University of Amsterdam

International and European Law
European Competition Law and Regulation LL.M. track

Master's Thesis

Nurturing business customers for slaughter?

Data leeching of non-public business customers' data performed by dual role online platforms – an abuse of a dominant position?

Name: Sergiu Petrișor | 13360531

E-mail: sergiu.petrisor@ymail.com

Tel.: +40 740 962 632

Supervisor: Dr. Jan Broulík

ABBREVIATIONS

(In alphabetical order)

GENERAL

(Used throughout the main text and/or footnotes)

AG – Advocate General

CJEU / Court – Court of Justice of the European Union

ECJ – European Court of Justice

EC – (European) Commission

EFD – Essential Facility Doctrine

EU – European Union

GC - General Court

GDPR – General Data Protection Regulation

IP(**R**) – Intellectual Property (Rights(s))

Notice – Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (2009/C 45/02).

OECD – Organisation for Economic Co-operation and Development

Regulation 1/2003 – Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty

TFEU – Treaty on the Functioning of the European Union

TPS – Third Party Seller(s)

JOURNALS

(Used throughout the footnotes)

(In accordance with the Cardiff Index of Legal Abbreviations)

CYELS – Cambridge Yearbook of European Legal Studies

ColumLRev - Columbia Law Review

JAE – Journal of Antitrust Enforcement

JECL & Pract – Journal of European Competition Law & Practice

MJ – Maastricht Journal of European and Comparative Law

NebLRev – Nebraska Law Review

RJT – Revue Juridique Themis de l'Université de Montréal

UPaLRev – University of Pennsylvania Law Review

WComp – World Competition

YEL – Yearbook of European Law

ABSTRACT

Digitally driven abuses of dominance are becoming increasingly prevalent and salient issues require answers. One of these issues coincides with the paper's research question: whether the non-public business data that dual role online platforms (vertically integrated platforms that also compete with its downstream rivals therein) harvest and subsequently use for their own benefits, following the interactions the platforms facilitate to their business users, – data leeching – may amount to an abuse of dominance within the ambit of article 102 TFEU and its current understanding, including the established case-law of the Court of Justice of the European Union.

Following previously conducted research into data leeching practices in the context of online marketplaces, the paper seeks to assess whether these may be extrapolated, on a general level, to all types of dual role online platforms. Without providing a clear-cut answer, the paper suggests that data leeching is akin to free riding, is apt to inflict harm on competitors and, thus, on the structure of the market and on competition as such, and, ultimately concludes that evidence is more suggestive of the fact that this practice is malevolent.

Finally, after performing a positive and general assessment of four categories of abuse potentially befitting data leeching practices – excessive pricing, leveraging and self-preferencing, margin squeeze, and refusal to deal/supply – the paper subsequently seeks to normatively adapt them to data leeching practices *per se*. While some of the scrutinized categories of abusive conduct may seem better suited to accommodate data leeching practices than others, the research predominantly focuses on presenting the differences, advantages, and challenges of each distinct category and, where needed, tries to iron out any overlapping scenarios between them.

KEY WORDS

Competition law; abuse of dominance; abuse of a dominant position; article 102 TFEU; digital economy; online platforms; cross-usage of data; data leeching; excessive pricing; leveraging; self-preferencing; margin squeeze; refusal to deal; refusal to supply; essential facility.

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I. INTRODUCTION

1. Purpose, methodology, and roadmap of the paper

In less than two decades the largest companies in the world, by market capitalization¹, operating in various industries, have been trumped by companies operating in the digital economy² and in 2020, six out of the top ten companies in the world were technology giants³. The rise of the digital economy has also incited a lot of novel competition law related issues, one of which – coinciding with the research question discussed herein – relates to whether the platforms' harvesting and preferential cross-using of non-public data of its business customers⁴, which compete with the latter on the platform itself, amounts to an abuse of dominance within the ambit of article 102 TFEU and its established case-law. This practice is hereinafter referred to as data leeching. Specifically, the paper scrutinizes whether platforms exploit their business users as guinea pigs for market insight, to their ultimate exclusion, and, if so, what theory of abuse is best suited to deal with such practices.

In scrutinizing whether competition on the merits is respected, this paper relies on classical legal research, specifically on case-law and legal doctrine, and is structured into five chapters. Following this introductory chapter, familiarizing the reader with the topics of online platforms and the Commission's 'Amazon Marketplace' investigation⁵, the second chapter focuses on a positive assessment of specific categories of abuses of dominance – excessive pricing, self-preferencing

¹ Gergely Csurgai-Horváth, 'An old concept for an old-new type of abuse of dominance in the digital sector: self-preferencing' (2020) 41(2) ECLR 68, 68. Haucap Justus, 'Competition and Competition Policy in a Data-Driven Economy' (2019) 54 Intereconomics 201, 201.

² Gergely (n 1).

³ PWC, 'Global Top 100 companies by market capitalisation' (Report, July 2020) 11 < https://www.pwc.com/gx/en/services/audit-assurance/publications/global-top-100-companies.html > accessed 1 June 2020.

⁴ eg, number of ordered and shipped products; customers' revenues; number of visits to the customers' offers; unmaterialized transactions; shipping data; customers' past performance(s); consumer claims and ancillary activated guarantees. See, eg, Commission, *Amazon Marketplace* Case no. 40462 < https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_40462 > accessed 1 June 2021.

⁵ Ibid.

and leveraging, margin squeeze, and refusal to deal/supply – potentially befitting data leeching practices. However, these categories are exclusively assessed on a general level therein, as tailoring them to accommodate the specificities of data leeching *per se* will ensue in the fourth chapter. As a nexus between them, the third chapter analyses the importance of (big) data, network effects, and data leeching and its effects. Lastly, the final, and fifth, chapter of this paper contains the concluding remarks of my research.

2. (Dual role) online platforms

Given their wide range and eclectic nature⁶, a standard 'one-size-fits-all' definition of *online* platforms is difficult to be provided, especially since they are, in fact, business models⁷. For the purpose of this paper, however, I will rely on the Commission's definition, labelling them as "undertaking[s] operating in two (or multi)-sided markets, which use[s] the Internet to enable interactions between two or more distinct but interdependent groups of users as to generate value for at least one of the groups." Thus, platforms are in the business of connecting dots or matchmaking, via the Internet, in which two/multi-sidedness and network effects play important roles.

Dual role online platforms (or hybrid platforms), on the other hand, are vertically integrated platforms⁹ which, apart from offering their dot connecting core-infrastructure on the upstream market (eg, listing and facilitating the sale of third-party sellers' (TPS)), make their own

⁶ Commission, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Online Platforms and the Digital Single Market Opportunities and Challenges for Europe' COM(2016) 288 final, 2. OECD, 'Market definition in multi-sided markets – Note by Sebastian Wismer & Arno Rasek' DAF/COMP/WD(2017)33/FINAL 5-7.

⁷ Anne-Claire Hoyng, Robert van Mastrigt, 'Is the current debate about changing the competition law toolbox warranted? A perspective from a digital platform' (2020) 41(7) ECLR 327, 327 and 331 et seq (for further details on types online platforms). Friso Bostoen, 'Online platforms and vertical integration: the return of margin squeeze?' (2018) 6 JAE 355, 364-365.

⁸ Hoyng and Mastrigt (n 7) fn 1.

⁹ Vertical integration entails that "two or more successive stages of production and/or distribution of a product are combined under the same control"; Robert H. Cole, 'General Discussion of Vertical Integration' (1952) in Vertical Integration In Marketing 9, cited in Lina Khan, 'Amazon's Antitrust Paradox' (2017) 126 Yale Law Journal 710, 731 (fn 109).

products/services available on the downstream market, competing with its business customers therein¹⁰. Marketplaces are fitting examples of dual role online platforms. For clarity purposes, references to (online) platforms will henceforth designate dual role online platforms, unless otherwise stated therein.

While some argue that this duality – platform (intermediary/referee) vs. merchant/services provider (competitor/player) – hosts a clash between the platform's *duty to stay neutral* and its desire to *capture the downstream market*(s)¹¹, and that, consequently, upon adding dominance into the mix, certain behaviours, such as self-preferencing¹² or leveraging, become problematic, others view the 'hybridization of marketplaces' as competition and innovation inducing¹³, since the platform would not have incentives to harm its downstream business customers¹⁴. While providing all-encompassing answers is difficult, this paper sheds light on some of these dilemmas, in chapter III.

3. The 'Amazon Marketplace' investigation

'Amazon Marketplace' is a platform where both TPS and Amazon sell, in competition with each other, their products, to final consumers¹⁵. According to the public information available, Amazon stands accused, by the Commission, that the TPS' harvested data troves grants it a detrimental

¹⁰ Bostoen, 'Online platforms' (n 7) 365 (and fn 74), even though the author does not label these platforms as such, by name.

¹¹ Khan (n 9) 754, 779-780.

¹² Hoyng and Mastrigt (n 7) 329. Khan (n 9) 754.

¹³ Neil Dryden, Sergey Khodjamirian, Jorge Padilla, 'The Simple Economics of Hybrid Marketplaces' (2020) SSRN 8 and 14 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3650903 > accessed 3 June 2021. Incidentally, funding for the paper was granted by Amazon (see fn 1).

¹⁴ Ibid 99. This appears to be akin to the 'single monopoly profit theorem' relied by the Chicago school to argue that a refusal to deal is not profitable. Also see OECD, 'Abuse of dominance in digital markets' (2020) 26 < www.oecd.org/daf/competition/abuse-of-dominance-in-digital-markets-2020.pdf > accessed 4 June 2021. For a critique of the 'single monopoly profit theorem' see Louis Kaplow, 'Extension of Monopoly Power through Leverage' (1985) 85 ColumLRev 515.

¹⁵ Feng Zhu and Qihong Liu, 'Competing with Complementors: An Empirical Look at Amazon.com' (2018) Harvard Business School Technology & Operations Mgt. Unit Working Paper No. 15-044, Strategic Management Journal (Forthcoming) (*Zhu & Liu*) 9 < https://ssrn.com/abstract=2533616 > accessed 4 June 2021.

competitive advantage over them, which allows it both to tailor its offers and strategic business decisions, and to "avoid the normal risk of competition"¹⁶. Even though leveraging seems to be the theory of harm advanced via the statement of objections sent to Amazon¹⁷, this research also covers other theories of harm potentially befitting data leeching practices, because, conceptually, a statement of objection is a "preliminary position (...) regarding the alleged infringement"¹⁸ and, thus, based on the proceedings (even though a proclivity towards a certain theory of harm may exist), the Commission's views could shift¹⁹. Additionally, leveraging is not pursued in isolation, but in combination with complementary behaviours, such as tying or self-preferencing, thus the information available is incomplete. Lastly, this endeavour also adduces added value to the discussion related to how to optimally tackle these practices.

Given of the poignancy of the facts of this investigation and the wide-ranging literature focusing on Amazon's conduct(s), Amazon('s investigation and practices) will serve as (a) useful reference point(s) in the overall analysis of data leeching practices performed by platforms. Since similar concerns have recently prompted the Commission to examine whether the data Facebook obtains on its social network, from competing add providers, is used to "outcompete them" in its related Marketplace service²⁰, such practices may be wide-spread. Consequently, scrutinizing the existing theories of abuse, to identify which one(s) could best befit data leeching, is imperative, which shall make the object of chapters II and IV below.

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Commission, 'Press release', 10 November 2020 https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2077 > accessed 4 June 2021.

¹⁷ Ibid.

¹⁸ Commission, 'Notice on best practices for the conduct of proceedings concerning Articles 101 and 102 TFEU' (2011/C 308/06) [2011] OJ C308/6, para 82.

¹⁹ Ibid, para 110.

See Commission, 'Press release', Brussels, 4 June 2021 < https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2848 > accessed 6 June 2021.

II. ABUSE OF DOMINANCE AND THE CATEGORIES POTENTIALLY BEFITTING DATA LEECHING

1. General remarks

This chapter introduces the concept of abuse of dominance and examines certain categories apt to broadly befit data leeching practices. However, tailoring these categories to the specificities of data leeching shall ensue only in the fourth chapter.

Defined in *United Brands*, dominance entails a position of economic strength enabling the dominant undertaking to avert effective competition from being maintained on the relevant market, and grants it independence from competitors, customers, and consumers²¹. While *dominance* alone is not problematic, under article 102 TFEU, *abuse* is. The Court held, in *Hoffman-La Roche*, that *abuse of dominance* is an *objective concept* related to (i) the fact that the simple behaviour of said undertaking influences the structure of the market, and (ii) its mere presence weakens the degree of competition, and (iii) effective competition is stifled because of the undertaking's engagement in business methods which would not be implementable under normal conditions of competitive pressures²². Consequently, the underlying rationale in assessing unilateral conduct is that, above a certain degree of market power (usually assessed, by proxy, through market shares²³), the undertaking has a *special responsibility* not to distort the process of competition²⁴.

²¹ Case 27/76 United Brands Company and United Brands Continentaal B.V. v Commission of the European Communities [1978] ECR 00207 (United Brands), para 65.

²² Case 85/76 Hoffmann-La Roche v Commission [1979] ECR 00461, para 91.

²³ Commission, 'Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (2009/C 45/02) (*Notice*), para 14.

²⁴ Case 322/81 NV Nederlandsche Banden-Industrie Michelin v Commission [1983] ECR 03461 (Michelin I), para 57.

While cases of abuse of dominance generally require the establishing of – actual or potential²⁵ – anti-competitive effects²⁶, considering all the relevant circumstances of the case²⁷ (a *rule of reason* approach), the abuse and its effects need not occur on the same relevant market²⁸. Moreover, marginalization or market exit of *less efficient competitors* is a normal outcome of *competition on the merits*²⁹. Article 102 TFEU prohibits not only practices that harm consumers directly, but also indirectly, through their impact on competition³⁰ and general competition rules also seek to protect the structure of the market and, thus, competition as such³¹. Lastly, as the list of abusive practices outlined in article 102 TFEU is exemplificative, thus non-exhaustive³², abuses may be 'executed' in various forms, if the actual or likely³³ anti-competitive effects are proven.

2. Types of abusive conducts

As data leeching may be devised as a long-term strategy implemented to, firstly, exploit business customers (capturing the value generated via the interactions facilitated) to, secondly, exclude them (creating outperforming products/services based on the captured value) to, lastly, exploit final consumers (raising prices and/or downgrading quality, after being unshackled of competitive pressures), this paper initially explores exploitative abuses (*data collection*) and continues with exclusionary ones (*data withholding*).

²⁵ Purely hypothetical anti-competitive effects are, however, insufficient – Case C-23/14 *Post Danmark A/S v Konkurrencerådet* [2015] 5 CMLR 25, para 65.

²⁶ Case C-52/09 Konkurrensverket v TeliaSonera Sverige [2011] ECR I-00527 (TeliaSonera), para 64.

²⁷ Michelin I (n 24), para 73; Case C-280/08 P Deutsche Telekom v Commission [2010] ECR I-09555 (Deutsche Telekom), para 175; Case C-209/10 Post Danmark A/S v Konkurrencerådet [2012] 4 CMLR 23 (Post Danmark I), para 26.

²⁸ Case C-333/94 P *Tetra Pak International SA v Commission* [1996] ECR I-05951 (*Tetra Pak*), para 25. Also see Bellamy & Child, *European Union Law of Competition* (Bailey and John (eds), 8th edn, OUP 2018) 864.

²⁹ *Post Danmark I* (n 27), para 22.

³⁰ Ibid, para 20 and case-law therein cited.

³¹ Case C-8/08 *T-Mobile Netherlands and Others* [2009] ECR I-04529 (*T-Mobile*), para 38.

³² Case 6/72 Europemballage Corporation and Continental Can Company v Commission [1973] ECR 00215, para 26; Case C-95/04 P British Airways v Commission [2007] ECR I-02331, para 57; Deutsche Telekom (n 27), para 173.

³³ *Deutsche Telekom* (n 27), paras 198 and 250-254.

2.1. Excessive pricing

Even though article 102(a) TFEU speaks of 'unfair purchase/selling prices', the literature generally refers to 'excessive prices' – as shall I, henceforth – to designate the exploitation of the direct customers of a dominant undertaking³⁴, which are charged *both* excessive and unfair prices³⁵. A cause of controversy, excessiveness may be difficult to evaluate objectively, especially when no price comparator(s) exists. Moreover, in the slipstream of the Chicago-school, the presumption goes that excessive prices are unsustainable and self-correctable by the market, considering the new entries such prices will attract³⁶ (assuming switching is possible). Lastly, even the Commission's enforcement priorities focus exclusively on exclusionary abuses, rather than exploitative ones³⁷, denoting a demoted interest for these practices.

However scarce such cases are³⁸, given the high evidentiary burden and risk of becoming a price regulator³⁹, the Commission did pursue such cases and, in *United Brands*⁴⁰, the Court concluded that excessive prices, bearing no reasonable relation to the economic value of the product supplied may be deemed, either in isolation, or when compared to competing products, excessive⁴¹. This may be performed through a cost-price analysis which evokes the profit margins thereof⁴², but said method is, as the Court noted, one among others⁴³. In *AKKA/LAA*⁴⁴, a case where the Court relied on the 'comparator' benchmark, it noted that there is "*no minimum threshold above which a rate*

³⁴ Pinar Akman, 'Exploitative Abuse in Article 82EC: Back to Basics?' (2009) 11 CYELS 12 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1328316 > accessed 21 June 2021.

³⁵ United Brands (n 21), para 252. Richard Wish, David Balley, Competition Law (9th edn, OUP 2018) 738.

³⁶ Pinar Akman, 'Exploitative Abuses' (n 34) 16.

³⁷ *Notice* (n 23).

³⁸ Marco Botta, Klaus Wiedemann, 'EU Competition Law Enforcement Vis-À-Vis Exploitative Conducts in the Data Economy Exploring the Terra Incognita' (2018) Max Planck Institute for Innovation & Competition Research Paper No. 18-08 6 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3184119 > accessed 23 June 2021.

³⁹ Ibid.

⁴⁰ United Brands (n 21).

⁴¹ Ibid, para 252.

⁴² Ibid, para 251.

⁴³ Ibid.

⁴⁴ Case C-177/16 Autortiesību un komunicēšanās konsultāciju aģentūra/Latvijas Autoru apvienība v Konkurences padome [2017] 5 CMLR 19 (AKKA/LAA).

must be regarded as 'appreciably higher"⁴⁵ (ie, excessive), but that these have to be both significant and persistent and established according to "objective, appropriate and verifiable criteria"⁴⁷. However, I see no reason why these conclusions could not be extrapolated, mutatis mutandis, to excessive prices in isolation.

Finally, and more importantly, as regards unfairness *per se*, the Court ruled that claiming payment(s), from contractual partners, for services which have not been rendered, is abusive⁴⁸, as is demanding payments for services unrequested by said partners⁴⁹. Even though the latter case involved an undertaking granted exclusive rights, in accordance with national law, I see no valid reasons why this conclusion should be restricted solely to such scenarios. As to the former case, charging prices without providing any *counter-performance* clearly falls within the ambit of 102(a) TFEU.

2.2. Leveraging and self-preferencing

Described in two Commission soft-law documents, concerning conditional rebates⁵⁰ and non-horizontal mergers⁵¹, *leveraging* is described in the latter, in the context of tying, as the *anticompetitive* ability to "*increase sales of a product in one market*" (the 'tied market'), "*by virtue of the strong market position of the product to which it is tied or bundled*" (the 'tying market')⁵². Distinct from market entry or vertical integration⁵³, anti-competitive leveraging is the practice

⁴⁵ Ibid, para 55.

⁴⁶ Ibid, paras 55-56.

⁴⁷ Ibid, para 51.

⁴⁸ Case C-385/07 P Der Grüne Punkt – Duales System Deutschland GmbH v Commission [2009] ECR I-06155 (Der Grüne Punkt), paras 141-147.

⁴⁹ C-179/90 Merci Convenzionali Porto di Genova / Siderurgica Gabrielli [1991] ECR I-05889 (Porto di Genova), paras 19-20.

⁵⁰ *Notice* (n 23), paras 39 and 44.

⁵¹ Commission, 'Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings' (2008/C 265/07), para 93.

⁵² Ibid.

⁵³ Which only denotes the presence of an undertaking on a given (related) market. See Patrick F. Todd, 'Digital Platforms and the Leverage Problem', (2019) 98 NebLRev 486, 489.

whereby, by means of anti-competitive behaviours⁵⁴ (eg, tying), the amassed dominance from one market – the locus of leveraging – is exploited to extend to (an) adjacent market(s) – where the effects of leveraging occur, but where the extent of market power is irrelevant⁵⁵ – ultimately suppressing competition and harming consumers. By expressly recognizing leveraging, in *Microsoft*⁵⁶, the Court rejected the Chicago-school beliefs that it is economically irrational and unsustainable⁵⁷. As far as technology markets are concerned, some argue that they are (more) prone to anticompetitive leveraging⁵⁸.

Self-preferencing, on the other hand, is generally understood as the practice whereby a vertically integrated undertaking deals on more favourable terms with its affiliates, at the expense of its rivals⁵⁹. Since it has been held that undertakings are not generally expected to "share their competitive advantages with rivals"⁶⁰ or create for them a level playing field⁶¹, the recent self-preference paradigm shift is controversial⁶². Apart from controversies surrounding its potential

⁵⁴ By other means than competition on the merit; see Case T 201/04 *Microsoft v Commission* [2007] ECR II-03601 (*Microsoft*), para 1080. For discussions on pro- and anti-competitive leveraging see Todd (n 53), 508 and 517 et seq.; and International Center for Law and Economics (*ICLE*), 'Why sound law and economics should guide competition policy in the digital economy' 7 < https://ec.europa.eu/competition/scp19/media_en.html#Contributions > accessed 10 June 2021.

⁵⁵ *Microsoft* (n 54), para 559.

⁵⁶ *Microsoft* (n 54), para 559.

⁵⁷ Ian Eagles, Louise Longdin, 'Microsoft's refusal to disclose software interoperability information and the Court of First Instance' (2008) 30(5) EIPR 205 (and fns 5 and 6).

⁵⁸ Florence Eicher, 'What's the abuse? A quest for the appropriate legal test in product design cases under Article 102 TFEU' MJ (2019) 26(3) 421, 436. For a cautionary perspective of this point of view, see *ICLE* (n 54).

⁵⁹ Pablo Ibáñez Colomo, 'Self-Preferencing: Yet Another Epithet in Need of Limiting Principles' (2020) 43(4) WComp 417, 418 and 420-421. This scenario is defined as 'pure self-preferencing' in the literature; see Inge Graef, 'Differentiated Treatment in Platform-to-Business Relations: EU Competition Law and Economic Dependence' (2019) 38(1) YEL 448, 453 (also for other hypothesis of self-preferencing).

⁶⁰ Ibid 422.

⁶¹ Ibid 421.

⁶² For views critical of platforms' self-preferencing practices see Jacques Crémer, Yves-Alexandre de Montjoye, Heike Schweitzer, 'Competition policy for the digital era' Final Report, Luxemburg 2019 (*Crémer Report*) 6-7 and 65-71.

welfare enhancing⁶³ or reducing effects⁶⁴, it also lacks a conceptual boundary, being potentially overinclusive⁶⁵ and overlapping with eg, tying and/or refusal(s) to deal, which are arguably forms of intra-company preferences⁶⁶. Since these are categorized distinctly, bearing separate legal tests⁶⁷, in the aftereffects of the Commissions' *Google Shopping*⁶⁸ decision – which, in 2017, saw the largest fine levied within the EU for a unilateral conduct, of \in 2.42 billion – two salient questions arise. Is 'self-preferencing' a distinct category, bearing a different legal test, and, if so, is this welcomed or a legal uncertainty inducing mistake (since the question should not be the preferential treatment *per se*, but whether it (may) inflict(s) anti-competitive effects⁶⁹)?

Scrutinizing said decision reveals indeed that the Commission relied on a novel theory of abuse – leveraging and self-preferencing⁷⁰ (*discriminatory leveraging*), even though not mentioned as such by name⁷¹ – apparently bearing a distinct legal test. Specifically, Google was sanctioned for giving more prominent display, in its general search engine results (Google Search), to its affiliated comparison-shopping service (Google Shopping), while, at the same time, actively demoting the services provided by its comparison-shopping rivals⁷², thus, raising their costs⁷³. According to Commissioner Margrethe Vestager, Google stifled competition and denied competitors a fair

⁶³ Colomo, 'Self-preferencing' (n 59) 419. Crémer Report (n 62) 69.

⁶⁴ Crémer Report (n 62) 66.

⁶⁵ Colomo, 'Self-preferencing' (n 59) 420.

⁶⁶ Ibid 419-420 and 436.

⁶⁷ Colomo, 'Self-preferencing' (n 59), 419-420.

⁶⁸ Google Search (Shopping) (Case No AT.39740) Summary of Commission Decision notified under C(2017) 4444 [2017] (2018/C 9/08) OJ C9/11 (the whole decision is available at < https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_39740 > accessed 12 June 2021.

⁶⁹ Colomo, 'Self-preferencing' (n 59) 425.

⁷⁰ Pablo Ibáñez Colomo, 'Exclusionary discrimination under article 102 TFEU' (2014) 51 CML Rev 141, 145.

⁷¹ Google Search (Shopping) (n 68), paras 334 and 649-652.

⁷² Ibid.

⁷³ Pablo Ibáñez Colomo, 'Indispensability and Abuse of Dominance: From Commercial Solvents to Slovak Telekom and Google Shopping' (2019) 10(9) JECL & Pract 532, 541.

chance to compete on the merits therewith⁷⁴. The decision incited a lot of criticism⁷⁵ for, among other, lack of consistency and clarity⁷⁶, lack of a clear legal test⁷⁷, and equating competitive disadvantages with anticompetitive effects (which ought to be distinct⁷⁸)⁷⁹. Incidentally, a similar investigation conducted across the pond, by the US' Federal Trade Commission, into Google's 'search biases' concluded that its 'product design/upgrade' was a quality improvement⁸⁰, without inferring any anticompetitive harms therefrom.

On the facts of the case, Google claimed, firstly, that the case concerns a refusal to deal/supply⁸¹, and as the *Oscar Bronner*⁸² indispensability criteria was unfulfilled, Google should have not been mandated to grant competitors "access to a significant portion of its general search results pages". Secondly, Google also contended the lack of legal precedents establishing that its alleged behaviour is anti-competitive⁸⁴ and, thirdly, that its search algorithm and display concern product

Commission, 'Press release', Brussels, 27 June 2017 https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1784 accessed 12 June 2021.

⁷⁵ Pinar Akman, 'The theory of abuse in Google Search: a positive and normative assessment under EU competition law' [2017] (2) Journal of Law, Technology and Policy, 301 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2811789 > accessed 12 June 2021. Far from disputing the academic prowess of the author, I note, incidentally, that funding for the research of that paper was provided by Google. Colomo, 'Self-preferencing' (n 59) 437 et seq.

⁷⁶ Colomo, 'Self-preferencing' (n 59) 437 et seq.

⁷⁷ Ibid. Vladya M.K. Reverdin, 'Abuse of Dominance in Digital Markets. Can Amazon's Collection and Use of Third-Party Sellers' Data Constitute an Abuse of a Dominant Position Under the Legal Standards Developed by the European Courts for Article 102 TFEU?' (2021) 12(3) JECL & Pract 181, 194.

⁷⁸ Case C-525/16 *MEO – Serviços de Comunicações e Multimédia SA v Autoridade da Concorrência* [2018] 4 CMLR 25, para 26.

⁷⁹ Colomo, 'Self-preferencing' (n 59) 444.

⁸⁰ OECD, 'Abuse of dominance' (n 14) 36.

⁸¹ As to the 'relevant input' itself, the matter is unclear, but presumably amounts to either receiving 'free internet traffic' to the shopping sites or their 'positioning and ranking' within Google's results. See Akman, 'The theory of abuse' (n 74), 309.

⁸² Case C-7/97 Oscar Bronner GmbH & Co. KG v Mediaprint [1998] ECR I-07791 (Oscar Bronner).

⁸³ Google Search (Shopping) (n 68), 645.

⁸⁴ Ibid, para 646.

design improvements⁸⁵. Conversely, the Commission required Google to apply a principle of *equal* treatment across the board – rivals and affiliates⁸⁶ – but without prescribing how to do so⁸⁷, ruling indispensability as irrelevant. It did this based on, firstly, the argument that Google's action did not concern a passive refusal to supply, but an active preferential treatment, and, secondly, based on the remedy it had imposed. Specifically, as the Commission's ordered remedy did not impose a compulsory asset transfer or contract entering⁸⁸, as understood in *Van den Bergh Foods*⁸⁹, it argued that the case does not concern a refusal to deal/supply. Scholars argued that by framing the applicable legal test according not to "what intervention demands in substance, but what the authority formally requires in its decision", the Commission favoured form over substance, granted itself discretion⁹⁰, and ultimately by-passed the essential facility doctrine⁹¹. As regards Google's 'novelty' and 'product design' arguments, the Commission replied, firstly, that leveraging is not novel (even though, this would not alleviate demonstrating indispensability, if the case⁹²) and that product designs should be evaluated based on the same standards therewith⁹³.

Crucially, however, the legal test applied seems elusive, since in demonstrating that leveraging is unlawful, based on the Court's case-law, it cited⁹⁴ three cases concerning refusals to deal/supply

⁸⁵ Ibid, para 647.

⁸⁶ Colomo, 'Indispensability' (n 74), 541. Akman, 'The theory of abuse' (n 75) 365-366.

⁸⁷ Incidentally, this may be problematic alone, under article 7 of Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1 (Regulation 1/2003).

⁸⁸ Google Search (Shopping) (n 68), paras 649-651.

⁸⁹ Ibid, para 651, citing Case T-65/98 *Van den Bergh Foods* [2003] ECR II-04653, para 161, upheld on appeal, in Case C-552/03 P, *Unilever Bestfoods Ireland v Commission* [2006] ECR I-9091 (*Van den Bergh Foods*), paras 113 and 137.

⁹⁰ Colomo, 'Self-preferencing' (n 59) 441.

⁹¹ Graef Inge, 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy' (2019) 53(1) RJT 33, 40. Reverdin (n 77) 194.

⁹² Colomo, 'Indispensability' (n 73), 541.

⁹³ Google Search (Shopping) (n 68), para 651.

⁹⁴ Ibid, para 334.

– *Telemarketing*⁹⁵, *Irish Sugar*⁹⁶, and *Microsoft*⁹⁷, one concerning tying – *Tetra Pak*⁹⁸, and one, a margin squeeze – *TeliaSonera*⁹⁹, all of which have different legal tests¹⁰⁰, telling of the perils of incorporating various self-preferential treatment under the same umbrella. In devising the *equal treatment* obligations imposed on Google, the telecom and internet '*neutrality*' (ie, *non-discrimination*) obligations¹⁰¹, imposed via EU enactments¹⁰², may have served as an inspiration source for the Commission. This is indicative of a broadening of the 'equality of opportunity' principle within 102 TFEU – which applied hitherto only in relation to as efficient competitors seeking access to an indispensable upstream infrastructure/input¹⁰³ – to a general '*platform*

⁹⁵ Case 311/84 Centre belge d'études de marché - Télémarketing (CBEM) v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB) [1985] ECR-03261 (Telemarketing), paras 26-27.

⁹⁶ Case T-228/97 Irish Sugar plc v Commission [1999] ECR II-02969, para 166.

⁹⁷ *Microsoft* (n 54), para 1344.

⁹⁸ Tetra Pak (n 28), para 25.

⁹⁹ TeliaSonera (n 26), para 85.

¹⁰⁰ For details, see Colomo, 'Self-preferencing' (n 59) 437 et seq; Colomo, 'Indispensability' (n 72) 541 et seq; Reverdin (n 77) 194-195.

¹⁰¹ Friso Bostoen, 'Platform Neutrality: Hipster Antitrust or Logical Next Step? (Part I)' (KU Leuven CiTiP, 12 December 2017) < https://www.law.kuleuven.be/citip/blog/platform-neutrality-hipster-antitrust-or-logical-next-step-part-i/ > accessed 20 June 2021.

¹⁰² For the telecom sector, see Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services [2002] OJ L249/21, art 3. For the internet sector, see Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union [2015] OJ L 310/1, art 3(3).

¹⁰³ Deutsche Telekom (n 27), paras 230-233. The case concerned a margin squeeze but predates the TeliaSonera judgment. Consequently, TeliaSonera may offer support for the broadening of the 'equality of opportunity' principle below cases requiring indispensability, including margin squeezes.

neutrality'¹⁰⁴, and foreshadowed the Digital Markets Act proposal¹⁰⁵. Naturally, open access to the platform and its services is a prerequisite of such neutrality obligations.

Thus, the takeaways of *Google Shopping* seem to be that vertically integrated undertakings must abide by an overall neutrality obligation and that failure to do so will incite a retaliatory enforcement action having the capacity to change product designs and/or business models. As the decision is being challenged before the Court, by Google, ¹⁰⁶ it remains to be seen whether overall 'platform neutrality' obligations will grow roots within article 102 TFEU.

2.3. Margin squeeze

A form of exclusionary abuse, a margin squeeze occurs when a vertically integrated ¹⁰⁷ and upstream dominant undertaking ¹⁰⁸ supplies (access to) an important infrastructure/input to (a) downstream competing undertaking(s) and charges such prices for that input that, when compared to the prices it charges on the downstream market (for a product/service which may incorporate the upstream input), an *equally efficient competitor* will have its profits artificially reduced or incur losses ¹⁰⁹, on a lasting basis ¹¹⁰. Naturally, beyond the existence of anti-competitive effects on the downstream market ¹¹¹, such a pricing policy must have no objective (economic) justification(s) ¹¹². As per the Notice, which is only a soft-law document, determining the 'equivalent efficiencies' of the two downstream undertakings generally requires margin squeeze cases to rely on long-run

¹⁰⁴ Friso Bostoen, 'Platform Neutrality: Hipster Antitrust or Logical Next Step? (Part II)' (KU Leuven CiTiP, 14 December 2017) < https://www.law.kuleuven.be/citip/blog/platform-neutrality-hipster-antitrust-or-logical-next-step-part-ii/ > accessed 20 June 2021.

¹⁰⁵ Commission, 'Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act)' COM/2020/842 final (see article 6(1)(d)).

¹⁰⁶ Case T-612/17 *Google and Alphabet v Commission* – pending case (OJ C 369/37 / 30.10.2017 / < https://curia.europa.eu/juris/liste.jsf?num=T-612/17 > accessed 21 June 2021).

¹⁰⁷ Wish and Balley (n 35) 773.

¹⁰⁸ TeliaSonera (n 26), para 89. Whether dominance (also) exists in the downstream market is, thus, immaterial.

¹⁰⁹ Ibid, para 33. Case T-271/03 *Deutsche Telekom v Commission* [2008] ECR 2008 II-00477, para 237 (the case was upheld, by the ECJ, on appeal); Friso Bostoen, 'Online platform' (n 7) 355-356.

¹¹⁰ *Notice* (n 23), para 80.

¹¹¹ Bostoen, 'Online platforms' (n 7) 359 and 370.

¹¹² *TeliaSonera* (n 26), para 75. Wish and Balley (n 35) 774.

average incremental costs (LRAIC) analysis of the downstream division of the integrated dominant undertaking ¹¹³.

As a refusal to deal/supply is described in the Notice as 'performable' either as an 'outright refusal' (ie, refraining from entering into, or continuing, a contractual relationship with another entity) or a 'constructive refusal' (eg, imposing unreasonable conditions in return for the supply or charging prices leading to the squeeze-out of that downstream competitor¹¹⁴), one might assume that the same conditions/thresholds must be met in both 'refusal' scenarios, particularly the *indispensability* of the upstream input, as per the *Oscar Bronner* requirements¹¹⁵. However, in *TeliaSonera*, the Court departed from this viewpoint, concluding that a margin squeeze is a distinct legal category¹¹⁶, and that the upstream input does not necessarily have to be indispensable for the conduct to qualify as a margin squeeze¹¹⁷. While potentially objectionable as a rationale – since undertakings may disguise an outright refusal by means of a constructive one, bearing equivalent exclusionary harm potential, yet benefiting from a lower evidentiary threshold¹¹⁸ – since this case remains good law, margin squeeze cases indeed 'benefit' from an exploitable reduced evidentiary burden.

However, while *TeliaSonera* did concern a margin squeeze¹¹⁹, the Court referred to 'unfair pricing practices'¹²⁰, "supplying services or selling goods on conditions which are disadvantageous or on which there might be no purchaser'¹²¹, and 'terms of trade'¹²² interchangeably throughout the judgment¹²³. This apparently broadens this category, limited hitherto exclusively at (pure) pricing

¹¹³ *Notice* (n 23), paras 79-80.

¹¹⁴ Ibid, para 80 (Notice).

¹¹⁵ Oscar Bronner (n 82), para 41. See subsection 2.4 of chapter II.

¹¹⁶ *TeliaSonera* (n 26), paras 54-56.

¹¹⁷ Ibid, para 72.

¹¹⁸ Colomo, 'Exclusionary discrimination' (n 70) 160.

¹¹⁹ *TeliaSonera* (n 26), para 34-37.

¹²⁰ Ibid, para 34.

¹²¹ Ibid, para 55.

¹²² Ibid, paras 54 and 58.

¹²³ Colomo, 'Indispensability' (n 73) 540.

practices, to also accommodate non-pricing practices (ie, disadvantageous terms of trade¹²⁴) having actual or potential exclusionary effects on an as efficient competitors¹²⁵. This reasoning has been subsequently (re)confirmed by the Court, in *Slovak Telekom*¹²⁶.

2.4. Refusal to deal/supply

Refusal to deal/supply and access to an essential facility are used interchangeably herein, denoting the exclusionary conduct by which a vertically integrated undertaking – dominant in the upstream market – refuses to provide access to an infrastructure/asset or stops supplying (access to) the latter to a downstream rival¹²⁷, in breach of article 102(b) TFEU. These cases are also provocative¹²⁸, because they mandate undertakings to conclude contracts with others against their will. As AG Jacobs noted, "the right to choose one's trading partner and freely dispose of one's property are generally recognized principles in the laws of the Member States", and thus, any incursions therein would require a "careful justification"¹²⁹. Imposing forced dealings may disincentivize undertakings from developing inputs¹³⁰, from investing and innovating¹³¹, and may allow free riders to take advantage of their work¹³², but may equally and conversely spur the advent of complementary products and follow-on innovation¹³³. Consequently, careful considerations are prerequisites of any remedial action(s) in such cases.

¹²⁴ Ibid 541.

¹²⁵ TeliaSonera (n 26), paras 64-66. Case C-295/12 Telefonica SA and Telefonica de España SAU v Commission [2014] 5 CMLRep 18 (Telefonica), para 124.

¹²⁶ Case T-851/14 *Slovak Telekom a.s. v Commission* [2018] (2019) 4 CML Rev 21 (*Slovak Telekom*), para 126. This judgment has been upheld on appeal (Case C-165/19 P *Slovak Telekom a.s. v Commission* [2021] OJ C-206/9). See Colomo, 'Indispensability' (n 73) 540.

¹²⁷ Graef, 'Rethinking the Essential' (n 91) 39. Wish & Balley (n 35) 714.

¹²⁸ OECD, 'Abuse of dominance' (n 14) 26.

¹²⁹ Oscar Bronner, Opinion of AG Jacobs, para 56. See also Notice (n 23), para 75.

¹³⁰ OECD, 'Abuse of dominance' (n 14) 26 (and therein cited authors).

¹³¹ Ibid.

¹³² Wish & Balley (n 35) 713.

¹³³ Graef, 'Rethinking the Essential' (n 91) 52.

The Court first encountered such issues in *Commercial Solvents*¹³⁴, where this upstream dominant undertaking stopped supplying a downstream competitor with a raw chemical compound needed to produce a drug in the downstream market, which it wanted to reserve for its subsidiary, ICI. The Court noted that said action, insofar as it *risks eliminating all competition on the downstream market*, amounted to an abuse of dominance¹³⁵, even though it did not refer to the indispensability of the input (as opposed to the Commission's decision). *Indispensability per se* was established later, in *Oscar Bronner*, where the Court scrutinized whether a smaller, local, publisher of daily newspapers is entitled to have access to the more developed, nation-wide, home-delivery scheme of its competitor, Mediaprint¹³⁶. The Court considered that access thereto may be granted solely if the delivery scheme is indispensable for carrying out the business, insofar as no (actual or potential) *substitute(s)* for the existing delivery scheme¹³⁷ (*ie*, of Mediaprint) exists. A key feature of refusal to deal cases, *indispensability* entails that duplication of the infrastructure/input is either (technically, legally, or economically) impossible¹³⁸ or (theoretically) possible, but with an unreasonable difficulty¹³⁹, ruling duplication as an unrealistic potential alternative. Less advantageous duplicable inputs, however, do not qualify as indispensable¹⁴⁰.

The Court expanded the *Oscar Bronner* requirements in cases concerning refusals to licence intellectual property rights (IPRs)¹⁴¹. Specifically, in *Magill*¹⁴², the Court held that such refusal is abusive (only) in *exceptional cases*¹⁴³ and where the refusal *prevents the emergence of a new product for which there is potential customer demand*¹⁴⁴. Confirming these conclusions, in *IMS*

¹³⁴ Joined Cases 6 and 7/73 *Istituto Chemioterapico Italiano and Commercial Solvents v Commission* [1974] ECR 00223 (*Commercial Solvents*).

¹³⁵ Ibid, para 25.

¹³⁶ Wish & Balley (n 35) 718.

¹³⁷ Oscar Bronner (n 82), para 41.

¹³⁸ Ibid, para 44.

¹³⁹ Ibid, para 45.

¹⁴⁰ Ibid, para 43.

¹⁴¹ Whether IPRs truly warrant a separate threshold is debatable. See Graef, 'Rethinking the Essential' (n 91) 68.

¹⁴² Joined Cases C-241/91 P and C-242/91 P *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission* [1995] ECR I-00743 (*Magill*).

¹⁴³ Ibid, paras 49-50.

¹⁴⁴ Ibid, para 54.

*Health*¹⁴⁵, a case concerning access to a database, the Court additionally explained that, as long as a potential or hypothetical market for the indispensable infrastructure/input may be envisioned, based on actual demand for it, the absence of current marketing thereof is immaterial¹⁴⁶.

Summarizing the conditions for a refusal to deal reveals that (i) the access to the facility/input is *indispensable* for (a) downstream competitor(s)¹⁴⁷, (ii) the refusal *risks eliminating all competition* on the downstream market¹⁴⁸, (iii) the refusal is *not objectively justified*¹⁴⁹, and (iv) strictly in case of IPRs¹⁵⁰, the refusal *prevents the emergence of a new product/service, for which there is potential consumer demand*¹⁵¹.

However, the succeeding General Court's (GC) judgement in *Microsoft*, a case concerning IPRs (interoperability access), diluted some of the above-mentioned requirements, leading to uncertainty as to whether those conclusions are restricted to cases resembling its particularities (super-dominance of Microsoft¹⁵²). Specifically, the GC noted that it is sufficient for the refusal to risk eliminating *all effective competition* on the downstream market¹⁵³, as opposed to *all competition*. This conclusion was reiterated in the GC's *CEAHR* judgment¹⁵⁴ and mirrors the Commission's view, outlined in the *Notice*¹⁵⁵ (a soft-law document, nonetheless). Despite allegations of a mere terminology dispute¹⁵⁶, the wording implies a lowered evidentiary threshold in my opinion, since, if an effective competitor is likely to be excluded from the downstream

¹⁴⁵ Case C-418/01 IMS Health GmbH & Co. OHG and NDC Health GmbH & Co. KG [2004] ECR I-05039 (IMS Health).

¹⁴⁶ Ibid, paras 42-44.

¹⁴⁷ Oscar Bronner (n 82), para 41.

¹⁴⁸ Ibid. Commercial Solvents (n 134), para 25.

¹⁴⁹ Oscar Bronner (n 82), para 41; IMS Health (n 145), para 52 second indent; Magill (142), para 55.

¹⁵⁰ *Microsoft* (n 54), para 334.

¹⁵¹ Magill (142), para 54; IMS Health (n 145), paras 37-38.

¹⁵² Graef, 'Rethinking the Essential' (n 91) 46. Incidentally, this notion is not reflected in the case-law of the Court, but only in scholarly debate.

¹⁵³ *Microsoft* (n 54), paras 560–563.

¹⁵⁴ Case T-712/14 *CEAHR v Commission* [2017] 5 CMLR 27, para 91. The judgement was appealed, by an intervener, solely regarding his intervening rights, thus the substance of the General Court's judgment was not touched upon.

¹⁵⁵ Notice (n 23), para 85.

¹⁵⁶ *Microsoft* (n 54), para 561.

market then, *a fortiori*, all competitors will likely suffer the same fate. The GC noted that a marginal presence, in certain niches on the market, would not qualify a competitor as 'effective', thus suggesting that '(in)effective' is not the same as '(in)efficient'. Moreover, and more importantly, the GC noted that the (*IMS Health* and *Magill*) 'new product' requirement "*cannot be the only parameter which determines whether a refusal to license an intellectual property right is capable of causing prejudice to consumers within the meaning of Article [102 TFEU]", and that, such prejudice may likewise exist where a refusal to deal would stifle production, markets, or technical developments to the detriment of consumers. Since <i>Microsoft* did not lodge an appeal against this judgment with the European Court of Justice (ECJ), uncertainties regarding the current applicable thresholds linger.

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My attention now turns to analysing the relevance of (big) data and network effects in the context of data leeching, as well as the latter's effect on markets.

III. (BIG) DATA AND NETWORK EFFECTS | DATA LEECHING

"The increased significance of data in shaping markets and influencing their development, highlight it being a relevant parameter in the assessment of markets and possible distortion of competition." ¹⁶⁰

1. (Big) data and network effects

The estimated daily data creation, in 2015, was 167,000 times that of the information contained in all the books of the US' Library of Congress, and, by 2020, that figure was expected to increase

¹⁵⁷ Ibid, para 647.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid, para 648.

¹⁶⁰ Ariel Ezrachi, 'EU Competition Law Goals And The Digital Economy' (2018) Oxford Legal Studies Research Paper no 17/2018 9, available at SSRN < https://ssrn.com/abstract=3191766 > accessed 12 June 2021.

forty times¹⁶¹. The advent of the internet has made *data*, or more explicitly *big data*¹⁶², a building block of production processes and innovation¹⁶³, and efficiencies¹⁶⁴. As data amounts to a paramount competitive advantage¹⁶⁵ for the possessor(s) it may, conversely, qualify as a barrier to entry¹⁶⁶ and pose numerous challenges¹⁶⁷, if wielded in harmful ways¹⁶⁸.

Apart from the key role of data and the extreme returns to scale exhibited in the digital economy, *network effects* are equally vital thereto, as they influence the growth (or demise) of platforms. As platforms are bi/multi-sided venues – hosting the interactions between distinct categories of users – they generate strong network effects, which, alone, make incumbents' market power 'sticky' and displacement more difficult¹⁶⁹, even absent anticompetitive behaviours. Thus, they can make platforms "*key enablers of digital trade*" or gatekeepers¹⁷¹, granting them control over, eg, the

https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2016/10_05_2016_Big%20Data%2 <u>OPapier.html</u> > accessed on 12 June 2021.

¹⁶¹ OECD, 'Data-Driven Innovation: Big Data for Growth and Well-Being', (2015) OECD Publishing, Paris, 20.

¹⁶² Big data is characterized by the 4Vs ("high volume, velocity and variety to require specific technology and analytical methods for its transformation into value"); see Andrea De Mauro, Marco Greco, Michele Grimaldi, 'A Formal definition of Big Data based on its essential Features' (2016) 65(3) Library review (Glasgow). [Online], 122–135, 131. Also see Autorité de la concurrence, Bundeskartellamt, 'Competition Law and Data' (Joint Paper) (2016) 4-5

¹⁶³ Crémer Report (n 62) 24.

HM Treasury, 'The economic value of data: discussion paper' (2018) 4 < https://www.gov.uk/government/publications/the-economic-value-of-data-discussion-paper > accessed on 14 June 2021.

¹⁶⁵ Crèmer Report (n 62) 7, 29, and 31.

¹⁶⁶ Jason Furman, 'Unlocking digital competition' Report of the Digital Competition Expert Panel, March 2019 (*Furman Report*), 33 (1.72 & 1.73). Autorité de la concurrence, Bundeskartellamt (n 162) 11. I understand the concept of barriers to entry as a factor that would make entrance more difficult and/or costly for entrants, but not for incumbents; see OECD, 'Abuse of dominance' (n 14) 17.

¹⁶⁷ Autorité de la concurrence, Bundeskartellamt (n 162) 13 and 20.

¹⁶⁸ Ibid 20.

¹⁶⁹ Crèmer Report (n 62) 70.

¹⁷⁰ Ibid 54.

¹⁷¹ Ibid.

market access of its (business) users (terms & conditions; fees¹⁷²) and their related interactions. Network effects indicate how a user's utilization of the platform's service(s) affects the value thereof to another user, located either on the same 'aisle' with the former (direct network effects), or on the other one (indirect network effects)¹⁷³. Taking Amazon's marketplace as an example, the more consumers it attracts, the more TPS will join in, and vice-versa. Thus, network effects and platforms' (private) regulatory powers¹⁷⁴ make platforms the ideal business acumen magnet, the 'interaction data' of which they can use for their own gains.

2. Data leeching and its effects

An empirical study into Amazon's downstream entry strategies, performed by Zhu and Liu¹⁷⁵, evokes that this does not occur randomly, but by design¹⁷⁶, based on, among other, certain product specificities¹⁷⁷, which make entry the most profitable¹⁷⁸. "*Likely premised on acquiring new information after forming partnerships with third-party sellers*"¹⁷⁹, this free riding on the TPS' efforts¹⁸⁰ is followed by imitating the successful product(s)¹⁸¹. Former Amazon executives have indeed suggested that Amazon's marketplace is used as a "*learning tool*" for market penetration¹⁸², and another research also suggests that Amazon uses sales data as a compass for vertical integration¹⁸³. Some dispute the anticompetitive claims of such practices, noting that replicating

¹⁷² Furman Report (n 166) 41 (1.117).

¹⁷³ Autorité de la concurrence, Bundeskartellamt (n 162) 27. Also see Haucap (n 1) 202.

¹⁷⁴ On this issue, see *Crémer Report* (n 62) 60-63.

¹⁷⁵ Zhu and Liu (n 15).

¹⁷⁶ Ibid 7, 17, and 25.

¹⁷⁷ Ibid, 7, 9, 16-19.

¹⁷⁸ Ibid, 7.

¹⁷⁹ Ibid, 4.

¹⁸⁰ Ibid, 7.

¹⁸¹ Ibid.

¹⁸² Ibid 26.

¹⁸³ "Once Amazon reaches information parity with its sellers, it switches to the reseller mode in order to exploit its scale advantage" See Andrei Hagiu, Julian Wright, 'Marketplace or Reseller?' (2015) 61(1) Management Science, 181, 196-197. Moreover, it has been shown that, under certain circumstances, product data that Amazon collects may help forecast demand(s); see Catherine Tucker, 'Digital Data, Platforms and the Usual [Antitrust] Suspects: Network

success, unless occurring by breaching intellectual property laws, is not anticompetitive ¹⁸⁴. Zhu and Liu's empirical study evokes, however, a pessimistic portrayal of TPS' abilities to fend-off Amazon's 'value misappropriation', especially if the former lack market power¹⁸⁵, implying that these practices reduce TPS' profit margins 186, and discourages them from offering their products and to grow their business on Amazon's platform¹⁸⁷. This suggests that, following TPS' targeted exploitation, their subsequent exclusion occurs, stifling competition and innovation 188 downstream, indicative of what appears to be out of merits competition. Since the effects on consumer welfare have not been empirically deduced by said study, they are uncertain, and even though a hypothetical increase thereof was advanced therein, based particularly on logistical grounds¹⁸⁹, this suggests that those gains are hypothetical and fact-specific, and should not be generalized. Whether the study's overall conclusions may be extrapolated to all types of dual role online platforms is, nevertheless, difficult to gauge. However, I view those conclusions telling of the fact that data leeching appears, prima facie, pernicious, at least for downstream competitors, and when the fabric of the competitive process or the structure of the market is harmed "disadvantages for consumers are also feared" 190. Moreover, as a rule of thumb, once obtaining a sizeable share of the market, undertakings cumulate both the incentive and ability to steadily raise their prices and/or downgrade the quality of their products/services. Incidentally, data leeching practices, performed by marketplace operators, was also red flagged by two prominent national competition authorities within the EU as potentially distortive¹⁹¹. Importantly, since the digital economy hosts bi/multi-sided interactions, the consumer welfare standard ought to be addressed

Effects, Switching Costs, Essential Facility' (2019) 6 (and the study therein cited) SSRN < https://ssrn.com/abstract=3326385 > accessed 15 June 2021.

Pablo Ibáñez Colomo, 'The Commission sends Amazon an SO: the rise of common carrier antitrust' (Chillin'Competition, 10 November 2020 < https://chillingcompetition.com/2020/11/10/the-commission-sends-amazon-an-so-the-rise-of-common-carrier-antitrust/ > accessed 25 June 2021.

¹⁸⁵ Zhu and Liu (n 15) 28.

¹⁸⁶ Zhu and Liu (n 15) 12.

¹⁸⁷ Zhu and Liu (n 15) 21 and 23.

¹⁸⁸ Zhu and Liu (n 15) 28.

¹⁸⁹ Specifically, Amazon's efficient distribution system, which presumably makes it appealing to consumers. See ibid.

¹⁹⁰ *T-Mobile* (n 31), Opinion of AG Kokott, para 58.

¹⁹¹ Autorité de la concurrence, Bundeskartellamt (n 162) 19.

considering *both* sides of the 'aisle' ¹⁹². Consequently, should the platform's conduct be detrimental to *as efficient competitors*, then enforcement action should be envisaged. Additionally, the reader is reminded that consumer welfare is not the only goal of competition law, and that, after rubberstamping AG Kokkot's opinion in *T-Mobile* ¹⁹³, the Court held that European competition law "is designed to protect not only the immediate interests of individual competitors or consumers but also to protect the structure of the market and thus competition as such" ¹⁹⁴. Far from a penchant to protect 'small business welfare', this approach protects competition, and its structure, as an institution ¹⁹⁵. Furthermore, gaining considerable traction, fairness is equally accepted as a goal of competition law, ensuring "equal opportunities for as efficient competitors" ¹⁹⁶.

In her popular paper, Khan argues that, as opposed to brick-and-mortar 'data observance', Amazon is able to monitor vastly more than materialized sales (eg, customer unmaterialized (TPS) acquisitions), which, given the "scale and sophistication" of data, elicits higher risks for TPS¹⁹⁷. Moreover, Amazon's data leeching practices extend beyond its marketplace into its affiliated cloud computing services, as a crystal bowl guiding its start-up investment decisions¹⁹⁸. This further signifies the effectiveness of these practices and supports the idea that marketplaces are not the sole venues for their deployment.

Consequently, data leeching appears a deliberate strategy devised be platforms to force free ride¹⁹⁹ on their business customers' efforts, with potentially subsequent exclusionary effects, casting a large shadow on the 'competitive merit' of the platforms' downstream market entry and capture. As the *Crémer Report* notes, since platforms must "ensure that any competition on their platform

¹⁹² Ezrachi (n 160) 6.

¹⁹³ *T-Mobile* (n 31), Opinion of AG Kokott, para 58.

¹⁹⁴ *T-Mobile* (n 31), para 38. Also see Case C-501/06 P *GlaxoSmithKline Services Unlimited v Commission and Others* [2009] ECR I-09291, para 63, approving the Court's assertions in *T-Mobile*.

¹⁹⁵ T-Mobile (n 31), Opinion of AG Kokott, para 58.

¹⁹⁶ Ezrachi (n 160) 13.

¹⁹⁷ Khan (n 9) 782-783.

¹⁹⁸ Ibid 783.

¹⁹⁹ "Forced free riding occurs when a platform appropriates innovation by other firms that depend on the platform for access to consumers"; Howard A. Shelanski, 'Information, innovation, and competition policy for the internet', (2013) 161 UPaLRev 1663, 1699.

is fair, unbiased, and pro-users"²⁰⁰, data leeching appears inapt to fulfil such obligations, especially when said data is used solely for the platform's own benefits.

IV. TAILORING THE CATEGORIES OF ABUSE OF DOMINANCE TO DATA LEECHING

"The real guarantee of an innovative future comes from keeping markets open so that anyone, big or small, can compete to produce the best ideas".

1. Excessive pricing

"Today's currency is data ..." 202

Equating data leeching with excessive pricing requires connecting the 'relinquishing' of data with a payment. Given the key importance of data in the digital economy, paying therewith may be conceptually envisioned²⁰³, especially given the alternative *United Brands* price gauge. However, the route seems challenging. While the Commission considered personal data akin to a commodity, in the *Telefonica* merger²⁰⁴, equating commodities with prices may be a long stretch, but not unconceivable. However, since (excessive) selling prices are benchmarked against a cost-price analysis (production costs and actual prices, expressed in currencies (including purchasing power parity indexes²⁰⁵)), including a non-price factor in the equation is apt to bring "uncertainty and

²⁰⁰ *Crémer Report* (n 62) 61. This view is contested by some scholars (notably Colomo). See subsection 2.2 of chapter II.

²⁰¹ EU Commissioner for Competition, Margrethe Vestager, cited in the *Crémer Report*, p 14.

Edith Ramirez, chairwoman of the Federal Trade Commission (talking about, among other, personal data and the evolution of the digital services) < https://www.nytimes.com/2014/12/22/business/federsal-trade-commission-raises-its-voice-under-its-soft-spoken-chairwoman.html > accessed 19 June 2021.

²⁰³ Excessive personal data collection or advertising exposure have been advanced as possible such scenarios; see OECD, 'Abuse of dominance' (n 14) 50.

²⁰⁴ Telefónica UK/Vodafone UK/Everything Everywhere/JV (Case No COMP/M.6314) Commission Decision 2013/C 66/04 [2013] OJ C66/5 (*Telefónica Merger*), para 543.

²⁰⁵ AKKA/LAA (n 44), paras 46 and 51.

ambiguity for market participants"²⁰⁶. Thus, the challenge lies in devising a clear and justiciable rule for evaluating the excessiveness and unfairness thereof (eg, what type and how much data is excessive?). The scholarly debate focused solely on excessive personal data collection – maybe because of the existing data and consumer protection regimes and the debate around the 'free' services offered by the platforms to natural persons²⁰⁷ – but what matters, in my opinion, is not its nature, but whether it amounts to a monetizable input and whether its mishandling is apt to generate exploitative anticompetitive effects. Since, based on the findings from chapter III, this appears to be so, business customers are equally exploitable and should be protected. Additionally, as already noted in scholarly debate, a "heavy methodological dependence on positive prices has led antitrust courts and enforcement agencies to overlook potentially massive welfare harms"²⁰⁸.

Regarding the excessive data evaluation, while the *AKKA/LAA*²⁰⁹ 'no minimum threshold' is helpful, devising an objective methodology is uncharted territory. However, parallels with the GDPR devised data minimization concept²¹⁰ and the legitimate interest platforms may have upon collecting certain types of data may provide useful. However, looking at the platform's (*lack of*) *counter-performance*, in exchange for the data waiver, may prove decisive. Specifically, if counter-performance is absent, then data collection may be deemed excessive and unfair, based on the *Der Grüne Punkt*²¹¹, as is the case when the platform renders unrequested service(s) in exchange, based on *Porto di Genova*²¹². I would include in this scenario rendering useless (ie, façade) services. Additionally, given the private regulatory powers of platforms and take-it-or-leave-it contracts they advance, it could be that any counter-performance is, *de facto*, coerced and/or disproportionate.

²⁰⁶ OECD, 'Abuse of dominance' (n 14) 51.

²⁰⁷ John M. Newman, 'Antitrust in zero-price markets: foundations' (2015) 164 UPaLRev 149, 165-169.

²⁰⁸ Ibid 149.

²⁰⁹ AKKA/LAA (n 44).

²¹⁰ European Parliament and Council Regulation 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation[2016] OJ L119/1 (GDPR), article 5(1)(c).

²¹¹ Der Grüne Punkt (n 48).

²¹² Porto di Genova (n 49).

In conclusion, beyond the only drawback I envision – the difficulty of objectively evaluating the excessiveness of data *per se*, when counter-performance exists (assuming its free expression) – two reasons make this *terra incognita* worthy of discovery. Firstly, as this concerns exploitation, proving any subsequent exclusion of downstream competitors is not necessary. More importantly, however, should every business customer be 'charged' the same type(s) of data (unlikely) and/or insofar as no (adequate) counter-performance exists for the waiver (likely), an enforcer's decision would be a silver bullet (ie, apt to apply *erga omnes*). However, as, to the best of my knowledge, no such case was advanced by an enforcer so far and given the very limited scholarly debate identified by me, revolving around this endeavour, while conceptually plausible, I consider the reliance on this theory of abuse rather unlikely.

2. Leveraging and self-preferencing (preferential data access)

As a rule, exploiting merit-based and self-developed capabilities, giving undertakings an efficiency-based edge, is the essence of competition and should not be chastised. Based on the findings presented in chapter III, however, data leeching appears designed to improve the quality/prices of the platform's downstream products/services based on the efforts of its competitors. Reaping the rewards of this free riding mechanism occurs via the platform's leveraging capabilities and, thus, the platform's competitive advantage appears, prima facie, anticompetitive, seemingly disqualifying it as competition on the merits. Additionally, if its yields are used (exclusively) 'in-house', on preferential terms when compared to the platform's competitors, then data leeching also qualifies as self-preferencing, under the *Google Shopping* logic. Consequently, the discriminatory leveraging theory of abuse seems to befit data leeching practices in these circumstances.

Comparing the legal test applied, by the Commission, in *Google Shopping*²¹³, with the one applied, by the Court, in *Van den Bergh Foods*²¹⁴, reveals two alternatives. Based on *Google Shopping*, which follows the logic that the remedy defines the theory of abuse, should data sharing/interoperability be mandated, then the case concerns a refusal to deal/supply and, consequently, data must be indispensable. In contrast, the Court's logic reaps identical results only

²¹³ Google Search (Shopping) (n 68).

²¹⁴ Van den Bergh Foods (n 89).

if data is considered indispensable in the first place, mandating its sharing. However, *Google Shopping* allows enforcers to dodge the essential facility doctrine (EFD) and its indispensability requirement²¹⁵ – which become irrelevant, regardless of whether data sharing eventually occurs – by requiring the platform to devise the equal treatment solution itself, and thus, relying on the distinct discriminatory leveraging theory of abuse. Apart from being logically circular (the remedy gives the theory of abuse, which, in turn, requires/approves that remedy) and potentially problematic under article 7 of Regulation 1/2003²¹⁶, this logic also contradicts the Court's conclusions, as the absence of indispensability requires the dismissal of the case pertaining to a refusal to deal/supply. While the *Google Shopping* conclusions find support in the Crèmer Report – which advocates that self-preferencing may be abusive even below the EFD's threshold, if leveraging is likely, and that, in certain conditions, self-preferencing should be subject to a rebuttable presumption of illegality²¹⁷ – it remains to be seen whether the Court will depart from its case-law and confirm these, and *Google Shopping*'s, conclusions.

Since data leeching, performed by dual role online platforms, neatly sits within the discriminatory leveraging logic of the *Google Shopping* decision, enforcers' reliance thereupon, and on its lower evidentiary threshold, is gaining traction²¹⁸ and seems highly appealing, especially when considering that it may provide them with a silver bullet (ie, *erga omnes* applicable remedy). However, given that this decision has not yet stood the Court's assessment, the success of this route remains uncertain.

3. Margin squeeze and self-preferencing (preferential data access)

If the preferential access to the leeched data allows platforms to undercut the prices of its downstream customers and artificially reduce their profit margins on a lasting basis, then a margin squeeze case is conceptually possible. However, the current understanding thereof would have to be warped to accommodate not whether the relation between the upstream and downstream prices is the source of the anticompetitive effect(s), but whether the *relation between the harvested*

²¹⁵ See Colomo, 'Self-preferencing' (n 59) 441. Reverdin (n 77) 194.

²¹⁶ Regulation 1/2003 (n 87).

²¹⁷ Crèmer Report 7, 66-71.

²¹⁸ See subsection 3 of chapter I above.

upstream input – the data – and the subsequent downstream price has this effect²¹⁹, which may find support in *TeliaSonera*. This also entails tailoring the 'as efficient competitor' test²²⁰ as to assess whether the platform's downstream affiliate would have been able to offer its products/services as profitable as its competitor, absent the captured data²²¹. An identifiable drawback, however, relates to the fact that, as opposed to 'typical' margin squeezes, which facilitate easy self-assessment(s) for undertakings²²², accounting for the 'value' of the data may pose challenges for them, as well as for enforcers.

However, two things make this route viable and appealing. Firstly, margin squeezes depart from the indispensability requirements of an EFD case, following TeliaSonera²²³, lowering the evidentiary threshold for enforcers. Secondly, the same case-law departs from the purist pricecentred view of margin squeezes, satisfied with proof of actual or potential exclusionary effects (fading profits) stemming out of the undertaking's (ie, platform's) disadvantageous 'terms of trade' or 'supply of services'. As this conclusion find support in a Court judgement, it makes reliance thereupon vastly more reliable than compared to Google Shopping. In this context, assuming both theories of abuse are equally plausible, since they appear partially overlapping and both require proof of actual or potential anticompetitive effects, the question of conceptual differentiation arises. Without providing a definitive answer, such differentiation may lie in the fact that discriminatory leveraging simply makes rivals' products/services less sought after because of eg, 'quality outperformance', consumer nudging or biases ('fading in oblivion'), without (also) reducing the competitor's profit margins if it were, theoretically, still be the consumers' preferred option for those product/services, as opposed to a margin squeeze (fading profits). Consequently, the discriminatory leveraging theory of abuse appears to have a lowered evidentiary threshold than a margin squeeze.

²¹⁹ In the same vein, see Reverdin (n 77) 192.

²²⁰ *Telefonica* (n 125), para 124.

²²¹ Reverdin (n 77) 192-193.

²²² Bostoen, 'Online platforms' (n 7) 376.

²²³ TeliaSonera (n 26).

Although this theory of abuse has been conceptualized by the competition law community in relation to platforms' strategies²²⁴ and has *TeliaSonera* capable of incorporating data leeching practices within its ambit, following some fine-tuning, an enforcer's case would have to rely on very detailed, case-specific, facts, which may prove demanding. Moreover, the lack of reliance thereupon by the Commission or other competition law enforcers²²⁵ make both the appeal and the success rate of this endeavour difficult to predict.

4. Refusal to deal/supply

Refusals to deal/supply require treating data(sets) as an essential input for downstream customers. This was already advanced in the literature²²⁶, since data is regarded as a prerequisite for competing in certain markets²²⁷ and a "backbone of many digital markets". Even the Commission considered personal data, compiled into a database, as an essential input, and examined its replicability, in the *Telefonica* merger²²⁸. As already argued, differentiating between the nature of data is illogical for competition law purposes, thus business data may equally amount to an essential input, if indispensable. Distinguishing between various data types is, however, imperative, for the purpose of this research. Being non-rivalrous in nature²²⁹, competitors are not precluded from gathering²³⁰ and/or using²³¹ identical data(sets). However, as the value of data lies not in its capture, but in the therefrom extracted knowledge²³², only *inferred data*²³³ is truly apt to spur innovation. A progeny of volunteered and/or observed data²³⁴, inferred data presupposes 'making sense' of the raw data

²²⁴ See OECD, 'Abuse of Dominance' (n 14) 53. Bostoen, 'Online platforms' (n 7). Reverdin (n 77) 186 et seq.

²²⁵ OECD, 'Abuse of Dominance' (n 14) 35.

²²⁶ Graef, 'Rethinking the Essential' (n 91).

²²⁷ OECD, 'Abuse of dominance' (n 14) 27 (and fn 59).

²²⁸ Telefónica Merger (n 204), paras 539 and 557.

²²⁹ Crémer Report (n 62) 105; Inge Graef, 'Market Definition and Market Power in Data: The Case of Online Platforms' (2015) 38(4) WComp 473, 479.

²³⁰ Graef, ibid.

²³¹ Crémer Report (n 62) 109 (and fn 179); Haucap (n 1) 207.

²³² Botta and Wiedemann (n 38) 48 (and fn 201).

²³³ Data "obtained by transforming in a non-trivial manner volunteered and/or observed data". On the different types of data see *Crémer Report* (n 62) 24-29.

²³⁴ On the various types of data, see *Crémer Report* (n 62) 8 and 25.

and drawing conclusions therefrom. Consequently, a data sharing/interoperability²³⁵ obligation would have to stop short at including inferred data, as undertakings must make their own 'intellectual assessment' thereof, extending solely to volunteered/observed data. Additionally, said sharing must extend exclusively to the data pertaining to that single business customer('s interactions), as broader data sharing may facilitate collusion or even qualify as a hub-and-spoke cartel, under 101 TFEU. Incidentally, the platform still retains an immeasurably broader data overview (ie, data pertaining to all its business customers) when compared to its competitors.

The first condition requires proving the *indispensability of the data*, as per *Oscar Bronner*. It was advanced that if creating a similar platform is a viable option for the business customer(s), alone or in cooperation with others, then indispensability is ruled out²³⁶. I think this assumption is misleading, as it equates the platform (infrastructure) with the subsequent data (input), thus requiring the duplication of two, distinct, assets. While nothing precludes both assets qualifying as indispensable²³⁷, this paper solely analyses *the indispensability of data and its potential replicability*. If replicability is either impossible (single sources of data²³⁸) or unreasonable difficulty, either by the business customer alone, or in cooperation with others²³⁹, then indispensability may be envisioned. If alternative venues of data supply exist (eg, data-brokers²⁴⁰; data marketplaces²⁴¹; competing platform(s) where the competitor is (also) present (multi-homing)), then a refusal to supply is untenable, even if that data is inferior in value (eg, less 'rich'; older)²⁴².

The second condition – the risk of eliminating all (effective) competition on the downstream market – apart from posing the threshold uncertainty discussed at subsection 2.4 of chapter II also requires

²³⁵ Data interoperability requires real-time, potentially standardized, access to the data. See ibid 58-59.

²³⁶ Reverdin (n 77) 189.

²³⁷ For suggestions regarding the essential facility doctrine being applied to the service provided by the platform itself see OECD, 'Abuse of dominance' (n 14) 27 (and fn 4); Khan (n 9) 800-802.

²³⁸ *Notice* (n 23), para 83 (fn 3 therein).

²³⁹ Oscar Bronner (n 82) para 44.

²⁴⁰ Autorité de la concurrence, Bundeskartellamt (n 162) 36 and 53-54.

²⁴¹ Commission, 'Guidance on sharing private sector data in the European data economy (Staff Working Document)' COM(2018) 232 final 10.

²⁴² Reverdin (n 77) 189.

proving the platform's desire to reserve downstream market for itself²⁴³ (affiliates are, naturally, included therein²⁴⁴), as a Court devised exception from the objective nature of abuses of dominance. Potentially difficult to prove in the real world²⁴⁵, the lack of any objective justification(s) for the refusal may provide some evidentiary support. However, reserving the market for itself requires the platform to *already be present in the downstream market* (actual competitor scenario) and, thus, cases where the data is leeched as a premeasure for future market entry (potential competitor scenario) would not be unlawful under this theory of abuse²⁴⁶. Because of this, calls for mandating data sharing, in certain scenarios, even when the platform is not yet present in the downstream market, have been advanced²⁴⁷. However, this would require a departure from the existing case-law of the Court. Since both this condition and indispensability are highly fact-specific, enforcers' 'pre-emptive strikes', the likes of discriminatory leveraging are, most likely, not tenable.

The third condition – *lack of objective justifications for the refusal* – may host a clash between competition and data protection law obligations²⁴⁸ if personal data of natural persons is contained in the data(sets), making the material scope of the GDPR²⁴⁹ applicable. However, aggregating and/or anonymizing the data(sets) (at the competitors' expense²⁵⁰), rendering the identifiability of a natural person impossible, may easily alleviate the applicability thereof. Lastly, the absence of a pre-existing market for (those) data(sets) is not an objective refusal, if a market and demand for the input (may) exist(s), as per *IMS Health*.

The last condition to be assessed in refusal to deal/supply cases – whether the *input/data amounts* to an IPR – pertains exclusively in relation thereto and states whether the Magill and IMS Health new product requirement must also be fulfilled. Clearly, raw, and unorganized data, alone, does

²⁴³ Commercial Solvents (n 134), para 25; IMS Health (n 146) para 52. Graef, 'Rethinking the Essential' (n 91) 67.

²⁴⁴ Telemarketing (n 95), para 27.

²⁴⁵ Reverdin (n 77) 189 (and fn 90).

²⁴⁶ Graef, 'Rethinking the Essential' (n 91) 67-68.

²⁴⁷ Ibid.

²⁴⁸ Haucap (n 1) 208; *Crémer Report* (n 62) 104. Reverdin (n 77) 190.

²⁴⁹ GDPR articles 1, 2 and 4(a). About anonymization, see, *eg*, Article 29 Data Protection Working Party, 'Opinion 05/2014 on Anonymisation Techniques' [2014] 0829/14/EN WP216 3 et seq.

²⁵⁰ Crémer Report (n 62) 104.

not amount to an IPR, as opposed to its subsequent processing and arrangement. To be of any value, the leeched data is most certainly compiled in (a) database(s), based on certain criteria. According to article 1(2) of the Database Directive²⁵¹, "a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means" amounts to a database, which may benefit from a dual IPR protection - a copyright and sui generis protection²⁵². Firstly, as per article 3(1) thereof, the structure of the database benefits from a copyright if "by reason of the selection or arrangement of [its] contents, constitute[s] the author's own intellectual creation". As per the Court's view, under the 'selection or arrangement' criteria, the author's original creative ability or 'personal touch' must be evoked therein, via free and creative choices²⁵³. Secondly, and notwithstanding the copyright protection eligibility under the 'selection or arrangement' criteria, databases may benefit from a sui generis IPR, as per article 7(1) of said directive, if "there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents". The Court ruled that substantial investment in the obtaining of the content "refers to the resources used to seek out existing independent materials and collect them in the database, and not to the resources used for the creation as such of [the] independent materials". 254 Put differently, the sui generis IPR applies exclusively to the independent investment(s) made in the creation of the 'data compiling' (ie, the database) and not the (prerequisite and preceding) 'data creation' (ie, raw data). However, cumulating both 'qualities' – data 'creator' and data 'compiler' – "does not (...) preclude that person from claiming the protection of the sui generis right", provided the

²⁵¹ 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 (*Database Directive*).

²⁵² Graef, 'Market definition' (n 229) 490.

²⁵³ See Case C-604/10, *Football Dataco Ltd and Others v.Yahoo! UK Ltd and Others* [2012] 2 CMLR 24, para 38. This may be debatable if artificial intelligence is used to make the 'creative choice(s)'.

²⁵⁴ Case C-46/02 Fixtures Marketing Ltd v Oy Veikkaus Ab [2004] ECR I-10365 (Fixtures), para 34. "Investment in ... the ... verification ... of the contents' of a database refers to the resources used (...) to monitor the accuracy of the materials collected" and the "investment in ... the ... presentation ... of the contents' of a database refers to (...) the resources used for the systematic or methodical arrangement of the materials contained in that database and the organisation of their individual accessibility" (para 37).

²⁵⁵ Graef, 'Market definition' (n 229) 490.

'substantial investment' criteria is fulfilled²⁵⁶. Qualifying for this sui generis protection will, thus, depend on the investment specificities (also) made in data compilation. As both data²⁵⁷ and (the) database(s)²⁵⁸ may be by-products of other services or production processes, zero or insignificant database production costs rules out the sui generis IPR protection²⁵⁹. Some argue that, where data is generated incidentally, the threshold for an essential facility case should be lowered²⁶⁰. Conceptually, however, the fact that data alone may be a by-product of eg, rendering the platform's core service(s) (the matchmaking), does not automatically mean that the database itself is also a mere by-product, with inconsequential costs. Nevertheless, failing to qualify under the sui generis protection does not rule out the copyright protection under article 3(1) of the Database Directive. Thus, the 'new product' requirement necessitates a careful case-by-case assessment. However, should the database(s) (still) qualify as (an) IPR(s), then the GC's reasoning in *Microsoft* may allow enforcers to demonstrate that refusing to license said IPR(s) may cause harm in different ways than just the prevention of the emergence of a new product. Alternatively, a(n) (bold) enforcer may also try to obtain the overruling of the existing case-law which requires the fulfilment of an additional condition pertaining exclusively to cases revolving around licensing indispensable IPRs, as an artificially imposed burden. Incidentally, the Cremer Report specifically mentions, in a similar vein with the GC's arguments in *Microsoft*, that "'exceptional circumstances' that justify the imposition of a duty to license may likewise exist where a refusal to deal would eliminate

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²⁵⁶ Fixtures (n 254), para 39. In this context, a 'split' could be envisioned, between the (i) 'data creation', (ii) 'data compiling', and (iii) 'data analysis'. The IPR protection extends only upon the data compiling process, while the first and third processes could make the object of trade secret protection. For trade secret protection of data, see Graef, 'Market definition' (n 229) 481 et seq.

²⁵⁷ Haucap (n 1), 208. Regarding personal data as a by-product (eg, the users' data generated and gathered by platforms when these use the platform services (*eg*, searches)) see Graef, 'Market definition' (n 229) 490. Nestor Duch-Brown, Bertin Martens and Frank Mueller-Langer, 'The economics of ownership, access and trade in digital data' (2017) Digital Economy Working Paper 2017-01; JRC Technical Reports, 29 < https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/economics-ownership-access-and-trade-digital-data > accessed 8 June 2021.

²⁵⁸ Duch-Brown, Martens and Mueller-Langer (n 257) 29.

²⁵⁹ Ibid.

²⁶⁰ Heike Schweitzer, Justus Haucap, Wolfgang Kerkber & Robert Welker, 'Modernising the law on abuse of market power. Report for the Federal Ministry for Economic Affairs and Energy (Germany). Executive summary' (2018) 5-6 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3250742 > accessed on 9 June 2021. For an opposing view regarding the need for indispensability see Colomo, 'Indispensability' (n 73) 546.

competition for innovation or quality to the detriment of consumers"²⁶¹, further pointing out that, in cases concerning data, the 'new product' requirement should "not be revived"²⁶². The only problem with pursuing a lowered threshold lies in the uncertainties already referred to in subsection 2.4 of chapter II above.

In conclusion, data(bases) are conceptually apt to qualify as essential/indispensable inputs for the downstream competitors of a platform. This is supported by the findings of this research, which demonstrates that data is a key input for production processes and innovation and that, without it, these downstream competitors may be excluded from the market, by the platform itself. Reliance on a refusal to deal/supply brings the highest level of legal certainty for all the parties potentially involved, with some caveats expressly outlined in the research, is supported by rich case-law, and may prove the most befitting theory of abuse. However, because these types of cases are very resource consuming and because of the high evidentiary thresholds demanded (especially data indispensability and the additional condition applicable to IPRs), a refusal to deal/supply is arguably a less appealing route for competition law enforcers.

V. CONCLUSIONS

The research question of this paper focused on whether data leeching practices, performed by dual role online platforms, over the non-public data of its business customers, may amount to an abuse of dominance, within the current understanding of article 102 TFEU and its established case-law. Familiarizing the reader with the topic under analysis, the methodology, and the roadmap of the paper, the introductory chapter also served to acquaint the reader with what platforms are and how they operate. It also provided details regarding a Commission driven investigation into an alleged data leeching abuse of dominance, performed by Amazon, on its marketplace. Because marketplaces are apt, by definition, to qualify as dual role online platforms, and because of existing and telling literature on Amazon's practices, Amazon served as an important reference point through this paper. Following a brief introduction into the realm of abusive conducts in general, the second chapter broadly and positively assessed four types of abusive conduct, hypothetically apt to befit data leeching practices — excessive pricing, leveraging and self-preferencing, margin

²⁶¹ Crémer Report (n 62) 106.

²⁶² Ibid 107.

squeeze, and refusal to deal/supply. As apparent, the analysis begun with exploitative abuses (data collection) and continued with exclusionary ones (data withholding). These types of abusive conducts were later normatively adapted to accommodate data leeching practices *per se*, in the fourth chapter, following the same structure. Sandwiched in between these two chapters, the third chapter scrutinized how (big) data and network effects make platforms the ideal value capture hubs of the digital economy. Moreover, said chapter also scrutinized data leeching *per se* and the effects it inflicts on the structure of the market and the platform's business customers/downstream competitors. Even though an absolute answer is impossible to be provided, this research compellingly suggests that data leeching is a malevolent practice, at least for the platform's competitors and the structure of the market and is akin to free riding. These conclusions also served as a basis for demonstrating why data leeching may befit a certain category of abuse, in the fourth chapter.

While some of the scrutinized categories of abusive conduct may seem better suited to accommodate data leeching practices than others, the research avoided black-and-white answers, focusing more on presenting the advantages and challenges of each category and, where needed, differentiated them from each other. Specifically, as regards the excessive pricing category, the research outlined that, while conceptually possible, there are difficulties pertaining to equating data with prices and, thereafter, devising objective methodologies for assessing 'excessive data collection'. The research showed, however, that, in certain cases (eg, when counter-performance for the data 'waiver' is non-existent), reliance on this theory may be well-suited and, incidentally, provide enforcers with a silver bullet. Additionally, since this case concerns exploitation, exclusionary effects need not be demonstrated, which may prove additionally appealing for enforcers. On the downside, however, this path has never been relied upon by enforcers. The second theory – Google Shopping's discriminatory leveraging – while lacking a clear legal test, being potentially over-inclusive, and suffering from some logical flaws, as outlined in this research, aptly befits data leeching. Moreover, evidence suggests that the Commission embraced an overall 'platform neutrality' mindset therein, which entails that vertically integrated platforms are not allowed to treat competitors less generous in comparison to its affiliates. Apart from the lower evidentiary threshold, when compared to a refusal to deal, but also a margin squeeze, this, incidentally and likewise, grants enforcers with a silver bullet. The major downside of this theory, however, is the lack of supporting case-law and the ancillary uncertainties it brings to the table.

The third theory of abuse – margin squeeze via preferential access to data(sets) – is also apt to befit data leeching and, as opposed to the discriminatory leveraging theory of abuse, may find recognition in the Court's case-law, specifically in TeliaSonera. The Court's ruling abandoned indispensability and ruled that margin squeezes are likewise 'performable' via the imposition of unfavourable 'terms of trade'. However, on the downside, this path entails two snags. Firstly, it requires a twisting of the current margin squeeze understanding. Specifically, the concept would have to accommodate the fact that artificially decreased profit margins derive not from the relation between the upstream and downstream prices, but from the relation between the upstream input (or lack thereof) and the subsequent downstream prices the platform requests for its (downstream) products/services. Secondly, it is also difficult to envision how the as efficient comparator will be performed and whether self-assessment will be possible. Finally, the last and potentially best suited category of abuse for data leeching – refusal to deal/supply – benefits from ample case-law and, thus, from legal certainty. On the downside, however, proving the Oscar Bronner indispensability requirement of the data(bases) for downstream competitors is arduous, case specific, and resource intensive. Moreover, the uncertainty related to IPRs, following the potential conflict between Magill and IMS Health, on the one hand, and Microsoft, on the other, may adduce both some evidentiary difficulties and legal uncertainty. Finally, however, reliance on this category is less appealing because of the enforcer's Sisyphean evidentiary burden.

In conclusion, while article 102 TFEU seems apt to tackle digitally driven abusive data leeching practices, it is clear, based on this research, that its principles and boundaries require adaptation and stretching. However, adapting the current rules is as difficult as it is imperative. Time will tell what the outcome and impact of the *Google Shopping* saga will be and where the *Amazon Marketplace* and *Facebook* investigations will lead, but the Commission and, ultimately, the Court, are faced with great opportunities and immense responsibilities. The opportunity to clarify the current understandings and boundaries of article 102 TFEU and the responsibility of shaping the fabric of the digital economy to the benefit of society.

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