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Antitrust Implications of Tying Transactions in the Digital Economy

[Konsekwencje transakcji wiązanych dla prawa antymonopolowego w gospodarce cyfrowej]

Abstract
This paper aims to explore the unique characteristics of tying transactions within digital markets. Emerging competitive conditions have led to novel business models that require analysis through the lens of antitrust laws, specifically focusing on abuse provisions. Historically, the abuse of tying transactions marked the initial significant legal proceedings in the digital economy. Given the lack of standardized terminology concerning tying transactions, a preliminary conceptual clarification is necessary. Before delving into their legal treatment and selected regulatory options, the paper examines the pro-competitive and anti-competitive impacts of such transactions.

Keywords: antitrust law, digital economy, DMA, TFEU, tying.

Introduction

Antitrust law does not prohibit companies from holding a dominant market position, but only from abusing such a position. Article 102 TFEU requires a dominant market position on the defined market for abuse control. Our research focuses on analyzing the implications of antitrust law, specifically Article 102 TFEU, concerning tying transactions in the digital economy. The article aims to understand the responsibilities of dominant companies, the challenges posed by digitalization, and the impact of the Digital Mar-

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kets Act on tying transactions. We conducted a thorough review of academic literature, case law, and regulatory documents to gather comprehensive information on antitrust law, tying transactions, and the digital economy. By integrating data from literature, case law, and policy documents, we created a comprehensive view of the regulatory landscape and its implications for platform operators. These methods enabled us to thoroughly explore the research question: What are the legal and economic implications of tying transactions in the digital economy, and how should competition law adapt to address the unique challenges posed by digital platforms and ecosystems?

Legal and Economic Impacts of Tying Transactions

According to Article 102, sentence 2, letter d, TFEU, the condition attached to the conclusion of contracts that the contracting parties must accept or provide additional services that are neither objectively nor according to commercial practice related to the subject matter of the contract is a case of abuse.[1] If these practices lead to anti-competitive market closure, they are an impermissible form of conduct in the form of tying transactions. 'Tying' usually refers to situations where "customers that purchase one product (the tying product) are required also to purchase another product from the dominant undertaking (the tied product). Tying can take place on a technical or contractual basis."[2] The European practice has developed certain characteristics of abuse in connection with tying transactions: The tying requirement is met if

(i) a company has a dominant position on the tying market and
(ii) the tying good and the tied good are separate goods,
(iii) the tying product cannot be purchased without the tied product,
(iv) the tying is likely to lead to anti-competitive market foreclosure, and
(v) there are no objective justifications for this.[3]

Due to the lack of standardized terminology regarding tying transactions, an initial conceptual clarification is necessary to address these transactions effectively. The paper will elucidate the protective intent of the tying provision and evaluate varying perspectives on the competition-promoting versus competition-restricting impacts of tying transactions. Subsequently, these perspectives will be analyzed in the context of legal treatment through practical case studies. The terminology surrounding bundling lacks uniformity;

[1] T. Peráček, *E-Commerce and Its Limits in the Context of the Consumer Protection: The Case of the Slovak Republic*, "Juridical Tribune" 2022, 12, 1, pp. 35–50.
[2] Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02).
[3] P. Craig, G. de Búrca, EU Law: Text, Cases, and Materials. 7th Edition, Oxford 2020, p. 1101 ff.

bundling can occur between products, services, or a combination of both, collectively referred to as "goods" hereafter. In tying transactions, it is essential to distinguish between the tying good and the tied good. From an antitrust standpoint, the tying good is the product offered by the dominant company in the market, while market dominance is not required for the tied good. In simpler terms, the contracting party seeks to acquire the tying good and would not obtain the tied good without the tying arrangement. Tying transactions can involve not only individual goods but also multiple tying or tied goods. Since there is no fixed terminology with regard to tying transactions, a conceptual clarification is first required as a basis for dealing with tying transactions. The protective purpose of the tying provision is then worked out and the different perspectives with regard to the competition-promoting or competition-restricting effect of tying transactions are determined. In a next step, these different views are to be examined in the context of the legal treatment of tying transactions using practical cases.[4] The literature distinguishes between: „tying," „pure bundling," and „mixed bundling."

In the European Union, the Microsoft case is highly significant in this context. The General Court of the European Union identified a tying situation because the Windows operating system (tying good) was sold exclusively with the Windows Media Player (tied good).[5] Theoretically, a distinction is made between "static tying" and "dynamic tying." If the goods in question are physically or technologically related, it is "static tying." Conversely, if the goods are physically or technologically loosely related, it is "dynamic tying." Pure bundling occurs when both goods are only available together in a bundle, meaning that neither can be purchased individually. In mixed bundling, the goods are offered separately, but their individual prices are higher than when bundled, making mixed bundling a financial discount (also known as a bundle or package discount).[6]

The fundamental protective purpose of the tying provision is discussed below (a). Additionally, there are two primary perspectives: one viewpoint suggests that tying transactions have a pro-competitive effect and should not be legally prohibited (b); the opposing viewpoint argues that tying transactions have a restrictive impact on competition and should therefore be subject to strict legal regulation (c).

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[4] Judgment of the General Court of 14 Sept. 2022, Case T-604/18, Google and Alphabet v Commission (Google Android), ECLI:EU:T:2022:541.

[5] Judgment of the Court of First Instance of 17 Sept. 2007, Case T-201/04, Microsoft Corp. v Commission of the European Communities, ECLI:EU:T:2007:289.

[6] D. Spector, *Bundling, Tying, and Collusion*, "International Journal of Industrial Organization" 2007, 25, 3 (Jun.); DOI: 10.1016/j.ijindorg.2006.06.003, pp. 575–581.

Protective Purpose of the Tying Provision

a) Overview

The prohibition of tying, as outlined in Article 102, sentence 2, letter d TFEU, aims to protect competition in the tied market by preventing dominant companies from leveraging their market power into the market for the tied good (leverage theory) and thus displacing competition. This displacement creates barriers to market entry. When the demand for the tied good is dependent on the demand for the tying good, a reduction in competition in the tied market makes market entry more costly and challenging for potential competitors. Consequently, competitors must enter both markets simultaneously due to tying transactions. According to the "defensive leveraging theory," tying strategies can also protect or even strengthen the dominant company's position in the tying market. By tying two goods together, the dominant company can keep competitors away from the tied market. If competitors fail to establish a presence in the tied market, it becomes difficult for them to compete with the tied good in the tying market.[7] Additionally, the rules on tying transactions are intended to protect the freedom of choice for contracting parties.

b) Competition-promoting effects of tying

In the context of the competition-promoting effects of tying deals, it is argued that tying leads to significant efficiency gains, which legitimize tying practices.[8] These efficiency gains can be categorized as follows:

(i) Economies of Scale and Scope: Companies can achieve substantial cost reductions in production or sales through tying deals, benefiting from economies of scale and scope.

(ii) Reduction in Transaction or Search Costs: Tying simplifies the purchasing process for consumers, as they can buy applications already linked to an operating system, rather than searching for and purchasing them separately. This reduces the search costs associated with finding the ideal combination of applications and operating systems.

(iii) Improvement of Goods and Quality: By combining two goods, a company can harness synergistic effects and offer a coordinated bundle, enhancing quality. This is particularly important in technological integration.

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[7] S. Holzweber, *Tying and Bundling in the Digital Era*, "European Competition Journal" 2018, 14, 2–3; DOI: 10.1080/17441056.2018.1533360, pp. 342–366.

[8] G. Csurgai-Horváth, *Is it Unlawful to Favour Oneself?* "Hungarian Journal of Legal Studies" 2022, 62, 4; DOI: 10.1556/2052.2022.00349, pp. 297–319.

(iv) Neutralization of Double Marginalization: According to economic theory, a monopoly company sets lower prices in complementary markets compared to two independent monopolists. By offering complementary goods at lower prices when bundled, the monopoly company can account for the positive effects on demand for one good when the price of the other good decreases.

c) Anti-competitive effects of tying

The theory proposed by the Chicago School has been critically evaluated by *post*-Chicago economics. Critics argue that the Chicago School's theory is based on highly restrictive assumptions, applicable only in specific circumstances. These assumptions are seldom met in practice, rendering the Chicago approach generally inapplicable.[9] Post-Chicago economics has demonstrated that tying strategies can be a rational tactic for causing market displacement (leverage theory). Whinston's foreclosure model is particularly relevant in this context, as it shows that the single monopoly profit theorem does not hold under certain conditions. This model assumes a company holds a monopoly in market X while facing actual or potential competition in market Y. The demand and pricing for goods X and Y are independent. By tying goods in markets X and Y, the dominant company sacrifices part of its monopoly rent. Although both the tying company's profit and that of its competitors decline, the impact on competitors is more severe, benefiting the dominant company's position in market X.[10] According to Whinston, bundling intensifies price competition in the tied market compared to offering the same good separately. This reduces the profit for new entrants, thereby deterring market entry, especially in markets where economies of scale are significant. The high fixed costs associated with market entry can lead to decisions against entering the market, ultimately eliminating competition. Furthermore, Choi and Stefanadis have illustrated with their chilling innovation model that simultaneous entry into both the tying and tied markets poses substantial risks, particularly in innovation markets where competition occurs at the research and development stage.[11] Competitors must enter both markets simultaneously to challenge tying practices effectively. However, the probability of successfully entering two markets is lower than entering just one. Consequently, these companies are less inclined to invest in research and development, resulting in a reduced

[9] H. Hovenkamp, Post-*Chicago Antitrust: A Review and Critique*. "Columbia Business Law Review" 2001, 2, pp. 257–336.

[10] M. D. Whinston, *Tying, Foreclosure, and Exclusion*, "The American Economic Review" 1990, 80, 4; DOI: 10.1257/aer.80.4.837, pp. 837–859.

[11] J. P. Choi, Ch. Stefanadis, *Tying, Investment, and the Dynamic Leverage Theory*, "The RAND Journal of Economics" 2001, 32, 1; DOI: 10.2307/2696397, pp. 253–272.

willingness to challenge the dominant company in the tying market and diminishing incentives for innovation in the tied market.[12]

Legal Treatment of Tying Transactions

The following part will first examine European case law (a), and then, based on this analysis, it will outline how tying transactions should be treated in the future (b).

a) Previous European Union case law

Over the years, European Union institutions have evolved their approach to tying practices. Initially, tying was deemed illegal *per se* in the EU, with proceedings focusing on the nature of the tying rather than its impact on consumers. Authorities evaluated the following characteristics of abuse:

(i) a dominant position in the tying market,

(ii) the existence of two separate goods (tying good and tied good), and

(iii) an element of coercion on consumers.[13]

In the Hilti case,[14] the European Commission determined that a company abuses its dominant position if the sale of patented cartridge strips is conditional upon ordering a corresponding quantity of bolts. According to the Commission, these practices leave consumers with no choice (element of coercion) regarding where to buy the bolts, thus exploiting them abusively. Similarly, in the Tetra Pak II case,[15] European authorities concluded that tying practices were abusive. Neither the European Commission nor the courts accepted Tetra Pak's justifications based on "technical reasons, responsibility for product quality, health reasons, and protection of the company's reputa-

[12] T. Peráček, B. Mucha, Š. Palatický, K. Keller, A. Mußmann, *European Digital Strategy and Its Impact on the Conclusion of Selected Types of Business Contracts* [in:] Developments in Information and Knowledge Management Systems for Business Applications. Studies in Systems, Decision and Control, N. Kryvinska, M. Greguš, S. Fedushko (eds.), Cham 2023, 463; DOI: 10.1007/978-3-031-25695-0_20, pp. 443–468.

[13] D. Mandrescu, *Tying and Bundling by Online Platforms – Distinguishing Between Lawful Expansion Strategies and Anti-Competitive Practices*, "Computer Law & Security Review" 2021, 40; DOI: 10.1016/j.clsr.2020.105499, pp. 1–24. R. Funta, *Competition Law Aspects Of Amazon's Business Model*, "Krytyka Prawa. Niezależne Studia nad Prawem" 2023, 15, 2; DOI:10.7206/kp.2080-1084.592, pp. 23–38. P. Miskolczi-Bodnár, *Visszaélés gazdasági erőfölénnyel* [*Abuse of Economic Dominance*] (in:) A. Tóth, M. Juhász, D. Juhász (eds.), Kommentár a tisztességtelen piaci magatartás és versenykorlátozás tilalmáról szóló 1996. évi LVII [Commentary on Act LVII of 1996 on the Prohibition of Unfair Market Practices and Restriction of Competition], Gazdasági Versenyhivatal [Hungarian Competition Authority]: HVG-ORAC, Budapest 2015, pp. 280–320.

[14] Commission Decision of 22 Dec. 1987 relating to a proceeding under Article 86 of the EEC Treaty (IV/30.787 and 31.488 – Eurofix-Bauco v. Hilti).

[15] Commission Decision of 26 July 1988 relating to a proceeding under Articles 85 and 86 of the EEC Treaty (IV/31.043 – Tetra Pak I (BTG licence).

tion." The General Court of the European Union upheld the Commission's decision, stating that Tetra Pak could have addressed these concerns with less drastic measures than contractual tying. The European Commission applied the same principles in the Coca-Cola Export case[16] regarding mixed bundling practices, concluding that mixed bundling was also illegal *per se*. However, Coca-Cola agreed to cease these practices as part of a settlement.

In the cases described, authorities overlooked the potential pro-competitive effects, particularly efficiency gains, of tying transactions. Instead, they assumed market foreclosure due to the dominant company's practice of tying its goods with other goods. This formalistic approach, based on typified case groups ("form-based approach"), has led to a reevaluation since the Microsoft decision,[17] although the direction of this rethinking remains unclear. In the Microsoft case, the European Commission found that Microsoft tied its Windows Media Player to the Windows operating system. The Commission applied a new test basis for tying cases, examining the following conditions:

(i) the existence of separate goods (tying good and tied good),

(ii) the company's dominant position in the tied market,

(iii) the lack of consumer choice to purchase the tying good without the tied good, and

(iv) the foreclosure of competition.

In this decision, the Commission departed from the form-based approach seen in the Hilti and Tetra Pak II cases by considering the specific circumstances of the case and evaluating the likely and actual effects of the tying arrangements on consumers and competition, thus adopting an effect-based approach. The General Court of the European Union confirmed the criteria for tying applied by the Commission.[18] However, the Court indicated that a practice is generally considered abusive only if it restricts competition, implicitly requiring an examination of potential competitive restrictions. The Court also noted that tying does not inherently have an exclusionary effect on the market, "in view of the specific circumstances of the present case," although it is typically the case in instances of abusive tying. According to the General Court of the European Union, tying practices continue to have an exclusionary effect *per se*.

The European Commission has recently scrutinized tying practices in the Google Android case,[19] modifying the elements of tying slightly. For tying to be deemed illegal, the following conditions must be met:

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[16] On 19 Dec. 1989, the Commission accepted a unilateral formal undertaking from The Coca-Cola Corporation, IP/90/7.

[17] Commission Decision of 24 Mar. 2004 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft).

[18] Judgment of the Court of First Instance of 17 Sept. 2007, T-201/04, Microsoft Corp. v Commission of the European Communities. ECLI:EU:T:2007:289.

[19] Commission Decision of 18 July 2018 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union (the Treaty) and Article 54 of the EEA Agreement (AT.40099 – Google Android).

(i) the presence of separate goods (tying good and tied good),

(ii) the company holds a dominant position in the tying market,

(iii) consumers are not given the option to purchase the tying good without the tied good, and

(iv) the tying is capable of restricting competition.

If the Commission determines that tying is illegal, it is up to the company to provide objective justification. Although the Priorities Communication sought to change the elements of tying as a guideline, the Commission still references the Microsoft decision of the General Court of the European Union in the Google Android case. The Commission delves deeper into the considerations from the Microsoft case, noting that to determine whether competition is impaired, it must be examined whether the tying reduces consumers' incentives to purchase products from other companies or whether third-party suppliers are encouraged to develop products that only implement the underlying technology of the tied product. The General Court of the European Union has slightly adjusted the criteria for tying cases. These criteria include:

(i) the existence of separate goods (the tying good and the tied good), (ii) the dominant position in the tying market,

(iii) the lack of an option for consumers to purchase the tying good without the tied good,

(iv) anti-competitive market foreclosure, and

(v) the absence of an objective justification.

These criteria are identical to those used in the Microsoft decision. Rather than introducing a "rule of reason" test, this adjustment is a cautious attempt to approximate such a rule. In this context, it is more appropriate to refer to "adapted *per se* illegality" instead of the rule of reason.[20] The Court frequently cites the Microsoft decision, particularly concerning the fourth criterion, "anti-competitive market foreclosure." It emphasizes that "a practice is only considered abusive if it is capable of restricting competition." However, in this case, a more detailed examination was required to determine the anti-competitive effects of the tying. Although authorities typically examine the anti-competitive effects of tying transactions in detail, the Court still could not identify an exclusionary effect *per se* based on the circumstances. This suggests that the Court generally prefers to adhere to a formalistic approach and only considers a detailed analysis of the effects necessary in exceptional cases.

The statements on competition restriction are of greater importance. According to the Court, in the context of tying transactions, it is essential to examine whether these practices have the capacity to restrict competition, as noted in the Google Android case, rather than whether they actually do.

[20] Judgment of 14 Sept. 2022 – Google and Alphabet v Commission (Google Android), T-604/18, ECLI:EU:T:2022:541.

In this case, the distinction between "restricting competition" and "having the capacity to restrict competition" was less significant, as the Commission was able to prove the actual anti-competitive effects of the tying. However, in the Google Android case, the Court may at least deviate from the view that the Commission did not introduce a new condition regarding the ability to restrict competition, since it expressly does not refer to paragraph 866 of the Microsoft decision, which stated that no new condition regarding tying was introduced. Therefore, future case law on tying practices requires the following elements:

(i) the existence of separate goods (tying good and tied good),
(ii) a dominant position in the tying market,
(iii) no option for consumers to purchase the tying good without the tied good,
(iv) the potential to restrict competition, and
(v) no objective justification.

Notably, there is no need for an actual restriction of competition. Additionally, if conditions (i)–(iv) are met, it is up to the dominant company to provide an objective justification.[21] The question still remains regarding the Court's intention behind referencing the *per se* exclusionary effect of the tying. According to the Court's reasoning, tying transactions as a typical offense still constitute *per se* illegal conduct. Despite this added comment, it is likely that the standard practice in the future will involve analyzing whether specific tying transactions are capable of restricting competition, with authorities probably assuming *per se* illegality only in exceptional cases. It is also unclear why the Court has not provided legal certainty on this matter or established a new practice. This may change with the pending decision of the Court of Justice of the European Union.

b) Forthcoming approach to tying cases

In European case law, it is generally accepted that an unlawful tying transaction must meet the following three criteria:

(i) a dominant market position,
(ii) separate goods, and
(iii) a form of tying, such as consumers being unable to purchase the tying good without the tied good.

However, there is a debate regarding the element of anti-competitive market foreclosure and the closely related issue of objective justification.[22]The scientific literature has extensively discussed the element of illegal foreclosure

[21] V. Mulaj, *Protection of Competition from Abuse with Dominant Positions and Anticompetitive Agreements in the Kosovo Market*, "Studia Iuridica Lublinensia" 2022, 31, 2; DOI: 10.17951/sil.2022.31.2.207-227, pp. 207–227.

[22] V. Šmejkal, *Digitisation and EU Competition Law – Time to Rethink the Basics?*, "The Lawyer Quarterly" 2024, 14, 1, pp. 66–81.

of competition.[23] When legally assessing tying transactions, it is essential to consider economic findings. To adequately incorporate economic models into the legal context, it is necessary first to determine the meaning and purpose of the illegal behavior, specifically tying transactions. This analysis can be used to identify the elements of tying. Subsequently, the economic models should be applied to these elements where appropriate. To determine the correct element of the offense, it is first necessary to examine the fundamental objective of Article 102 TFEU. Neither legal system prohibits the acquisition, maintenance, or strengthening of a dominant market position as long as it is done without inappropriate conduct. However, the abuse of such a market position is prohibited.[24] As previously explained, the law aims to maintain competition on the merits within the framework of abuse control, thus primarily protecting the competitive process and striving for undistorted competition. Unlawful behavior in the form of exploitative abuse is directed against the respective opposing side of the market, while exclusionary abuse is directed against other companies in competition, which can indirectly harm consumers by limiting the competitiveness of the market. However, Article 102 TFEU ultimately protects the competitive process and undistorted competition, rather than the opposing side of the market or other market participants.[25] Regarding the degree of danger at which the prohibition of abuse applies, case law indicates that it is sufficient if behavior is capable of or aimed at restricting competition.[26] If a behavior is aimed at restricting competition, it is usually also capable of doing so.[27] For instance, in cases of market structure abuse, the reference point is the change in market structure, not the weakening of competitors' market positions. This danger of restricting competition must be concrete and not merely abstract, meaning the behavior must actually be capable of producing its effects. The European Court of Justice confirmed this view in the Intel case. For a violation of Article 102 TFEU, there is no need for a restrictive effect on competition, as the assessment of whether the conduct of a market-dominant company is abusive depends on the "analysis of the potential for exclusion." In this context, the more detailed impact assessment, which has gained importance with the "more economic approach," must also

[23] A. Ezrachi, EU Competition Law: An Analytical Guide to the Leading Cases, London 2024, p. 244ff. P. Plavčan, R. Funta, *Regulatory Concepts for Internet Platforms*. "Online Journal Modelling the New Europe" 2021, 35 (Apr.); DOI: 10.24193/ojmne.2021.35.0, pp. 44–59.

[24] This is in contrast to the US American Sherman Act, which, according to Section 2 of the Sherman Act, already criminalizes monopolization or the attempt to monopolize.

[25] O. Blažo, *Bypassing Competition Law, Bypassing through Competition Law* [in:] EU Antitrust: Hot Topics & Next Steps. Proceedings of the International Conference Held in Prague on Jan. 24–25, 2022, V. Šmejkal (ed.), Praha 2022, pp. 372–382.

[26] Judgment of the Court of 6 Sept. 2017, C-413/14 P, Intel Corp. v European Commission, ECLI:EU:C:2017:632.

[27] Judgment of the Court of First Instance of 30 Sept. 2003, T-203/01, Manufacture française des pneumatiques Michelin v Commission of the European Communities, ECLI:EU:T:2003:250.

be addressed.[28] Such an intensified analysis is not legally required, as proof of a potential anti-competitive effect is sufficient. The Draft Guidelines[29] further clarify that tying and bundling are among the categories of conduct with a high potential to lead to exclusionary effects. As such, they may not require a full-blown effects analysis in every case, especially when coercion or lack of consumer choice is evident. This supports a more predictable enforcement standard for digital markets. The Draft Guidelines complement the DMA by providing a coherent framework for assessing exclusionary conduct under Article 102 TFEU. While the DMA applies *ex-ante* obligations to gatekeepers, the Guidelines clarify how abusive conduct by dominant undertakings is evaluated *ex-post*. Importantly, they reflect lessons learned from landmark cases such as Microsoft and Google Android, and they emphasize the importance of consumer welfare and competition on the merits.

c) Overview of the regulatory proposals

Observing international trends in digital economy markets, a shift is noticeable.[30] Specifically, there's a clear transition from the 'rule of reason' towards *ex-ante* regulations.

In the European Union, the Digital Markets Act (DMA) came into force on September 14, 2022, and has been applicable since May 2023. The DMA is an *ex-ante* regulation that outlines specific dos and don'ts for gatekeepers in Article 5. These rules aim to prevent unfair or contestable practices. The European Commission does not need to conduct market dominance or other lengthy, resource-intensive impact analyses of behavior. Instead, the law applies as soon as a gatekeeper is identified (Articles 3 and 4), and this gatekeeper must comply with or refrain from certain actions as specified in Articles 5 and following. For example, gatekeepers are required to allow interoperability of number-independent interpersonal communication services and must not favor their own services and products over those of third parties, including in rankings.[31] The advantage of the DMA is its clear *ex-ante* regulatory approach. Given the recent challenges faced by authorities at various stages of the process and the complex economic discussions that have arisen, the DMA is a welcome development for the regulated entities.

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[28] R. Funta, *Data, Their Relevance to Competition and Search Engines*. "Masaryk University Journal of Law and Technology" 2021, 15, 1; DOI: 10.5817/MUJLT2021-1-5, pp. 119–140.

[29] Draft Guidelines on the application of Article 102 of the Treaty on the Functioning of the European Union to abusive exclusionary conduct by dominant undertakings, available online: https://competition-policy.ec.europa.eu/public-consultations/2024-article-102-guidelines_en.

[30] R. Funta, D. Buttler, *The Digital Economy and Legal Challenges*, "InterEULawEast" 2023, 10, 1; DOI: 10.22598/iele.2023.10.1.8, pp. 145–160; G. Skara, O. Muçollari, B. Hajdini, *Adapting the Competition Policy for the Digital Age: Assessing the EU's Approach*. "Laws" 2024, 13, 5, 64; DOI: 10.3390/laws13050064, pp. 1–5.

[31] V. Šmejkal, *Abuse of Dominance and the DMA – Differing Objectives or Prevailing Continuity?*. "Acta Universitatis Carolinae. Iuridica" 2023, 69, 2; DOI: 10.14712/23366478.2023.13, pp. 33–51.

The United Kingdom has adopted a different strategy compared to the European Commission. The 'Digital Markets, Competition and Consumers Bill' aims to grant statutory powers to the Digital Markets Unit (DMU), a division within the Competition and Market Authority (CMA), to oversee the new 'pro-competitive regime' for digital markets. Additionally, the CMA will have the authority to designate companies with 'Strategic Market Status' (SMS). Unlike the DMA, the UK will still require proof that the company under investigation possesses significant and consolidated market power.

Even in the United States of America a move away from the "rule of reason" is evident, although the literature and courts were and still are strong advocates of the "rule of reason."[32] In addition to various initiatives in Congress,[33] the statements of the Federal Trade Commission (FTC) since the appointment of Lina Khan as Chair of the FTC are of particular interest. In a statement dated November 10, 2022,[34] the FTC expressed its intention to increasingly rely on Section 5 FTC Act, which prohibits illicit methods of competition in addition to unfair competition. Accordingly, the meaning of Section 5 FTC Act goes beyond the Sherman Act and the Clayton Act and includes various types of unfair conduct that negatively affect the conditions of competition. The FTC has also expressly clarified that, contrary to its own statements of August 15, 2015,[35] it will not pursue the "rule of reason" approach when applying Section 5 FTC Act. This direct reference to its own statement from 2015 is a clear statement: The FTC explains that Congress originally did not require anti-competitive harm or anti-competitive intent, but rather intended to stop monopolies in the early stages (incipiency). Consequently, it is not in keeping with the spirit of the law that the FTC has to prove anti-competitive effects, as would be required under the "rule of reason." It is sufficient if a conduct already shows a tendency to negatively affect competitive conditions in accordance with Section 5 of the FTC Act. According to this approach, the ability of a conduct to restrict competition with a certain probability should be sufficient to meet Section 5 of the FTC Act. In this context, the FTC expressly refrains from applying the "rule of reason."

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[32] E. Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, "Harvard Law Review" 2009, 123, 2, pp. 33–51.

[33] E.g. S.4258 – Competition and Transparency in Digital Advertising Act 117th Congress (2021–2022); S.2710 – Open App Markets Act 117th Congress (2021–2022).

[34] Policy Statement Regarding the Scope of Unfair Methods of Competition Under Section 5 of the Federal Trade Commission Act Commission File No. P221202, Nov. 10, 2022.

[35] Statement of Enforcement Principles Regarding "Unfair Methods of Competition" Under Section 5 of the FTC Act, Aug. 15, 2015. The FTC withdrew this opinion on July 1, 2021, because it violates the structure and history of Sec. 5 FTC Act and largely eliminates the FTC's independent authority. See. Remarks of Chair Lina M. Khan on the Withdrawal of the Statement of Enforcement Principles Regarding "Unfair Methods of Competition" Under Section 5 of the FTC Act, July 1, 2021.

Challenges for Tying Transactions in the Digital Economy

In the digital economy, the number of users is particularly significant.[36] While user share alone does not indicate market dominance, it raises questions about its role in tying deals, potentially outweighing traditional measures of market dominance. It's crucial to assess whether companies can leverage methods like digital integration to direct their large user base to dominate a new market through tying deals. This is not limited to integrating users into new products within the digital ecosystem but also involves new data processing capabilities.[37] These capabilities enable increased usage of their services and performance optimization across the ecosystem. For instance, companies can position themselves to generate higher advertising revenues due to a larger and more detailed data set.

This issue ties into another major challenge of the digital economy: companies often do not offer physical goods alone but combine them with digital services.[38] For instance, companies can pursue coupling strategies either across different platforms or within a single platform. When coupling across platforms, a company typically aims to transfer market power. This occurs when a company that already dominates one market uses its platform to offer a different service on another platform within its ecosystem. In such cases, the company employs tying practices to transfer market power to the new platform (leverage theory). This raises the question of whether we need to consider the entire business model of the digital ecosystem and whether these different platforms constitute separate goods. Identifying separate goods becomes more challenging when a company expands its services within a single platform. In this scenario, the company integrates new services into the existing platform rather than creating a new one. As the new service becomes part of the existing platform, it is debatable whether it should be considered a separate good or merely an addition to the existing one. Given that the new service is free and there is no obligation to use it, it also raises the question of whether such integration can be classified as a tying transaction.

Another important aspect is the impact of tying on competition. While the effects of tying are extensively debated in the context of the Chicago School and post-Chicago economics, the digital economy is likely to further divide these perspectives. The Chicago School's views on price discrimination are becoming increasingly relevant due to the unique pricing structures of digi-

[36] R. Funta, *Economic and Legal Features of Digital Markets*, "Danube: Law, Economics and Social Issues Review" 2019, 10, 2; DOI: 10.2478/danb-2019-0009, pp. 173–183.

[37] A. Piskorz-Ryń, *European Data Governance Act: Essential Problems for Re-Use of Public Sector Information*, "Prawo i Więź" ["Law and Social Bonds"] 2025, 53, 6; DOI.org/10.36128/PRIW.VI53.1148, pp. 321–333.

[38] B. Šramel, P. Horváth, *Internet as the Communication Medium of the 21st Century: Do We Need a Special Legal Regulation of Freedom of Expression on the Internet?*, "The Lawyer Quarterly" 2021, 11, 1, pp. 141–157.

tal platforms. Companies can charge zero or even negative prices on one side of the platform while generating necessary revenue on the other side. This enables cross-subsidization, which mimics price discrimination and results in efficiency gains through better coordination across the platform. Economies of scale are also crucial in the digital economy. According to the Chicago School, these economies can lead to significant efficiency gains, representing a pro-competitive effect of tying. The low marginal costs in the digital economy are particularly important, as the cost of selling an additional good or service approaches zero, providing a cost advantage and high value for consumers. This increases the attractiveness of the platform and boosts demand. High fixed costs and low marginal costs are often cited to justify tying practices, as they help recoup high investment costs. Potential competitors are prevented from achieving these economies of scale from the outset, allowing the market-dominating company to secure markets it does not yet dominate. The software sector exemplifies tying practices well, as marginal costs in this sector are very low or even zero. Tying deals become less attractive as marginal costs increase. These observations about the software sector can be broadly applied to digital economy markets. In the digital economy, the average cost per unit of service decreases as the quantity increases. Given the very low marginal costs, there is a higher risk of tying deals having anti-competitive effects.[39]

In the digital economy, pre-installed applications act as significant barriers to market entry. Pre-installation not only enables companies to automatically reach a large user base but also allows them to benefit from economies of scale and optimize their services. The lack of interoperability in the digital economy further amplifies the effects of pre-installation. Additionally, winner-takes-all markets provide dominant companies with greater incentives to strengthen their market position through tying practices. Although the digital economy is rapidly evolving and new technological developments can potentially counteract winner-takes-all markets, companies can mitigate this risk by employing tying strategies. If dominant companies use tying to establish high barriers to market entry and reduce incentives for innovation and research and development, they can consolidate their market position and mitigate the risk of losing their market power. The characteristics of digital economy markets are therefore often central to the arguments of both the Chicago School and *post*-Chicago economics. When these arguments are applied to the digital economy, the divergence between the two perspectives becomes even more pronounced than in traditional markets.

[39] Q. Wu, N. J. Philipsen, *The Law and Economics of Tying in Digital Platforms: Comparing Tencent and Android*, "Journal of Competition Law and Economics" 2023, 19, 1; DOI: /10.1093/joclec/nhac011, pp. 1–20.

Concluding Remarks

Our findings demonstrate that tying practices in the digital economy present both pro-competitive efficiencies and anti-competitive risks, but the balance increasingly tilts toward the latter due to the structural characteristics of digital markets. These include network effects, data-driven dominance, low marginal costs, and ecosystem lock-in, all of which amplify the exclusionary potential of tying strategies. From a legal perspective, the traditional framework under Article 102 TFEU, which prohibits the abuse of a dominant position, has evolved significantly. While earlier case law relied on a formalistic, *per se* approach, recent decisions (e.g., Microsoft, Google Android) have moved toward a more nuanced, effects-based analysis. However, this shift has not always provided sufficient legal certainty or timely intervention in fast-moving digital markets. The 2024 Draft Guidelines on the application of Article 102 TFEU to abusive exclusionary conduct mark a pivotal development in this context. They consolidate EU case law and enforcement experience, offering clearer criteria for assessing exclusionary practices such as tying and bundling. Notably, the Guidelines distinguish between: Conduct requiring proof of capability to exclude, Conduct with a high potential to exclude, and Naked restrictions, which are presumed unlawful. Tying and bundling fall into the second category, meaning that authorities need not prove actual harm but only the capability to restrict competition. This aligns with the broader trend toward proactive enforcement and supports a more structured legal test that balances legal certainty with flexibility.

In parallel, the EU is revisiting the idea of "new competition tools," a concept originally proposed to address structural risks in digital markets that fall outside traditional antitrust enforcement. The 2024 Draghi Report has reignited this discussion, calling for instruments that allow regulators to intervene before harm materializes. Some Member States, such as Germany and Austria, have already introduced such tools into their national laws, enabling *ex-ante* intervention against systemic market risks even in the absence of proven abuse. Together with the Digital Markets Act (DMA), which imposes *ex-ante* obligations on designated gatekeepers, these developments reflect a paradigm shift in EU competition policy. The focus is no longer solely on punishing past abuses but on preventing future harm in structurally fragile markets.

In conclusion, tying in the digital economy cannot be viewed in isolation. It is often a strategic lever for ecosystem control, with long-term implications for innovation, market structure, and consumer choice. The legal and regulatory response must therefore be flexible, forward-looking, and integrated—combining traditional antitrust tools with new regulatory instruments and cross-disciplinary insights from data protection and consumer law. Only then

can competition law effectively safeguard open digital markets in the face of evolving technological and economic realities.

Abstrakt

Celem niniejszego artykułu jest zbadanie szczególnych cech transakcji wiązanych na rynkach cyfrowych. Powstające warunki konkurencji doprowadziły do powstania nowych modeli biznesowych, które wymagają analizy z punktu widzenia przepisów antymonopolowych, ze szczególnym uwzględnieniem przepisów dotyczących nadużyć. W przeszłości nadużywanie transakcji wiązanych stało się przedmiotem pierwszych znaczących postępowań sądowych w gospodarce cyfrowej. Biorąc pod uwagę brak ujednoliconej terminologii dotyczącej transakcji wiązanych, konieczne jest wstępne wyjaśnienie pojęć. Przed zagłębieniem się w kwestie ich prawnego traktowania oraz wybranych opcji regulacyjnych – w artykule przeanalizowano prokonkurencyjny i antykonkurencyjny wpływ takich transakcji.

Słowa kluczowe: prawo antymonopolowe, gospodarka cyfrowa, DMA, TFUE, transakcje wiązane.

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