personalised pricing, harness network effects, improve the quality of the product, launch a new product and when implementing a range of business strategies. It has further been stated that datasets of certain dominant players are considered a prerequisite for even being able to compete in certain markets.[220]

Companies have the possibility to collect, store and use large amounts of data. Data can be used for the purpose of AI but also when establishing and running online services, production processes and logistics. The Commission's Competition Policy report explains that the possibility to use data to develop innovative products and services is seen as a competitive parameter which will become increasingly relevant.[221]

[219] Torsten Körber, 'Is Knowledge (Market) Power? - On the Relationship Between Data Protection, 'Data Power' and Competition Law' (2018) NZKart 2016 (German version) 303 and 348 <https://ssrn.com/abstract=3112232> 2; See section 4.2.9 for the different types of data.

[220] OECD 'Digital markets' (n 2) 27.

[221] Commission Report (n 3) 2.

In the context of AI and machine learning, there might be no substitutes to access the necessary datasets.[222] This is because the training of an ML algorithm requires such large high-quality datasets.[223] The use of ML algorithms can be seen as an important competitive advantage. As such, algorithms can take large masses of data and filter unnecessary and useful information and thus, it can also combine datasets.[224] Data is also the key factor when developing applications.[225]

Data can also be present in masses produced at great volume, variety and at great velocity referred to as 'Big data'.[226] The scope of Big data is continuously increasing because of the rise of the 'Internet of Things' which refers to sensors that are embedded in physical devices. This can be household objects, cars or other automobiles, smartphones etc.[227]

[222] Commission Report (n 3) 103; Competition & Markets Authority, 'Pricing algorithms Economic working paper on the use of algorithms to facilitate collusion and personalised pricing' (2018) CMA94 <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746353/Algorithms_econ_report.pdf> accessed 18 May 2022 para 2.22; Gal Avigdor, 'It's a Feature, not a Bug: On Learning Algorithms and what they teach us' in *Roundtable on Algorithms and Collusion* (OECD 2017) <https://one.oecd.org/document/DAF/COMP/WD(2017)50/en/pdf> accessed 19 May 2022.

[223] Commission Report (n 3) 103; Alon Halevy, Peter Norvig and Fernando Pereira, 'The unreasonable effectiveness of data' (2009) 24(2) IEEE Computer Society 8 8-12; Andrew Ng, 'What Artificial Intelligence Can and Can't Do Right Now' (Harvard Business Review 2016) <https://hbr.org/2016/11/what-artificial-intelligence-can-and-cant-do-right-now> accessed 18 May 2022; Gal (n 208); Matt Turck, 'The Power of Data Network Effects' (2016) <https://mattturck.com/the-power-of-data-network-effects/> accessed 17 May 2022; Manuel Ebert, 'AI's Big Trade Secret' (Medium 2016) <https://medium.com/@maebert/ai-s-big-trade-secret-a0d59110d6e3> accessed 17 May 2022; Boriz Wertz, 'Data, not algorithms, is key to machine leaning success' (Machine Intelligance Report 2016) <https://medium.com/machine-intelligence-report/data-not-algorithms-is-key-to-machine-learning-success-69c6c4b79f33> accessed 19 May 2022; Alexander Wissner-Gross, 'Datasets Over Algorithms' (Edge 2016) <https://www.edge.org/response-detail/26587> accessed 17 May 2022.

[224] Commission Report (n 3) 103.

[225] Commission Report (n 3) 103; Wertz (n 223); Wissner-Gross (n 223).

[226] Jones, Dunne and Sufrin (n 3) 57.

[227] Jones, Dunne and Sufrin (n 3) 59.

4.1.2. The effect of data on the framework of EU competition law

The following will present the discussion between scholars on whether the already established EU competition law framework can apply to data. Some scholars argue that it would be necessary to change the existing framework to apply to digital markets, and specifically access to data, through new regulations. Others argue that there is just a need for some guidance.[228]

In the Commission's Report, competition law and regulation should be considered complements to one another and not necessarily substitutes.[229] Competition law and Article 102 TFEU can for this reason be seen as a background regime. The competition law analysis, such as analysis of markets and market failures, can further create important guidance to firms, legislations and the overall debate and help redefine the legal framework for the digital market.[230] The Commission Reports present the debate whether competition authorities or the Court would need to specify the conditions of especially access to data in the digital markets. Furthermore, there might be a need for a new regulation that is more sector specific.[231] Redesigning access to data has further been presented by Commissioner Margrethe Vestager.[232]

An opposing view is questioning the necessity to change the existing principles of competition law to deal with the digital economy, because of the present law's ability to continually grow, adapt and reinvent itself. Hence, there is no need for special or additional rules to be able to deal with for example tech giants.[233]

[228] Se the following discussion for references.

[229] Commission Report (n 3) 5.

[230] Commission Report (n 3) 5.

[231] Commission Report (n 3) 9-10.

[232] Alicia Prager, Daniel Eck (tr) and *Zoran Radosavljevic (ed)*, 'Vestager calls for more access to data for small platforms' *Euractiv* (10 May 2019) <https://www.euractiv.com/section/data-protection/news/vestager-calls-for-more-access-to-data-for-small-platforms/> accessed 17 May 2022.

[233] Jones, Dunne and Sufrin (n 3) 63; Pablo Ibáñez Colomo and Gianni De Stefano, 'The Challenge of Digital Markets: First, Let Us Not Forget the Lessons Learnt Over the Years' (2018) 9(8) JELAP 485.

Furthermore, Davilla[234] argues that it would be unjustified to treat data under a stricter test that would rely on the characteristics of the specific database, leveraging theories and advocating for maintaining a level playing field on the market. The author further argues that such theories would create a great degree of subjectivity, speculation, and uncertainty and using such a lower standard could result in over-enforcement, negative effects on undertakings commercial freedom and negatively affect innovation.[235] Whereas, others argue that a broad application of the EFD to data would be too far-reaching interference on the freedom to conduct business.[236]

Another view is that Article 102 TFEU can be used to regulate the digital economy, but the possible flexibility might be limited, as seen in the application of the Facebook Germany investigation, which applied national competition law.[237] It is also considered that the usual application of Article 102 TFEU will differ when it applies to data. An example is that the Commission is increasingly taking potential competition into account when assessing the dominance of a firm in a dynamic market.[238]

The Commission Report stresses that more guidance from competition agencies would contribute to better functioning of the digital economy. The report further states that guidelines concerning the definition of dominance in digital markets, data access and the criterion of indispensability in the EFD would promote legal certainty for companies. Yet, these guidelines would have to be updated frequently because of the fast pace of development in the digital markets sector.[239]

In relation to the goals of competition law, the goals are general principles and should therefore be able to apply to new developments such as the digital economy. As such, the fundamental goals of EU competition law and its core principles should

[234] Marixenia Davilla 'Is Big Data a Different Kind of Animal? The Treatment of Big Data Under the EU Competition Rules' (2017) 8(6) JELAP Oxford University Press 370 380.

[235] Davilla (n 234) 380.

[236] Nadine Schawe, 'It's all about data: Time for a data access regime for the sharing economy?' (2020) 25(2) Information Polity 177 184-85.

[237] Jones, Dunne and Sufrin (n 3) 577.

[238] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 267.

[239] Commission Report (n 3) 126.

not be changed because of the 'revolution' of the digital age. For the reason of ensuring consistent enforcement. Following this, is the basic framework of competition law in Article 102 TFEU considered sufficiently flexible for ensuring the protection of competition even in the digital era. An example of this is that the doctrine has evolved continuously due to the different challenges that occur on a case by case basis.[240] However, the Commission Report holds that it is necessary to incorporate new thinking on plausible theories of harm and also a further theoretical understanding of the different specificities of digitalisation and empirical evidence.[241]

4.2. Characteristics of data

4.2.1. The digital economy

The digital economy is referred to as the global network of economic activity and commercial transactions made possible by information and communication technology. Where data is the foundation of much of the digital economy and digital services.[242]

It is argued that competition law's application to the digital economy might require new thinking concerning the framework and theories of harm.[243] It is presented that this argument is based on some specific *characteristics that can be different* when applied to a digital economy.[244] The following will present such characteristics in the context of data and data-driven markets.

[240] Commission Report (n 3) 3.

[241] Jones, Dunne and Sufrin (n 3) 65; Commission report (n 3) 38-41.

[242] Jones, Dunne and Sufrin (n 3) 57; Jan Krämer, Daniel Schnurr, Sally Broughton Micova, 'The role of data for digital markets contestability: case studies and data access remedies' in Jan Krämer (ed), *Digital markets and online platforms New perspectives on regulation and competition law* (Centre on Regulation in Europe 2020) 81.

[243] Jones, Dunne and Sufrin (n 3) 65; Commission report (n 3) 38-41.

[244] Jones, Dunne and Sufrin (n 3) 62-63.

4.2.2. Barriers to entry and foreclosure effects

First, one needs to consider if data can constitute a barrier to entry and the possible foreclosure effects when it comes to data-driven markets. It is argued that whether data constitutes a barrier to entry or not depends on the case at hand and whether access to user data is considered an economic advantage. However, it might be possible for a new entrant to acquire partial substitutes for data that is enough to enter the market and they can improve their service in another way and become a competitor.[245] The use of data seen as a competitive advantage is also presented in the ongoing investigation of Amazon by the Commission and NCAs. The Commission investigates if the undertaking attains an unfair advantage from the data which Amazon obtains from independent retailers on its online marketplace. The data in question concerns information on the activity in the marketplace.[246]

The exclusive control over user data can constitute a barrier to entry. This is so especially if the scale of the amount of data is unmatchable.[247] In the merger case[248] of *Google and DoubleClick*,[249] was it considered that a combination of data would not give the merged entity a competitive advantage and that competitors would be able to match the combined data since that combination of data was already available to its competitors before the merger in question.[250] This rationale was in addition used in other merger cases concerning combining data where the combined data was not considered to be in the undertaking's exclusive control.[251]

[245] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 257.

[246] European Commission 'Antitrust: EC opens formal investigation against Amazon' (Press release 2019) <https://ec.europa.eu/commission/presscorner/detail/en/ip_19_4291>.

[247] Schepp and Wambach (n 1) 121; Robert Mahnke, 'Big Data as a Barrier to Entry' (2015) 5(2) CPI Antitrust Chronicle <https://www.competitionpolicyinternational.com/big-data-as-a-barrier-to-entry/> accessed 17 May 2022.

[248] Although different provisions, are merger cases are of relevance since it includes reasoning of exclusive control over data.

[249] *Google/DoubleClick* (COMP/M.4731) (n 10).

[250] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 264-65; *Google/ DoubleClick (*COMP/M.4731) (n 10) paras 364-65.

[251] Graef, 'EU Competition law, Data Protection and Online Platforms' (n 29) 265; *Facebook/WhatsApp* (COMP/M.7217) (n 10) paras 188-89; *Telefónica UK/Vodafone UK/Everything Everywhere/JV* (Case No COMP/M.6314) [2012] OJ C/66/04 para 539.

Whether data can constitute a barrier to entry or not is dependent on the specific product-market in question, where the relevance of data may differ.[252] Graef[253] suggests that to consider that a barrier to entry exists and data can be seen as a competitive advantage, there are two cumulative conditions required. Firstly, the data is an important input to produce the services of the online platform and secondly, the specific information that is necessary to compete is not readily available.[254]

As a final note on the concept of barriers to entry and data, the Commission Report states that the benefits of granting access to data might outweigh the negative effects of such imposed access. This is particularly so when taking into account the importance of protecting competition *for* the market in highly concentrated markets which have high barriers to entry and data-driven feedback loops which further enhance the dominance.[255] In addition, is it considered that the possibilities of foreclosure are often high when one does not grant access to data.[256] However, this requires that this denial of access is done on less favourable terms, degraded access.[257]

As for the referred concepts of competition *for* the market, does it refer to more long-term considerations, hence, more difficult to predict. Compared to competition *in* the market which gives results in the short run by increasing competition through a decrease in price and increase in product variety.[258] The preference in the context

[252] Schepp and Wambach (n 1) 121.

[253] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29).

[254] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 257.

[255] Commission Report (n 3) 106.

[256] Commission Report (n 3) 99.

[257] Rivas (n 82) 4.

[258] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 51; Damien Geradin, 'Limiting the scope of Article 82 EC: What can the EU learn from the U.S. Supreme Court's judgment in Trinko in the wake of Microsoft, IMS, and Deutsche Telekom?' (2004) 41(6) Common Market Law Review 1519 <https://kluwerlawonline.com/journalarticle/Common+Market+Law+Review/41.6/COLA2004064> accessed 19 May 2022 1540.

of the EFD is competition in the market although competition for the market should be explicitly considered, both contribute in different ways to societal welfare.[259]

4.2.3. Network effects

Second, another characteristic of data-driven markets to consider is network effects. Direct network effects refer to when a product becomes increasingly valuable and attractive to users the more users it has.[260] Data can be seen to reinforce the operation of network effects since the companies need real-time valuable data. An undertaking that can update its datasets frequently has a competitive advantage since they use data that are more relevant in terms of time.[261]

Indirect network effects refer to when increased usage of one product also increases the value of other complementary ones, as in multi-sided markets. Indirect network effects can be seen to constitute serious barriers to entry when it comes to digital markets and is reinforced by Big Data. This is because the more data an undertaking collects the better the algorithm, which then can be used for target customers and users which attracts even more users. As a result, data may reinforce the power of the undertaking.[262] In addition, data-driven network effects are likely to lead to a tipping of the market where only one dominant provider remains and therefore able to create high entry barriers.[263]

[259] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 51.

[260] Jones, Dunne and Sufrin (n 3) 120.

[261] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 255.

[262] Jones, Dunne and Sufrin (n 3) 130; Ariel Ezrachi and Maurice E. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy* (Harvard University Press 2016) 237–239; Schepp and Wambach (n 1) 120; David S. Evans and Richard Schmalensee, 'Debunking the 'Network Effects' Bogeyman' (2018) 40(4) Regulation 36 <https://ssrn.com/abstract=3148121> accessed 17 May 2022; David S. Evans and Richard Schmalensee, *Matchmakers: The New Economics of Multisided Platforms* (Harvard Business Review Press 2016).

[263] Krämer, Schnurr, B. Micova (n 242) 82.

4.2.4. Multi-sided markets

Third, to further acknowledge is if the market is multi-sided. Which refers to markets where the undertakings compete on more than one group of customers simultaneously.[264] The difficulty is in the application of the market definition test when it comes to multi-sided markets. This since if the SSNIP test or critical loss analysis is applied as usual to one side of the market it may lead to incorrect, over-narrow definitions. It has been generally agreed amongst economists that the use of the SSNIP test should be adjusted when it comes to multi-sided markets, however, how this should be done is though debated.[265] The Commission Reports acknowledge the problem of defining the market of the multi-sided market when it comes to digital markets. The report further presents that there should be less emphasis on the market definition part of the analysis of digital markets and more on the *identification of anti-competitive strategies* and *theories of harm*.[266]

4.2.5. Positive feedback loops

Fourth, to also consider is the positive feedback loops. Combining data from a wide range of sources can generate a collection of a further variety of types of data and information which can be useful when adding new functionalities. Hence, the combination of scale and scope of data can reinforce each other and create a feedback loop.[267]

[264] Jones, Dunne and Sufrin (n 3) 60.

[265] Jones, Dunne and Sufrin (n 3) 120-121; Jens-Uwe Franck and Maerin Peitz, 'Market definition and market power in the platform economy' in Jan Krämer (ed), *Digital markets and online platforms New perspectives on regulation and competition law* (Centre on Regulation in Europe 2020) 35.

[266] Jones, Dunne and Sufrin (n 3) 121; Commission Report (n 3) 46.

[267] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 253; Brendan Van Alsenoy, Valerie Verdoodt, Rob Heyman and others, 'From Social Media Service to Advertising Network. A Critical Analysis of Facebook's Revised Policies and Terms' (Report commissioned by the Belgian Privacy Commission 1(4) 2015) <https://www.law.kuleuven.be/citip/en/news/facebook-1/facebooks-revised-policies-and-terms-v1-3.pdf> accessed 18 May 2022 10; OECD, 'Data-Driven Innovation. Big Data for Growth and Well-Being', (OECD Publishing 2015) <http://dx.doi.org/10.1787/9789264229358-en> accessed 19 May 2022 185.

4.2.6. Assessment when data is not traded

Fifth, many providers of search engines, social networks and platforms do not trade with data.[268] The definition of the hypothetical or potential market can therefore only be based on assumptions about the possible structure of the market. Consequently, it includes an assessment of how the market should look rather than *reflecting market realities*.[269] When determining the boundaries of the relevant market concerning data, the key issue is substitutability of different types of data.[270]

4.2.7. Complementary inputs regarding the technology

Sixth, when analysing data-driven competitive advantages it is important to consider complementary inputs that are required in the process of collecting and processing data. Such as, the infrastructure of storage and the skilled algorithms and human sources.[271] As noted, the value of the data is dependent on what knowledge one can extract from it.[272] This can be corroborated by the argument that Google does not have any better algorithms than its competitors, just *more* data.[273] However, the quality of data significantly affects the economic value of what can be extracted.[274]

[268] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 260.

[269] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 260.

[270] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 260.

[271] Krämer, Schnurr, B. Micova (n 242) 82.

[272] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 254, 256; Geoffrey A. Manne and Raymond Ben Sperry, 'The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework' (2015) 5(2) CPI Antitrust Chronicle <https://ssrn.com/abstract=2617685> accessed 17 May 2022 9; OECD 'Data-Driven Innovation. Big Data for Growth and Well-Being' (n 267) 186; Same reasoning in OECD 'Digital markets' (n 2) 27; Michael L. Katz, 'Multisided Platforms, Big Data, and a Little Antitrust Policy' (2019) 54(4) Review of Industrial Organization 695 <https://link.springer.com/article/10.1007/s11151-019-09683-9> accessed 17 May 2022; Schepp and Wambach (n 1) 122.

[273] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 257.

[274] Krämer, Schnurr, B. Micova (n 242) 81.

4.2.8. Precisely what data should be assessed

Seventh, the differentiation in the types of data can further constitute an issue regarding what data should be provided. Colangelo and Maggiolino,[275] argue that it is a general issue of determining precisely what data should be provided. The scholars present that it can constitute an issue since there can be several types of data extracted from large unknown 'Big Data' sets.[276]

Furthermore, there are uncertainties about whether the obligation to supply requires an obligation to continuously supply data, depending on the timeliness of the data and if the data is updated repeatedly.[277]

In addition, the current value of the data when assessing an obligation to supply might extend beyond its current usage. Hence, when assessing what data is necessary to supply, the competition authorities should use more caution when it comes to data.[278] On the other hand, it is presented that the threshold for intervention may be considered lower when the input concerns data since it is not subject to a property right. Data is instead considered subject to possession or control.[279]

4.2.9. Different types and uses of data

The last point to the important characteristics of data is the different types and uses of data.[280] Since it may influence the possibilities for other competitors to have access to and collect the same data.[281] It is therefore important to not only consider the mere amount of the data.[282]

[275] Colangelo and Maggiolino (n 91).

[276] Jones, Dunne and Sufrin (n 3) 519; Colangelo and Maggiolino (n 91) 249.

[277] Jones, Dunne and Sufrin (n 3) 519; Colangelo and Maggiolino (n 91) 249.

[278] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 280.

[279] Rivas (n 82) 4.

[280] Commission Report (n 3) 8, 101-02.

[281] Commission Report (n 3) 8, 101-02; 105; Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 254-55.

[282] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 253; *Google/DoubleClick* (COMP/M.4731) (n 10).

Different types of data can be substitutable to a differentiating extent.[283] Data can be gathered and used in different forms such as only containing individualised data where it is from a specific user or machine. There is also aggregated data and contextual data. Furthermore, there is a distinction between data that has been volunteered, observed, and inferred. Where the two later mentioned are what an access request generally will focus on.[284] Data can also differ in terms of frequencies and if the data concerns real-time data or not.[285] Data can also be personal or non-personal seen in the context of GDPR, which affects the possibilities to use the data.[286]

The planned use of the data also affects its importance. Article 102 TFEU might not be the best tool for requiring access to data for business purposes unrelated to the market of the dominant firm, such as training AI algorithms.[287] It is argued to lower the threshold for granting data access in those cases where the data is merely a by-product of another activity. It is considered that the incentives to generate such data would persist irrespective of granting access.[288] However, whether it is a by-product or not is considered not to be an important factor for the application of the *indispensability* requirement. This since the indispensability criterion was required even in the case of *Magill* where the program listing required, was just a by-product.[289] It is a more important factor when the data is not merely a by-product. Since the incentives to invest and acquisition of new products are then linked to data acquisition.[290]

[283] Jones, Dunne and Sufrin (n 3) 519; Schepp and Wambach (n 1) 120-121 substitutable is discussed in the context of market definition.

[284] Commission Report (n 3) 101.

[285] Commission Report (n 3) 8, 101-02; 105; Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 254-55.

[286] Commission Report (n 3) 101.

[287] Commission Report (n 3) 9-10, 101.

[288] Commission Report (n 3) 105.

[289] Ibáñez Colomo (n 29) 546.

[290] Commission Report (n 3) 106.

4.3. Applying the doctrines criteria to data

4.3.1. General remarks on the possible application to data

The Commission's Report has argued that a right to require a duty to supply data may arise through Article 102 TFEU.[291] As presented, is it possible to apply the EFD to cases in a digital context (section 3.3). However, it is argued that the conditions of the EFD are difficult to meet, or even considered unsuitable when taking into account different characteristics of data and data-driven markets. Furthermore, it is considered that data access claims, through competition law, would merely be successful in very exceptional cases.[292] The following subchapters will therefore present an analysis of the possible application of the doctrine's criteria to data.

4.3.2. The indispensability criterion and data

Whether data can be considered 'indispensable' in the context of competition law is debated.[293] The following will present the different opinions and application of the indispensability criterion to data.

The first opinion is the objection of the possibility of conceptualising data as an essential facility based on the rationale that data is non-rivalrous.[294] This is further

[291] Commission Report (n 3) 98-105; Jones, Dunne and Sufrin (n 3) 519.

[292] Feasey and Streel (n 9) 92; Schawe (n 236) 184; Oscar Borgogno and Giuseppe Colangelo, 'Data Sharing and Interoperability Through APIs: Insights from European Regulatory Strategy' (2018) European Union Law Working Papers No. 38 <https://ssrn.com/abstract=3288460> accessed 19 May 2022.

[293] Jones, Dunne and Sufrin (n 3) 519; Graef 'EU Competition Law, Data Protection and Online Platforms: Data as Essential Facility' (n 36); Michal Gal and Niva Elkin-Koren, 'Algorithmic Consumers' (2017) 30(2) Harvard Journal of Law and Technology 309 <https://jolt.law.harvard.edu/assets/articlePDFs/v30/30HarvJLTech309.pdf> accessed 17 May 2022; Catherine E. Tucker, 'Digital Data, Platforms and the Usual [Antitrust] Suspects: Network Effects, Switching Costs, Essential Facility' (2019) <https://ssrn.com/abstract=3326385> accessed 17 May 2022; OECD 'Digital markets' (n 2) 27; OECD, 'Consumer Data Rights and Competition: Background note by the Secretariat' (DAF/COMP(2020)1 2020) <https://one.oecd.org/document/DAF/COMP(2020)1/en/pdf> accessed 19 May 2022.

[294] Jones, Dunne and Sufrin (n 3) 519; Schepp and Wambach (n 1) 120-121; Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 254; *Telefónica UK/Vodafone UK/Everything Everywhere/JV* (COMP/M.6314) (n 251) para 543; Manne and Sperry (n 272) 9.

explained by the mere fact that if commercially valuable data is only held by one undertaking which is considered dominant and does not, generally, hinder competitors to collect the same or equivalent data from alternative sources or the same information.[295]

One other argument is that 'essential data' in the meaning of the EFD, often do not exist because market entries are possible without accessing e.g., proprietary behavioural user data. Such entries can also be based on already available data. However, specific types of data can be seen as necessary if one wants to offer a competitive service or develop other data-driven innovations in other domains.[296]

Another difficulty that can be apparent when applying the indispensability criterion, especially to large datasets, is that the companies requesting access might not precisely know in advance what service or product to develop on the data they are requesting.[297] The apparent question is therefore whether data can even be seen to be indispensable if one does not know what to request? Furthermore, even if it can be considered that smaller competitors are prevented from collecting data, it is not sufficient in itself to further prove that the data is considered essential for the indispensability criterion to be fulfilled (nor does it prove a dominant position).[298]

The second opinion, whereas some argue that the data is accessible for all, others argue that the data can be exclusive due to contracts or protection through *sui generis* database protection[299] or trade secret law.[300] There is open data that is freely accessible but there is also data that can be considered to be of particular relevance for companies which are in exclusive control of the companies that collected it.

[295] Jones, Dunne and Sufrin (n 3) 519; Schepp and Wambach (n 1) 120-21; Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 254; see also the same reasoning in OECD 'Digital markets' (n 2) 27; Katz (n 272).

[296] Krämer, Schnurr, B. Micova (n 242) 83.

[297] Schawe (n 236) 184; Borgogno and Colangelo (n 292).

[298] Colangelo and Maggiolino (n 91) 7.

[299] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases' [1996] OJ L 77/20.

[300] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 268; Trade Secret Directive (n 35).

These companies have therefore the possibility to decide the data's use and can therefore deny access to competitors.[301]

Nevertheless, if data would be so widely and freely available as some consider, the providers of online platforms would then not be investing in such magnitude to just develop free services for users to collect and analyse that data.[302] In this regard, the Commission has also held that even though an undertaking has large amounts of data, there will still be large amounts of valuable data available that are not in the dominant undertaking's exclusive control.[303] However, under certain circumstances may an undertaking require a specific type of data where other third parties data would not be an adequate substitute. Such a situation can occur when an undertaking operates a search engine and the data required can only be obtained from serving customers.[304]

As presented, data can be considered to be necessary for an undertaking to even build a successful online platform without having previous operations in that specific marketplace. This rationale would therefore strengthen the possibility that at least consumer data may be able to fulfil the criterion of indispensability.[305] Yet, the indispensability criterion cannot be seen to be fulfilled by the mere fact that the data is inaccessible since the *Bronner* criteria require it to be technically, economically, or legally impossible for other competitors to find substitutes.[306]

An additional remark is that the Commission Report[307] states that a duty to grant access to data would be possible to fall within the scope of Article 102 TFEU. As such, indispensability should apply as the central criterion when assessing the duty

[301] Schepp and Wambach (n 1) 121.

[302] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 256; Allen P. Grunes and Maurice E. Stucke, 'No Mistake About It: The Important Role of Antitrust in the Era of Big Data' (2015) Antitrust Source <https://ssrn.com/abstract=2600051> accessed 17 May 2022 7.

[303] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 272; *Facebook/WhatsApp* (COMP/M.7217) (n 10) paras 187-89.

[304] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 272.

[305] Jones, Dunne and Sufrin (n 3) 519.

[306] Colangelo and Maggiolino (n 91) 272-73.

[307] Commission Report (n 3).

to supply data, even though a strict application of the *Bronner* test has been rejected.[308] The analytical framework of refusal to supply and the criterion of indispensability are considered to remain the same, even when the application concerns access to data. However, it is considered that the analysis can be complex. Due to, the analysis is dependent on if the use of the data is unrelated to the market and the distinction between different types of data.[309]

The indispensability of a dataset is dependent on the type of data and the type of use. Hence, an indispensability analysis requires to be done on a case-by-case basis.[310] To note is that the Commission in *Google Shopping*[311] did stay clear for even considering classifying the business models in the case as essential input while treating Google's data collection advantages as a barrier to entry which reinforces its dominant market position.[312] This might indicate the complexity of applying the indispensability criterion to cases concerning data.

4.3.3. The elimination of all competition criterion and data

This criterion requires analysing whether the potential competitors would need to be given access to the data to be on an equal level as the undertaking holding the data and therefore ensuring effective competition. The criteria of indispensability and exclusion of effective competition can be seen to partially overlap and can therefore be analysed in connection to each other.[313] Graef,[314] however, claims that it is of importance to preserve the two criteria as separate because the criterion of exclusion of effective competition determines what degree of foreclosure of

[308] Jones, Dunne and Sufrin (n 3) 519; Commission Report (n 3).

[309] Commission Report (n 3) 101.

[310] Jan Krämer (ed), *Digital markets and online platforms New perspectives on regulation and competition law* (Centre on Regulation in Europe 2020) 27.

[311] *Google Search* (Shopping) (Case AT.39740) (n 7).

[312] Jones, Dunne and Sufrin (n 3) 519; *Google Search* (Shopping) (Case AT.39740) (n 7).

[313] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 275; se discussed approach in Microsoft where they first determined what degree of interoperability was needed to ensure effective competition and if that 'interoperability' that Microsoft refused to supply was indispensable.

[314] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29).

competition it concerns for the liability of a refusal to deal and additionally to determine what degree of competition that is protected under the EFD.[315]

The exclusion of effective competition further requires, in a vertical setting, that the dominant undertaking is active in the downstream market and as a result of a refusal to supply, reserves the undertaking the market to itself. Hence, giving itself an unfair advantage.[316] In this regard, Graef[317] argues that such a narrow interpretation will become increasingly problematic when it is applied to an economy where more markets become inter-related due to the role of data.[318]

4.3.4. The not objectively justified criterion and data

By reviewing settled case law, may the following be considered accepted justifications.[319] The first is capacity constraints.[320] Secondly, if there are technical or commercial requirements.[321] Thirdly, if a request constitutes improper commercial behaviour and the order is considered out of the ordinary regarding the quantity requested.[322] Further defences can be considered to be ex-ante or ex-post efficiency defences.[323]

It is considered that a duty to share data might only have a limited effect on the ex-ante innovation incentives which further reduces the possibility of ex-ante efficiency defences succeeding. The non-rivalrous nature of data may also affect

[315] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 223.

[316] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 219, 268, 274; Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 66-67; Case T-504/93 *Tiercé Ladbroke v Commission* ECLI:EU:T:1997:84 [1997] ECR II-923 para 133; C-241/91 and C-242/91 *Magill* (n 113) para 56; Case C-418/01 *IMS Health* (n 37) para 52.

[317] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29).

[318] Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 68; Drexl (n 30) 282-83.

[319] See section 2.2.2.4.

[320] 6/73 and 7/73 *Commercial Solvents* (n 109) paras 27-28; Case 77/77 *BP* (n 146) 32.

[321] Case 311/84 *CBEM Télémarketing* (n 147) para 26.

[322] Case 27/76 *United Brands* (n 148) para 182; C-468/06 to C-478/06 *GlaxoSmithKline* (n 148) paras 70, 76.

[323] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 235; See definition in section 2.2.2.4.

the possible ex-post efficiency defences since it would reduce the scope of objective justifications. This is because giving access to its data does not affect the dominant undertakings' possibilities to use the same dataset.[324] The possibilities of using capacity constraints as a defence are also reduced when using data based on the same rationale.[325] The other possible defences, including other than the ones stated above, have not been held to *not* be able to apply on a case by case basis in the context of data.[326]

[324] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 270; Cédric Argenton and Jens Prüfer, 'Search Engine Competition with Network Externalities' (2012) 8(1) Journal of Competition Law and Economics 73 98.

[325] Graef 'EU Competition law, Data Protection and Online Platforms' (n 29) 270; Zachary Abrahamson, 'Essential Data' (2014) 124(3) The Yale Law Journal 867 <https://www.yalelawjournal.org/pdf/AbrahamsonPDF_5r1zpdih.pdf> accessed 17 May 2022 877-78.

[326] See section 2.2.2.4 for a more thoroughly presentation of all the defences.

5. Analysis

5.1. Introduction

The chapter aims to synthesise the analysis of the sub-questions in order to address the research question, *to what extent can refusal to supply, in particular the essential facilities doctrine, be applicable to data and how do fundamental rights* (the freedom to conduct business and the right to property) *relate to such extension.*

In the course of examining the thesis' sub-questions, three main points became apparent for further analysis; there are still uncertainties in the application of the EFD; it is not apparent whether the EFD remains unchanged when applied to data and; whether the fundamental rights of the freedom to conduct business and the right to property are ensured by such application.

5.2. Uncertainties in the application

The discussion has focused on whether the application of the EFD has been developed to be interpreted differently in more recent case law than the initially stated five criteria and their application in previous case law. Consequently, can *legal certainty* be considered the main issue. This is due to the *unpredictable application* and *debated relevance* of the indispensability criterion, which is one of the five criteria of the EFD.[327]

As of the *unpredictable application*, a prediction of whether the indispensability criterion will be used in an assessment of a refusal to supply or not can only be certain when some narrow factual circumstances are apparent. This is due to the continuous justifications for not using the indispensability criterion, if not, the factual circumstances replicate the ones in *Bronner*, *Magill* and *IMS Health*.[328]

[327] Section 3.2.2; 3.3.3; 4.3.2.

[328] Section 3.3.3; Ibáñez Colomo (n 29) 547; *Google Search* (Shopping) (Case AT.39740) (n 7) and Case T-851/14 *Slovak Telekom* (n 133).

The *uncertainties of the relevance* of the indispensability criterion have been apparent even before applying the doctrine to any digital context, such as data. This is due to a considered 'misjudgement' in case law, that sparked the discussion, and the opposing views of the criterion's relevance.[329] *On the one hand,* the criterion has an important function of filtering. Hence, its important function for the assessment since the dimension of ex-ante and ex-post is quite complex; its important function to balance the assessment of imposing structural remedies or not; and further seen to be an appropriate device for limiting competition authorities' exposure to the complexity of imposing ineffective or too far-reaching remedies.[330] In addition, it has an important function of ensuring a high threshold for imposing such affirmative obligation. *On the other hand*, contrary to the view of its important functions, has the case law indicated an approach of circumventing its application by using a variety of arguments questioning its relevance to the case at hand and further reinterpreting the criterion's meaning.[331]

As held, there are many reasons that can be argued to question the criterion's relevance in actual cases.[332] It is apparent that the possibility to predict when the criterion is applicable or not is therefore uncertain, which is of most significance since one of its functions is to ensure a high threshold for the application of the doctrine. As a result, there are uncertainties if the EFD indispensability criterion should remain and in addition how to predict when the criterion will be applied or not. Future case has therefore the possibility of clarifying the EFD or abandoning the EFD, where the former is preferable due to its necessary functions and legal certainty.

[329] Section 3.3.3.

[330] Ibáñez Colomo (n 29) 546-47.

[331] Section 3.3.3; *Google Search* (Shopping) (Case AT.39740) (n 7) and Case T-851/14 *Slovak Telekom* (n 133).

[332] Section 3.3.3.

5.3. Changing the doctrine when it applies to data

Concerning the discussion as to what extent data can be considered in the application of the EFD, it is considered that albeit a more complex and cautious application would be needed, an application of the EFD to data would in theory be possible.[333] The application should have a more restrictive approach since the effect of imposing an obligation to supply might have further consequences compared to when the input is not data.[334]

To first consider are the findings of a possible application of the indispensability criterion to data. There are various arguments presented if data can be 'indispensable', such discussion focuses on the *availability* and *possibility* to reproduce data. Of additional note is that the mere fact that data is inaccessible does not in itself fulfil the criterion of indispensability. Even if the application of the indispensability criterion to data would be possible, it is yet questionable to what extent data could *in practice* successfully be claimed to fall within the criterion. This is due to the nature of the data, including different types and uses and difficulties knowing precisely what data is needed, and the fact that data is generally seen as accessible and of non-rivalrous nature.[335]

Whether the doctrine's application should change is, as presented, uncertain. The main reason being its non-consistent application in the case law applying other theories of harm.[336] The reason behind such differentiating applications in case law *is discussed* amongst scholars.[337] Whereas the argument of applying other theories of harm to avoid the strict application of the EFD appears rational. This is due to the presented view that the EFD has the possibility of being applied in such cases, which has not used refusal to supply as a theory of harm if the assessment gets further aligned with refusal to supply's economic interest through assessing

[333] Section 4.3.

[334] Section 4.2.

[335] Section 4.3.2.

[336] Section 3.3.1; 3.3.2.

[337] Section 3.3.2.

characteristics of the digital economy.[338] Whether such application is possible in practice, remains questionable. Nevertheless, the non-consistent application of Article 102 TFEU by applying various theories of harm evidently affects legal certainty.[339]

Furthermore, as presented, are there various opinions on whether the existing framework is capable of applying to data and should remain the same *or* if it should be changed.[340] While on the one hand it is argued that a change of the existing framework would be necessary, others argue that some guidance would be sufficient.[341] Of most interest is the viewpoint of the need to enable access to data and furthermore emphasising the importance of such access.[342] Hence, indicating a less strict application of the abuse.

As the next part of the analysis will present, a less strict application to enabling access to data in the context of data might not entirely follow the rationale behind ensuring a strict application of refusal to supply. However, the consequences of not enabling access to data might be more deterrent to competition. Such as foreclosures and higher barriers to entry.

5.4. Ensuring fundamental rights

Refusal to supply falls within the category of exceptional abuse.[343] This is important to note since one would need to acknowledge the rationale behind having a strict application of the EFD when considering changing such application.

[338] Section 3.3.2; Graef 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (n 29) 55-56, 72.

[339] Section 3.3.1.

[340] Section 4.1.2.

[341] Section 4.1.2.

[342] Section 4.1.2; Prager, Eck (tr) and *Radosavljevic* (n 232).

[343] Section 2.1.2.1.

The reason for having a strict application of refusal to supply is due to the interference with fundamental rights and in particular, the freedom to conduct business and the right to property.[344] The freedom to conduct business further includes the freedom to exercise an economic or commercial activity, freedom of contract and the right to free competition. Freedom of contract entails the right to enter contracts but also refuse doing so, which is given special emphasis in the context of refusal to deal.[345] These fundamental rights are not absolute and were seen to be overruled by *other fundamental rights*. To further note regarding interference with fundamental rights is that a justification of interference with the CFR based on *economic objectives*, would not be possible under most provisions although the text in Article 52(1) CFR might indicate such considerations.[346]

The interference with fundamental rights is further seen to be limited to scenarios where there are no other available means or remedies to tackle the abuse of dominance, which needs to constantly be in consideration.[347] A thought is therefore if the application of other theories of harm, dependent on other remedies that obligate access, could be seen as less of an interference with the fundamental rights.

A less strict application might be apparent for two reasons. First, since the development seems to emphasise the importance of enabling access to data.[348] Secondly, since the case law has been applying other theories of harm.[349] It is apparent that such an application is not ensuring the fundamental rights to the same extent as the initial strict application of the EFD.

The thesis however presents various characteristics of data and data-driven markets which make the application of the EFD more complex.[350] The non-rivalrous nature

[344] Article 16 and 17 CFR.

[345] Section 2.3.

[346] Section 2.3.1; Article 52(1); Craig and De Burca (n 22) 431.

[347] Section 2.1.2.3.

[348] Prager, Eck (tr) and *Radosavljevic* (n 232).

[349] Section 3.3.1; 3.3.2.

[350] Section 4.2.

of data and the discussion on the application of the indispensability criterion gives an example of the difficulties of data falling within the criteria of EFD.[351]

Furthermore, such characteristics and their interactions with each other are important to incorporate in the assessment regarding the EFD since different types of data can influence the possibilities for other competitors to have access to and collect the same data. To give an example of such interactions, although the possibility of positive feedback loops might contribute to higher barriers to entry in data-driven markets, the type and timeliness of the data might indicate that the barriers might not be as high as originally assessed. This is because data that is only relevant for a limited time makes it easier for competitors to compete since competitors acquiring large amounts of datasets only have that competitive advantage for a limited time. Timeliness can on the other hand also makes it more difficult to compete, if such data, that is only relevant for a limited time, takes time to acquire.[352]

Furthermore, it is argued that the assessment of what data is necessary to supply requires a more cautious approach since it is not possible to predict the future value of the data.[353] Hence, may result in higher exposure to over- or under-enforcement. The difficulty of predicting the future value is of special importance due to the indications of applying an effect rather than form-based approach to exclusionary abuses. Consequently, it appears that the characteristics of data need to be included in the assessment including their interactions.[354]

Applying such characteristics and advocating for maintaining a level playing field on the market, therefore applying a stricter approach, has however been criticised since this gives rise to a subjective application containing speculations and uncertainties, that is further argued to be unjustified.[355] Yet, an incorporation of characteristics, creating a more strict approach, might balance the ‘less strict

[351] Section 4.3.2.

[352] Section 4.2.

[353] Section 4.2.8.

[354] Section 4.2.

[355] Davilla (n 234) 380.

developments' interference with fundamental rights. This since the reasoning of ensuring access to data, through a less strict application, is as mentioned, affecting the strict application aimed to ensure fundamental rights.

To further note, the application of the EFD to data might not become as apparent in practice as discussed in theory because of the difficulties of knowing precisely what data to require from another competitor.[356] Other considerations indicating that the EFD application to data might not be applicable in practice in a larger number of cases are due to the discussed *non-rivalrous* nature of data.[357] To circle back to the previous section of the analysis, there are indications of uncertainties and an imposed high threshold of the EFD indispensability criterion even before an application to data. Therefore, the possibility of claiming data to fall within the EFD is questionable.

All things considered, although a less strict application of the EFD is suggested to be the next step in the evolution of the EFD, the consequences of such a less strict application to fundamental rights might not become as apparent when applied to data in practice. For the reason of the various presented difficulties of applying the doctrine to data.

The development of considering characteristics of data and data-driven markets to the application of the EFD restricts the possibilities of considering a conduct of a refusal to supply abusive. The inclusion of such considerations in the assessment might unintentionally ensure the high threshold of the application of the doctrine. Which as a result ensures the fundamental rights of freedom to conduct business and right to property through limiting the interference with such rights. However, this requires that the characteristics of data are considered in the assessment.

[356] Section 4.3.2; Schawe (n 236) 184; Borgogno and Colangelo (n 292).

[357] Section 4.3.2.

Consequently, a broadening of the framework to enable accessing data and a less strict application not considering the characteristics of data would presumably, based on the analysis in the thesis, result in a notable interference with the fundamental rights.

6. Concluding remarks

To once again go back to the purpose of the thesis, *to what extent can refusal to supply, in particular the essential facilities doctrine, be applicable to data and how do fundamental rights relate to such extension.* The established criteria of the EFD to refusal to supply are, albeit a cautious approach and complex assessment, possible to apply to data, at least in theory. When applying the EFD to data it has been presented that there are various characteristics of data and data-driven markets that can be considered in the assessment and there are further difficulties in predicting such markets. This further confirms the argued complexity of applying the assessment of EFD to a digital context, as seen in the non-consistent application of theories of harm in case law.

In line with the preceding analysis, the question of whether there will be a clarification of the EFD and whether the EFD in practice will be applied to markets concerning data or adapted, by either incorporating assessments of characteristics of data or merely imposing a less strict application enabling data access, remains open. The thesis has thus, *on one hand*, highlighted the possible application of the doctrine to data while also ensuring legal certainty. *On the other hand*, highlighted the balancing of ensuring a strict approach to such changes regarding enabling access to data, due to the rationale behind refusal to supply and the interference of fundamental rights.

As for future research, it would be of interest to follow the assessments and developments regarding refusal to supply and accessing data. Furthermore, look for a clarification of the EFDs application in cases regarding competition law in the digital market. Perhaps already in the pending *Google Android* case or in the initiated investigations against Amazon.

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