Designing Remedies from a Consumer Welfare Perspective for Big Tech Companies' Practice of Self-Preferencing in the EU and US

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ABSTRACT

This thesis aims to provide a framework for designing effective remedies for big tech companies' self-preferencing practices from a consumer welfare perspective in the European Union and the United States. The thesis defines the scope of consumer welfare and identifies the relevant considerations for its determination. As substantive issues inspire remedies, the thesis describes self-preferencing practice. The analysis starts by discussing the practice of the Google Shopping case as an example of a self-preferencing case decided differently by the EU General Court and Federal Trade Commission. After presenting the perception of the issue in the different legal systems, the thesis describes their regulatory environment, including the remedies outlined in the Digital Markets Act in the EU and the Bill of American Innovation and Choice Online Act in the US. By challenging the effectiveness of the existing remedies, the thesis questions whether big tech companies' self-preferencing practice creates the need to portray new types of remedies, untested in the digital market, such as randomization, mandatory sharing of algorithm/data, subsidization of a competitor, mandatory antitrust shutdown. The thesis concludes by identifying the relevant considerations for crafting effective remedies serving consumer welfare in the digital market.

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LIST OF ABBREVIATIONS

DMA	Digital Market Act
Act	Bill of American Innovation and Choice Online Act
TFEU	Treaty on the Functioning of the European Union
EU	European Union
FTC	Federal Trade Commission
DOJ	Department of Justice
US	United States
OECD	The Organization for Economic Co-operation and Development
WTP	Willingness to Pay
WTA	Willingness to Accept

INTRODUCTION

'You get to be the umpire, or you get to have a team in the game – but you do not get to do both at the same time.'

Elizabeth Warren[1]

By acquiring a dual role in the digital market, big tech companies became platform providers and third parties' competitors by their vertically integrated businesses on the same platforms. Consumers come across such business practices in their daily lives. For instance, while placing an order on Amazon, users can choose products produced and manufactured by either third parties' businesses or by Amazon itself. In addition to providing the platform for selling and buying products, the latter offers its consumers shipment services through its own delivery. Similarly, Google offers users Generic search and its own map systems simultaneously. Apple has developed its own music streaming – iTunes. Considering the real-life examples, it is evident that big tech companies can cover several lines of business due to their strong position in the market.[2] Gatekeepers' strong tendency to benefit from their market position and provide preferential treatment to their own vertically integrated businesses over rivals has not remained unnoticed. Moreover, the result of such conduct has identified the danger of creating a twofold anticompetitive effect in the digital market. In particular, self-

[1] Team Warren [@TeamWarren], 'You Get to Be the Umpire or You Get to Have a Team in the Game—but You Don't Get to Do Both at the Same Time. We Need to #BreakUpBigTech. #DemDebate Https://T.Co/UAhWniV1R8' <https://twitter.com/TeamWarren/status/1184295385562599424> accessed 15 June 2023.

[2] Mikaela Pyatt, 'Rulemaking to Bar Self-Preferencing by Technology Platforms' (2023) 26 Stan. Tech. L. Rev.Pg.148

preferencing practice might 'exclude competitors from the market and extend big tech companies' market power into adjacent markets.'[3]

Given the function of digital platforms and the services they provide, they can engage in self-preferencing practices through various methods. For example, big tech companies can prioritize their own products or services by granting them high rankings and, by doing so, demoting competitors' offerings.[4] Moreover, they might refuse to offer certain functionalities to their competitors.[5]

Notably, scholars and competition practitioners do not unanimously agree on banning self-preferencing. Opponents point out the potential economic advantages of vertical integration for consumers in the market.[6] Additionally, they challenge the decision to declare the online practice as anticompetitive when the same business conduct offline is accepted,[7] even described as efficient. [8]Moreover, the self-preferencing practice has been assessed as the reward for managing the platform.[9] However, the course of this debate could be shaped differently by considering big tech companies' inherent features – network effects, business models, and access to the data of consumers and competitors, which empower them to impede contestability

[3] Giuseppe Collangelo, Antitrust Unchained: The EU's Case Against Self-Preferencing, GBUR International, XX (XX), 2023, Pg. 1
[4] Noby Thomas Cyriac, *Big Data and the Abuse of Dominance by Multi-Sided Platforms: An Analysis of Art. 102 TFEU* (Nomos 2022). Pg. 272
[5] ibid.
[6] Pablo Ibáñez Colomo, 'The Draft Digital Markets Act: A Legal and Institutional Analysis' (22 February 2021). Pg. 567
[7] Aurelian Portuese, "Please, Help Yourself": Toward a Taxonomy of Self-Preferencing, Information Technology and Innovation Foundation, October 2021, Pg. 7
[8] Pedro Caro de Sousa, What Shall We Do About Self-Preferencing? Competition Policy International, Inc. 2020 Pg.1
[9] Ibid.

on the market.[10] Such an observation has been supported by the challenging practices of Google,[11]Amazon,[12] and Apple.[13]

As briefly discussed above, there is no disagreement regarding the presence of the self-preferencing practice in the digital market, but the perception of its anticompetitive effect and the methods it has to be tackled. Interestingly, the approaches related to the issue in the US and EU differ significantly.

The main objective of this study is to provide a framework for designing effective remedies for big tech companies' self-preferencing practices from a consumer welfare perspective in the EU and US. Although, since the 'remedy mirrors the substantive concerns,' [14]the writing begins by identifying self-preferencing as the concern for competition law and, consequently, addresses the *following issues*:

1. What does consumer welfare in the digital market entail for the EU and US competition authorities?
2. What is the current regulatory environment in relation to self-preferencing practice in the EU and US?

[10] Jan Kraemer and Daniel Schnurr, 'Big Data and Digital Markets Contestability: Theory of Harm and Data Access Remedies' (18 May 2021). Pg. 256

[11] The Commission investigated Google's practice regarding self-preferencing in AdTech industry. 'Antitrust: Google in the Online Advertising Technology' (*European Commission- European Commission*) <https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3143> accessed 15 June 2023.

[12] The Commission investigated Amazon's practice related to its practice of using the data of third-party sellers for its own benefit 'Antitrust: EC opens formal investigation against Amazon' (*European Commission- European Commission*) <https://ec.europa.eu/commission/presscorner/detail/pl/ip_19_4291> accessed 15 June 2023.

[13] The Commission challenged Apple's business practice regarding its in-app purchase system and restriction on third party businesses inability to inform iPhone and iPad Users of alternative cheaper purchasing possibilities outside of apps. 'Antitrust: Commission opens investigations into Apple' (*European Commission- European Commission*) <https://ec.europa.eu/commission/presscorner/detail/es/ip_20_1073> accessed 15 June 2023.

[14] Thomas Graf and Henry Mostyn, Do We Need to Regulate Equal Treatment? The Google Shopping Case and the Implications of its Equal Treatment Principle for New Legislative Initiatives, Journal of European Competition Law and Practice, 2020, Vol 11, No. 10 Pg. 561

3. Do current remedial tools defined for the big tech companies' self-preferencing practice enhance/strengthen consumer welfare or create a need for designing new remedies serving such an objective?

1. GENERAL CONSIDERATIONS REGARDING SELF-PREFERENCING PRACTICE

1.1 Theoretical Framework

Not everything that counts can be counted, and not everything that can be counted counts.

Einstein

Considering the research subject of the thesis, the first important step of the analysis is defining consumer welfare (CW) in relation to self-preferencing practice. Remarkably, flawless enactment of the competition policy requires a comprehensive analysis of its profound objectives.[15] Unfortunately, the goals of the CW have not been outlined in the legislation.[16]This subchapter defines what counts while applying consumer welfare standards in the digital market.

Adapting the economic concept[17] in competition law establishes the starting point for the analysis through the economic prism. Economists generally measure consumer welfare by *consumer surplus*, which implies the difference between the maximum amount consumers are willing to pay and what they actually pay to purchase a product/service.[18] This benchmark has

[15] 'The Consumer Welfare Standard - Advantages and Disadvantages Compared to Alternative Standards - Background Note' (OECD 2023) <https://one.oecd.org/document/DAF/COMP(2023)4/en/pdf>. Pg. 7
[16] ibid. Pg. 6
[17] Agustín Reyna, 'The Shaping of a European Consumer Welfare Standard for the Digital Age' (2019) 10 Journal of European Competition Law & Practice 1. Pg.1
[18] ibid.

been challenged by the zero-price products/services of the digital market. Yet, the notion that "there is no free lunch" is validated by the fact that consumers are paying for digital platforms' services/products "with their attention, information, or both"[19] and, by doing so, empower undertakings' position on the market.[20] Notably, economists aim to quantify zero-price services by developing various approaches. One such method is the "willingness to pay "(WTP) and "willingness to accept "(WTA); the former implies surveying consumers about the value they attach to relinquishing a specific digital platform.[21] On the other hand, WTA refers to collecting data in an experiment when the suggested choices are based on hypothetical situations.[22] Conducting the research could be affordable by applying Google surveys. However, the stated preferences may lack objectivity.[23]

The scope of consumer harm in the digital platform is not limited to the price effects and involves consideration of choice, quality, and innovation. This understanding has been supported by the work of scholars, including Daskalova (EU system) and Hovenkamp (US system).

Daskalova points out that consumer welfare requires answers to two main questions – who is a consumer and whether harm refers to price effects.[24] Furthermore, to identify the consumer, she relates to the Commission's interpretation "The concept of "consumer" encompasses all direct or indirect users of the product covered by the agreement, including producers that use the product as an input, wholesalers, retailers, and final consumers, i.e,. natural persons who are acting for purposes which can be regarded as outside their trade or

[19] John M Newman, 'Antitrust in Zero-Price Markets: Foundations' (2015) 164 University of Pennsylvania Law Review. Pg. 202
[20] Ariel Ezrachi, 'EU Competition Law Goals and the Digital Economy' (6 June 2018). Pg. 9
[21] Erik Brynjolfsson, Avinash Collis and Felix Eggers, 'Using Massive Online Choice Experiments to Measure Changes in Well-Being' (2019) 116 Proceedings of the National Academy of Sciences 7250. Pg.2
[22] Sobolewski (n 19). Pg. 6
[23] Brynjolfsson, Collis and Eggers (n 22).Pg. 5
[24] Victoria Daskalova, 'Consumer Welfare in EU Competition Law: What Is It (Not) About?' (2015) 11 The Competition Law Review. Pg.133

profession."[25] While discussing the second concern, she explains commission's recent tendency to prefer formulating consumer welfare in terms of price, quality, and choice for promoting competition policy objectives such as competitiveness and innovation.[26]

Hovenkamp describes consumer welfare as an under-inclusive term, implying commercial intermediary and end users.[27] He indicates that the profound objective of the policy is "to encourage markets in which output, measured by quantity, quality, or innovation, is as large as possible consistent with sustainable competition. "[28]

The economic understanding of consumer welfare becomes slightly modified compared to the legal perception. For European consumer welfare, the standard entails "wider consideration, such as fairness, plurality, democratic values, and freedoms. "[29] Furthermore, EU competition law perceives maintaining the effective competitive structure as complementary to providing consumer welfare. [30]As outlined in practice, competition law "is designed to protect not only the immediate interests of individual competitors or consumers but also the structure of the market and thus competition as such."[31]

In the US, Salop differentiates the understanding of consumer welfare as true and aggregate in nature.[32] The main difference between those concepts depends on the perception of harm to competitors. While applying true consumer welfare, the plaintiff has to prove that in addition to the injury to competitors, the conduct is harmful to competition too.[33] In other

[25] Communication from the Commission— Notice — Guidelines on the application of Article 81(3) of the Treaty (Text with EEA relevance) 2004. Paragraph 84.
[26] Daskalova (n 25). 147
[27] Herbert Hovenkamp, 'Is Antitrust Consumer Welfare Principle Imperiled?' [2019] Journal of Corporation Law. Pg. 144
[28] ibid. Pg. 103
[29] Reyna (n 17).Pg 1
[30] Ibid
[31] *T-Mobile Netherlands BV, KPN Mobile NV, Orange Nederland NV and Vodafone Libertel NV v Raad van bestuur van de Nederlandse Mededingingsautoriteit* [2009] ECJ Case C-8/08., Paragraph 38
[32] Steven C Salop, 'Question: What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard' [2005] SSRN Electronic Journal. Pg. 336
[33] ibid.343

words, for true consumer welfare standard, the main concern is consumer well-being, and it is concerned about the competitors only if the conduct also likely harms consumers.[34] Contrary, for aggregate economic welfare, the harm to competitors is sufficient ground to declare the conduct anti-competitive.[35] The practice and the enacted legislation prove that a true consumer welfare standard has been applied in the US.[36]

The thesis aims to encourage competition in the digital market and, in turn, enhance consumer welfare. Therefore, the consumer of the digital platform lies at the heart of the defined purpose, which refers to businesses and individuals using digital platforms, consumers of big tech companies' vertically integrated businesses, and their rivals. Furthermore, within the policy, additional factors of CW must be discussed, such as choice, quality, and innovation.

1.2 Method and Use of Materials

The analysis starts by examining the perception of self-preferencing practice in the EU and US based on Google's practice. Notably, company's business conduct to provide preferential treatment to its related products over rivals on its general search page has been challenged by both systems. However, the outcome drastically differentiates: EU Commission fined Google and imposed a cease-and-desist obligation on the company. Contrary, the US Federal Trade Commission decided to terminate the investigation. Therefore, analysis of the practice allows the thesis to illustrate the legal significance of the practice from the imperative perspective. The case has the potential to serve as a strong foundation for understanding the debate over self-preferencing practices in those legal systems. Moreover, by discussing recent cases, the thesis assesses the effectiveness of the remedies applied to the digital platform. Furthermore, big tech companies' current announcements regarding technological

[34] ibid.338
[35] ibid. Pg.343
[36] Ibid

improvements of their services are reviewed as a possible threat of self-preferencing and as an encouragement of changing regulatory responses in the US.

The regulatory environment in the legal systems is described through the relevant legal sources. The thesis in relation to the EU refers to Treaty on the Functioning of the European Union (TFEU), Regulation 1/2003, Regulation (EU) 2019/1150, and the Digital Market ACT. As for the US, it covers the Sherman Act, the Antitrust Procedures and Penalties Act of 1974, and the Bill of American Innovation and Choice Online Act (ACT).

The analysis of the respective regulatory provisions allows the thesis to identify the remedies which could be imposed by competition authorities (conventional remedies – such as commitments, interim measures, monetary, structural, and behavioral) for big tech companies' self-preferencing practice. Within this process, the thesis questions whether such remedial tools serve consumer welfare efficiently in the digital market or create the necessity of imposing a new type of remedies (randomization, interoperability- mandatory sharing of algorithmic learning, data, subsidization of competitors, temporary shutdowns).

In addition to the case law and the identified relevant regulations, the thesis relies on the secondary literature. Furthermore, considering the novelty of the issue, the articles from the scholars have been a remarkably helpful tool for understanding and clarifying the matter, competition law policy, and regulatory responses to the big tech companies' self-preferencing practice. Moreover, the analysis covers relevant statements, speeches, and guidelines.

1.3 Outline

Considering the above-mentioned, the first chapter is dedicated to understanding the notion of self-preferencing practice based on the Google Shopping case, which is an excellent example of perceiving the same practice differently through the US and EU legal systems' prism.

The following section, by discussing the relevant provision of the legal sources, outlines the regulatory environment to the issues created by self-preferencing practice and, by explaining the precedents, analyzes the effectiveness of the conventional remedies in the EU and US. Considering acquired experience, the third chapter describes the profound considerations while designing and applying the relevant remedies to self-preferencing practice and challenges the need to create new types of remedial toolsets. The thesis concludes by analyzing the proper remedies for gatekeepers' self-preferencing practice to provide consumer welfare in the digital market.

2. REGULATORY ENVIRONMENT IN RELATION TO THE SELF-PREFERENCING PRACTICE

2.1 Google Shopping: A Landmark Case of Self-Preferencing Practice

Based on the Google case, this chapter aims to illustrate different perceptions of gatekeepers' self-preferencing practices by the EU and US competition authorities.

In both legal systems, the company has been accused of favoring Google-affiliated products instead of the most relevant ones in its search results. Competitors' products have been shown on the generic search results page. But compared to its own products, they have been presented in a less visible format on "Product Universal Box" or the "Google Shopping Unit."[37]Moreover, using the algorithms, Google's competitors' comparison-shopping services were demoted in the search results.[38]

[37] The differences in the names of the services involved could be described artificial. They all refer to the same specialized information about Google products and services. Christian Bergqvist and Jonathan Rubin, 'Google and the Trans-Atlantic Antitrust Abyss' (18 March 2019). Pg. 29

[38] Google Shopping Case/ FTC, 'Statement of the Federal Trade CommissionRegarding Google's Search Practices'.

The presented case details challenged both competition authorities to analyze whether the dominant undertakings can favor their vertically integrated businesses over their rivals on their platforms. The assessment of the disputed practice led competition authorities of the different legal systems to contrasting outcomes: in the EU, the dispute continued for more than seven years and has been concluded by a groundbreaking decision – defining self-preferencing as an independent form of discriminatory abuse under 102 TFEU.[39] Google has been fined EUR 2.42 billion and, as a form of a remedy, has been requested to propose commitments that would end its anticompetitive conduct – expressed by favoring its own shopping comparison service in search results and providing non-discriminatory treatment to rivals.[40] In the US, after a comprehensive analysis of the search bias allegations, the Federal Trade Commission (FTC) decided to terminate the investigation.[41]

2.1.1 Product Improvement Defense

In examining the case, competition authorities have analyzed Google's defense regarding product improvement. This argument has been examined differently by the EU and US competition authorities. EU Commission and the General Court have acknowledged the pro-competitive feature of the improvement. However, they remained reluctant to accept such arguments due to the outcome of the competition defendant's business conduct – favoring its own comparison service over its rivals and by doing so, creating danger for foreclosing competing comparison-shopping services.[42] Competition authorities consider a decrease in consumer choice, which could be caused by the foreclosure of competitors or consumers' tendency to pay attention to the comparison service expressed in a more visible format

[39] *T-612/17 - Google and Alphabet v Commission(Google Shopping)* (General Court). Paragraph 610
[40] ibid. Paragraph 702-703
[41] (n 39).
[42] *T-612/17 - Google and Alphabet v Commission(Google Shopping)* (n 41). Paragraph 170-171

compared to rivals. [43]In this context, FTC compared the benefits of undertaking business conduct for the users and the anti-competitive effect on competitors and concluded that users' improved experience in the Google search outweighed the outcome of the algorithm's influence on the rivals' websites.[44] Consequently, any negative effect on competitors has been considered a consequence of 'competition on the merits'[45] and the investigation has been concluded. Notably, the „FTC does not outline any 'special responsibilities' on dominant undertakings not to distort competition as defined under article 102 TFEU. "[46]

2.1.2 Discussion Regarding the Competition Doctrines

According to Google Shopping the anticompetitive conduct is not the subject of refusal to deal and the essential facility doctrine. In its appeal Google claimed that the Commission failed to apply to the case the condition of indispensability outlined in the Bronner judgment.[47] The General Court emphasized the relevance of the mentioned standard in relation to refusal of access practices and highlighted that in the present case, Google did not refuse access, but instead provided discriminatory treatment to third parties compared to Google comparison shopping service.[48] Consequently, such business conduct has been perceived an independent form of leveraging abuse.[49] As for essential facility doctrine, in the response of this claim, the decision confirms that the general results pages have characteristics of essential facilities, since currently no actual or potential substitutes is available for replacement in an economically

[43] Thomas Graf and Henry Mostyn, 'Do We Need to Regulate Equal Treatment? The *Google Shopping* Case and the Implications of Its Equal Treatment Principle for New Legislative Initiatives' (2020) 11 Journal of European Competition Law & Practice. Pg. 566
[44] (n 39).
45 Richard Bunworth, 'In the Market for a New Form of Abuse? Google Shopping and the Law on Self-Preferencing in the EU Case Notes' (2022) 21 Hibernian Law Journal. Pg. 136
46 ibid.
[47] *C-7/97- Bronner* (Judgment of the Court (Sixth Chamber)).
[48] *T-612/17 - Google and Alphabet v Commission (Google Shopping)* (n 40). Paragraph 240
[49] ibid.

viable manner.[50] Furthermore, it states that not every issue of the access to such facility necessarily means that the Bronner criteria relating to the refusal to supply must be applied.[51]

Interestingly, when discussing precedents, the FTC's decision regarding concluding investigation might be inspired by the Trinko Case,[52] which covers the assessment of the business conduct in the telecommunication industry. The US Supreme Court emphasized the importance of the freedom in operating the business - the company's opportunity to choose with whom it wants to contract. Moreover, while determining the possible **outcome** of enforced sharing, the court states that such an act might incentivize the actors on the market not to invest in "economically beneficial facilities".[53] Overall, the court perceived itself ill-suited for imposing the duty of enforced sharing on the undertaking since it implies identifying "the proper price, quantity and other terms of dealing"[54] and it exceeds court's authority.

The court stated that 'insufficient assistance in service provision to rivals is not a recognized antitrust claim under the existing refusal to deal precedents.'[55]This conclusion would be unchanged even if the case were discussed in the "essential facilities" doctrine crafted by the lower courts …. Where access exists, the doctrine serves no purpose."[56] Furthermore, the case facts have not been considered sufficient for adding practice to the exceptions from the proposition that there is no duty to aid competitors.[57] The precedent might support the FTC's decision not to submit the claim against Google Search bias practice because it did not see the success for such claims.

[50] ibid. Paragraph 224
51 ibid. Paragraph 230
[52] Bunworth (n 46). Pg. 135
[53] *Verizon Communications Inc v Law Offices of Curtis V TRINKO, LLP* Supreme Court of the United States No. 02-682.. Pg. 408
[54] Ibid.
[55] Ibid.
[56] Ibid.
[57] Ibid.

The underlying competition law policy of legal systems might also explain such different approaches to the practice. In some cases, EU competition authorities refer to the ordoliberal theory, which views protecting competitive processes and opportunities for rivals as a crucial objective.[58] The US legal system is influenced by Chicago school focusing on consumer welfare.[59] FTC's decision does not consider the broader interpretation of consumer welfare, including consumer choice framework.[60] In other words, the EU concentrates on future competition on the markets while the US continues to emphasize "short-term consumer welfare and freedom of contracts for undertakings."[61]

The story of challenging Google's business practice has not ended with the FTC decision to terminate this investigation. In both 2015 and 2021, parts of the FTC memorandum were leaked, [62]describing Google's conduct as detrimental to the interest of consumers; the memorandum outlined real and substantial harm to Google's competitors.[63] Despite those identified potential dangers, the FTC has not been assured to bring the case against Google for allegedly biased and self-preferencing search results.[64]

As new approaches illustrate, the competition authorities' approach towards big tech companies' practices has been modified: DOJ commenced two cases against Google due to its self-preferencing practices. In January 2023, DOJ submitted a claim against Google for the company's self-preferencing practice expressed through „controlling real-time bidding on publisher inventory to its ad exchange and impeding rival ad exchanges' ability to compete on

[58] Bunworth (n 46). Pg. 136
[59] Ibid
[60] Bergqvist and Rubin (n 38)..
[61] Richard Bunworth, In the Market for a New Form of Abuse? Google Shopping and the Law on Self-Preferencing in the EU, Pg. 137
62 William Rau, 'What the Leaked FTC Memos on Google Really Teach Us' (*American Enterprise Institute - AEI*, 24 March 2021) <https://www.aei.org/technology-and-innovation/what-the-leaked-ftc-memos-on-google-really-teach-us/> accessed 15 June 2023.
63 Christian Bergqvist, Jonathan Rubin, Google and the Trans-Atlantic Antitrust Abyss, Pg. 31
64 Nylen (n 64).

the same terms as Google's ad exchange."[65] Moreover, in September 2023 has been scheduled the proceedings regarding Google's practice of „using monopoly profits to buy preferential treatment for its search engine on devices, web browsers, and other search access points, creating a continuous and self-reinforcing cycle of monopolization**.**"[66]

This subsection illustrated the perception of the big tech companies' self-preferencing practice as an antitrust issue in both the EU and US legal systems. As emphasized above, Google's practice which was discussed in 2017 in the EU and 2013 in the US, demonstrated that the EU Commission and General Court considered self-preferencing as anti-competitive conduct - the effectiveness of the remedies imposed within the dispute remains the subject of the heated debates.[67] In contrast, FTC has not followed the same path. However, the amended approaches from US competition authorities towards practice describe the changes in understanding the effects of big tech companies' self-preferencing practice.

The following subchapter analyzes the existing regulatory framework related to the big tech companies' self-preferencing practice in the US and EU legal systems.

[65] 'Justice Department Sues Google for Monopolizing Digital Advertising Technologies' (24 January 2023) <https://www.justice.gov/opa/pr/justice-department-sues-google-monopolizing-digital-advertising-technologies> accessed 15 June 2023.
[66] 'Justice Department Sues Monopolist Google For Violating Antitrust Laws' (20 October 2020) <https://www.justice.gov/opa/pr/justice-department-sues-monopolist-google-violating-antitrust-laws> accessed 15 June 2023.
[67] Graf and Mostyn (n 44). Pg. 561

2.2 Regulatory Environment in the EU and US

With the recognition of the potential issues in the digital market, the Digital Market Act has been enacted in the hope of ensuring a fair business environment.[68] Notably, the DMA defines gatekeepers' self-preferencing practice as per se violation. Through shifting from ex-post to ex-ante regulation, it aims to provide efficient proceedings, enabling platforms to exercise their complete potential by addressing the most prominent incidents of unfair practice or/and limiting competition in the EU.[69] Moreover, it aims to grant both end user and business user the full enjoyment of the platform economy, and the digital economy, ensuring the maximum benefits for all parties.[70]As for the remedies DMA determines the fines, periodic penalty payments and additional remedies.[71] Those remedies have been applied in practice and their effectiveness will be assessed in the following chapter of the thesis. Before exploring the details outlined in the regulation, the subchapter commences by identifying the relationship between the DMA and Article 102 TFEU.

2.2.1 DMA „a lost child of competition law? "[72]

As discussed in the previous chapter, the legal basis for Google Shopping Case has been assessed under Article 102 TFEU. The enactment of the DMA imposes the logical question – of whether the gatekeeper, in case of full compliance with DMA, is excluded from the liability concern of possible violation.

[68] Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on contestable and fair markets in the digital sector (Digital Markets Act) 2020. Pg. 2
[69] ibid.
[70] ibid. Pg. 2-3
[71] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance) 2022 (OJ L). Article 30, 31
[72] Alexandre de Streel and Pierre Larouche, 'The European Digital Markets Act: A Revolution Grounded on Traditions' (20 August 2021). Pg. 545

To begin with, the legal basis of DMA has been defined Article 114 of TFEU.[73] Scholars perceive such a choice as an attempt to divide the competition law and DMA on substantive grounds.[74] Moreover, the regulation aims to correct the flaws of competition law identified in the relevant practice.[75] The relationship between those regulations has been described as complementary.[76] Furthermore, they have been represented as components of a coherent whole, i.e., the EU body of economic regulation.[77] Both regulations embrace contestability (ensuring as open and competitive a market as possible) and fairness (non-discriminatory environment for the market participants).[78]

By enacting DMA, discriminatory treatment on the digital platform has been shifted from ex post to ex ante regulation.[79] Moreover, a significant difference could be found in the intervention proceedings outlined in the regulations: (1) Assessment of the undertaking: Article 102 TFEU requires the determination of the dominant position of the undertaking, the definition of the market, and the abuse of such position.[80] The subject of the prohibition under EU competition law is the abuse of dominance, not the dominance as such.[81]Unlike that, DMA outlines the relevant criteria for determining the gatekeeper. Within the process, the undertaking concerned has to prove that it is not the subject of the said regulation.[82] (2) The scope of the violation: TFEU, unlike DMA, requires the evaluation of economic and legal aspects of

[73] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Preamble
[74] Ondrej Blazo, 'The Digital Markets Acts - Between Market Regulation, Competition Rules and Unfair Trade Practices Rules' (2022) 2022 Strani Pravni Zivot (Foreign Legal Life) Pg.126.
[75] de Streel and Larouche (n 74). Pg.543
[76] Marco Botta, 'Sector Regulation of Digital Platforms in Europe: Uno, Nessuno e Centomila' (2021) 12 Journal of European Competition Law & Practice 511.
[77] de Streel and Larouche (n 74).Pg 543
[78] ibid.544
[79] Cani Fernández, 'A New Kid on the Block: How Will Competition Law Get along with the DMA?' (2021) 12 Journal of European Competition Law & Practice Pg. 271.
[80] Ibáñez Colomo (n 6). Pg. 566
[81] ibid.566
[82] ibid.566

business conduct before intervention.[83] Such requirements have been identified as the general reason for lengthy proceedings.[84]

Considering those above, compliance with DMA obligations does not exclude the possibility of imposing liability for gatekeepers' business conduct under Article 102 TFEU. For instance, if, due to the innovation, the scope of the self-referencing practice broadens (treatment in ranking-related indexing and crawling, services and products offered), the innovative conduct might become the subject of article 102 TFEU or hypothetically, the competition defendant not satisfying the gatekeepers' criteria conducts discriminatory practice in the digital platform. Consequently, the coexistence of those regulations could not be perceived problematic as long as the scope of their subjects are clearly defined.

As for the US context, in 2021 American Innovation and Choice Online Act ("Act") has been introduced by House of Representatives banning the "covered platforms" self-preferencing practice. At the time of writing this thesis, the Act has not been enacted. However, competition authorities' decisions regarding challenged self-preferencing practice of Google discussed above, might change this picture. In the same context, on May 10, 2023, Google has opened access to a new AI-empowered tool - Search Generative Experience (SGE) in the US.[85] This innovation facilitates searching process for consumers and assists them in learning "about important factors, getting a list of stylish options, including price, customer rating and links to purchase or generic features of the desired products."[86] The tool allows the company to promote

[83] ibid.566 -569
[84] Marco Botta, 'Sector Regulation of Digital Platforms in Europe: Uno, Nessuno e Centomila' (2021) 12 Journal of European Competition Law & Practice Pg.500.
[85] 'Supercharging Search with Generative AI' (*Google*, 10 May 2023) <https://blog.google/products/search/generative-ai-search/> accessed 15 June 2023.
[86] '3 New Ways Generative AI Can Help You Search' (*Google*, 25 May 2023) <https://blog.google/products/search/search-generative-ai-tips/> accessed 15 June 2023.

its own products.[87] Therefore, the practice has potential to become the subject of the claim from Google's vertically integrated businesses' competitors. The thesis considers that active discussions of the issue in the courtroom and the practice might increase the chances of the ACT's prompt enactment, moreover, incorporating the significant practical matters into legislation.

2.2.2 Brief Description of the General Concepts Outlined in Regulations

Before representing remedies as the proper responses to the anticompetitive conduct, the analysis has to start by identifying the subjects of the regulations and the general characteristics of business conduct to be determined as self-preferencing practice. Therefore, this subchapter serves only descriptive purposes of the legal sources outlining specific legal requirements.

The DMA interprets gatekeepers as a digital platform having a "significant impact on the internet market," provide "a core platform service, which is a crucial gateway for business users to reach end users, "and it has to enjoy an „entrenched and durable position" on the digital market.[88] As for the Act, it describes „the covered platform" as a business that is a "critical trading partner for the sale or provision of any product or service offered on or directly related to the online platform."[89]

Legal sources impose the specific qualitative and quantitative thresholds for the businesses to become the subject of the regulation. The DMA connects such requirements to the EU annual turnover/average market capitalization/equivalent fair market value and the

[87] Kif Leswing, 'Google's New A.I. Search Could Hurt Traffic to Websites, Publishers Worry' (*CNBC*, 11 May 2023) <https://www.cnbc.com/2023/05/11/google-ai-search-could-squeeze-web-traffic-publishers-worry.html> accessed 15 June 2023.
[88] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Article 3
[89] S.2992 - 117th Congress (2021-2022): American Innovation and Choice Online Act 2022. Section 5 (iii)

number of active ends and business users in the EU during the last three years.[90] If the business actor satisfies the outlined criteria, it will be considered a gatekeeper unless it proves otherwise by submitting the relative evidence to the commission.[91] Similarly, the ACT connects the status of the covered platform to the United States-based monthly active users, business users, or whether the business at any point during the 2 years preceding a designation as covered platform or preceding the filing of a complaint for the alleged violation, is owned or controlled by publicly traded company or by the person whose annual sale or market capitalization has been in compliance with the provision.[92] Those requirements should be satisfied during the 12 months preceding the filing of a complaint.[93]

The main objective of banning the self-preferencing practice is eliminating discriminatory treatment in the digital market. Therefore, DMA obliges the gatekeepers not to treat their own products and services more favorably in ranking and related indexing and crawling compared to rivals' products and services on their platform.[94] Moreover, the gatekeepers shall apply transparent, fair, and non-discriminatory conditions to such practice.[95] Notably, the Commission should outline the specific services, which are essential platform for business users to reach their end users.[96]

As in the ACT, the self-preferencing practice has been described as the covered platforms' act disadvantaging or excluding the products, services, or lines of business of another business user relative to the covered platform operator's own product, services, or lines of

[90] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Article 3
[91] ibid. Article 3 (5)
[92] S.2992 - 117th Congress (2021-2022) (n 53). Section 5
[93] ibid.
[94] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Article 6 (5)
[95] ibid. Article 6 (5)
[96] ibid. Article 3.9

business. [97] Furthermore, concerning any user interface, including search or ranking functionality offered by the covered platform, [should not] treat the covered platform operator's own product, services, or lines of business more favorably than those of other business users.[98]

Overall, the regulatory desire to shift from ex-post to ex-ante regulation of the self-preferencing practice might explain competition authorities' keen desire to avoid discriminatory conduct in the digital market and, by doing so, provide contestable and fair conditions for the digital ecosystem's participants. [99] However, due to disregarding the economic-based approach – as efficient competitor test, such choice has been highly disputed among scholars.[100] Moreover, economic assessments has been identified as an essential tool for defining the existence of the market power, and stating violation based on crude metrics have not been considered as promoting non-competition objectives." [101] Notably, practitioners perceive the provisions of the DMA as reflection of competition authorities' obtained experience.[102]

The remedies outlined in the mentioned documents will be discussed in the following chapter as part of the discussion regarding effectiveness of conventional remedies in competition law. Such decision has been supported by the regulator's decision to borrow in the DMA the remedies defined under Regulation 1/2003[103] and the provision of the Act stating

[97] S.2992 - 117th Congress (2021-2022) (n 53). Section (a) 1-2
[98] ibid.Section 2 (7)
[99] Valeria Falce and Nicola MF Faraone, 'Digital Ecosystems in the Wake of a Legislative/Regulatory Turmoil: A First (Tentative) Antitrust Assessment of the Italian (and European) Experience in the AGCM Case Law' (2023) 46 World Competition.
[100] Filippo Lancieri and Caio Mario da Silva Pereira Neto, 'Designing Remedies for Digital Markets: The Interplay Between Antitrust and Regulation' [2021] Journal of Competition Law and Economics. Pg. 633
[101] Maureen K Ohlhausen and John M Taladay, 'Are Competition Officials Abandoning Competition Principles?' (2022) 13 Journal of European Competition Law & Practice. Pg. 468
[102] Fiona Scott Morton and Cristina Caffarra, 'The European CommissionDigital Markets Act: A Translation' (*CEPR*, 5 January 2021) <https://cepr.org/voxeu/columns/european-commission-digital-markets-act-translation> accessed 15 June 2023.
[103] de Streel and Larouche (n 74). Pg. 552

competition authorities' competence to impose the remedies for platforms based considering the existing antitrust regulation.[104]

Bearing in mind the considerations briefly discussed in this chapter, the following chapter illustrates the remedies imposed for an anticompetitive conduct under competition law, promises, and fears related to the remedial tools for self-preferencing practice in the digital market.

3. DESIGNING REMEDIES FOR BIG TECH COMPANIES' SELF-PREFERENCING PRACTICE

The anticompetitive effect of the big tech companies' self-preferencing practice in the digital market challenged the effectiveness of conventional remedies.[105] The profound objectives of the intervention, such as ending the anticompetitive conduct, restoring the competition, and avoiding its reoccurrence,[106] became a demanding goal to achieve. Furthermore, balancing properly the dominant undertakings' freedom to conduct a business and provide competitors operating in their platforms with fair treatment has not facilitated the task.[107]

The focal features of the digital economy explain the reasons for the complexity of the assignment mentioned above. In particular, the dominant undertaking's monopoly power in the rapidly developing digital market is supported by economies of scale and economies of scope, strong network effects, and the fact the digital economy is driven by collecting and processing

[104] S.2992 - 117th Congress (2021-2022) (n 53). Section 3.
[105] Sebastian Peyer, 'Private Remedies and Digital Markets' in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (Kluwer Law International 2020).Pg. 214
[106] Hjelmeng Erling J. Competition law remedies: Striving for coherence or finding new ways? Common Market Law Review 50 Issue 4, 2013 Pg.1006
[107] Lancieri and da Silva Pereira Neto (n 102). Pg. 662

data.[108] The combination of those characteristics creates a "snowball" phenomenon – „a winner takes all."[109] Consequently, a dominant undertaking promptly takes most of the market shares, and its rivals have a low chance (if any) of entering the digital market.[110] Having in mind the essence of those characteristics and their relations is the key element for crafting a proper remedy that benefits consumer welfare and does not suppress business's whims to innovate. Undoubtedly, if one is to find a fair outcome, the aim of the technological innovation must improve and not impede consumer welfare when all is said and done.[111]

The process of portraying effective remedies requires the understanding of both supply-side and demand-side market.[112] The comprehension of the incentives for consumer preferences is efficient consideration for portraying the respective remedies.[113] As business practices illustrate the engaged, informed, consumers encourage the undertakings to deliver high-quality goods or services.[114] The connection between consumers and businesses operating in the digital market could be explained within the „4 As" framework (Attend; Access; Assess; Act), which describes the steps of consumer decision-making process.[115] Such analysis has crucial importance to recognize whether applied remedies hinder, (if so, when) consumers experience in the digital market.

[108] Emmanuel Combe, *Competition Policy: An Empirical and Economic Approach - Antitrust / Competition Law - Law* (Kluwer Law International 2021). Pg.377
[109] ibid.
[110] Ibáñez Colomo (n 6). Pg. 568
[111] Michal Gal and Nicolas Petit, 'Radical Restorative Remedies for Digital Markets' (2021) 37 Berkley Technology Law Journal. Pg. 619
[112] Fletcher and Hansen (n 108). Pg. 18
[113] OECD 2021 remedy pg 21
[114] Fletcher and Hansen (n 108). Pg.19
[115] ibid. Pg. 21

As a general understanding, portraying remedies should not be the afterthought that follows the determining of the infringement.[116] Moreover, it has to be effective, proportionate, and provide legal certainty for the actors in the market.[117]

Having in mind the primary characteristics of big tech companies' self-preferencing practice discussed in Chapter 2, this section has twofold objectives: the first subsection discusses the effectiveness of conventional remedies in the digital market and, through examining regulatory proposals in the EU and US, argues the necessity/need for imposing new types of remedies. Furthermore, the following sub-chapter discusses untested competition remedies as possible solutions to the presented/identified issue. In this context, the subchapter briefly discusses randomization, mandatory sharing of algorithmic learning, subsidization of competitors, and temporary shutdowns. Based on the information discussed in this subchapter, the following chapter illustrates the considerations for the consumer-friendly remedy for big tech companies' self-preferencing practice.

3.1 Conventional Remedies

The efficiency of the remedies depends on the outcome of their application, even well-designed intervention might be ineffective if implemented poorly.[118] In addition to the legal provisions related to the remedial toolkit in the digital market, this subsection analyzes competition authorities' past interventions and, by doing so, evaluates possible outcomes while applying them to self-referencing practice. Therefore, this subsection commences by illustrating the essence of monetary fines, negotiated remedial commitments, interim measures, and behavioral and structural remedies as restorative tools outlined in the regulatory framework

116 Ibid Pg. 76
117 Pisarkiewicz Anna Renata, 'Remedies and Commitments in Abuse Cases' (2022) OECD Competition Policy Roundtable Background Note. Pg. 3
118 ibid. Pg. 25

in the US and EU. Furthermore, by identifying their advantages and challenges, the subchapter presents what their future holds in relation to self-preferencing practice.

3.1.1 Monetary Fines

Non-compliance with competition law could assist companies to gain profits, if it goes without competition authorities' respective intervention.[119] Therefore, in general imposing fines aim to make unlawful business practice of the undertaking concerned less profitable.[120]

In the case of detecting a violation, the DMA states imposing a fine not exceeding 10 percent of gatekeepers' total worldwide turnover in the previous financial year, if they do not comply with the imposed obligations, then the fine increases up to 20 percent of its total worldwide turnover in the previous financial year.[121] Additionally, DMA states periodic penalty payment not exceeding 5% of the average daily worldwide turnover in the preceding financial year per day, to ensure the gatekeepers' compliance with their obligations.[122]As article 23 of Regulation (EC) No 1/2003 defines while imposing the monetary fine both the gravity and the duration of the infringement has to be considered. As the guidelines of this regulation outlines the Commission applies two-step methodology starting form determining a basic amount of the fine for each undertaking or association of undertakings, and next adjust that basic amount upwards or downwards.[123] As the consideration of the fine has been borrowed from this regulation, it is highly expected that the same standard would apply.

[119] 'Competition and Sanctions in Antitrust Cases - OECD' <https://www.oecd.org/daf/competition/competition-and-sanctions-in-antitrust-cases.htm> accessed 14 June 2023.
[120]ibid.
[121] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Article 30
[122] ibid. Article 31
[123] Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003 (Text with EEA relevance) 2006. Recital 11

As for the Act, it imposes the remedy in the form of a civil penalty and defines its amount not more than (A) 15 percent of the total United States revenue of the person for the previous calendar year.[124] The main objective of the remedies are both avoiding future anticompetitive practices in the market, and restore injured parties to the position, they would have in case of absence of unlawful conduct.[125] Moreover, monetary fines has been considered as an useful federal-enforcement tool, when violations are „difficult and costly to remedy.“[126]

In relation to self-preferencing practice, it is important whether defined percentage of the turnover will discourage big tech companies to engage in self-preferencing. The logical consideration is the possible profit they gain through favoring their product over rivals.

3.1.2 Negotiated Remedial Commitments

The recognition by competition authorities for the need to ban the practice of self-preferencing in the digital market as anticompetitive conduct has led them to identify negotiated remedial commitments as the response for such practice.

The Digital Markets Act determines the possibility to conclude an investigation by commitments and preserves the right of the Commission to re-open investigation upon request or by its own initiative.[127] In this setting, the Act does not provide any direct indication about the commitment. However, it defines the possibility to implement the remedies applied in practice.[128] Therefore, the Antitrust Procedures and Penalties Act of 1974, 15 U.S.C §16

[124] S.2992 - 117th Congress (2021-2022): American Innovation and Choice Online Act' (2 March 2022). Section3. (5) B
[125] 'Competition And Monopoly: Single-Firm Conduct Under Section 2 Of The Sherman Act : Chapter 9' (25 June 2015) <https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-9> accessed 14 June 2023.
[126] ibid.
[127] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance).Article 25, 76, and Recital 99
[128] Bill SEC 2. (f) Remedies

(APPA) (known as Tunney Act) could be legal basis for commitment implementation. As the general observation, remedial commitments have been used more frequently in the US compared to EU.[129]

Overall, the remedial commitment is the result of cooperation between competition agency and the undertaking.[130] Informational asymmetry existing in the digital market encourages the commence of such coordination. However, the success of the partnership – restoring the competition through the commitments - depends on the clear identification of the anticompetitive conduct, mechanism against it and the respective outcome.[131] Moreover, the agreed terms should prevent challenged practices recurrence.[132]

Within negotiations, parties are encouraged to discuss the scope of remedies in details, adjust obligations to cope with conceptual uncertainties.[133] Depending on the details of the case such commitments might combine behavioral and structural remedies.[134]

The Commission has applied remedial commitments to Amazon's self-preferential practice in 2022. In particular, EU Commission challenged the company's business conduct of using the non-public marketplace seller data for its own retail operations and its outlined requirements for choosing the winner of the Buy Box and allowing sellers to offer its products under its Prime Programme. The main concern of the disputed practice has been identified as possible preferential treatment of Amazon's retail business or of the sellers that use Amazon logistics and delivery services. Within the investigation, the Commission preliminary declared

[129] Yane Svetiev, *Experimentalist Competition Law and the Regulation of Markets* (Bloomsbury Publishing 2020). Pg. 61
[130] Directorate for Financial and Enterprise Affairs Competition Comitte, DAF/COMP/WD (2016) 23 Commitment Decision in Antitrust Cases pg.2
[131] Svetiev (n 131). Pg. 63
[132] Directorate for Financial and Enterprise Affairs Competition Comitte, DAF/COMP/WD (2016) 23 Commitment Decision in Antitrust Cases Pg.2
[133] Svetiev (n 131).Pg. 64
[134] ibid.

Amazon's challenged business practices as anticompetitive conduct. The Commission concluded its investigation by accepting Amazon's commitments, which have successfully passed the market test, and consultations with interested third parties. Consequently, the company is obliged to improve data protection from the use by Amazon's competing logistics services and ensure equal access to Buy Box and Prime.[135]

However, "all that glitters in not gold ", and this tool is not an exception. Negotiations might express the interests of regulators and gatekeepers, "at the expense of third parties, including social welfare".[136] However, defending the relevant competition policy is in the interest of competition authorities. Furthermore, remedial commitment might threaten the development of legal precedents – solving issues based on negotiations might cause limitation of the understanding harm the anticompetitive conduct causes.[137]

To conclude, the analysis of the commitment choice, might shift the burden of designing, and implementing the relevant remedy to the wrongdoer,[138] and the Commission has an obligation to monitor of implementation of the suggested remedy. Still such approach might be justified by the undertakings' better position to identify the best way to comply with competition.[139]

[135] 'Antitrust: Commission Accepts Commitments by Amazon' (*European Commission- European Commission*) <https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7777> accessed 15 June 2023.
[136] Patrice Bougetter, Oliver Budzinski, and Frederic Marty, Self-Preferencinf and Competitive Damages: A Focuse on Exploitative Abuses, *GREDEG Working Paper* No. 2022-01, Pg. 22
[137] Svetiev (n 131).Pg 62
[138] ibid. Pg. 59
[139] Fletcher and Hansen (n 108). Pg.91

3.1.3 Interim Measures

The rapid development of the digital market and strong will to avoid tipping[140] require prompt responses to the gatekeepers' practice of self-preferencing . One of the reflections of this understanding is competition authorities' power of imposing interim measures according to the DMA[141] and Act.[142]

The DMA considers imposing interim measure to avoid serious and irreparable damage for business users and end users of gatekeepers where the is sufficient likelihood of establishing infringement on merits after the complete investigation.[143] In the same context, the Act by reference to injunction aims to stop the business practice, which threatens loss and damage – danger of irreparable loss or immediate damage.[144] Additionally, levying the relief in equity as necessary to prevent, restrain or prohibit violation of the ACT.[145] Moreover, the Act by defining the emergency injunction allows competition authorities to request from the undertaking concerned to take or stop taking action for more than 120 days.[146]

As the general standard for applying interim measure, in the EU two prerequisites have to be met: "(1) the likelihood of infringement (fomus boni iuris) and (2) the urgency to prevent harm (periculum in mora)."[147] In the same token, US defines the standard based on the following criteria: "(1) probability of success on the merits; (2) threat of irreparable injury; (3)

[140] Pablo Ibáñez Colomo, '"Regulatory" and "Antitrust" Remedies in EU Competition Law' in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (Kluwer Law International 2020).. Pg 89
[141] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Article 25
[142] S.2992 - 117th Congress (2021-2022) (n 20).Section 2.2 C
[143] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Recital 84
[144] S.2992 - 117th Congress (2021-2022) (n 20). Section 6. C
[145] ibid.Section 2. 2.C
[146] ibid. Section
[147]OECD Competition Policy Roundtable, 'Interim Measures in Antitrust Investigations' (OECD 2022). Pg.11

balance of hardships (or balancing the equities; i.e. whether the harm will be treated than the harm the defendant will suffer if the injunction is granted); and (4) protection of the public interest."[148]

Several considerations must be taken into account once adopting interim measures for self-preferencing practice. To begin with, remedy might have 'potentially very important consequences'[149] for the undertaking. Therefore, identifying the scope of the interim measures and the duration requires careful analysis of the market. Especially, when the outcome of the measure might be difficult to change or it is irreversible.[150] Moreover, it might create expectations for rivals that such action will continue.[151] In other words, competition authorities' short-term solution should not create long-term issues.

On a concluding note, the interim measures might encourage commencement of commitment negotiations.[152] Moreover, its application in practice, might allow competition authorities to test the remedy on the market and assess its effectiveness as the final response within the decision.[153]

3.1.4 Structural and Behavioral Remedies

The DMA authorizes the Commission to impose structural or behavioral remedies to ensure concerned undertakings effective compliance with the Regulation.[154] In the same context, the Act states imposing civil penalties in addition to remedies available under federal

[148] ibid.
[149] Ibáñez Colomo (n 142). Pg.90
[150] ibid.Pg.89
[151] ibid.Pg 90
[152] OECD Competition Policy Roundtable (n 149). Pg. 24
[153] ibid.
[154] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance).Article 18

or state law.[155]Notably, structural or/and behavioral remedies could be imposed according to Sherman Act Section 2.

Before the assessment of the possible risks caused by the reference of the above-mentioned remedies in connection to gatekeepers' practice of self-preferencing , their general notions should be analyzed: after identifying the anticompetitive conduct, as the form of behavioral remedy the undertaking concerned might be requested to act or refrain from the certain action.[156] As an alternative - structural remedy influences competitive structure of the relevant market.[157] As practice illustrates, the Commission tends to impose behavioral remedies related to the obligation of non-discriminatory treatment.[158] However, this tendency might be changed considering the Commission's statement in relation to the Google practice in ad tech industry, issued on June 14, 2023. The Commission preliminarily found that Google has dominant power for publisher ad servers and for programmatic ad buying tools for the open web. Such market power allows the undertaking to favor its own ad exchange, AdX, in the auction conducted by its publisher ad server, DFP. Moreover, Google engages in a self-preference practice related to placing bids on ad exchanges through Google Ads and DV360.[159]

Interestingly, within the statement, the Commission doubts the effectiveness of behavioral remedies for preventing Google's practice of self-preferencing or engagement in new ones. Therefore, considering undertaking's dominance in both – the publisher ad server and with its ad buying markets – the Commission identifies mandatory divestment as an efficient option for addressing competition concerns. [160] Moreover, in the case of US v.

[155] S.2992 - 117th Congress (2021-2022) (n 18).Section 2.
[156] Benjamin Loertscher and Frank Maier-Rigaud, 'On the Consistency of the European Commission's Remedies Practice' in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (2020). Pg. 61
[157] ibid.Pg 59
[158] Lancieri and da Silva Pereira Neto (n 102). Pg. 618.
159 'CommissionSends Statement of Objections to Google' (European Commission- European Commission) <https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3207> accessed 15 June 2023.
[160] ibid.

Microsoft the district court applied the structural remedies. The outcome has been amended at the Court of Appeal.[161] However, the case remains as an example of structural remedy's application.

The effectiveness of the behavioral remedies has been questioned because it lacks the capacity to stop the undertaking concerned to engage in abusive conduct.[162]Its alternative in the form of separation might be structural – operations are decided into separate independent businesses or functional – in which case „subsidiaries of the same company are entitled to operate but with the series of behavior restrictions."[163] Three justifications for such choice has been identified:"(1) restoring competition or innovation that has been harmed by conduct or a transaction. (2) deterring any future anticompetitive conduct. (3) opening markets to competition and innovation ".[164] Among scholars' separation has been discussed as the solution to practice of self-preferencing in exceptional cases.[165]

The application of the remedies discussed above, has been supported by the relevant regulatory provisions in DMA and the ACT. Due to acquired experience, scholars have been reluctant to the effectiveness of those remedies and have been proposing the new types of remedies for the digital market.[166] Therefore, the following subchapter is dedicated to the explanation of the notion of such remedies and what main objectives do they serve.

[161] *UNITED STATES of America v MICROSOFT CORPORATION* (United States Court of Appeals, District of Columbia Circuit). Pg. 98 -114
[162] OECD Competition Policy Roundtable Background Note, 'Remedies and Commitments in Abuse Cases' (OECD 2022). Pg. 20
[163] Patrice Bougetter, Oliver Budzinski, and Frederic Marty, Self-Preferencinf and Competitive Damages: A Focuse on Exploitative Abuses, *GREDEG Working Paper* No. 2022-01, Pg. 22
[164] Richard J. Gilbert, Separation: A Cure for Abuse of Platform Dominance? Information Economics and Policy, 2020, Pg. 2
[165] de Streel and Larouche (n 74). Pg. 552
[166] Gal and Petit (n 113). Pg. 620

3. 2 Untested Remedies

The application of conventional remedies in the digital market has been assessed as a failure.[167] This experience created solid incentives for scholars to discuss the possibility of crafting efficient competition tools serving profound remedy purposes – restoring competition and deterring anticompetitive conduct's recurrence.[168] *Gal and Petit* name untested remedies such as mandatory sharing of algorithms, subsidizing competitors, and temporary antitrust shutdowns as alternative remedies for anticompetitive conduct in the digital market.[169] Moreover, they perceive their primary objective to influence the market structure created by big tech companies' anticompetitive conduct.[170] In the context of the mandatory sharing of algorithm, the thesis in this subchapter discusses the opportunity to oblige the wrongdoer to share obtained data. *Ducci* suggests the possibility of setting a randomized mechanism as the opportunity to create non-discriminatory access to platforms or ex-ante remedy for restoring the competition.[171]

The main objective of this subchapter is a brief discussion of each possibility and represents its importance for big tech companies practice of self-preferencing. The critical consideration has to be highlighted that application of each remedy discussed below requires a comprehensive analysis of big tech companies' business structure, products/services, and competitive problems they create.[172] While assessing the business model of the digital platform the demand-side of the market has to be considered.[173] Such analysis allows the thesis to assess the whole picture in the market.

[167] ibid. Pg.4
[168] ibid. Pg. 619 - 620
[169] ibid. Pg. 617
[170] ibid. Pg. 622
[171] Francesco Ducci, 'Randomization as an Antitrust Remedy' (1 November 2022).Pg. 4
[172] Herbert Hovenkamp, 'Antitrust Interoperability Remedies' (27 January 2023). Pg. 4
[173] Fletcher and Hansen (n 108). Pg. 18

3.2.1 Mandatory Sharing of Algorithms

Gal and Petit discuss the application of the mandatory sharing of the algorithm as an order to big tech companies to share particular algorithm with rivals.[174] The subject of such remedy is identified the algorithm trained on unlawfully obtained data or "legally obtained data, to which access was illegally prevented to competitors."[175] *Gal and Petit* further explain justification for applying such remedies: dominant undertakings have power to gain more data from the users and their competitors, and, by doing so, create advanced algorithms.[176] Such advantage empowers them to define unfair trading conditions or price discrimination.[177]

For this remedy's relevance to the practice of self-preferencing, several factors have to be considered – starting from the explanation of how consumers make their choice. A number of behavioral biases influence the consumer decisions, such as saliency bias, present bias.[178]Consequently, consumers tend to make a choice in favor to the first suggestion.

Analyzing the consumer data obtained within this process allows big tech companies to understand consumer preferences and improve the product or create the new one accordingly.[179] Therefore, the remedy seems appealing, especially considering its advantages, such as 'the non-rivalrous nature of the assets. Another benefit could be no need to monitor the enforcement; the remedy provides immediacy in restoring competition. Moreover, such intervention provides consumer welfare since consumers can enjoy algorithmic business conduct without hindrance.

[174] Gal and Petit (n 113). Pg. 640
[175] ibid.
[176] ibid. Pg. 641
[177] Hovenkamp (n 174). Pg.4; Vladya MK 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 Journal of European Competition Law & Practice. Pg. 181
[178] Fletcher and Hansen (n 108). Pg. 24
[179] Structural challenges of digital Pg. 14

As for the rivals, they are granting the chance to overcome at least some data-based first-mover advantages.' [180]

However, the apparent disadvantage of the remedy has to be outlined as its possible negative influence on gatekeepers' whim to invest in data analysis and algorithm development.[181] As it has been outlined in the Trinko case, "mandatory sharing the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival or both to invest in those economically beneficial facilities."[182]

The second important issue is the administrability of the remedy – the issue when the algorithm has been created by unlawfully and legally obtained information.[183] In such cases, *Gal and Petit* suggest to consider the proportion of legally and unlawfully obtained information, based on which the algorithm has been trained. [184] Another peril of the remedy is the creation a basis for collusion in the market.[185] As for consumer welfare – such remedy might cause a decrease investment in algorithmic businesses and consequently reduce consumer choices in the market. [186]

Interestingly, DMA considers interoperability in several provisions, for instance, the Commissions entitled to have access to the data and algorithm required to investigate the case. [187] The Commission might require the access to such information by simple request or by

[180] Gal and Petit (n 113). Pg. 642-643
[181] ibid. Pg. 647
[182] *Verizon Communications Inc. v. Law Offices of Curtis V. TRINKO, LLP* (n 54). Pg. 407-408
[183] Gal and Petit (n 113). Pg. 649
[184] ibid.
[185] ibid. Pg. 647
[186] ibid. Pg. 648
[187] Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance). Recital 81

decision.[188] Notable, for the requirement the scope of the shared algorithm might be referred the Regulation (EU) 2019/1150. Interestingly, the document does not impose for online providers and intermediation services or online search engines the obligation to disclose the detailed functioning of their ranking mechanism, including algorithms.[189] However, the regulation requires declaring the "main parameters determining to rank… The description should be based on actual data on the ranking parameters' relevance."[190] As OECD report outlines, the perception of the algorithm as trade secrets ensures its confidentiality from the competitors within investigation.[191] In this context, the Act defines the cases when the undertaking could not be requested to share data or interoperate with other persons or business users.[192]

The alternative of the remedy could be discussed obligation to share data and request from the wrongdoer to vanish the algorithm. *Gal and Petit* within discussion of pitfalls of ordering to share data name the following: (1) technological difficulty, (2) design and scope of data interoperability (3) compliance with other regulations concerning data protection.[193] As for unteaching the algorithm the main issue remains the control of competition defendant's compliance with such order.[194] The related issue might be separating and diminishing illegally obtained data.[195]

[188] ibid. Article 21.1
[189] Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (Text with EEA relevance) 2019 (OJ L). Recital 27 Article 5.6
[190] Ibid
[191] 'Algorithmic Competition - OECD' <https://www.oecd.org/competition/algorithmic-competition.htm> accessed 12 June 2023.
[192] S.2992 - 117th Congress (2021-2022) (n 18). (7) (iii) Rules of Construction
[193] Gal and Petit (n 113).649-650
[194] ibid. Pg. 651
[195] ibid. Pg. 651

3.2.2 Subsidization of a Competitor

Subsidization has the potential to have a positive influence on the market structure and economic efficiency.[196] One of the common justifications for applying subsidization has been outlined exploitation of economies of scale – assisting beneficiaries to achieve a specific size to be able to benefit from economies of scale.[197] *Gal and Petit* justify the application of subsidization in the digital market for the short-term and explain such choice as "response to external shocks when supply is inelastic and market-driven adjustment is inefficient."[198] In this context, they take into account the remedy's influence on social welfare and competitors as well.[199]

The question is whether such a remedy applies to the big tech companies' practice of self-preferencing . If big tech companies' conduct causes the exclusion of the rivals from the market, assisting them in reappearing in the digital market might be justified through subsidization. *Michal S. Gal and Nicolas Petit*, while describing the methods of imposing the remedies, outline – the source of the remedy funding as monetary fines imposed on the gatekeepers.[200] As for the identification of the respective beneficiaries – the authors suggest considering the subsidized organizational capabilities and resources, they needed to meet all or most of the demand for commoditized or differentiated services it will take away from the monopolist.[201] Therefore, competition authorities have to choose undertakings, which will be able to benefit from subsidization, in this context "the product life cycle should be longer than the time needed for a subsidized firm to expand its capacity". [202]

[196] OECD Competition Policy Roundtable, 'Subsidies, Competition and Trade' (OECD 2022) <https://www.oecd.org/daf/competition/subsidies-competition-and-trade-2022.pdf>. Pg.10
[197] ibid. Pg. 11
[198] Gal and Petit (n 113). Pg. 654
[199] ibid.
[200] ibid. Pg. 657
[201] ibid. Pg. 659
[202] ibid.

If successful, subsidization brings competition to the market, reduces informational asymmetry,[203] provides "productivity growth, economic growth, and more innovation".[204] However, it might create issues related to awarding the respective subsidization to the right business.[205] In this narrative, the remedy application does not have an immediate effect.[206] *Gal and Petit* identify two pitfalls related to dynamic efficiency. In particular, decreasing big tech companies' incentives to innovate and while applying the remedy the risk of "going beyond restoring lost competition".[207]

3.2.3 Temporary Antitrust Shutdown

Gal and Petit explain temporary shutdowns as an order for the undertaking to shut down user interfaces.[208] Temporary antitrust shutdown is not a novel tool for law: In the US, the application of such remedy has been acceptable by US Supreme Court and State Courts in other legal fields.[209] Whereas, in the EU member states have power to impose or withdraw corporate privileges.[210] Presumably, the application of temporary antitrust shutdown in the digital market might raise normative, not doctrinal, concerns.[211]

The main objective of the remedy is to restore competition by creating opportunities for undertakings' rivals by forcing consumers to (temporally) shift towards big tech companies' alternative services/products.[212] This noble objective might make a solid incentive to damage consumer welfare if applied poorly. For instance, the remedy might increase the switching cost

[203] ibid. Pg. 655
[204] OECD Competition Policy Roundtable (n 198). Pg. 12
[205] Gal and Petit (n 56). Pg. 661-662
[206] Gal and Petit (n 113). Pg. 662
[207] ibid.
[208] ibid. Pg. 663
[209] ibid.
[210] ibid. Pg. 665
[211] ibid.
[212] ibid. Pg. 663

for consumers.[213] *Gal and Petit* identify the importance of the scope of the remedy application. In particular, the authors emphasize that while imposing remedies, the following considerations have to be taken into account: concerned undertakings' competitors must have the opportunity to provide alternative services to the consumers; The subject of the remedies should be identified cautiously and carefully; The duration of the imposed remedy has to be defined considering its necessity. The application of the remedy should not create the appearance that the regulator is involved in the market design process. The users should be properly informed and aware of the legal ground to apply temporary shutdowns for practice of self-preferencing. Finally, all the relevant cost related to the remedy has to be considered.[214]

3.2.4 Randomization

Ducci discusses the randomization as the opportunity to provide non-discriminatory access and/or a restorative remedy for discriminatory cases ex post.[215] The notion of this remedy implies the possibility of "allocating a set of options or resources with equal probability" or according to specific criteria.[216] The remedy has been explained as equal, wealth natural and cheaper for administrability.[217] Considering the essence of practice of self-preferencing , solving the issue of preferential treatment through rotational mechanism is appealing, such choice might be a guarantor for fairness in the market. The economic justification of the remedy could be its potential to encourage dynamic efficiency and competition.[218]

[213] Ibid. Pg. 667
[214] Gal and Petit (n 113). Pg. 666-668
[215] Ducci (n 173). Pg. 4
[216] ibid. Pg. 28-29
[217] ibid. Pg.28
[218] ibid. Pg. 44

Ducci while proposing the remedy emphasizes two important factors: (1) higher shareability of the digital input and (2) randomization as the temporary remedy.[219]

Within the framework of the first point, the author questions the common understanding of scarcity in digital market. In particular, *Ducci* criticizes the comment: „There is only one first-ranked position, one second-ranked, and so on. "[220] and a recent policy report „ the scarcity of resources – in these cases, the display space inside the shopping unit or on the desktop or home screen – imposes constraints. "[221] And *Ducci* concludes scarcity constraints in the context of ranking are „characterized by higher degrees of shareability than typically assumed. "[222]

As for the second point, the author proposes considerations for applying randomization - "specific features of different platforms and identified competitive problems at issue."[223] Moreover, *Ducci* describes the remedy as behavioral and quasi-structural tool: since "it imposes a specific allocation rule for algorithmic matching"[224], and it increases screen choice ballot.[225] The quasi-structural feature is expressed by defining the scope of the big tech companies vertical integration and operation in its downstream market.[226] At this point the influence of the remedy on consumer welfare could be described ambiguous. The consumers might encounter less relevant result in the search or excessive information, at the other hand. However, randomization will increase the number of available choices that will be displayed for them.[227]

[219] ibid. Pg. 29
[220] ibid. Pg. 30
[221] Ibid Pg. 30-31
[222] Ibid
[223] Ducci (n 173). Pg. 34
[224] ibid. Pg.42
[225] Ibid
[226] Ducci (n 173). Pg. 42
[227] ibid. Pg. 43

The brief review of the information above, allows the thesis to analyze the existing uncertainties in relation to practice of self-preferencing.

4. ANALYSIS AND CONCLUDING REMARKS

As illustrated in the previous chapters imposing effective remedies from a consumer welfare perspective for big tech companies' practice of self-preferencing is connected to several uncertainties. A brief description of the practice's life cycle in question illustrates such ambiguity. Consequently, this analysis involves the assessment of the following stages: (1) identifying the practice of self-preferencing; (2) defining the notion of consumer welfare; (3) portraying the remedial tools effective from a consumer welfare paradigm; and (4) considerations for implementing the imposed remedies.[228]

In addition to shedding light on each phase mentioned above, the thesis clarifies that while crafting remedies, the features of the digital market and undertakings' business must be considered carefully. Furthermore, the selection of practical remedial tools must ensure both development of the digital market and enhancement of consumer welfare. In the case of uncertainty in the market, Svetiev imposes the *experimentalist* solution, which implies the tool providing "reporting, monitoring and peer review." [229] Taking into account, the novelty of the issue, this thesis considers such approach appealing. The process of finding the relevant solution starts from considering rapid development of digital market. Moreover, its inherited characteristics, which create uncertainty, and continues by admitting the difficulty of portraying the 'proper instruments for the achievement of desirable competition policy outcomes'.[230] Consequently, the determination of the effective remedies from a consumer welfare perspective

[228] Lancieri and da Silva Pereira Neto (n 102).Pg. 659
[229] Svetiev (n 131).Pg. 18
[230] ibid.Pg.18

requires active reporting, monitoring, and strong coordination between competition authorities through sharing experiences.

The starting point of the analysis is the outcome of regulations – declaring the practice of self-preferencing as per se violation. In other words, it questions whether disregarding economic reasoning to state competitive harm is justified. Notably, this decision has been inspired by past antitrust cases. As *Morton and Caffarra* point out, such adaptation lacks "the translation tools to map a rule from the setting that inspired it to other businesses that are deemed gatekeepers." [231] The validity of the attempt to achieve procedural efficiency at the expense of disregarding the economic approach has to be tested in future cases. The fact that self-preferencing can only be carried out by gatekeepers/covered platforms meeting specific criteria might become the subject of speculation. The non-discriminatory obligation imposed on the big tech companies to create equal treatment in their downstream market creates the basis for active competition. Consequently, big tech companies will be forced to invest more in the development of their own vertically integrated businesses and make it more appealing to consumers. Therefore, such investment would positively influence consumer welfare, since it provides quality improvements.

As theoretical framework of the thesis illustrated, understanding consumer welfare in the digital market could be described as ambiguous. The traditional metric – consumer surplus – has lost its power to measure consumer welfare since the service/product of digital platforms is free of charge for consumers. However, while providing consumers with zero-price services/products, big tech companies obtain data, which serve "as a non-monetary form of consideration, having significant value. "[232] Notably, big tech companies have the power to "subsidize the non-paying side by profits made on a different side of the platform, that is, they

[231] Morton and Caffarra (n 104).
[232] European Commission. Directorate General for Competition., 'Competition Policy for the Digital Era.' (Publications Office 2019) <https://data.europa.eu/doi/10.2763/407537> accessed 16 June 2023. Pg. 44

sell to that other side the attention of users."[233] Considering those points, the question remains how could be the data and consumer engagement expressed in the metric. That is the challenge economist face in digital platforms. One solution might be imposing questions on consumers – how much data they are willing to share for getting the service or how the consumer assesses their attention paid to the specific services. In this context, "willingness to pay" and "willingness to accept" approaches could be applied. The question could be formulated as "*What is the price acceptable for consumers to pay for Google's non-discriminatory approaches*." However, these approaches could not fully and objectively assess consumer welfare. While discussing the consumer surplus, the additional considerations are choice, quality, and innovation. The network effect of digital platforms makes it complicated for competitors to compete with gatekeepers. Even if the consumer is not fully satisfied with the digital platforms service, the expectation that they will switch to a substitute service is highly doubtful.[234]

While imposing remedies, several factors have to be considered. The primary point of the intervention should serve its inherited objectives, such as deterring anticompetitive conduct and preventing its recurrence. However, balancing business incentives and ensuring consumer welfare complicates the task. For instance, while imposing monetary fines. It has to be analyzed whether the amount of the fine is sufficient to stop big tech companies practice of self-preferencing. In other words, 10 percent of a gatekeeper's yearly turnover for DMA and 15 percent of a covered platform's annual turnover for ACT is sufficient to prevent the practice of self-preferencing in the relevant digital market. It is logical that if the companies gain more through such anticompetitive conduct, they will consider conducting the business practice with such identified risks.

[233]Ibid
[234] Combe (n 110). Pg. 379 Peyer (n 107). Pg. 216 - 217

As pointed out several times, the shifting from ex-post to ex-ante regulation has been encouraged by the necessity of effective procedures in the digital market. The remedies are the essential tool to achieve such an objective. As outlined in the regulatory sources, competition authorities have the discretion to design interventions for self-preferencing. The regulation authorizes competition authorities to impose interim measures and behavioral and structural remedies and participate in commitments. The assumption that the efficiency of the regulation might be created only by reducing the time required to discuss the proceedings could be debated. As mentioned in the chapter above, even precisely designed remedies might be inefficient once implemented poorly.

The question has to be formulated as what has been changed concerning the remedy proposals. The first observation might illustrate that the application of interim measures has been encouraged by experts, which could be justified by the speedy development of the digital market.[235] However, the discussed disadvantages of a remedy [difficult to undo/irreparable] creates the need for careful and causations application.

To begin with, applying temporary shutdowns as an interim measure for the big tech companies' vertically integrated businesses might become a strong incentive to encourage consumers to shift to another business. However, this creates the need for further consideration, such as assessment of the duration of the interim remedies and the rules how to inform the consumers regarding shutting down their preferable business. That might negatively influence consumer welfare. In the same context, the less demanding choice might be imposing the obligations of randomization, allowing gatekeepers to operate their vertically integrated businesses on the downstream market providing that they place the products or services in the random/lottery principle. Application of such practice would provide the fairness in the market.

[235] OECD Competition Policy Roundtable (n 149). Pg. 25

One of the main concerns regarding this choice is the technical performance. The solution could be found with the cooperating of the respective experts and the business itself. In case of application of remedy, consumers might encounter excessive information, and consequently research process might become complicated. Moreover, if the algorithm will provide the result in the search system according to specific requirements, it might cause the new basis for big tech companies' discriminatory behavior.

The commencement of the commitment process has to be inspired by the need to create a fair business environment in the digital market. Understanding such a process as a balancing mechanism of informational asymmetry is acceptable. However, it questions whether such a choice would provide desired proceeding efficiency. As discussed in the previous chapters, commitments might include behavioral and structural remedies. In addition to the temporary shutdowns and randomization, behavioral remedies could be expressed as interoperability – mandatory sharing of algorithms or data, or subsidization. The data and algorithms are essential assets for operating the business. Once stating the practice of self-preferencing, competition authorities might perceive the need to impose the obligation of mandatory sharing of data and algorithms to the defendant. At first glance, strengthening rivals with acquired information might seem unfair. However, the remedy allows market participants to benefit from such information and provide social welfare.

The efficiency of imposing subsidization as a remedy requires careful analysis of the market. In particular, it is crucial to outline the objective criteria to define the beneficiaries of subsidies. Defining such criteria, in addition to determining the source of subsidies, might create issues for competition authorities. As for the consumer, the remedy if successfully implemented will provide more businesses on the market and consequently, increases the choice.

The remedies have to find the balance between over- and under-enforcement.[236] Consideration of providing consumer welfare is essential part of this process. The proper remedies would encourage big tech companies to provide a non-discriminatory business environment in their digital platforms. On the other hand, they would support the development of their vertically integrated businesses and create various choices and high-quality services/products for consumers. In the same context, if the preferred remedies would cause over-enforcement, it is logical that big tech companies would lose interest in investing in research and development and, therefore, create fewer choices for consumers. The essential point related to regulating the practice of self-preferencing is that it does not imply banning vertically integrated businesses but the preferential treatment toward that.

CONCLUSION

The regulatory environment does not support big tech companies' discriminatory practices in their adjacent market. Such understanding has been shared in the EU by enacting DMA, and in the US by initiating the Act. Declaring the practice of self-preferencing as anti-competitive conduct requires defining the proper remedies. In addition to the ongoing and rapid development of the digital market, its features, such as economies of scale, economies of scope, and strong network effect complicate this task. The acquired experience in the EU illustrated the failure of conventional remedies imposed in the digital market. Notably, the cases regarding the practice of self-preferencing are currently ongoing in the US. The course of those cases might have a respective influence on the Act's enactment.

For the purpose of crafting effective remedies, the thesis identified the notion and scope of consumer welfare and the importance of understanding big tech companies' business practices. By illustrating the failure of conventional remedies in the digital market, the thesis

[236]Lancieri and da Silva Pereira Neto (n 102). Pg. 614

illustrated scholars' incentives for proposing remedies, untested in the digital platform. In particular, within the conventional remedies, the thesis discussed monetary fines, commitments, interim measures, and behavioral and structural remedies. After a brief description of the notions of those remedies, the thesis focused on the relevant practices and revealed challenges. For instance, the profound importance of proportionality while imposing monetary fines. Third chapter described commitments as an opportunity to balance informational asymmetry between actors in the digital market, but challenged its time efficiency. In this narrative, the writing considered the reasons for competition authorities' reluctance to apply interim measures and their future in the digital market. Moreover, the issues of behavioral remedies and increased tendency towards application of structural remedies have been examined.

After the analysis of the conventional remedies, the thesis illustrated the untested remedies randomization, mandatory sharing of algorithm/ data, temporary antitrust shutdowns, and subsidization. The thesis identified their objective as strengthening consumer welfare by creating a fair and contestable business environment in the digital market. Their application has been considered as a new form of conventional remedy. For instance, randomization and temporary antitrust shutdown have been discussed within interim measures. On the other hand, mandatory sharing of algorithms/data and subsidization has been analyzed as the form of behavioral remedies. The subsidization as a choice for structural remedies.

The thesis considered advantages and challenges of the proposed remedies from a consumer welfare prism. Therefore, the application of the remedies has been discussed in the context of innovation, choice, and quality of the goods and services. The thesis identified that novel forms of intervention might disadvantage consumer welfare if applied poorly and outlined considerations for proper application. Businesses' incentives to invest in innovation has been essential consideration for portraying the remedies.

This thesis is a reminder for dominant undertakings to act in compliance with their 'special responsibility '[237] and avoid impairing competition through practice of self-preferencing in the digital market.

[237] Outlined in cases C-322/81, Michelin v. Commission EU:C: 1983:313, Paragraph 57; C-413/14 P, Intel v Commission EU:C: 2017:632, Paragraph 135-136

BIBLIOGRAPHY

'3 New Ways Generative AI Can Help You Search' (*Google*, 25 May 2023) <https://blog.google/products/search/search-generative-ai-tips/> accessed 15 June 2023

'Algorithmic Competition - OECD' <https://www.oecd.org/competition/algorithmic-competition.htm> accessed 12 June 2023

Anna Renata P, 'Remedies and Commitments in Abuse Cases' (2022) OECD Competition Policy Roundtable Background Note

'Antitrust: Commission Accepts Commitments by Amazon' (*European Commission - European Commission*) <https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7777> accessed 15 June 2023

'Antitrust: Commission opens investigations into Apple' (*European Commission - European Commission*) <https://ec.europa.eu/commission/presscorner/detail/es/ip_20_1073> accessed 15 June 2023

'Antitrust: EC opens formal investigation against Amazon' (*European Commission - European Commission*) <https://ec.europa.eu/commission/presscorner/detail/pl/ip_19_4291> accessed 15 June 2023

'Antitrust: Google in the Online Advertising Technology' (*European Commission - European Commission*) <https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3143> accessed 15 June 2023

Bergqvist C and Rubin J, 'Google and the Trans-Atlantic Antitrust Abyss' (18 March 2019)

Blazo O, 'The Digital Markets Acts - Between Market Regulation, Competition Rules and Unfair Trade Practices Rules' (2022) 2022 Strani Pravni Zivot (Foreign Legal Life) 117

Botta M, 'Sector Regulation of Digital Platforms in Europe: Uno, Nessuno e Centomila' (2021) 12 Journal of European Competition Law & Practice 500

Brynjolfsson E, Collis A and Eggers F, 'Using Massive Online Choice Experiments to Measure Changes in Well-Being' (2019) 116 Proceedings of the National Academy of Sciences 7250

Bunworth R, 'In the Market for a New Form of Abuse? Google Shopping and the Law on Self-Preferencing in the EU Case Notes' (2022) 21 Hibernian Law Journal 121

Combe E, *Competition Policy: An Empirical and Economic Approach - Antitrust / Competition Law - Law* (Kluwer Law International 2021)

'Commission Sends Statement of Objections to Google' (*European Commission - European Commission*) <https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3207> accessed 15 June 2023

‘Competition And Monopoly: Single-Firm Conduct Under Section 2 Of The Sherman Act : Chapter 9’ (25 June 2015) <https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-9> accessed 14 June 2023

‘Competition and Sanctions in Antitrust Cases - OECD’ <https://www.oecd.org/daf/competition/competition-and-sanctions-in-antitrust-cases.htm> accessed 14 June 2023

Cyriac NT, *Big Data and the Abuse of Dominance by Multi-Sided Platforms: An Analysis of Art. 102 TFEU* (Nomos 2022)

Daskalova V, ‘Consumer Welfare in EU Competition Law: What Is It (Not) About?’ (2015) 11 The Competition Law Review

de Streel A and Larouche P, ‘The European Digital Markets Act: A Revolution Grounded on Traditions’ (20 August 2021)

Ducci F, ‘Randomization as an Antitrust Remedy’ (1 November 2022)

European Commission. Directorate General for Competition., ‘Competition Policy for the Digital Era.’ (Publications Office 2019) <https://data.europa.eu/doi/10.2763/407537> accessed 16 June 2023

Ezrachi A, ‘EU Competition Law Goals and the Digital Economy’ (6 June 2018)

Falce V and Faraone NMF, ‘Digital Ecosystems in the Wake of a Legislative/Regulatory Turmoil: A First (Tentative) Antitrust Assessment of the Italian (and European) Experience in the AGCM Case Law’ (2023) 46 World Competition

Fernández C, ‘A New Kid on the Block: How Will Competition Law Get along with the DMA?’ (2021) 12 Journal of European Competition Law & Practice 271

Fletcher A and Hansen D, ‘The Role of Demand Side Remedies in Resolving Competition Concerns’ in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (Kluwer Law International 2020)

FTC, ‘Statement of the Federal Trade Commission Regarding Google’s Search Practices’

Gal M and Petit N, ‘Radical Restorative Remedies for Digital Markets’ (2021) 37 Berkley Technology Law Journal

Graf T and Mostyn H, ‘Do We Need to Regulate Equal Treatment? The *Google Shopping* Case and the Implications of Its Equal Treatment Principle for New Legislative Initiatives’ (2020) 11 Journal of European Competition Law & Practice 561

Hovenkamp H, ‘Is Antitrust’s Consumer Welfare Principle Imperiled?’ [2019] Journal of Corporation Law

, ‘Antitrust Interoperability Remedies’ (27 January 2023)

Ibáñez Colomo P, '"Regulatory" and "Antitrust" Remedies in EU Competition Law' in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (Kluwer Law International 2020)

, 'The Draft Digital Markets Act: A Legal and Institutional Analysis' (22 February 2021)

'Justice Department Sues Google for Monopolizing Digital Advertising Technologies' (24 January 2023) <https://www.justice.gov/opa/pr/justice-department-sues-google-monopolizing-digital-advertising-technologies> accessed 15 June 2023

'Justice Department Sues Monopolist Google For Violating Antitrust Laws' (20 October 2020) <https://www.justice.gov/opa/pr/justice-department-sues-monopolist-google-violating-antitrust-laws> accessed 15 June 2023

Kraemer J and Schnurr D, 'Big Data and Digital Markets Contestability: Theory of Harm and Data Access Remedies' (18 May 2021) <https://papers.ssrn.com/abstract=3789510> accessed 15 June 2023

Lancieri F and da Silva Pereira Neto CM, 'Designing Remedies for Digital Markets: The Interplay Between Antitrust and Regulation' [2021] Journal of Competition Law and Economics

Leswing K, 'Google's New A.I. Search Could Hurt Traffic to Websites, Publishers Worry' (*CNBC,* 11 May 2023) <https://www.cnbc.com/2023/05/11/google-ai-search-could-squeeze-web-traffic-publishers-worry.html> accessed 15 June 2023

Loertscher B and Maier-Rigaud F, 'On the Consistency of the European Commission's Remedies Practice' in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (2020)

Morton FS and Caffarra C, 'The European Commission Digital Markets Act: A Translation' (*CEPR,* 5 January 2021) <https://cepr.org/voxeu/columns/european-commission-digital-markets-act-translation> accessed 15 June 2023

Newman JM, 'Antitrust in Zero-Price Markets: Foundations' (2015) 164 University of Pennsylvania Law Review

Nylen L, 'The Government's Lawyers Saw a Google Monopoly Coming. Their Bosses Refused to Sue.' (*POLITICO,* 16 March 2021) <https://www.politico.com/news/2021/03/16/google-files-mobile-search-market-475576> accessed 15 June 2023

OECD Competition Policy Roundtable, 'Interim Measures in Antitrust Investigations' (OECD 2022)

'Subsidies, Competition and Trade' (OECD 2022) <https://www.oecd.org/daf/competition/subsidies-competition-and-trade-2022.pdf>

OECD Competition Policy Roundtable Background Note, 'Remedies and Commitments in Abuse Cases' (OECD 2022)

Ohlhausen MK and Taladay JM, 'Are Competition Officials Abandoning Competition Principles?' (2022) 13 Journal of European Competition Law & Practice 463

Peyer S, ‘Private Remedies and Digital Markets’ in Damien Gerard and Assimakis Komninos (eds), *Remedies in EU Competition Law: Substance, Process and Policy* (Kluwer Law International 2020)

Pyatt M, ‘Rulemaking to Bar Self-Preferencing by Technology Platforms’ (2023) 26 Stan. Tech. L. Rev.

Rau W, ‘What the Leaked FTC Memos on Google Really Teach Us’ (*American Enterprise Institute - AEI,* 24 March 2021) <https://www.aei.org/technology-and-innovation/what-the-leaked-ftc-memos-on-google-really-teach-us/> accessed 15 June 2023

Reverdin VMK, ‘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 Journal of European Competition Law & Practice 181

Reyna A, ‘The Shaping of a European Consumer Welfare Standard for the Digital Age’ (2019) 10 Journal of European Competition Law & Practice 1

Hjelmeng Erling J. Competition law remedies: Striving for coherence or finding new ways? Common Market Law Review 50 Issue 4, 2013

Salop SC, ‘Question: What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard’ [2005] SSRN Electronic Journal

Sobolewski M, ‘Measuring Consumer Well-Being from Using Zero Price Digital Services: The Case of Navigation Apps and Location-Based Services’ (2021) JRC Technical Report 2021–04 <https://joint-research-centre.ec.europa.eu/system/files/2021-02/jrc123535.pdf> accessed 13 June 2023

‘Supercharging Search with Generative AI’ (*Google,* 10 May 2023) <https://blog.google/products/search/generative-ai-search/> accessed 15 June 2023

Svetiev Y, *Experimentalist Competition Law and the Regulation of Markets* (Bloomsbury Publishing 2020)

Team Warren [@TeamWarren], ‘You Get to Be the Umpire or You Get to Have a Team in the Game—but You Don’t Get to Do Both at the Same Time. We Need to #BreakUpBigTech. #DemDebate Https://T.Co/UAhWniV1R8’ <https://twitter.com/TeamWarren/status/1184295385562599424> accessed 15 June 2023

‘The Consumer Welfare Standard - Advantages and Disadvantages Compared to Alternative Standards - Background Note’ (OECD 2023) <https://one.oecd.org/document/DAF/COMP(2023)4/en/pdf>

C-7/97- Bronner (Judgment of the Court (Sixth Chamber))

T-612/17 - Google and Alphabet v Commission (Google Shopping) (General Court)

T-Mobile Netherlands BV, KPN Mobile NV, Orange Nederland NV and Vodafone Libertel NV v Raad van bestuur van de Nederlandse Mededingingsautoriteit [2009] ECJ Case C-8/08

UNITED STATES of America v MICROSOFT CORPORATION (United States Court of Appeals, District of Columbia Circuit)

Verizon Communications Inc v Law Offices of Curtis V TRINKO, LLP Supreme Court of the United States No. 02-682

Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty (Text with EEA relevance) 2004

Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003 (Text with EEA relevance) 2006

Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on contestable and fair markets in the digital sector (Digital Markets Act) 2020

Sen. Klobuchar A [D-M, S.2992 - 117th Congress (2021-2022): American Innovation and Choice Online Act 2022

Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (Text with EEA relevance) 2019 (OJ L)

Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (Text with EEA relevance) 2022 (OJ L)