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Preventing Tipping in Digital Markets

A Study on Article 102 TFEU in Relation to Market Tipping, with Insights from US Antitrust

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Abstract

Digital markets, characterized by high returns to scale, network effects, and the central role of data, often lead to market tipping, where one undertaking, or a few, dominate the market. These digital market structures create barriers to entry and complicate competitive assessments. To tip the market and maintain their position, dominant undertakings sometimes use strategies like predatory pricing, self-preferencing, and prevention of multi-homing.

While the digital economy promotes efficiency and innovation, it can also reduce competition and negatively impact consumer welfare. Market tipping also raises democratic concerns due to the concentration of power over information flow. Early intervention in tipping cases could be beneficial, but Article 102 TFEU only permits action once an undertaking's dominance in its relevant markets is established, making it challenging to intervene early.

A comparative study with US antitrust law reveals that while the US majority view on attempted monopolization requires the showing a certain degree of market power, the minority view focuses on intent and conduct. Adopting the US minority view in the EU to lower the threshold for Article 102 is not recommended however, as it could hinder fair competition. Instead, the idea of adopting a similar approach to the majority, i.e. that it would only require a dangerous probability to reach dominance could be employed, to get above the threshold for Article 102 intervention.

Case law and the European Commission's new and upcoming guidelines on interpretation and enforcement show that the application of Article 102 is evolving. In the *Google Shopping* case, the judgment from the European General Court describes Google's search engine as an "essential facility" in the digital infrastructure, showing ingenuity of the court and the adaptability of Article 102. The *Google Android* case shows the European General Court's recognition of the importance of digital market structures and recognizes the notion of a "digital ecosystem". These developments, together with the European Commission's newly issued Revised Market Definition Notice, suggest a future with a more flexible Article 102, that can be enforced earlier to prevent tipping in digital markets.

Abbreviations

CJ	European Court of Justice
CJEU	Court of Justice of the European Union (CJ and GC)
Commission	European Commission
DMA	Digital Markets Act
EU	European Union
GC	European General Court
NCA	National Competition Authority
OS	Operating System
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
US	United States
US Supreme Court	Supreme Court of the United States

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1 Introduction

1.1 Background

The rapid evolution of the digital economy has presented challenges to the framework of competition law, reminiscent of the disruptions seen during the Industrial Revolution.[1] Central to these challenges is the trend of increasing monopolization within digital markets, primarily characterized by a "winner-takes-all" dynamic. This outcome is mainly due to the inherent characteristics of digital platform markets, where various intrinsic qualities encourage both consumers and businesses to converge to a single platform. This phenomenon, known as *tipping*, results in a concentration of market power that, once established, creates formidable barriers for new entrants, thereby entrenching the dominance of established actors.[2]

Via the European Commission's (Commission) Impact Assessment from 2020, it is possible to infer a consensus among National Competition Authorities (NCAs) that Article 102 of the Treaty on the Functioning of the European Union (TFEU), prohibiting abuse of a dominant position, may be insufficient in its current form to effectively address the unique challenges posed by digital markets.[3] Margrethe Vestager, the European Commissioner for Competition, has however, described Articles 101 and 102 TFEU[4] as "magic boxes, capable of expanding their contents"[5] to meet new challenges presented by digital markets. The European Union's (EU) competition law, including Article 102, has, indeed, traditionally adapted to market dynamics on a case-by-case basis. This flexibility has allowed the EU to address an array of competitive distortions over time.[6]

The Commission and the Court of Justice of the European Union (CJEU) have leveraged Article 102 creatively to tackle emerging market challenges, as evidenced for example by the landmark case *Microsoft v Commission*[7] in 2004. In this case, the Commission argued that Microsoft had behaved anticompetitively through exclusionary practices such as tying and refusal to supply. The decision

[1] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 69.
[2] Concurrences – Antitrust Publications & Events, "tipping", retrieved 10 March 2024, available at concurrences.com/en/dictionary/tipping.
[3] European Commission, *Summary of the contributions of the National Competition Authorities to the impact assessment of the new competition tool*, 2020, p. 6.
[4] Hereinafter Article 102.
[5] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1212.
[6] European Commission, Directorate-General for Competition, Montjoye, Y.-A., Schweitzer, H., Crémer, J., *Competition policy for the digital era*, Publications Office, 2019, p. 39.
[7] COMP/37.792, *Microsoft* 24 March 2004; Case T-201/04, *Microsoft v Commission* EU:T:2007:289.

from the Commission was upheld, setting a precedent for addressing similar behaviors in digital markets.[8] More recent cases against so-called Big Tech undertakings such as Amazon[9], Apple[10], Meta[11], and Google[12] indicate a continued effort from the Commission to curb monopolistic behaviors that distort digital market dynamics. In these cases, the undertakings' dominant position was, however, not the main issue under scrutiny. Thus, questions remain about whether Article 102 can also be applied to undertakings behaving abusively without necessarily holding a dominant position, yet.

In the US, the competition authorities have been slow to act against Big Tech's unilateral anticompetitive conduct. However, recent political shifts and high-profile lawsuits[13] signal a changing landscape. US antitrust[14] encompasses attempts at monopolization, an offense acting as a companion to completed monopolization, which can be used as a secondary claim in case monopoly power cannot be shown. Thus, the US legal framework will serve as a reference model for preemptively targeting abusive corporate behaviors in the EU before such entities achieve dominant market positions.

1.2 Aim and Research Question

The aim of this research is to explore and analyze the unique dynamics of digital markets, focusing on the factors that make them prone to tipping and the implications for EU competition policy. By examining how tipping in digital markets poses a concern for EU regulators, especially Article 102, this study seeks to assess the adequacy of the provision in addressing anticompetitive actions that could lead to dominance. Through a comparative legal analysis with the US Sherman Act, this thesis will explore the feasibility of integrating the concept of attempted monopolization into EU competition law. This investigation is timely and relevant, considering digital platforms' significant influence on economic structures and policy frameworks. The objectives culminate in the following research questions:

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[8] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1213.
[9] AT.40462, *Amazon Marketplace* and AT.40703, *Amazon Buy Box* 20 December 2022.
[10] Commission Press Release, *Antitrust: Commission sends Statement of Objections to Apple over practices regarding Apple Pay*, 2 May 2022, and Commission Press Release, *Antitrust: Commission sends Statement of Objections to Apple clarifying concerns over App Store rules for music streaming providers*, 28 February 2023.
[11] Commission Press Release, *Antitrust: Commission sends Statement of Objections to Meta over abusive practices benefiting Facebook Marketplace*, 19 December 2022.
[12] Commission Press Release, *Antitrust: Commission sends Statement of Objections to Google over abusive practices in online advertising technology*, 14 June 2023.
[13] See, e.g., US Department of Justice Press Release, *Justice Department Sues Google for Monopolizing Digital Advertising Technologies*, 24 January 2023; Federal Trade Commission Press Release, *FTC Sues Amazon for Illegally Maintaining Monopoly Power*, 26 September 2023; US Department of Justice Press Release, *Justice Department Sues Apple for Monopolizing Smartphone Markets*, 21 March 2024.
[14] Antitrust is the US word for competition law. "Trust" refers to a group of businesses that team up or form a monopoly to dictate pricing in a particular market. Antitrust and competition law are used interchangeably in the context of this paper.

1. Can the US concept of attempted monopolization serve as a model to lower the threshold for Article 102 intervention?
2. Does Article 102 encompass practices where undertakings try to achieve a dominant position through using the inherent tipping prone structures of digital markets?

1.3 Delimitations

This thesis focuses on unilateral conduct as regulated under Article 102, addressing firms' actions that may lead to or reinforce market dominance. Given the specificity of the research questions, this study intentionally limits its examination to the substantive aspects of competition law that relate to the abuse of dominance, particularly exclusionary practices, which are most pertinent to preventing market tipping in digital economies. The effectiveness of remedies imposed on the undertakings that are found violating Article 102, although crucial for the efficiency of the provision, is not a subject of this essay. This study only touches briefly upon the procedural rules of competition law when they are directly necessary to understand the differences between the EU and US jurisdictions.

It is worth mentioning that this paper does not cover the Digital Markets Act (DMA). The DMA imposes obligations such as interoperability requirements on undertakings qualifying as so-called gatekeepers.[15] Despite the implementation of the DMA, which addresses certain aspects of monopolistic behavior in the digital economy, there remains a need for legal research to examine to what extent Article 102 functions in the digital economy. While the DMA likely will handle cases related to tipping, addressing the effectiveness of Article 102 regarding tipping remains essential. Especially where companies do not meet the criteria to be considered gatekeepers or their market behavior is not covered by the specific obligations of the DMA.

1.4 Methods and Material

1.4.1 EU Legal Method and Sources

I use the EU-legal method to analyze legal material from EU sources, which is what this paper mainly consists of. There is no one way of defining this method, but the easiest way to explain it is probably to do it in relation to the material that is being analyzed. The main legal text of importance for this thesis is Article 102, which is a part of the EU primary law. When interpreting EU statutes, case law

[15] *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* (Digital Markets Act), where Article 3 lists the criteria to be designated gatekeeper status.

from the European Court of Justice (CJ) is essential.[16] he CJ has a monopoly on interpreting EU legal acts, which in practice means that if a member state is uncertain about the interpretation of an EU legal act, it should refer its question to the CJ for a preliminary ruling.[17] It is the CJ that gives meaning to the provisions of EU law and systematizes them,[18] to ensure a uniform application of law in all member states.[19] The CJ together with the lower court, the European General Court (GC) forms the CJEU. The precedential value is lower from the GC than from the CJ, but especially in cases where the CJ has not pronounced, the judgments of the GC are still valued as a source of EU law.[20]

Within the framework of this paper, some cases, especially those analyzed in more detail, come from the GC. This is because the GC is often the first instance when the CJEU reviews the legality[21] of the Commission's competition decisions, and there are not yet many cases concerning digital markets. This study explores the potential for using Article 102 *before* an undertaking has reached a dominant position, and the CJEU rarely dismisses the Commission's dominance assessments. This rarity can be interpreted in two ways: either it is challenging for companies to refute these assessments, or the Commission is selective about which cases it prosecutes under Article 102.

The decisions from the Commission regarding Article 102 violations on digital markets are a helpful source in this regard. However, the Commission's decisions involve a certain amount of policy formation, and it is ultimately the CJEU's task to determine how Article 102 is to be interpreted. The Commission's guidelines on the enforcement of Article 102 also play a role in this paper. Although these decisions and guidelines are not legally binding, the CJEU has recognized the importance of these guidelines,[22] and is thus used in this study as well. Doctrine provides a helpful framework for understanding the interpretation and application of legal principles related to Article 102 and especially regarding the US provisions and case law, this being a foreign jurisdiction to me.

1.4.2 Comparative Method and Sources

This thesis also employs a comparative method since part of the essay analyzes how the US deals with the market power criteria in relation to unilateral anticompetitive conduct. The legal text used in the comparative part of the thesis consists mainly of Section 2 of the Sherman Act, which prohibits attempted and completed monopolization. Case law is primarily employed to interpret this statute,

16 Article 19(1) TEU.
17 Article 267 TFEU.
18 Hettne, J. & Otken Eriksson, I., *EU-rättslig metod: teori och genomslag i svensk rättstillämpning*, 2nd ed., Stockholm 2001 p. 50.
19 Reichel, J., *EU-rättslig metod*, in Nääv, M. & Zamboni, M. (eds.) Juridisk metodlära, 2nd ed., Lund 2018, p. 116.
20 Hettne, J. & Otken Eriksson, I., *EU-rättslig metod: teori och genomslag i svensk rättstillämpning*, 2nd ed., Stockholm 2001 p. 57.
21 Article 263 TFEU.
22 Reichel, J., *EU-rättslig metod*, in Nääv, M. & Zamboni, M. (eds.) Juridisk metodlära, 2nd ed., Lund 2018, p. 128.

as the US is a common law country. However, as the US legal text and its corresponding case law serve as a framework for a discussion about the dominance criteria within an EU context, the main thing is not to establish de lege lata in the US but to compare different legal viewpoints and weigh them against each other.

The material in a comparative study can be used in different ways. The material from a foreign legal system may serve a so-called dominant function, meaning that the comparison itself is the goal of the investigation. Comparative material can also serve a so-called subordinate function, meaning that the material from the foreign legal system has a subordinate role to the result that the study aims to achieve.[23] Within the scope of this thesis, the US legal reasoning serves a subordinate function, as the core of the work is to determine how Article 102 should, or could, be interpreted. The comparative material is thus used as a foundation for the analysis and is not the subject of it.

A central aspect within the comparative legal method is functionalism, which means that the objects being compared should serve the same function in their respective legal systems.[24] In this comparison between the legal systems of the US and the EU, there are certain institutional similarities, which is advantageous in a comparative study. The EU consists of a union of countries that have decided to transfer certain parts of their legal and political power to the EU.[25] Similarly, the US consists of a union of states ultimately governed by the federal government.[26] Despite political and social differences, there has also been a concordance between both jurisdictions' competition law regulations.

The selection of case law involves systematic searches on the CJEU's website, Curia, the US Supreme Court's website, Justitia, and other legal databases. The focus is on judgments where Article 102 and Section 2 of the Sherman Act, respectively, are central to the ruling and where the term "abuse of a dominant position" or "attempt to monopolize" appears within the judgment. Doctrine is also used as a screening tool to identify relevant legal cases. Additional sources include news articles and expert reports. These sources provide a broader context and help clarify the legislative and regulatory intentions behind the analyzed frameworks. The methodology for sourcing material involves searching academic databases and journals, utilizing library resources, and conducting targeted searches on legal databases.

[23] Strömholm, S., *Har den komparativa rätten en metod?*, SvJT, 1972, p. 462.
[24] Valguarnera, F., *Komparativ Juridisk Metod*, in Nääv, M. & Zamboni, M. (eds.) Juridisk metodlära, 2nd ed., Lund 2018, pp. 155–156.
[25] Article 5 TEU.
[26] U.S. Constitution, Article I, Section 10.

1.5 Outline

Below is a disposition of each of the following chapters, giving an overview of their content and relevance to the research questions. The second chapter (2) delves into the concept of market tipping within the digital economy. This chapter explains the structural and strategic elements facilitating tipping, setting the stage for the subsequent legal analysis. Chapter three (3) outlines the primary objectives of EU competition law and sets the context for why market tipping, if unregulated, can undermine these objectives. This chapter outlines the criteria for Article 102 and its limitations concerning digital markets. Chapter four (4) investigates whether the US concept of attempted monopolization under the Sherman Act can serve as a model to lower the threshold for intervention under Article 102. Chapter five (5) considers whether Article 102 is adequate to address undertakings on the path to dominance due to market structures prone to tipping, rather than due to superior competitive performance. Chapter six (6) concludes and discusses the findings.

2 The Tipping Phenomena

2.1 Multi-sided Platforms and Digital Ecosystems

The digital economy, defined as a network of digital activities and transactions facilitated by information technologies, has significantly transformed market dynamics and regulatory landscapes. Within the competition law discourse, the digital economy is often synonymous with the platform economy,[27] a synonymity that will be maintained here. There is much to say about digital markets, but I will start by introducing some useful terms.

Multi-sided platforms act as intermediaries that assist interactions between at least two groups of users who provide each other with benefits. These platforms create value primarily by enabling direct interactions among these groups, leveraging network effects to enhance the platform's value as more users from each group join. Examples of multi-sided platforms include online marketplaces like Amazon, social media platforms such as Facebook, or search engines like Google.[28]

A *digital ecosystem* can be explained as a network of interdependent services, products, and technologies that work together to provide a cohesive and integrated user experience. An ecosystem is often orchestrated by a dominant firm providing the core platform for developing complementary products and services. Digital ecosystems often encompass multiple markets, making their competitive dynamics complex. The orchestrator of the ecosystem can leverage its control over the core platform to influence the development and success of complementary products and services.[29] This can also be described as a product having many so-called "after-markets", which competition law is more used to deal with. An aftermarket consists of a product that is complementary to another. For example, shoelaces can constitute an aftermarket for shoes, which would constitute the primary market. Together, they form a so-called system market, and competition can take place between systems, but also between the respective markets.[30]

Some multi-sided platforms and digital ecosystems are so-called zero-price markets, where consumers do not directly pay for the product or service, but the

[27] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law,* 8th ed., Oxford 2023, p. 70.
[28] Bedre-Defolie, Ö. & Nitsche, R., *When Do Markets Tip? An Overview and Some Insights for Policy*, Journal of European Competition Law & Practice, Volume 11, Issue 10, 2020, p. 611.
[29] OECD, *OECD Handbook on Competition Policy in the Digital Age*, 2022, p. 23.
[30] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law,* 8th ed., Oxford 2023, p. 137-138.

provider generates revenue through other means, such as advertising and data collection.[31]

2.2 Tipping Facilitating Factors

The Commission's 2019 report, *Competition Policy for the Digital Era*, identifies three characteristics that distinguish digital markets: very high returns to scale, network effects, and the central role of data.[32] These characteristics contribute to market tipping[33] where one company becomes ultra-dominant. Tipping is not a new concept within competition law, but it is particularly prominent in digital markets. Initially, digital markets may be competitive, but once a market tips, it becomes exceedingly difficult, if not impossible, for other actors to compete.[34] This is the rationale behind the need for the Commission to be able to intervene early against tipping, if it should intervene at all.

Digital markets experience very *high returns to scale*, which means that the cost of serving additional customers decreases significantly as the number of customers increases. This economic characteristic is common in digital markets, where the marginal cost of producing digital goods or services for an additional customer often is negligible. For instance, once a software application is developed, the cost of distributing it to additional users is minimal. Established market players can leverage their scale to spread costs over a large user base, making operating cheaper than for new entrants. In digital markets, this concentration is often seen in companies like Google, Meta, and Amazon, which have achieved substantial market power due to their scale.[35] High returns to scale create formidable barriers to entry, which discourage potential competitors from entering the market.[36]

Network effects play an essential role in the dynamics of digital markets, contributing to market tipping. These effects happen when the value of a platform, for instance, increases as more people use it. A social media platform becomes more valuable when more users join, allowing for richer interactions and content sharing. Or, the value of a ride-sharing platform increases as more drivers and riders join, improving service availability and efficiency.[37] These effects can deter users from switching to competitors, even if they offer superior services, as users gravitate towards platforms with the most extensive user base due to the enhanced value provided by the network.[38]

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[31] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law,* 8th ed., Oxford 2023, p. 124.
[32] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1209.
[33] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law,* 8th ed., Oxford 2023, p. 1211.
[34] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1207.
[35] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1209–1210.
[36] European Commission, Directorate-General for Competition, Montjoye, Y.-A., Schweitzer, H., Crémer, J., *Competition policy for the digital era*, Publications Office, 2019, p. 20.
[37] Petit, N., *Are 'FANGs' Monopolies? A Theory of Competition under Uncertainty*, Working Paper, October 10, 2019, pp. 20–22.
[38] Bedre-Defolie, Ö. & Nitsche, R., *When Do Markets Tip? An Overview and Some Insights for Policy*, Journal of European Competition Law & Practice, Volume 11, Issue 10, 2020, p. 611.

Access to *data* plays a role in the digital economy, serving as an asset for platforms. The ability to gather and utilize large amounts of data provides a competitive edge. Platforms that accumulate extensive user data can improve their service offerings. Data-driven insights allow platforms to personalize user experiences, refine algorithms, and optimize operations. Data accumulation creates high entry barriers for competitors lacking the same amount of data. New entrants find it difficult to compete without access to equivalent data resources. The accumulation of data feeds into a self-reinforcing cycle. Enhanced service quality attracts more users, which generates more data, further improving the service. This cycle can lead to market tipping, where a single platform becomes dominant.[39]

2.3 Tipping Strategies

Digital undertakings often employ strategies to facilitate or accelerate market tipping in their favor. This section explores these strategies, including predatory pricing, self-preferencing, leveraging market power, exclusivity agreements, and the prevention of multi-homing. Identifying these strategies is necessary for understanding how to promote competition and innovation.

One of these strategies are *predatory pricing*. Predatory pricing involves setting prices extremely low, often below cost, to rapidly attract a large user base. Due to the long-term benefits of network effects, digital platforms prioritize growth over short-term profit. The rationale is that a large user base can be monetized later through various revenue streams, including advertising and premium services.[40] Amazon, for instance, operated at a loss for several years[41] to build its market presence and now ranks among the world's largest companies by revenue.[42] By maintaining low prices, incumbents make it harder for new competitors to enter the market. Although predatory pricing can benefit consumers in the short-term, it raises long-term concerns. Once competitors are driven out of the market, the dominant firm may increase prices, ultimately harming consumers.

Leveraging is when a firm uses its dominance in one market to gain more power in another.[43] *Self-preferencing* is a new form of leveraging in digital markets. It refers to the practice where a dominant company favors its own services or products over competitors'. This strategy is effective in digital markets where platforms can control the visibility and ranking of products or services. Search engines like Google can prioritize their services in search results, thereby increasing their own visibility and accessibility to users. This was the case in *Google Shopping*, where Google displayed its own comparison shopping device over

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[39] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1211.
[40] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 445.
[41] Petit, N., *Big Tech and the Digital Economy: The Moligopoly Scenario*, Policy Conversation on Big Tech, online ed., Oxford 2020, Chapter 1.A.2.b.
[42] Fortune, *Global 500,* retrieved 2 April 2024, available at fortune.com/ranking/global500/.
[43] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 423.

competitor's.[44] This can disadvantage competitors who rely on the same platform to reach users. Self-preferencing can lead to market foreclosure, where competitors are effectively excluded from the market due to reduced visibility. This strategy reinforces the dominant position of the platform and makes it difficult for new entrants to gain traction.[45]

Lack of *multi-homing* is also a characteristic that can increase the risk of tipping.[46] Multi-homing refers to using several platforms that serve similar purposes, while single-homing involves using only one. Preventing multi-homing involves strategies that discourage users from using multiple platforms simultaneously. Platforms can use subscription models, such as monthly flat rates, to encourage users to stay on one platform. Services like Netflix and HBO, for instance, make it less likely for users to subscribe to multiple streaming services due to cost considerations.[47] Platforms that offer a suite of complementary services and products can create digital ecosystems that make it easier for users to single-home. For example, Apple's ecosystem of devices and services encourages users to stay within its ecosystem due to the seamless integration and convenience. Preventing multi-homing can also be achieved through self-preferencing, decreasing the need for multiple platforms.[48]

2.4 Summary

Digital markets, such as multi-sided platforms and digital ecosystems, share an inherent structure that facilitates rapid growth of a small number of incumbents, creating a monopoly-like situation known as market tipping. The characteristics of digital markets consist mainly of high returns to scale, network effects, and the central role of data. These features create substantial barriers to entry, entrenching the market power of incumbents. Digital undertakings may employ strategies to tip the market in their favor, leveraging their inherent characteristics to create and maintain dominance. Predatory pricing, self-preferencing, and prevention of multi-homing are examples of strategies that enhance a platform's position on the market.

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[44] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 423.
[45] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 1223.
[46] Armstrong, M., *Competition in Two-Sided Markets*, RAND Journal of Economics, Volume 37, 2006, p. 669.
[47] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 61–62.
[48] Bedre-Defolie, Ö. & Nitsche, R., *When Do Markets Tip? An Overview and Some Insights for Policy*, Journal of European Competition Law & Practice, Volume 11, Issue 10, 2020, p. 613–615.

3 Tipping from an EU Competition Law Perspective

3.1 Objectives of EU Competition Law in General and Article 102 in Particular

In neoclassical welfare economics theory, a perfectly competitive market maximizes welfare. However, welfare can be defined in different ways, with consumer welfare and social (also called total or general) welfare being the most prominent.[49] Within competition law, the predominant view is that of consumer welfare,[50] which focuses on the total consumer surplus.[51] A "narrow" take on consumer welfare is to only measure consumer surplus in economic terms. In contrast, a "broader" perspective on consumer welfare includes quality, choice, and innovation considerations.

The original purpose of EU competition law was to facilitate market integration and ensure effective and undistorted competition. This objective is partly outlined in Article 3(1)(b) TFEU, which grants the Union the power to adopt the competition rules that are needed for the internal market to function properly. The objective of EU competition law has also been shaped by case law. The CJ has the mandate to interpret the meaning and scope of Article 102,[52] while the Commission formulates and implements EU competition policy.[53] In the case *Continental Can*, the CJ held that competition rules apply both to conduct that directly harms consumers and to conduct that indirectly affects consumers by harming competition. The court stated that "[t]he provision is not only aimed at practices which may cause damage to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure."[54] This position has been reflected in subsequent case law.[55]

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[49] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, pp. 15–16.
[50] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 33.
[51] Orbach, B. Y., *The Antitrust Consumer Welfare Paradox*, Journal of Competition Law & Economics, Volume 7, Issue 1, March 2011, pp. 137–140.
[52] Articles 263 and 267 TFEU.
[53] Ibáñez Colomo, P., *The (Second) Modernisation of Article 102 TFEU: Reconciling Effective Enforcement, Legal Certainty and Meaningful Judicial Review*, Journal of European Competition Law & Practice, Volume 14, Issue 8, 2023, p. 609.
[54] Case 6/72, *Continental Can v Commission* EU:C:1973:22, para. 26.
[55] See e.g. Case C-52/09, *Konkurrensverket v TeliaSonera* EU:C:2011:83, para. 24, Case C-209/10, *Post Danmark v Konkurrencerådet (Post Danmark I)* EU:C:2012:172, para. 20 and Case C-23/14, *Post Danmark v Konkurrencerådet (Post Danmark II)* EU:C:2015:651, para. 69.

As the principles of the Chicago School somewhat gained traction within the EU, the Commission integrated the consumer welfare model into a more economic, effects-based approach. This changed EU competition law from a procedural focus to outcome-based assessments. Over the past two decades, this shift has led to the prioritization of maximizing consumer welfare as the primary objective of EU competition law.[56] The Commission issued a Guidance Paper on the enforcement priorities of Article 102, emphasizing an effects-based approach.[57] This shift was highlighted by Joaquín Almunia, the former Vice-President and European Commissioner for Competition, in his 2010 statement. He emphasized that "Competition policy serves the interests of consumers. At the core of our policy is consumer welfare, which shapes our priorities and influences our decisions."[58]

In response to these evolving market conditions, the CJ and the Commission moved away from the Guidance Paper. In 2023, the Commission issued a series of amendments[59] to it, introducing new criteria for assessing abuse, including considerations of behavioral and structural abuse, platform neutrality, and control and use of data.[60] The Competition Policy Brief[61] released by the Commission on the same day as the amendments offers additional details on the amendments. It advocates for an adaptable and practical effects-based method to applying Article 102, drawing on precedents set by the CJEU. The Policy Brief seeks to clarify both general and specific points; for instance, it references the *Google Android* case[62] to illustrate that enforcing Article 102 serves wider goals, such as preserving consumer choice and supporting democratic diversity.[63] Furthermore, it has been established in case law that consumer welfare should be broadly interpreted to include factors like price, choice, quality, and innovation.[64] This does not

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[56] Ezrachi, A., *EU Competition Law Goals and the Digital Economy*, Oxford Legal Studies Research Paper No. 17/2018, June 2018, p. 4.

[57] *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (Guidance Paper)* 2009/C 45/02, see, e.g., p. 5-6, 10.

[58] Joaquín Almunia, *Competition and consumers: the future of EU competition policy*, speech at European Competition Day, Madrid, 12 May 2010.

[59] *Amendments to the Communication from the Commission Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*, C(2023) 1923 final.

[60] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 322.

[61] European Commission, Directorate-General for Competition, McCallum, L., Bernaerts, I., Kadar, M., et al., *Competition policy brief. A dynamic and workable effects-based approach to the abuse of dominance*, 2023.

[62] Case T-604/18, *Google and Alphabet v Commission (Google Android)* EU:T:2022:541, para. 1028, on appeal, Case C-738/22 P, judgment pending.

[63] European Commission, Directorate-General for Competition, McCallum, L., Bernaerts, I., Kadar, M., et al., *Competition policy brief. A dynamic and workable effects-based approach to the abuse of dominance*, 2023. p. 1.

[64] See, e.g., Case C-377/20, *Servizio Elettrico Nazionale and others* EU:C:2022:379, para. 45; Case C-413/14 P, *Intel v Commission* EU:C:2017:632, paras. 133–134; Case C-209/10, *Post Danmark I*, para. 22.

detract from consumer welfare being the primary goal of Article 102, but it emphasizes that its enforcement is interconnected with broader EU objectives.[65]

3.2 Tipping Effects on EU Competition Law Objectives

The effects of tipping, such as the efficiencies derived from network effects and data aggregation, do not inherently pose a problem from a consumer welfare perspective. Consumers benefit from the cost-efficiency of network effects, which can lead to increased choices, greater convenience, and lower prices. A fundamental principle in competition law is that dominance itself is not harmful if it arises from competition on the merits.[66] Consumers and society at large can benefit from the efficiencies a dominant firm can generate. For example, a narrow consumer welfare perspective on predatory pricing might suggest it is not problematic because the strategy results in lower consumer prices. If these business strategies benefit consumers, then what is the issue?

As previously discussed, however, EU competition law aims to maintain competition in the internal market. This means that competition law addresses conduct that harms consumers directly, such as exploitative abuse, and conduct that harms competition itself. Conduct that harms competition, such as exclusionary practices, indirectly harms consumers by reducing quality, choice, and innovation. This broader EU approach to consumer welfare allows for considerations beyond purely economic ones when examining whether an action negatively affects consumers. With this perspective highly concentrated markets with high barriers to entry can harm consumers.

An issue with digital platforms is that firms can become large thanks to network effects, which relate to the number of individuals, customers, or firms interacting on the platform, meaning a dominant undertaking might not have gained their dominance thanks to superior quality of the product or service. Due to information asymmetries, it can be hard for consumers to assess quality as they would with traditional services or products, making platforms bigger, not thanks to their attractiveness to users but due to network effects. Moreover, what constitutes high quality can vary among users; for some, price and convenience are paramount, while others may prioritize privacy and democratic impact. Many may consider all these factors relevant, but due to these information asymmetries, assessing these aspects can be challenging.[67] On quality, a tipped market provides low incentives for firms to innovate further. The list of suppliers to choose from might also be low, seeing as tipped markets deter market entry of new firms.[68]

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[65] Kadar, M. & Holzwarth, J., *Effects-based approach? Effects-based approach! The European Commission's "Article 102 Package"*, Neue Zeitschrift für Kartellrecht, 2023, pp. 333–334.

[66] OECD Competition Committee, *Competition on the merits*, Series Roundtables on Competition Policy number 56, 2005, p. 149.

[67] Tang, Y., Zhang, Y. & Ning, X., *Uncertainty in the platform market: The information asymmetry perspective*, Computers in Human Behavior, Volume 148, 2023, Introductory Chapter.

[68] Prufer, J. & Schottmüller, C., *Competing with Big Data*, TILEC Discussion Paper, February 2017, p. 3.

It is also relevant to discuss how high concentrations of market power within digital markets affect democracy, especially given that the Commission has updated the objectives of competition law to include it. Digitalization has brought advantages in this area, with platforms enabling communication and collaboration in unprecedented ways, which have proven to be assets for societies in various aspects. For instance, social media platforms have played a role in democratic revolutions by facilitating communication and coordination among protestors. These platforms allowed users to share real-time information, coordinate protest activities, and mobilize support locally and globally. In regions where traditional media is state-controlled or censored, social media may provide an alternative platform for citizens to exchange information and organize freely. Social media platforms thus can give a voice to individuals and groups who might otherwise be marginalized or silenced by traditional media outlets.[69]

However, the issue lies not in the technology itself but in the fact that a few dominant companies control the infrastructure for disseminating information (i.e., data). This concentration raises human rights and democratic concerns, including privacy, free speech, and the potential manipulation of democratic processes. Social media platforms and search engines can shape public discourse and information dissemination, as their algorithms determine what information is promoted or suppressed. This control over the flow of information can influence public opinion, electoral outcomes, and the overall health of democratic debate. Concerns have been raised about the platforms' potential to amplify misinformation and extremist content, as well as "algorithm-based censorship" restricting the public debate.[70] The role of Big Tech in elections and democratic processes has come under scrutiny, especially regarding targeted advertising and the potential for foreign interference.[71]

3.3 Article 102 and Some Limitations

3.3.1 Abuse of Dominance

In the EU, Article 102 is designed to prevent the abuse of a dominant position. This provision is a cornerstone of EU competition law, targeting:

> [a]ny abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it [...] in so far as it may affect trade between Member States.

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[69] See, e.g., Norris, P., *Political mobilization and social networks. The example of the Arab Spring*, in Kersting, N., Stein, M. & Trent, J. (eds.) Electronic Democracy, Opladen 2012, pp. 56–76.
[70] Robertson, V.H.S.E., *Antitrust, Big Tech, and Democracy: A Research Agenda*, The Antitrust Bulletin, Volume 67, Issue 2, p. 4.
[71] Robertson, V.H.S.E., *Antitrust, Big Tech, and Democracy: A Research Agenda*, The Antitrust Bulletin, Volume 67, Issue 2, p. 10.

Exclusionary abuse includes practices that exclude competitors from the market, thereby harming the competitive process. Such practices are particularly prevalent in digital markets due to their structure.[72] Abuse is an objective concept,[73] meaning that conduct can be abusive even without any fault or intent. The undertaking's argument that the conduct was *not* intended to discourage or weaken its competitors is irrelevant to classifying the act as abusive. An anticompetitive purpose is thus not necessary to establish a violation of Article 102. However, the existence of such a purpose can support the argument that a firm has abused its dominant position.[74] The CJEU assesses whether a conduct is abusive by considering the actual or potential effects that the action has or could have, aligning with the effects-based approach advocated by the Commission, at least within the last decade.

Beyond actual measurable effects, the court has identified several criteria that can be used to assess anticompetitive effects. In cases such as *Post Danmark II* and *Intel*, the court noted that coverage is one of these criteria, as conduct that only applies to a few cannot have such anticompetitive effects. Similarly, the more market power a company posits, the more likely are the anticompetitive effects of the practice. The form of the action also matters, indicating that abusive actions that are not considered normal business conduct are more likely to have restrictive effects on the market. Additionally, whether the conduct is part of a plan to exclude competition can also matter. Finally, the characteristics and the regulatory context of the relevant market may also be used to assess any potential effects.[75]

Article 102 applies only if the firm in question holds a dominant position. The importance of establishing dominance as a prerequisite for finding abuse has been emphasized consistently in case law. In cases like *United Brands* and *Hoffmann-La Roche* define dominance as a power that enables a firm to act independently from other market actors.[76] The fact that a firm has a dominant position does not mean it has a monopoly on the market. Thus, in markets with dominant firms, competition exists, but is distorted.[77] The Commission and the CJEU have developed criteria to assess dominance. To determine whether an undertaking has a dominant position, the Commission and the CJEU apply a two-step approach, whereby the relevant market is defined as a first step. The second step includes assessing the undertaking's power on that market. The market power of the undertaking in question is defined through an analysis of market shares and other factors that may indicate a dominant market position, like high

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[72] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 396.
[73] Case C-85/76, *Hoffmann-La Roche v Commission* EU:C:1979:36, para. 91.
[74] See, e.g., the reasoning of the GC in Case T-301/04, *Clearstream v Commission* EU:T:2009:317, para. 142 and Case T-321/05, *AstraZeneca v Commission* EU:T:2010:266, para. 359.
[75] Ibáñez Colomo, P., *The (Second) Modernisation of Article 102 TFEU: Reconciling Effective Enforcement, Legal Certainty and Meaningful Judicial Review*, Journal of European Competition Law & Practice, Volume 14, Issue 8, 2023, p. 615.
[76] Case 85/76, *Hoffman-La Roche v Commission* EU:C:1979:36, para 41; Case C-27/76, *United Brands v Commission* EU:C:1978:22, para. 65.
[77] Concurrences – Antitrust Publications & Events , "dominance", retrieved 25 April 2024, available at concurrences.com/en/dictionary/dominance-notion.

barriers to entry. When dominance is disputed, it is generally about defining the relevant market, as determining the market power once the relevant market is established usually is relatively straightforward.[78]

A traditional tool for defining relevant markets is the SSNIP test (Small but Significant and Non-transitory Increase in Price). The SSNIP test is used to define the relevant product market through a hypothetical experiment to identify which products consumers would turn to if the price of a good was increased slightly but significantly over a period of time. This test, however, is less effective when zero-price products are involved, often being the case in digital markets.[79] To address this, the SSNDQ test (Small but Significant Non-transitory Decrease in Quality) was developed, focusing on quality reduction rather than price increases.[80] However, operationalizing the SSNDQ test is challenging due to difficulties in defining and measuring quality reductions, such as privacy loss or increased data retrieval.[81] The trend towards product and price individualization further complicates market definition. Such personalization can lead to lock-in scenarios, necessitating more restricted secondary market definitions unless addressed through competition law or other measures.[82]

3.3.2 Limitations Related to Tipping

As stated in the beginning, when the Commission considered introducing the New Competition Tool,[83] a survey among member states revealed that Articles 101 and 102 were insufficient for addressing competition issues in digital markets.[84] There were two main reasons why it was seen as an inadequate tool. First, intervention is only possible after a firm has reached a dominant position, making it difficult to address structural risks to competition. The structure of the market and difficulties in entering it, for example, due to network effects, can affect market power. However, it is challenging to identify markets prone to tipping. The second reason is that it is only possible to intervene after a company has initiated anticompetitive conduct.[85] Since Article 102 cannot be used preventively, it is inadequate in addressing a structural lack of competition.

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[78] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 330–331.
[79] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 124.
[80] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, p. 33.
[81] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, p. 33.
[82] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 33–34.
[83] It was later abandoned, and the DMA was issued instead.
[84] European Commission, *Summary of the contributions of the National Competition Authorities to the impact assessment of the new competition tool*, 2020, p. 6.
[85] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, English Summary, p. 12.

In the German report *Modernising the Law on Abuse of Market Power,* the authors also question whether EU competition law is adaptable enough to meet the challenges of the digital economy. They explore whether the current threshold for market dominance in Article 102 is set too high. The report identifies scenarios where competition law intervention could be beneficial even below this threshold, including unilateral actions by firms not yet dominant in digital markets that are likely to tip. The report characterizes this as "likely to promote a dangerous probability of monopolization",[86] a concept revisited in the next chapter.

Another issue with Article 102 is the connection between market power and independence. The idea is that dominant undertakings lack competitive control and thus can behave independently from other actors on the market. The lack of competition control, however, can be assessed in other ways than determining market shares and high barriers to entry, especially in markets prone to tipping. Concerning consumers, for example, the lack of competitive control might also stem from information asymmetries.[87] Information asymmetries, however, exists in all markets. Perfect competition requires a perfect level of consumer knowledge to make economically rational choices, which is rarely the case. In digital markets, however, information asymmetries are particularly prevalent. An example would be if a consumer does not have complete information at the time of purchase, making it challenging to assess the outcomes of their transactions.[88]

The fact that digital markets suffer from a high degree of information asymmetry, combined with the inherent design of digital markets, making them prone to tip, suggests that the reason for a digital undertaking's dominance does not have to do with its superiority over its competitors. If enough consumers choose a particular platform benefitting from positive network effects, this platform can become dominant even if it does not offer the "best" product or service; one can explain it as the firm has gained dominance without having competed on the merits.[89]

"Competition on the merits" comes from early competition law. It is about distinguishing companies that gained market power thanks to their competition on the merits from those that have acted illegally. The theory is based on the idea that only dominant undertakings can afford to act abusively.[90] Today, this idea is said to be somewhat outdated. The CJ has since then expressed that behavior that constitutes normal competition for smaller companies can constitute abuse for dominant companies. Dominant companies have a so-called "special

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[86] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 1–2.

[87] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 35–36.

[88] Tang, Y., Zhang, Y. & Ning, X., *Uncertainty in the platform market: The information asymmetry perspective*, Computers in Human Behavior, Volume 148, 2023, Introductory Chapter.

[89] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 35–36.

[90] Case C-85/76, *Hoffmann-La Roche v Commission*, para. 41.

responsibility" because they are not as exposed to competition as their smaller competitors.[91]

3.4 Summary

Tipping may lead to reduced competition and indirectly affecting consumer welfare, as interpreted within EU Competition policy, negatively. Furthermore, tipping in digital markets raises democratic concerns, as the concentration of power over information flow creates the potential for manipulating public opinion or electoral processes. Given the nature of digital markets and the difficulty in reversing a tipped one, it may be beneficial for competition policy to permit early intervention when dealing with tipping cases. An issue here is that Article 102 only allows for intervention once it is established that the undertaking in question is dominant on the relevant market.

If the aim is to be able to apply competition law against abusive behavior as early as possible one strategy may be to incorporate the specific market structures that make a market easy to tip into the assessment of dominance and anti-competitive effects. Another strategy is to move away from the established dominance test and instead use the conduct itself and the intention to tip the market as sufficient evidence of violation. Such an approach is based more on the form of the conduct, and proponents of this idea argue that it is the conduct itself that should be prohibited and that less weight should be given to the possible power of the firm and the possible consequences of the conduct. Before moving further into the current application and recent developments of Article 102, I explore ways to lower the intervention threshold through a comparative study. In doing so, the next chapter takes you across the Atlantic to the birth country of antitrust.

[91] Case C-322/81, *Michelin v Commission (Michelin I)* EU:C:1983:313, para 57.

4 Lowering the Threshold via the US Attempt Offense?

4.1 Sherman Act Section 2 – Completed and Attempted Monopolization

The same German report as mentioned in the previous part, *Modernising the Law on Abuse of Market Power*, brings up, but quickly dismisses, the possibility of using US antitrust as inspiration to lower the intervention threshold for Article 102, thus allowing for earlier intervention.[92] However, this possibility will be discussed more in-depth in the following part, primarily related to the US antitrust offense "attempt to monopolize". As one of the fundamental antitrust laws in the US, the Sherman Act plays a central role in regulating and preserving competitive market practices. Section 1 of the Sherman Act prohibits such contracts, or trusts, restraining competition in the States. Section 2 of the Sherman Act, on the other hand, outlines the legal framework against unilateral, monopolistic behaviors, stating the following:

> Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among several States, or with foreign nations, shall be deemed guilty of a felony […]

For monopolization, as defined in the landmark case *United States v. Grinnell Corp.*, the requirements are possession of monopoly power in the relevant market, which includes both product and geographic dimensions and a willful acquisition or maintenance of that power.[93]

Attempted monopolization involves a proactive effort to achieve monopoly power without its full realization but with a clear direction toward such an outcome. This means that both anticompetitive actions that have or could lead to a monopoly are actionable under US law. The criteria for the attempt to monopolize offense are, as outlined in *Swift & Co. v United States*, 1) a specific intent to attain monopoly power, 2) an anticompetitive or exclusionary act aimed at

[92] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 44–46.
[93] *United States v. Grinnell Corp.*, 384 U.S. 563, 570–571 (1966).

accomplishing that intent, and 3) a dangerous probability of success in achieving monopoly power.[94]

Completed monopolization under Section 2 of the Sherman Act necessitates a *general* intent to commit the act, usually inferred from actions that constitute the offense. In contrast, attempted monopolization requires a *specific* intent to achieve monopolization. A general intent to carry out the action does not suffice, but it the intent needs to be directed towards monopolizing the market. Specific intent is, however, also usually inferred from the anticompetitive conduct in question due to the inherent challenges of providing direct proof of specific intent. Since most companies aim to succeed and grow, distinguishing between legitimate business strategy and illegitimate specific intent to monopolize the market can be challenging. Specific intent can, however, serve as evidence in attempted monopolization claims if the conduct itself is not clearly anticompetitive. Thus, specific intent and anticompetitive conduct are closely linked.[95] Within EU competition law, an anticompetitive intent is not necessary to violate Article 102. However, it can be used as evidence to strengthen the thesis that a company is abusing its dominant position.[96] Thus, it can be concluded that intent is treated somewhat similarly, at least in practice, under EU and US competition law.

Regarding anticompetitive or exclusionary conduct, Section 2 of the Sherman Act primarily aims to prevent injury to competition through the exclusion of rivals.[97] Exploitative abuses, such as charging excessive prices, are not typically addressed by US antitrust law.[98] The EU definition of abuse is broader and includes both exclusionary and exploitative abuses. Nevertheless, both jurisdictions prohibit exclusionary practices that can harm competition, which is the type most relevant in the context of digital markets. However, the same anticompetitive practices may not imply attempted monopolization under Sherman Act Section 2 for a company with less market power, indicating that market power is a factor in determining attempts to monopolize,[99] which is the recognized position of the attempt offense.[100] However, the third criteria, a dangerous probability of success at achieving monopoly power, has been a subject of debate within American antitrust jurisprudence. Jurisprudence is divided between those advocating for market power as essential for establishing an attempt to monopolize (called the

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[94] *Swift & Co. v. United States*, 196 U.S. 375, 396 (1905); see also *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993).

[95] Roszkowski, M. E. & Brubaker, R., *Attempted Monopolization: Reuniting a Doctrine Divorced From its Criminal Law Roots and the Policy of the Sherman Act*, Marquette Law Review, Volume 73, No. 3, Spring 1990, p. 362–363.

[96] Case T-301/04, *Clearstream v Commission*, para. 142; Case T-321/05, *AstraZeneca v Commission* EU:T:2010:266, para. 359.

[97] Adkinson, W. F., Grimm, K. L. & Bryan, C. N., *Enforcement of Section 2 of the Sherman Act: Theory and Practice*, Working Paper, November 3 2008, p. 3.

[98] Concurrences, "antitrust", retrieved 3 March 2024, available at concurrences.com/en/dictionary/Antitrust.

[99] Roszkowski, M. E. & Brubaker, R., *Attempted Monopolization: Reuniting a Doctrine Divorced From its Criminal Law Roots and the Policy of the Sherman Act*, Marquette Law Review, Volume 73, No. 3, Spring 1990, p. 363–364.

[100] *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 459 (1993).

majority or classic approach) and others who believe it unnecessary (called the minority or expansionary approach).[101]

4.2 The Minority Position – A Conduct Offense

The Ninth Circuit of the US Court of Appeal has developed a minority position to the attempt offense.[102] In *Lessing v. Tidewater Oil Co.*[103] the court states that "specific intent itself is the only evidence of dangerous probability the statute requires", meaning that dangerous probability of success can be inferred from specific intent.[104] In later cases the court has moved slightly away from this approach and has instead stated that dangerous probability of success in *most* cases can be deduced from anticompetitive practices and specific intent[105], but that proof of dangerous probability of success is necessary when the practice is not clearly anticompetitive.[106] Advocates for the minority position argue that the language and the history of Section 2 of the Sherman Act show that the provision was intended to prohibit active conduct rather than a state of being.[107] Thus, market power analysis should be irrelevant to a conduct offense such as attempted monopolization, at least when the conduct is unambiguously anticompetitive.[108]

When dealing with markets susceptible to tipping, the proposal to eliminate market share requirements, like the view in *Lessing v. Tidewater Oil Co.*, could be a solution, as it would allow interference irrespective of the undertaking's position on the market. This approach suggests a departure from traditional EU practices. Eliminating the dominance requirement in Article 102 application is appealing because it simplifies legal processes by avoiding defining a relevant market and assessing market power. It can be even more tempting given the difficulties of doing so in a digital economy. This method presumes the danger of the completion of the offense solely based on the presence of anticompetitive conduct and specific intent, two criteria that, in my view, are treated essentially the same in practice in the EU and the US.

An argument used by the majority *for* considering market power is the risk of nonsense complaints if claims against all sorts of undertakings are allowed.

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101 Roszkowski, M. E. & Brubaker, R., *Attempted Monopolization: Reuniting a Doctrine Divorced From its Criminal Law Roots and the Policy of the Sherman Act*, Marquette Law Review, Volume 73, No. 3, Spring 1990, p. 356.

102 See, e.g., *A.H. Cox & Co. v. Star Machinery Co.*, 653 F.2d 1302 (9th Cir. 1981); *California Steel & Tube v. Kaiser Steel Corp.*, 650 F.2d 1001 (9th Cir. 1981); *Pierce Packing Co. v. John Morrell & Co.*, 633 F.2d 1362 (9th Cir. 1980).

103 327 F.2d 459 (9th Cir. 1964) at 474.

104 Bjorkman, J. C., *Attempt to Monopolize: Dangerous Probability of Success as an Obstacle to Enforcing Section 2 of the Sherman Act*, Seattle University Law Review, Volume 5, 1982, p. 295.

105 *A.H. Cox & Co. v. Star Machinery Co.* 653 F.2d 1302 (9th Cir. 1981), at 1308.

106 *California Steel & Tube v. Kaiser Steel Corp.* 650 F.2d 1001 (9th Cir. 1981) at 1004.

107 Bjorkman, J. C., *Attempt to Monopolize: Dangerous Probability of Success as an Obstacle to Enforcing Section 2 of the Sherman Act*, Seattle University Law Review, Volume 5, 1982, p. 295–298.

108 Bjorkman, J. C., *Attempt to Monopolize: Dangerous Probability of Success as an Obstacle to Enforcing Section 2 of the Sherman Act*, Seattle University Law Review, Volume 5, 1982, p. 298.

However, this may be more prevalent in the US. In the US, the parties bear only their own costs. In addition, antitrust laws allows treble damages for plaintiffs if they win an attempted monopolization claim,[109] and the majority fears that the system would be used for violations only causing small or insignificant damage to competition. In the EU, however, the enforcement of Article 102 is primarily the responsibility of the Commission and the NCAs. They investigate alleged abuse of dominance, which can be initiated based on complaints or through ex officio investigations. Therefore, the argument regarding nuisance complaints is not as valid in an EU context.

Furthermore, the majority fears that an approach that excludes the market power criteria might even damage competition since it would discourage small undertakings from aggressive business conduct. The ability of a company to innovate and compete could be stifled if they are perpetually at risk of being deemed dominant without the necessity of demonstrating substantial market power. This argument is serious, as it would completely go against the very purpose of competition law. The US Supreme Court Judgment of *Copperweld v. Independence Tube*[110] discusses the reasons for excluding unilateral anticompetitive conduct from non-dominant undertakings from antitrust. The court states that Congress purposefully left a gap in the legislation, where such conduct committed in conspiracy may be prohibited under Section 1 of the Sherman Act, while the same conduct committed by a firm, unilaterally, which does not possess sufficient market power, is not prohibited. This, the court continues, is true even if the conduct has the same effects on competition as if it had been committed in conspiracy (and thus liable under Section 1 of the Sherman Act). The Court frames it as follows:

> Because the Sherman Act does not prohibit unreasonable restraints of trade as such – but only restraints effected by a contract, combination, or conspiracy – it leaves untouched a single firm's anticompetitive conduct (short of threatened monopolization) that may be indistinguishable in economic effect from the conduct of two firms subject to § 1 liability.[111]

The court held that Congress had sound reasons to do this, as "[s]ubjecting a single firm's every action to judicial scrutiny" would do more harm than good to competition.[112]

This reasoning may come from the US courts' concern with overenforcing antitrust laws. Overenforcement (also called type-I errors or false positives) is when an act is considered illegal without causing any harm to competition. Conversely, underenforcement (also called type-II errors or false negatives) is when the act in question is allowed despite causing competitive harm.[113] Within an EU

[109] 15 U.S. Code § 15(a).
[110] *Copperweld v. Independence Tube*, 467 U.S. 752 (1984).
[111] *Copperweld v. Independence Tube*, 467 U.S. 752, 775 (1984).
[112] *Copperweld v. Independence Tube*, 467 U.S. 752, 775 (1984).
[113] Broulík, J., *Predictability: a mistreated virtue of competition law*, Journal of Antitrust Enforcement 2023, p. 4.

context, the view was that the more economic, effects-based approach adopted after the issuing of the Guidance Paper 2009 resulted in more false negatives, which is part of why the Guidance Paper now is reviewed.[114] Although US courts usually have been more hesitant to get involved in overseeing complicated business practices[115] overenforcement is, however, neither desirable within EU competition law.

Furthermore, the intent criterion for attempted monopolization originates from the principle that criminal punishment is reserved for intentional actions that pose imminent harm to society[116] – a standard that might not be suitable for assessing competitive behaviors in business, at least not in an EU context where this would be foreign. As companies naturally strive for increased market power, applying a criminal law framework to business practices could mischaracterize competitive strategies as illicit attempts at monopolization. The difficulties in distinguishing permissible business strategies from impermissible ones, in general, and in particular with the rapid development of the digital sector, make it inappropriate to draw inspiration from criminal law to solve the tipping issue. It is also inappropriate to draw inspiration from the criminal law doctrine of attempts because the lines between abuse of a dominant position and that of legal competitive conduct do not meet the requirement of legality that should apply in criminal punishment. Adopting the minority approach in the EU could simplify enforcement, especially in digital markets, by eliminating the need to define market power. However, overenforcement and stifling competition are serious concerns, making this approach less attractive to solve the issue of tipping in digital markets.

4.3 The Majority Position – Partly Conduct, Partly Structure

The prevailing approach is that a violation of Sherman Act Section 2 attempt to monopolize requires some degree of market power to reach a dangerous probability of monopolizing the market in question.[117] To determine what constitutes a sufficient market power for a dangerous probability of achieving monopoly power, we have to start with the definition of monopoly power. Monopoly power is defined in casu and can depend on more factors than market shares, similar to the EU competition framework. However, the US courts generally look for a

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[114] Ibáñez Colomo, P., *The (Second) Modernisation of Article 102 TFEU: Reconciling Effective Enforcement, Legal Certainty and Meaningful Judicial Review*, Journal of European Competition Law & Practice, Volume 14, Issue 8, 2023, p. 612.

[115] Keyte, J., *Why the Atlantic Divide on Monopoly/Dominance Law and Enforcement Is So Difficult to Bridge*, Antitrust, Volume 33, Issue 1, Fall 2018, p. 114.

[116] Delineated in *Swift & Co. v. United States*, 196 U.S. 375 (1905) by Justice Holmes and enunciated by Holmes in *Commonwealth v. Peaslee*, 177 Mass. 267, 271–272 (Mass. 1901).

[117] *Swift & Co. v. United States*, 196 U.S. 375 (1905); *United States v. American Tobacco Co.*, 221 U.S. 106 (1911); *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951); *Walker Process Eqpt., Inc. v. Food Machinery Corp.*, 382 U.S. 172 (1965); *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993).

significant market share as a primary indicator of monopoly power. A market share of over fifty or seventy percent has often been considered sufficient to demonstrate monopoly power, but this is not an absolute rule, and lower shares might also be sufficient if accompanied by other factors like barriers to entry and lack of competitive alternatives.[118]

There is consensus that an attempt to monopolize claim does not require as high a market share as do monopolization claims.[119] In the case *Domed Stadium Hotel, Inc. v. Holiday Inns, Inc.*[120] the Fifth Circuit of the US Court of Appeal stated that a share of less than fifty percent may support a claim for attempted monopolization. In the case *M&M Medical Supplies and Service, Inc. v Pleasant Valley Hospital, Inc.* the Fourth Circuit claims that, when the other prerequisites of attempted monopolization are satisfied, cases above fifty percent should be treated as such. It further states that claims of attempted monopolization where the defendant holds market shares between thirty and fifty percent only should be viewed as such if it is very likely that monopoly will be reached or if the act alone is especially unwanted.[121] In the EU stable market shares above fifty percent have been associated with a rebuttable presumption of dominance, as indicated in *Akzo v Commission*.[122] Under certain circumstances, a market share slightly below forty percent can be sufficient to establish dominance if other factors support such a finding.[123]

The market power required to establish a dominant position in EU competition law and the degree needed to represent a dangerous probability of achieving monopoly power in US antitrust law are not directly equivalent, due to differing legal standards and economic contexts. Although the legal frameworks and terminologies vary between the EU and the US, case law from both regions suggests that the market share percentages considered indicative of dominance or a dangerous probability of achieving monopoly power often fall within similar ranges. It is important to recognize that assessing market power is a multifaceted process involving a comprehensive analysis of market conditions and competitive dynamics in both jurisdictions. A conclusion can however be drawn that the EU can reach such conduct that falls under Section 2's attempted monopolization provision since Article 102 requires a considerably less amount of market power than is required for monopoly power.[124] However, the aim of this paper is not to directly translate attempted monopolization to an EU context, but to draw inspiration to fill a regulatory gap. Thus, the possibility of implementing a similar concept as a dangerous probability in Article 102 will be discussed below.

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[118] Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018, pp. 44–45.

[119] See, e.g., *Colorado Interstate Gas Co. v. Natural Gas Pipeline Co. of America*, 885 F.2d 683, 694 (10th Cir. 1989) and *Rebel Oil Co., Inc. v. Atlantic Richfield Co.*, 51 F.3d 1421, 1438 (9th Cir. 1995).

[120] *Domed Stadium Hotel, Inc. v. Holiday Inns, Inc.*, 732 F.2d 480, 490 (5th Cir. 1984).

[121] *M & M Medical Supplies v. Pleasant Valley Hospitals*, 981 F.2d 160, 168 (4th Cir. 1992).

[122] Case C-62/86, *Akzo v Commission* EU:C:1991:286, paras. 59–60.

[123] See Case T-219/99, *British Airways v Commission* EU:T:2003:343.

[124] Hawk, B. E., *Attempts to Monopolize: An American Anomaly*, The Antitrust Bulletin, Volume 62, Issue 4, 2017, footnote 3.

The US majority approach to attempted monopolization is that it, like completed monopolization, is partially a structure offense, partially a conduct offense. Applying this approach in an EU context, one solution could be to lower the threshold for activating Article 102 generally, to a dangerous probability of achieving dominance. Lowering the intervention threshold for Article 102 would make more tipping cases eligible. As shown, however, US dogmatics are different in that their framework distinguishes between completed and attempted monopolization, where the attempt offense is often used as a secondary claim to completed monopolization, which suggests that the attempt offense is seen as less reprehensible. In the EU, the threshold to fall under Article 102 TFEU is already lower than it is to activate a completed monopolization claim in the US. A general lowering of the dominance threshold is not warranted, and it would probably create similar problems of foreseeability and the chilling of competition as we have seen in the previous part. Rather, it would be advised to try to solve these issues in a way that targets these situations specifically.

One way of making the change more specific is to reinforce the role of market structure in the assessment of a possible breach of Article 102. This idea is that in cases where the market is inherently designed in such a way that it can easily tip, it should be sufficient to show that the market is tipping-prone and that the undertaking has some market power (which would be less than needed for dominance) to show that the undertaking has a dangerous probability of achieving dominance, and that this would be sufficient to activate Article 102 TFEU. In this way, market structure and dominance would act as alternative but complementary requirements, where if the market structure is not particularly easy to monopolize, the normal requirement of dominance would prevail. If, however, it can be proven that the market is especially prone to tip, less market power would be necessary. Thus, it can be described that undertakings that have a dangerous probability of achieving a dominant position due to the relevant market structure and due to their power on that market, that acts in a way that render actual or potential anticompetitive effects would be covered by Article 102. The principle of special responsibility held by dominant firms could be analogously applied to firms in tipping-prone markets. This precautionary approach would require firms to conduct themselves in a way that does not exploit the tipping dynamics of the market to hinder competition.

4.4 Summary

The minority position argues that specific intent and anticompetitive conduct should suffice for attempted monopolization, regardless of market share. Upon reviewing the implications of adopting the US minority holding to attempted monopolization in an EU context, there is reason to believe that such a shift could lead to a legal environment less conducive to fair competition and innovation. The US majority view on attempted monopolization claims that a certain degree of market power needs to be shown to have a dangerous probability of success in reaching monopolization, which might serve as better inspiration.

Instead of eliminating market power requirements, refining these criteria to better reflect the dynamics of modern markets may be more effective.

The next chapter analyzes case law from the GC regarding anticompetitive conduct on digital markets, to see if these changes are already here, and thus ultimately tries to answer the question if Article 102 covers practices where undertakings try to achieve a dominant position through using the inherent tipping-prone structures of digital markets.

5 Article 102 – Towards a "Dynamic and Workable" Approach?

5.1 The Adaptation of Article 102 to a Digital Economy

A lot has happened since the claims of the inadequacy of Article 102 (brought up in the section "Limitations Related to Tipping") and there is still a lot going on that will impact the future of Article 102. Earlier this year, the Commission issued a Revised Market Definition Notice,[125] providing guidelines for defining the relevant market and assessing market power. Next year, it will issue its new guidelines on exclusionary abuses for Article 102 enforcement.[126] s both the Revised Market Definition Notice and the updated guidelines rest on case law from the Commission itself, as well as from the CJEU, it provides a rationale to look at some decisions and cases relating to the digital market, and how the Commission and the court has treated factors such as network effects and data in assessing dominance and the severity of the effects of their conduct.

As said earlier in the "Methods and Material" section, due to difficulties in finding case law that dismisses the Commission's dominance assessment, the development of case law is based on decisions and judgments where the dominance question is not the primary one. However, it is of interest in this thesis how the Commission and the CJEU deal with the structures of digital markets. This includes the Commission and CJEU's reasoning on factors characteristic of digital markets in relation to the assessments of anticompetitive effects, as this can provide guidance on the direction in which EU competition law in general, and Article 102 in particular, is heading. Thus, this chapter first addresses the *Google Shopping* case and how the GC approach self-preferencing, a (then) new theory of harm. Next, it is discussed how the GC defined the relevant market in the *Google Android* case, which has in part been translated into the Revised Market Definition Notice.

[125] *Commission Notice on the definition of the relevant market for the purposes of Union competition law (Revised Market Definition Notice)* C/2024/1645.

[126] The Commission has announced intentions to release proposed Guidelines for public review in the summer of 2024, aiming to finalize and adopt them by 2025. Upon the adoption of these Guidelines, the existing Guidance Paper will be withdrawn.

5.2 *Google Shopping* – Essential Facility Doctrine

The *Google Shopping*[127] case concerns the Commission's decision[128] against Google regarding Google's so-called self-preferencing. The case involved two markets: Google's dominant general online search service and its comparison shopping service. The general online search service is probably the one most people associate Google with, as online searching for information is even called "googling". The comparison shopping device is a specialized search engine, offering search results from different merchant websites. The practice under scrutiny was that Google showed its own comparison shopping service more favorably in its search results on its general search engine, while simultaneously demoting results from competitors' comparison shopping devices.[129] Google did not dispute its dominant position.[130] The Commission stated that Google had abused its dominant position in the market for general search services by, illegally, giving advantages to its own service, thereby infringing Article 102.[131] In its decision, the Commission defined Google's self-preferencing as leveraging since it transferred the market power on its general search engine to its specialized one.[132]

In challenging the Commission's decision, Google contended that its behavior should not be categorized under Article 102, arguing that its self-preferencing constituted a product improvement and thus represented a legitimate form of competition. However, the Commission found this argument unconvincing, as established case law does not afford special consideration to product improvements over other types of conduct.[133] Even if a product's design offers competitive advantages, it can still be deemed abusive. Product improvements are comparable to other potentially pro-competitive strategies like standardized rebate schemes, tying, or refusing to license intellectual property rights. Consequently, the Commission rejected Google's argument.[134]

The GC, however, examined this issue in greater depth. The court described this behavior as a "certain form of abnormality".[135] The primary argument to this was that Google's favoritism towards its own shopping service contradicted the universal function of its search engine, which according to the court, is to generate results with any possible content.[136] Thus, it was "not necessarily rational" for Google to limit the scope of its results.[137] In relation to this statement, the court noted that Google could only engage in such conduct due to its significant market

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[127] Case T-612/17, *Google and Alphabet v Commission (Google Shopping)* EU:T:2022:541, on appeal, Case C-48/22 P, judgment pending.
[128] AT.39740, *Google Search (Shopping)* 27 June 2017.
[129] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 584.
[130] Case T-612/17, *Google Shopping*, para. 119.
[131] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, p. 546.
[132] AT.39740, *Google Search (Shopping)* 27 June 2017, para. 649, confirmed in Case T-612/17, *Google Shopping*, para. 240.
[133] AT.39740, *Google Search (Shopping)* 27 June 2017, para. 652.
[134] Ibáñez Colomo, P., *Competition on the merits*, 61 Common Market Law Review, December 20 2023, forthcoming in 2024, p. 30.
[135] Case T-612/17, *Google Shopping*, para. 176.
[136] Case T-612/17, *Google Shopping*, para. 176.
[137] Case T-612/17, *Google Shopping*, para. 178.

power, as this behavior of self-preferencing would constitute a risk for smaller undertakings.[138] The court furthermore stated that it became increasingly apparent that Google's business practices did not constitute competition on the merits as it changed its behavior towards self-preferencing to leverage its dominance on other markets on the market for comparison shopping devices.[139] Some commentators argue that this judgment suggests a return to the "competition on the merit" doctrine.[140] The Court's argument that Google's behavior was abnormal could indicate a some-what departure from the effects-based approach. This approach is appealing as it would facilitate enforcement, especially when effects are difficult to measure or assess.

However, this might be a far-reaching interpretation. The court had no problem with self-preferencing in isolation, but it was mainly in combination with Google treating its competitors with a malicious downgrading,[141] together with the court's assessment of the facts supporting anticompetitive effects provided by the Commission that led the court to the conclusion that Google had violated Article 102. More noteworthy is that the Court described Google's search engine as an essential facility. The Commission described Google's general search engine as effectively irreplaceable, and that there were no economically viable alternatives, which the GC agreed with.[142]

Some commentators argue that this is controversial. The essential facility doctrine has traditionally been applied to regulated industries where companies holding monopolies on traditional essential facilities such as railways did not generally run a particularly high commercial risk as they were often protected by state monopolies. This is not the case here. Instead, Google has invested heavily in creating an attractive and usable platform.[143] Thus, defining Google's general search engine as an essential facility might hinder innovation and competition as it risks penalizing companies just because they have managed to create a useful (the best?) platform.

However, I do not agree that this would be a controversial finding by the Court. I believe that digital infrastructure is as important today as physical infrastructure was 100 years ago, when the US enacted its first antitrust laws[144] to curb trusts and monopolies, including in the railroad industry. Considering the data that Google controls and the effects it has and might have on innovation, quality and democracy, all important goals of EU competition law, I think it is reasonable to view Google's general search engine as an essential facility. It merely reflects the reality we live in and is a step in the right direction towards a more workable approach to Article 102.

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[138] Case T-612/17, *Google Shopping*, para. 178.
[139] Case T-612/17, *Google Shopping*, paras. 181–184.
[140] Ibáñez Colomo, P., *Competition on the merits*, 61 Common Market Law Review, December 20 2023, forthcoming in 2024, p. 31.
[141] Case T-612/17, *Google Shopping*, paras. 176-179.
[142] Case T-612/17, *Google Shopping*, paras. 224-228.
[143] Bergqvist, C., *Google Shopping and Self-favoring as a Separate Abuse*, University of Copenhagen, November 28, 2021, p. 9.
[144] Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8th ed., Oxford 2023, pp. 40-41.

5.3 *Google Android* – Recognition of Digital Ecosystems

In February 2024, the Commission issued a Revised Market Definition Notice, which provides updated guidance on market definition principles, including non-price competition and proactive market definitions. A case referenced in the Revised Market Definition Notice is the *Google Android* case. Here, I will analyze how the Commission and the GC reason regarding assessing the relevant market.

The Commission stated, in its decision, that Google had abused its dominant position through leveraging, by imposing several restrictive contractual terms on Android device manufacturers and mobile network operators.[145] The Commission identified four distinct yet interconnected product markets: 1) the licensing of smart mobile operating systems (Android OS), 2) Android app stores, 3) general online search, and 4) mobile web browsers.[146] Defining four separate markets was justified by the differences in substitutability among device manufacturers, app developers, and consumers support the need for multiple market definitions.

To assess the competitive constraint on the market for Android OS, the Commission assessed the substitutability between Android OS and Apple iOS, even though they were not considered to operate on the same market. The Commission assessed the effects of a hypothetical small but significant non-transitory decrease in quality in Android OS to determine if Apple iOS applied any competitive constraints Android. The court and it endorsed the Commission's use of the SSNDQ test.,[147] and it agreed with the Commission that variables in traditional markets may be of less importance here than factors such as innovation, access to data, multi-sidedness, or network effects.[148]

In its appeal, Google argued that the Commission had underestimated the competition Google faced from Apple, and in particular from the constraint from Apple's App Store on the market for Android App stores. However, the Court reasoned that the Play Store and the App Store cannot be assessed separately from their respective digital ecosystems, being Android OS and Apple iOS, stating in paragraph 116 that "the products or services which form part of the relevant markets that make up that ecosystem may overlap or be connected to each other".[149] As the Commission had shown that Apple iOS did not impose an effective competitive control on Android OS, it must follow that the App Store did not impose an effective competitive constraint on the Play Store.[150] Thus, the court recognized the notion of a digital ecosystem. In footnote 142, the Revised Market Definition Notice confirms the court's definition of a digital ecosystem, and adds that "[a]n example of a digital ecosystem would be an ecosystem of products built around a mobile operating system, including hardware, an

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145 AT.40099, *Google Android* 18 July 2018.
146 AT.40099, *Google Android* 18 July 2018, para 217, confirmed in Case T-604/18, *Google Android,* paras. 120–129.
147 Case T-604/18, *Google Android*, paras. 177, 180.
148 Case T-604/18, *Google Android,* para. 115, included in the *Revised Market Definition Notice*, para. 94.
149 Case T-604/18, *Google Android,* para 116.
150 Case T-604/18, *Google Android*, paras. 246–252.

application store and software applications",[151] suggesting a somewhat broader definition than the court.[152]

The increased importance of market structure in the assessment of dominance means that Article 102 has been adapted to the market in question. It potentially means that cases where network effects play a significant part in a firm's role in the market, even though their market power in the traditional sense is not very significant, may be covered by Article 102. The Revised Market Definition Notice provides tools and guidelines on what is essential to look at to assess whether a market is tipping prone. Market power and anticompetitive effects are often intertwined. In practice, a business conduct that results in significant anticompetitive effects likely stems from a position of market power. Thus, recognizing the effects as indicative of dominance aligns legal analysis more closely with market realities. This is a step forward in adapting Article 102 to the digital economy, and it will probably increase the possibility of applying Article 102 earlier in the process when it comes to digital markets, as these criteria are more adapted to how digital markets function and consider factors that may increase the risk of tipping.

5.4 Summary

It is evident that Article 102 is undergoing changes, which is welcomed as it must keep up with the evolving market conditions to function efficiently. In *Google Shopping* self-preferencing, a new form of abuse most prevalent within digital markets was introduced and accepted by the GC. The court likens Google's general search engine to an essential infrastructure in a digital sense, thus recognizing the importance of Google's network effects on its general search engine. The *Google Android* case recognizes the importance of digital market structures, as the GC supported the Commission's definitions of interconnected digital ecosystems and highlighted network effects in assessing market power. The Revised Market Definition Notice, which reflects the case law, considers the specific characteristics of digital markets, such as network effects and the importance of data, thus integrating market structure into the assessment of relevant market and market power. Together with the increased relevance of factors that can make a market tip easily, I believe this may contribute to Article 102 being enforced earlier in the process and prevent digital markets from tipping in the first place.

[151] *Revised Market Definition Notice*, footnote 142 to para. 104.
[152] Robertson, V.H.S.E., *Google Android and ecosystem market definition*, EU Law Live Competition Corner, November 10, 2022, p. 16.

6 Concluding Remarks

6.1 Conclusion

The digital economy brings benefits such as economic efficiency and innovation. However, certain business strategies in digital markets can reduce competition and harm consumer welfare, as interpreted under EU competition policy. Adopting the US minority approach to attempted monopolization, which focuses on intent and conduct rather than market power, is not advised as it might undermine fair competition and innovation in the EU. Instead, applying the majority approach, that require a lower degree of market shares, while simultaneously refining the criteria for assessing market power to better reflect the dynamics of digital markets could be effective. Looking to EU law, and Article 102 again this is, more or less, what has happened. *Google Android* recognized the importance of digital market structures such as digital ecosystems and the network effects at play. The Revised Market Definition Notice further integrates these ideas in its guidance on defining relevant markets and assessing market power. *Google Shopping* introduced and accepted self-preferencing as a form of abuse, showing the adaptability of Article 102. These changes are, indeed, steps towards a more dynamic and workable, just as the Commission intends.

It is difficult to answer the question whether Article 102 encompasses practices where undertakings try to achieve a dominant position through using the inherent tipping prone structures of digital markets. The lack of case law in this area suggests that it is the view of both the Commission and the CJEU that dominance must be shown as a first step when applying Article 102. However, the new ways in which Article 102 has been used regarding tipped digital markets (granted where dominance is undisputed) could point to a future where such an interpretation of Article 102 is not excluded. Thus, Article 102 may correctly be described as a "magic box", but it remains to be seen how far it can be extended.

6.2 Final Comments

The historical focus of competition law has been to protect consumers from high prices charged by dominant firms or cartels. The traditional notion that only dominant firms can exploit consumers by behaving inefficiently or unattractively is outdated in the context of digital markets, where defining consumer welfare is more complex. In today's data-driven economy, information is everything, and companies have strategies to retain and acquire as many users as possible. But

how is this different from "regular" capitalism? Questions arise about whether easy access to cheap products or platforms that prioritize ad exposure truly enhance consumer welfare. These issues go beyond legal analysis and are outside the scope of this paper, but it is evident that both EU and US competition agencies are on the march against Big Tech.

Competition law is going through an exciting time with digital developments, both in the EU and in the US. It remains to be seen what the CJ has to say about the Google judgments, and how the court will implement the new guidelines from the Commission. It is questionable, however, whether similar actions against very large companies in the digital sector will be taken by the Commission with the entry of the DMA, as the DMA touches on many of the types of abuse that the Commission has accused these large tech companies of. Article 102 risks losing its relevance in the digital sector if it can only be applied to clearly dominant companies that are also classified as gatekeepers under the DMA. As I said in the introduction, it is not preferable to rely entirely on the DMA. The fact that the DMA is an ex-ante regulation is good in that an (almost) monopolized digital market is difficult to do anything about, especially with fines that the Commission usually uses as a remedy. The weakness of ex-ante regulation is that it risks becoming a kind of "box-checking" without leading to any improvements. Furthermore, such regulation is less flexible and risks becoming outdated due to the rapid pace of innovation in the digital field. However, this is only a general criticism of ex-ante regulation, and it remains to be seen how effective DMA is.

The strength of ex-post regulation is that it is more adaptable to new circumstances, reducing the risk of loopholes in the regulatory framework. On one hand, the more flexible Article 102 becomes, the less predictable it is for market participants. On the other hand, it is probably in the interests of firms that the regulatory framework is not too formalistic, so that they can argue their case based on the specific context at hand. One can note that as the court also requires predictability in regulation, it can be expected that predictability will be maintained through over-review of Commission decisions. It is apparent that tensions between policy and law are inevitable. The demands for consistency and legal certainty may hinder the ability to apply competition law effectively, but to not risk overenforcement, the Commission should try to meet these demands as far as possible.

The US, probably because of the reluctance so far for overenforcement, has a deliberate loophole in its regulation, whereby companies that do not have or are close to reaching monopoly power are given greater freedom in their business strategies and are even allowed to engage in actions that have anticompetitive effects. As the threshold for monopoly power is higher than for being classified as dominant, this means that dominant companies are allowed to behave anticompetitively (unilaterally) in the US. In the chapter "Limitations Related to Tipping" it was suggested that Article 102 also has such a gap. However, I believe that this is not true. This is because the definition of dominance is dependent on the definition of abuse. A firm is dominant if it lacks competitive constraint and thus has the ability to behave anticompetitively. Abuse, on the other hand, is determined by the effects the conduct has, directly on consumers, or indirectly

through the impact on competition. If the effects are potential, they are estimated based on, among other things, the nature of the conduct, whether the conduct is part of a larger strategy to exclude competition, the structure of the market, and the market power of the firm in the relevant market, i.e., how dominant the firm is.

This circular definition of dominance, abuse, and dominance again is, in my view, unnecessary. Instead, I advocate a "purely" effects-based approach, which ignores the dominance assessment and instead looks at the effects of the conduct directly. In traditional markets, dominance could still have a major impact on the assessment of effects. In markets that are particularly tipping-prone, such as digital markets, market structure could play a more prominent role. The current EU approach requires establishing dominance before assessing abuse, which can be seen as an unnecessary hurdle, especially in digital markets. A purely effects-based approach, focusing solely on anticompetitive effects, would align more closely with market realities and reduce procedural burdens.

I am not advocating a departure from defining the relevant market or from determining the power of the firm in question in that market. The dominance threshold has so far functioned as a screening mechanism, and it may well continue to do so where it works. I am merely advocating a more flexible approach to Article 102, where market power may sometimes have less significance and where market structures, when they do matter, are given a more prominent role.

List of References

Cases

European Court of Justice
Case C-6/72, *Continental Can v Commission* EU:C:1973:22.
Case C-27/76, *United Brands v Commission* EU:C:1978:22.
Case C-85/76, *Hoffmann-La Roche v Commission* EU:C:1979:36.
Case C-322/81, *Michelin v Commission (Michelin I)* EU:C:1983:313.
Case C-62/86, *Akzo v Commission* EU:C:1991:286.
Case T-219/99, *British Airways v Commission* EU:T:2003:343.
Case C-52/09, *Konkurrensverket v TeliaSonera* EU:C:2011:83.
Case C-209/10, *Post Danmark v Konkurrencerådet (Post Danmark I)* EU:C:2012:172.
Case C-23/14, *Post Danmark v Konkurrencerådet (Post Danmark II)* EU:C:2015:651.
Case C-413/14 P, *Intel v Commission* EU:C:2017:632.
Case C-377/20, *Servizio Elettrico Nazionale and others* EU:C:2022:379.

European General Court
Case T-201/04, *Microsoft v Commission* EU:T:2007:289.
Case T-301/04, *Clearstream v Commission* EU:T:2009:317.
Case T-321/05, *AstraZeneca v Commission* EU:T:2010:266.
Case T-612/17, *Google and Alphabet v Commission (Google Shopping)* EU:T:2022:541, on appeal, Case C-48/22 P, judgment pending.
Case T-604/18, *Google and Alphabet v Commission (Google Android)* EU:T:2022:541, on appeal, Case C-738/22 P, judgment pending.

Supreme Court of the United States
Swift & Co. v. United States, 196 U.S. 375 (1905).
United States v. American Tobacco Co., 221 U.S. 106 (1911).
Lorain Journal Co. v. United States, 342 U.S. 143 (1951).
Walker Process Eqpt., Inc. v. Food Machinery Corp., 382 U.S. 172 (1965).
United States v. Grinnell Corp., 384 U.S. 563 (1966).
Copperweld v. Independence Tube, 467 U.S. 752 (1984)
Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447 (1993).

United States Courts of Appeal
Commonwealth v. Peaslee, 177 Mass. 267, 271-272 (Mass. 1901).
Lessing v. Tidewater Oil Co., 327 F.2d 459, 474 (9th Cir. 1964).
Pierce Packing Co. v. John Morrell & Co., 633 F.2d 1362 (9th Cir. 1980).
California Steel & Tube v. Kaiser Steel Corp., 650 F.2d 1001 (9th Cir. 1981)
A.H. Cox & Co. v. Star Machinery Co., 653 F.2d 1302 (9th Cir. 1981).
Domed Stadium Hotel, Inc. v. Holiday Inns, Inc., 732 F.2d 480 (5th Cir. 1984).

Colorado Interstate Gas Co. v. Natural Gas Pipeline Co. of America, 885 F.2d 683 (10th Cir. 1989).
M & M Medical Supplies v. Pleasant Valley Hospitals, 981 F.2d 160 (4th Cir. 1992)
Rebel Oil Co., Inc. v. Atlantic Richfield Co., 51 F.3d 1421 (9th Cir. 1995)

European Commission

Decisions

COMP/37.792, *Microsoft* 24 March 2004.
AT.39740, *Google Search (Shopping)* 27 June 2017.
AT.40099, *Google Android* 18 July 2018.
AT.40462, *Amazon Marketplace* 20 December 2022.
AT.40703, *Amazon Buy Box* 20 December 2022.

Communications

Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (Guidance Paper) 2009/C 45/02.
Amendments to the Communication from the Commission Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, C(2023) 1923 final.
Commission Notice on the definition of the relevant market for the purposes of Union competition law (Revised Market Definition Notice) C/2024/1645.

Other

European Commission, Directorate-General for Competition, Montjoye, Y.-A., Schweitzer, H., Crémer, J., *Competition policy for the digital era*, Publications Office, 2019.
European Commission, *Summary of the contributions of the National Competition Authorities to the impact assessment of the new competition tool*, 2020.
Commission Press Release, *Antitrust: Commission sends Statement of Objections to Apple over practices regarding Apple Pay*, 2 May 2022.
Commission Press Release, *Antitrust: Commission sends Statement of Objections to Meta over abusive practices benefiting Facebook Marketplace*, 19 December 2022.
Commission Press Release, *Antitrust: Commission sends Statement of Objections to Apple clarifying concerns over App Store rules for music streaming providers*, 28 February 2023.
Commission Press Release, *Antitrust: Commission sends Statement of Objections to Google over abusive practices in online advertising technology*, 14 June 2023.
European Commission, Directorate-General for Competition, McCallum, L., Bernaerts, I., Kadar, M., et al., *Competition policy brief. A dynamic and workable effects-based approach to the abuse of dominance (Policy Brief)*, 2023.

U.S. Department of Justice and Federal Trade Commission

U.S. Department of Justice Press Release, *Justice Department Sues Google for Monopolizing Digital Advertising Technologies*, 24 January 2023.
Federal Trade Commission Press Release, *FTC Sues Amazon for Illegally Maintaining Monopoly Power*, 26 September 2023.

U.S. Department of Justice Press Release, *Justice Department Sues Apple for Monopolizing Smartphone Markets*, 21 March 2024.
U.S. Department of Justice, *Competition And Monopoly: Single-Firm Conduct Under Section 2 Of The Sherman Act: Chapter 2*, retrieved 17 April 2024, available at justice.gov/archives/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-2.

Literature

Adkinson, W. F., Grimm, K. L. & Bryan, C. N., *Enforcement of Section 2 of the Sherman Act: Theory and Practice*, Working Paper, November 3 2008.
Armstrong, M., *Competition in Two-Sided Markets*, RAND Journal of Economics, Volume 37, 2006, pp. 668–691.
Bedre-Defolie, Ö. & Nitsche, R., *When Do Markets Tip? An Overview and Some Insights for Policy*, Journal of European Competition Law & Practice, Volume 11, Issue 10, 2020, pp. 610–622.
Behrens, P., *The "Consumer Choice" Paradigm in German Ordoliberalism and its Impact upon EU Competition Law*, Discussion Paper No 1/14, Europa-Kolleg Hamburg, 2014.
Bergqvist, C., *Google Shopping and Self-favoring as a Separate Abuse*, University of Copenhagen, November 28, 2021.
Bjorkman, J. C., *Attempt to Monopolize: Dangerous Probability of Success as an Obstacle to Enforcing Section 2 of the Sherman Act*, Seattle University Law Review, Volume 5, 1982, pp. 289–306.
Broulík, J., *Predictability: a mistreated virtue of competition law*, Journal of Antitrust Enforcement 2023.
Ezrachi, A., *EU Competition Law Goals and the Digital Economy*, Oxford Legal Studies Research Paper No. 17/2018, June 2018.
Hawk, B. E., *Attempts to Monopolize: An American Anomaly*, The Antitrust Bulletin, Volume 62, Issue 4, 2017.
Hettne, J. & Otken Eriksson, I., *EU-rättslig metod: teori och genomslag i svensk rättstillämpning*, 2nd ed., Stockholm 2001.
Ibáñez Colomo, P., *Competition on the merits*, 61 Common Market Law Review, December 20 2023, forthcoming in 2024.
Ibáñez Colomo, P., *The (Second) Modernisation of Article 102 TFEU: Reconciling Effective Enforcement, Legal Certainty and Meaningful Judicial Review*, Journal of European Competition Law & Practice, Volume 14, Issue 8, 2023, pp. 608–623.
Jones, A., Sufrin, B. & Dunne, N., *EU Competition Law*, 8 uppl., Oxford 2023.
Kadar, M. & Holzwarth, J., *Effects-based approach? Effects-based approach! The European Commission's "Article 102 Package"*, Neue Zeitschrift für Kartellrecht, 2023.
Keyte, J., *Why the Atlantic Divide on Monopoly/Dominance Law and Enforcement Is So Difficult to Bridge*, Antitrust, Volume 33, Issue 1, Fall 2018, pp. 113–119.
Norris, P., *Political mobilization and social networks. The example of the Arab Spring*, in Kersting, N., Stein, M. & Trent, J. (eds.) Electronic Democracy, Opladen 2012, pp. 56–76.
Orbach, B. Y., *The Antitrust Consumer Welfare Paradox*, Journal of Competition Law & Economics, Volume 7, Issue 1, 2011, pp. 133–164.
Reichel, J., *EU-rättslig metod*, in Nääv, M. & Zamboni, M. (eds.) Juridisk metodlära, 2nd ed., Lund 2018.
Robertson, V.H.S.E., *Antitrust, Big Tech, and Democracy: A Research Agenda*, The Antitrust Bulletin, Volume 67, Issue 2, pp. 259–279.

Robertson, V.H.S.E., *Google Android and ecosystem market definition*, EU Law Live Competition Corner, November 10, 2022, pp. 13–16.
Roszkowski, M. E. & Brubaker, R., *Attempted Monopolization: Reuniting a Doctrine Divorced From its Criminal Law Roots and the Policy of the Sherman Act*, Marquette Law Review, Volume 73, No. 3, Spring 1990, pp. 355–420.
Petit, N., *Are 'FANGs' Monopolies? A Theory of Competition under Uncertainty*, Working Paper, October 10, 2019.
Petit, N., *Big Tech and the Digital Economy: The Moligopoly Scenario*, Policy Conversation on Big Tech, online ed., Oxford 2020.
Prufer, J. & Schottmüller, C., *Competing with Big Data*, TILEC Discussion Paper, February 2017.
Strömholm, S., *Har den komparativa rätten en metod?*, SvJT 1972, pp. 456–465.
Tang, Y., Zhang, Y. & Ning, X., *Uncertainty in the platform market: The information asymmetry perspective*, Computers in Human Behavior, Volume 148, 2023.
Valguarnera, F., *Komparativ Juridisk Metod*, in Nääv, M. & Zamboni, M. (eds.) Juridisk metodlära, 2nd ed., Lund 2018.

Other

Reports

Schweitzer, H., Haucap, J., Kerber, W. & Welker, R., *Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen*, Report for the Federal Ministry for Economic Affairs and Energy (Germany) 2018.

Speeches

Joaquín Almunia, *Competition and consumers: the future of EU competition policy*, speech at European Competition Day, Madrid, 12 May 2010.

Web documents

OECD Competition Committee, *Competition on the merits*, Series Roundtables on Competition Policy number 56, 2005
OECD, *OECD Handbook on Competition Policy in the Digital Age*, 2022.

Websites

Concurrences – Antitrust Publications & Events, "tipping", retrieved 10 March 2024, available at concurrences.com/en/dictionary/tipping.
Concurrences – Antitrust Publications & Events, "antitrust", retrieved 3 March 2024, available at concurrences.com/en/dictionary/Antitrust.
Concurrences – Antitrust Publications & Events, "dominance", retrieved 25 April 2024, available at concurrences.com/en/dictionary/dominance-notion.
Fortune, *Global 500,* retrieved 2 April 2024, available at fortune.com/ranking/global500/.