

No Strings Attached? Zero-Price Practices on Social Media Markets under EU Abuse of Dominance Assessment

by

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Abstract

Do customers pay *too little* when they pay *nothing* for accessing a social media platform ‘for free’, and/or do they pay *too much*? These ‘free’ online services attract customers even if they come at personal information or attention costs. As competition law traditionally focuses on positive prices, ‘free’ services raise the question whether and how they could be assessed as potentially harmful to competition and consumers. Thus, the aim of this paper is to discuss the extent to which EU competition law can be applied to evaluate unilateral abusive pricing practices of social media platforms providing ‘free’ services to customers. It explores the economic characteristics and competitive dynamics of social media platforms, contrasts the traditional framework for assessment of abuse of dominance, predatory pricing, and excessive pricing with the challenges posed by their ‘free’ services, as well as offers recommendations.

Resumé

Les clients paient-ils *trop peu* lorsqu’ils *ne paient rien* pour accéder «gratuitement» à une plateforme de médias sociaux, et/ou paient-ils *trop*? Ces services attirent les clients même s’ils ont un coût d’informations personnelles ou d’attention. Comme le droit de la concurrence se concentre traditionnellement sur les prix positifs, les services «gratuits» soulèvent la question si et comment ils peuvent être évalués comme potentiellement nuisibles à la concurrence et aux consommateurs. Ainsi, l’objectif de cet article est d’examiner dans quelle mesure le droit européen de la concurrence peut être appliqué pour évaluer les pratiques unilatérales de tarification abusive des plateformes de médias sociaux fournissant des services «gratuits» aux clients. Il explore les caractéristiques économiques et la dynamique concurrentielle des plateformes de médias sociaux, oppose le cadre traditionnel d’évaluation des abus de position dominante, des prix prédateurs et des prix excessifs aux défis posés par leurs services «gratuits», et propose des recommandations.

Key words: abuse of dominance; excessive pricing; predatory pricing; zero-price markets; social media; online platforms.

JEL: K21

I. Introduction

Humans love free things. Rapidly growing providers of digital technologies have surely noticed and exploited this, offering access to online platforms, such as social networks, for ‘free’. The COVID-19 pandemic, when for many social media became the only place of social interaction, underlined the importance of their accessibility for users from less privileged backgrounds.

Besides providing their services at no monetary charge, social media platforms (hereinafter: SMPs) boast about being a new system, which people want to be a part of, and owing their success to innovation. However, they also have a darker side: dominating users' lives with social media addiction, 'stealing' and selling their data, bombarding users with resembling mind-reading advertising, manipulating their political choices. While social media giants expanded by offering better services than their competitors, they are now protected from rivals by very strong network effects, economies of scale and access to users' data. Resulting from weak competition, consumers who want to keep using the platforms have no choice but to comply with data and attention sacrifice, while many users, blinded by the advantages, often do not even notice the risks they are exposed to.

Several popular platforms can now be argued to dominate their (digital) markets and to have the potential to engage in abusive practices under EU competition law. Due to the novelty features of the digital economy, the framework of EU competition law does not offer appropriate means to address all emerging challenges, capture all behaviour harming consumers and ensure the effectiveness of enforcement. Subsequently, certain harmful practices can escape competition law scrutiny. Traditional competition law is centred around positive prices, which SMPs often do not charge for their services. Instead, they are satisfied with the information and attention costs users incur to access the platform, as they monetise them through advertisements. Meanwhile, due to complicated privacy settings users are often not even aware of incurring such costs and enjoy their presence on the platforms without monetary costs.

This paper discusses the extent to which EU competition law can be applied to assess abusive pricing practices of SMPs providing services 'free' of charge. I begin with an analysis of the characteristics of digital markets, with a particular focus on SMPs and a discussion of the features of 'free'. Following, I outline the EU legal framework of assessment of unilateral conduct of SMPs engaging in zero-price practices. I highlight the challenges posed to EU competition law assessment and enforcement and – considering ongoing legislative initiatives – suggest ways to address them through updating the EU Market Definition Notice and further developing the Digital Package. Finally, I consider how the predatory pricing and the excessive pricing doctrines can be applied to zero-price practices of SMPs respectively. I recommend considering the revenue from advertisements and premium users in assessing predatory pricing, as well as – to some extent – examining theories of harm associated with data and consumer protection in assessing excessive pricing.

II. Characteristics of social media platform and zero-price practices

1. Social media platforms

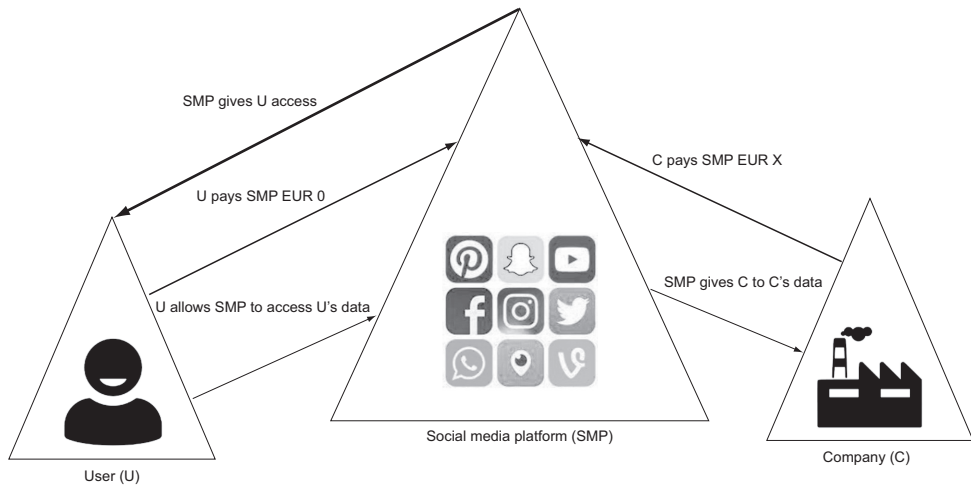
Social media platforms can be defined as Internet-based services, which allow individuals to establish public or semi-public profiles within a limited forum and connect with other users (Gebicka and Heinemann, 2014).¹ SMPs have become increasingly popular all over the world, with billions of people using them to interact with their family and friends, share their experiences or even find partners.² Thus, SMPs range from classic social networking (e.g. Facebook, LinkedIn), photo or video sharing sites (e.g. Instagram or YouTube), discussion platforms (e.g. Reddit, Quora) to online dating communities (e.g. Tinder, Bumble), offering a great diversity for users and constituting a rapidly growing industry.

While SMPs' characteristics, such as the importance of network effects, economies of scale, quality and innovation, build upon those of online platforms in general, certain particularities relevant to competitive dynamics must be noticed. Competition conditions in the industry can be generally characterised by multiple platforms competing in a rather well-defined category, for instance social networking. Most sites rely on user-generated content, with consumers defining the companies' product offering. Usually, users have diversified content preferences and opt for sharing content with similar users, which results in large direct network externalities. Moreover, as the degree of differentiation is high on social media markets, consumers can join multiple platforms, which enables high multi-homing for both its users and advertisers. As a result, such platforms compete mostly for consumer information and attention (Dutch-Brown, 2017). Figure 1 illustrates the functioning of a SMP on a zero-price market.

Social media platforms are characterised by the existence of both same-side network effects and cross-side network effects. Namely, a platform becomes more valuable to consumers, once other consumers, whom they wish to interact with, join the platform (CMA, 2019). Nonetheless, the value of the SMP to its users also depends on the number of customers active on the other side of the platform, such as content providers and third-party developers (CMA, 2019). Both same-side and cross-side network effects greatly impact the functioning

¹ For a more elaborative definition, differentiating between 'social network sites' and 'social networking sites' see (Boyd and Ellison, 2007). See also (European Commission, 2018).

² According to Statista in 2020, there were 3.6 billion social media users in the world. This number is predicted to grow to 4.41 billion by 2025. Accessed on 10 April, online: <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>.

Figure 1. SMP operating on a zero-price market

Source: Author's own illustration.

of SMPs, including their pricing strategies. As consumers access the platforms for 'free', for which they indirectly compensate the platform with their presence and bearing the unpleasantness of advertising, the platform utilises its consumer base as a bargaining chip to charge the advertisers for access to those consumers (Shekhar, 2020). Consequently, on social media markets direct network effects are high for users and low for advertisers, while indirect network effects are low for users and high for advertisers.

2. Zero-price practices

Offering goods or services for a price of EUR 0 is not a new phenomenon – such markets have existed for decades, if not centuries. From ancient-times' matchmaking services, radio since the 1920s to general purpose payment cards since 1950s – various goods and services people have enjoyed for 'free' can serve as examples (Evans, 2011). However, with the evolution of the Internet, they spread in number, variety and popularity, resulting in many doctrinal and practical issues with regard to their legal assessment. As competition law is primarily based on neoliberal economy³, which is centred on price theory,

³ In this context neoliberalism refers to the 'competition only' approach, dominating EU competition policy, which gives primacy to narrow efficiency and consumer welfare considerations, focusing the assessment on positive prices. See (Buch-Hansen and Wigger, 2010; Montalban, Smith and Ramirez-Perez, 2011).

zero-price markets constitute a conundrum as to whether they can be seen as ‘markets’ at all. Following the logic that without prices, markets do not exist, there would be no need for competition law scrutiny (Newman, 2014). This approach, however, overlooks the overwhelming potential for consumer harm that zero-price markets entail.

When discussing the practice of offering goods or services for a price of EUR 0, one should first define the concept of ‘free’. ‘Free’ in a commercial context means ‘no payment’ or ‘costing nothing’ (Oxford Dictionary, 2021). However, ‘free’ products and services – the ones priced at EUR 0 – offered on digital markets, are rarely truly free, in the sense of these definitions (Hoofnagle and Whittington, 2014; Newman, 2015). Despite not having positive prices attached, for-profit companies operating in ‘free’ markets recoup the costs of zero-price products or services in other ways – mostly by offering them in exchange for consumers’ attention and personal information (Jarman and Karaman Orsal, 2020; Newman, 2014). Thus, since consumers ‘pay’,⁴ regardless of the medium of exchange, these goods or services are not *actually* free. Therefore, the correct way to refer to a lack of positive price attached to goods or services on digital markets offered in exchange for customers’ attention and data should be ‘zero-price’ rather than ‘free’. Importantly, it is the trade of customers’ information and attention for accessing or using the zero-price services, which brings the zero-price digital markets into the realm of competition law scrutiny, confirming their status as markets.

The reasons why for-profit companies engage in zero-price practices can be explained by the interrelated nature of the services they offer (Newman, 2014). So as to profitably offer services at a price of EUR 0 in the long run, a rational firm must search for ways to turn a profit without involving these services. Despite various typologies (Anderson, 2009; Battistella, Murgia, and Nonino, 2019; Evans, 2011; Gal and Rubinfeld, 2016), following Newman, two types of platforms’ strategies engaging in zero-price practices can be distinguished (Newman, 2014).

Primarily, there are sustainable models. These allow the for-profit companies in zero-price markets to earn money through offering a different product or service, which is somehow connected to the one priced at a zero level. They may take the shape of direct cross-subsidies, wherein buying two products from the same company, only one is paid for. Other sustainable strategies of SMPs include multi-sided platform⁵ models, where, for example

⁴ It is ambiguous in the doctrine whether referring to the process of exchanging personal data and attention for the usage of online platforms as ‘paying’ is accurate. See a series of blog posts (Schrepel, 2019).

⁵ In literature the terms ‘multi-sided platforms’ and ‘two-sided platforms’ are often used interchangeably to refer to the same phenomenon. This paper will refer to it as ‘multi-sided platforms’ for the sake of coherence, meaning to encompass two- or more sided platforms.

Facebook allows customers to create accounts for “free”, while charging advertisers.

Another strategy is the ‘freemium’ model, in which a basic version of a service is offered for EUR 0, while its higher quality version – premium – is available at a positive price (Bostoën, 2019). This can be observed for instance in LinkedIn trying to entice some of its customers with additional or enhanced services to purchase its paid version, LinkedIn Premium.

Conversely, the non-sustainable strategies do not allow for-profit companies to support themselves in the long run. These may involve products or services offered at a price of zero for non-financial reasons such as non-profit organization (e.g. the Wikimedia Foundation, operating Wikipedia), recoupment strategies such as promotional campaigns (such as Uber offering first-time users to take their first ride for free⁶) or outright predatory pricing strategies (Newman, 2014).

Anyway, zero-price practices are part of an economic exchange with customers, who incur certain costs. Newman differentiates between non-market signalling costs, such as opportunity costs or external costs (Newman, 2014), and market-signalling costs, which in zero-price markets are information and attentions costs. These market-signalling costs in zero-price markets serve the same function as money in positive-price markets – they encourage parties to enter into ‘commercial’ exchanges pursuing ‘economic gain’ from the transactions (Newman, 2014). Digital markets rely on gathering personal information, which can contribute to pro-competitive behaviour through for instance better tailoring the platform to the user’s preferences, but it can also trigger anti-competitive practices. Online platforms extract personal data from their users, and then sell access to these users to advertisers, making customer attention to advertisement the second key desire of companies active on zero-price markets. Regarding solicited and consent-based advertisements, a monetary fee is replaced by customers’ time and mental commitment to watch, view or hear them – they quite literally ‘pay attention’. In short, the non-monetary remuneration for social media services consists of the user’s personal data, which enables personalised advertising and data marketing, as well as the user’s attention to the ads presented, which profits the website’s owner (Gebicka and Heinemann, 2014).

Finally, it is important to note that ‘0’ in a zero-price is not ‘just another number’ (Evans, 2011, p. 71) – ‘zero is an emotional hot button – a source of irrational excitement’ (Ariely, 2009, p. 55). According to behavioural economics research, zero-price markets generate the so-called ‘zero-price effect’ (Newman,

⁶ However, since such promotion is based upon the expectation to recoup profits from next rides of the users (‘penetration pricing’), it can be argued it is rather a sustainable strategy for Uber.

2014). Namely, when the price of a product or service reaches zero, consumer demand tends to drastically increase, leading to “irrationally high shift in demand toward the free product” (Hüttel, Schumann, Mende, Scott, and Wagner, 2018, p. 269). This phenomenon occurs even where a standard cost-benefit analysis would lean towards the positive price option, often assuming that ‘free is good’ (Barnett, 2018; Newman, *The Myth of Free*, 2017). However, the issue of human attraction to the concept of ‘free’ is a more complex one, bringing into debate psychological and sociological accounts (Ariely, 2009). Having observed that, these accounts will be left outside the scope of this paper.

III. Legal assessment of zero-price practices of social media platforms

The key features of digital markets and social media platforms carry substantial challenges to competition law, as they bring considerable complexity and novelty to the EU competition assessment and enforcement (King, 2018). These markets rely on zero-price practices, which render them structurally very different from traditional markets. However, as established in the previous chapter, they remain *markets* in the sense of competition law; hence, raising questions regarding the appropriate application of positive price-based competition law framework to their market definition, market power and theory of harm.

1. Market power

Although this paper will not engage in a deeper discussion on how the notion of “free” affects market definition, it is deemed relevant for further considerations to review the established practice of the European Commission and the Court of Justice of the European Union (hereinafter: CJEU or Court). As a starting point in discussing the EU’s position *vis-à-vis* zero-price markets it should be noted the argument that EU competition rules do not apply to services provided ‘free of charge’ was rejected in the *Höfner* case.⁷ Moreover, the European Commission repeatedly held various free services on digital markets as relevant product markets. For example, in a recent *Microsoft/*

⁷ CJ judgement of 23.04.1991, Case C-41/90 *Höfner and Elser v Macrotron*, ECLI:EU:C:1991:161, paras 19–23.

LinkedIn decision the Commission defined the relevant product market as the market for enterprise communications services.⁸

In addition, as regards market power the General Court found market power to be of less importance when assessing zero-price practices than in traditional competition assessment, holding that ‘[T]he fact that the services are offered free of charge is a relevant factor in assessing the market power of the new entity. In so far as users expect to receive consumer communications services free of charge, the potential for the new entity to set its pricing policy freely is significantly restricted.’⁹ Consequently, the market power is of lesser importance when assessing zero-price practices than in traditional competition assessment.

Nevertheless, I argue that neither the Commission’s case-law, nor the Court’s jurisprudence solved all the issues of defining the relevant market or assessing market power of potentially dominant social media platforms offering their services at a price of EUR 0, as the multi-sided character of the markets on which SMPs operate still poses problems. Considering the difficulty in the precise delimitation of their activities, defining what the (multiple) sides of the multi-sided markets are separately, should be the first step (Thepot, 2013).

Another issue relates to the question of defining substitutability between different types of social media markets.¹⁰ In traditional competition assessment of products’ interchangeability, price is the factor that receives more attention than non-price variables, such as quality, innovation or privacy (Just, 2018). Without doubt the small but significant increase in price (hereinafter: SSNIP) test, a module often used in defining the scope of relevant market, does not find its use in zero-price markets. To address this issue, alternatives to SSNIP, such as small but significant non-transitory decrease in quality (hereinafter: SSNDQ) or small but significant non-transitory increase in cost (hereinafter: SSNIC) tests have been developed. Furthermore, competition authorities should take account of the data flows, which are key in ‘free’ markets. However,

⁸ Case COMP/M.7217 – *Microsoft/LinkedIn*, paras 77–83, 115. See also Case COMP/M.6281 – *Microsoft/Skype*, paras 18–63, confirmed on appeal: GC judgment of 11.12.2013, Case T-79/12 *Cisco Systems Inc. and Messagenet v European Commission*, ECLI:EU:T:2013:635, paras 65–74; Case COMP/M.7047 – *Microsoft/Nokia*, paras 43–45; Case COMP/M.7217 – *Facebook/WhatsApp*, paras 20–34. Nevertheless, the issue of market definition of “free” markets remains controversial in the doctrine; see (Polverino, 2012; Sousa Ferro, 2015; Sousa Ferro, 2017).

⁹ Case T-79/12 *Cisco Systems Inc. and Messagenet*.

¹⁰ Interestingly, the issue of defining relevant markets within online platforms was considered in a US case where the court distinguished between dating websites and general social networking websites, basing the lack of substitutability on the fact that the latter offered significantly more functions and appeal to users; see *LiveUniverse v. Myspace* CV 06-6994 AHM, 2007 WL 6865852 (C.D. Cal. Jun. 5, 2007).

it remains unclear what the role of such tests or data exchange in defining relevant markets should be and these matters are hoped to be addressed by the European Commission in the updated Market Definition Notice, currently under evaluation (European Commission, 2020).

Finally, the relevance of the discussion of market power of digital platforms should be also flagged in merger review. In the EU, merger notification thresholds are based on undertakings' turnover or assets.¹¹ Since online platforms often do not reach these thresholds, despite having significant value, they may escape the notification obligation, which in return can result in allowing 'killer' acquisitions (UNCTAD, 2019). The most striking example of issues of merger review of zero-price markets was the controversial *Facebook/Instagram* merger (Wu, 2018).¹² As neither undertaking charged users with money for their services, the price-focused competition authorities lacked the tools to rule the platforms were competitors on the attention markets.¹³

2. Abuse of dominant position

A dominant position on a market is defined as 'a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers'.¹⁴ In determining dominance, market shares play an important role. As per June 2021, Facebook holds more than 70% of the market share of worldwide social media platforms' visits, with Twitter and Pinterest coming next with around 8% each.¹⁵

However, while there is a general presumption of market dominance when market shares in the relevant market exceed 50%, it can be balanced with low

¹¹ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EU Merger Regulation) (OJ L 24/1).

¹² For a wider context and comment see also (Wu, 2018a). However, it is not unanimous that *Facebook/Instagram* was a killer acquisition, as it is argued that the merger benefited consumers by improving their experience on both platforms, see (Sperry, 2020).

¹³ Unintelligibly, the British Competition Authority held that Facebook and Instagram were not competitors, arguing that Facebook does not have a photo-taking app, while Instagram does not have advertising revenue. See the Decision of the Office of Fair Trading of 14 August 2012 no. ME/5525/12. For disproving the OFT's position by explaining how the platforms competed on attention markets see (Wu, 2019).

¹⁴ Case C-27/76 *United Brands v. Commission* ECR 207, para. 65.

¹⁵ GlobalStats statscounter, available: <https://gs.statcounter.com/social-media-stats> (accessed on 11 April 2021).

barriers to entry for competitors.¹⁶ Social networking sites requiring users to create accounts generate switching costs for consumers as people prefer not to constantly create new profiles. Furthermore, the notion to join a SMP because ‘everyone is on it’ attracts more and more users (Gebicka and Heinemann, 2014) – SMPs are characterised by high network effects. In the EU, Facebook and YouTube take the lead as the most important online social media providers considering user reach and frequency of usage (European Commission, 2018). As a result, many SMPs are deemed dominant not only due to their high market shares, but also due to the difficulties of competitors to successfully compete or, even simply, enter the relevant market (Gebicka and Heinemann, 2014). Thus, it can be assumed that many of the SMPs offering their services for a zero-price are currently dominant.

Abusive pricing practices as a form of abuse of dominance exist in the form of predatory and excessive pricing. Looking at zero-price practices of SMPs, the first competition law concern that arises, is whether the price of zero, which by default is placed below cost, is a predatory pricing strategy. Simultaneously, bearing in mind that such zero-price services are not actually offered for free, the question whether a company could require ‘too much’ information or attention from its users, resulting in an excessive pricing behaviour, arises.

In essence, there are two key issues that form the heart of debate on abusive pricing practices of SMPs offering their services ‘free of charge’ to customers – do customers pay *too little* when they pay *nothing*, and/or do they pay *too much*? The frameworks for individual assessment of both predatory pricing and excessive pricing doctrines, as well as potential solutions to the issues in their assessment are discussed in the following chapters.

3. Theory of harm

Zero-price practices have certain benefits for customers of online platforms. As anyone can access them without paying for the service, they arguably offer a unique opportunity to customers to use various social media platforms at zero monetary costs. Moreover, the main economic characteristics of digital platforms on top of the zero-price, such as very high network effects or increased productive efficiency (reduction of search and transaction costs) provide immediate and tangible benefits to consumers.¹⁷ Introducing positive

¹⁶ European Commission, Communication from the Commission — Guidance on the Commission’s enforcement priorities in applying Art. 82 of the EC Treaty [now: Art. 102 TFEU] to abusive exclusionary conduct by dominant undertakings (OJ 2009 C 45/7), para. 16.

¹⁷ For example, Marchese (2020) claims that Facebook’s allegedly anti-competitive practices may be harmful for its competitors, but in the end it benefits consumers, through

prices in place of ‘free’ services would insignificantly impact upper-income Europeans, who would easily afford the subscription fees. However, lower-income Europeans would face digital exclusion (Portuese, 2021). With that in mind, the identification of consumer harm can be problematic (Marciano, Nicita and Ramello, 2020).

Nevertheless, as zero-price services offered by SMPs are not *actually* free, the risk of abuse of a platform’s dominant position due to predation or excessive use of information and attention of its users persists. Data and consumer protection are not matters usually falling under the scrutiny of competition law. Consequently, competition law assessment of abusing dominant position of SMPs operating zero-priced services has been a controversial matter, calling into question the extent to which data and consumer protection could be accounted for when building theories of harm. The debate on the appropriate theory of harm to consumer welfare remains unresolved in the doctrine (Khan, 2017; Melamed and Petit, 2019; Newman, 2019; Newman, 2017a); nonetheless, it should be perceived against the backdrop of the wider considerations of the aims of competition policy.

Siding with the Neo-Brandeis arguments¹⁸ that competition law should reach beyond the consumer welfare standard, defined as short-term price benefits, to capture the potential for consumer harm brought by social media giants, I further argue in favour of expanding the theories of harm of predatory and excessive pricing to – to some extent – take account of data, privacy and consumer protection matters. I believe that the three complement one another, aiming to protect different aspects of consumer welfare (Graef et al., 2018).

4. Recent developments

The European Commission has shown awareness of the shortcomings of the abuse of dominance framework regarding the assessment of online platforms and their harmful practices with the proposals for the Digital Services Act (hereinafter: DSA)¹⁹ and the Digital Markets Act (hereinafter: DMA)²⁰

price reductions and targeted advertising benefits. However, it is hard to agree with the author that such correlation would ultimately render Facebook’s practices pro-competitive.

¹⁸ See for a summary of the Neo-Brandeis arguments concerning EU digital markets see (Botta and Solidoro, 2020).

¹⁹ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC, COM(2020) 825 final.

²⁰ Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act), COM/2020/842 final.

presented in December 2020. This Digital Package aims to establish a safer digital space, in which fundamental rights of users are upheld, and a level playing field, promoting innovation, growth and competitiveness, both in the EU and worldwide (European Commission, 2020a).

With reference to the framework of assessment of abuse of dominance, the key proposal is based on the concept of ‘digital gatekeepers’, large platforms providing online services or controlling access to online services, which exercise control over the digital ecosystems²¹ and have a significant influence over competition and innovation in the fields (Bourreau and Alexandre, 2019).²² Seeing how a number of online platforms have grown to become gatekeepers, the Commission further proposes *ex-ante* regulation so as to tackle competition issues, which the current competition law framework was unable to address (Mabiega, 2020).²³ The *ex-ante* regulation would entail either a set of clearly defined and predetermined obligations and prohibitions, so-called ‘blacklisted practices’ or a range of tailor-made remedies designed for regulators to impose on digital gatekeepers when deemed necessary and justified on a case-by-case basis (Mabiega, 2020).

In January 2021 Germany passed a reform of its Act against Restraint of Competition (hereafter: ARC Amendments), introducing preventative provisions aimed at tackling the market dominance of large online platforms (Van Dorpe, 2021). According to the new §18 ARC, an undertaking is considered dominant if it has no competitors, is not exposed to any substantial competition, or has a paramount market position in relation to its competitors.

Importantly, the ARC Amendments also touch upon zero-price practices, as according to §18 (2a) ‘the assumption of a market shall not be invalidated by the fact that a good or service is provided free of charge’. Furthermore, the ARC Amendments elaborate on the way the market position in case of multi-sided markets and networks should be assessed. Following §18 (3a) the emphasis should be placed on network effects and economies of scale, parallel use of services from various providers, users’ switching costs, access to data and innovation-driven competitive pressure. The ARC Amendments seem to also tackle the issues regarding merger notification obligation of undertakings operating zero-price practices, as by adding another threshold in §35 (1a), the Federal Cartel Office (hereinafter: FCO) should be notified of mergers

²¹ A digital ecosystem can be characterised by a fast and ongoing development of technologies as well as open, transparent and collaborative processes.

²² For an extensive outline of the concept of ‘gatekeeper’, as well as relevant notions of ‘bottlenecks’, ‘unavoidable trading partners’ and ‘doctrine of special responsibility’ see (Alexiadis and de Stree, 2020).

²³ The existing *ex-post* competition enforcement is criticised for being too slow, cumbersome and unpredictable for the fast-paced digital markets.

between small, but innovative undertakings and large platforms, even in cases where the smaller company would not reach the regular turnover threshold.

5. Recommendations

Having studied the EU framework for assessment of abuse of dominance of zero-price SMPs, I conclude the price-centred existing tools do not address the challenges of digital economy, allowing certain practices to escape competition enforcement. Thus, they should be adjusted, where possible, and new competition tools need to be developed.

The Market Definition Notice's ongoing update must adjust the way we define markets to digital economy and zero-price markets. The assessment should place more focus on non-price factors from the demand-side, as with no monetary exchange, competitive parameters such as service's functionality, quality (including privacy), data, attention or innovation are more significant to customers.

Moreover, defining relevant markets, each side of the multi-sided platforms should be held as a separate market, provided that consumers, advertisers and other agents do not enter into transactions with each other respectively, since products and services are deemed to have different degrees of substitutability on each side of the platform. For instance, SMPs and search engines could be regarded as substitutes by advertisers, but not by consumers (UNCTAD, 2019).

Additionally, as the SSNIP test relies on price mechanisms, which are not present as such on digital markets offering zero-price services, competition authorities should base their assessment on a different mechanism instead. For example, the SSNIC test is aimed to assess if the undertaking in question could impose a small but significant non-transitory increase in cost for customers in a profitable way (Newman, 2015). In zero-priced markets, customers' costs entail information and attention costs,²⁴ which are more complicated in terms of transparency and calculability than prices. It could be difficult for customers to assess their behaviour when facing a theoretical increase in information and attention cost. Furthermore, both information and attention costs may take various shapes and forms – the former can constitute numerous types of personal data (which renders the assessment even more difficult given the application of data protection rules) – while the latter can constitute the number of appearing advertisements, the length of the display, size of each

²⁴ Considering attention costs, Wu proposes a solution tailored to the attention economy dynamics present among online platforms – the attentional small but significant and non-transitory increase in price (hereinafter: A-SSNIPS) test. The A-SSNIPS would be assessing consumers' reaction to an increase in undesired messages or advertising load. See (Wu, 2019).

advertisement, frequency of their display. While SSNIC is sensible from an economic perspective, its practical application raises doubts.

Alternatively, advocated by the OECD, the SSNDQ test corresponds with the nature of digital platforms, where quality of the product or service is imperative. The relation between quality and substitution is not a new concept in economic theory or competition law (Mandrescu, 2018), yet, quality is a wide notion, which in the case of assessing SMPs could include data privacy, user friendliness, security etc. Considering that various platforms compete based on different quality criteria, the ‘quality’ within the SSNDQ would likely have to be assessed on a case-by-case basis. While certain doubts concerning its practicality remain (OECD, 2013), the European Commission’s application of the SSNDQ test in *Google Android*²⁵ exemplifies its functioning.

Furthermore, additional criteria for the definition of relevant market in digital sectors should be considered. Following Germany’s example of clarifying that ‘free’ products or services can constitute markets, other jurisdictions should adapt their laws accordingly. Even though this addition simply solidifies recent European and national practice, it is an important step to resolve one of the issues in the debate on ‘free’ markets once and for all. Moreover, Germany’s amendments regarding market power assessment of multi-sided platforms and the introduction of a transaction value threshold for merger notification are laudable and present a useful blueprint for competition regimes elsewhere.

Finally, the EU Digital Package should be commended for its attempts to tame the increased and seemingly uncontrollable power of large online SMPs. However, while the introduction of the notion of digital gatekeepers and *ex-ante* regulation is a step forward, the DSA and DMA leave certain aspects, regarding zero-price practices more specifically, out of its scope. I consider this an indication of EU policy-makers’ uncertainty whether these types of regulation are the appropriate legal means to tackle the consumer harm stemming from predatory and excessive pricing associated with zero-price practices on SMPs. As discussed in the following chapters, I call for a deeper integration of data and consumer protection in assessing these issues.

IV. Predatory pricing

Services offered at the price of EUR 0 bring immediate apprehension considering the predatory pricing doctrine. They are by default below costs; even though digital platforms might have low marginal costs, they are surely

²⁵ Case AT.40099 *Google Android*, para. 267.

not zero. At first glance, it would thus seem implied that provision of any ‘free’ services falls under the predatory pricing doctrine.²⁶ Conversely, consumers favour services offered at the price of EUR 0.²⁷ The next sub-chapters discuss the application of predatory pricing to assess multi-sided platforms and freemium models.

1. Multi-sided platforms

Due to the multi-sided nature of platforms offering zero-price services to consumers, the recoupment often appears on another side of the platform, rendering the services not actually “free”. Thus, the question of implications of predatory pricing rules on zero-price practices of multi-sided markets sparked an intense debate in the doctrine.

Evans and Schmalensee (2012) summarised the general agreement, stating that the standard cost-based mechanisms for identifying predatory pricing did not apply to the economic reality of multi-sided platform. Bostoen (2019) exemplified this statement with the case of British quality newspapers price war that occurred in the 1990s, where *The Times*, pricing 10 pence for its issues, risked charges for predatory pricing (also discussed by Behringer and Filistrucchi, 2015). However, the newspapers were a two-sided market, connecting readers with advertisers – bearing in mind that sometimes papers are free to readers and fully funded by advertisements, it appeared necessary to take into account both sides of the multi-sided platforms when examining whether prices are indeed predatory (Bostoen, 2019). In my opinion, it is an imperative step in adapting predatory price doctrine to digital markets.

The implications of predatory pricing on platforms’ economics were first discussed by Wright (2004), who analysed fallacies resulting from applying assessment typical to one-sided markets to multi-sided ones. He held that a price below marginal cost does not always indicate predation. Following, Evans (2003, p. 325) initiated the substantial debate on the matter, adjusting the predatory pricing test in the following way: ‘[i]n multi-sided markets, one needs to compare the combined price charged to all sides to the combined costs for all sides’.²⁸ Behringer and Filistrucchi (2015) presented the first

²⁶ Following Rato and Petit (2013, p. 50) ‘a dominant supplier who gives away products for free seemingly engages in the worst possible form of predatory pricing’.

²⁷ For an elaboration on the zero-price effect see (Shampan’er and Ariely, 2006).

²⁸ Evans reaffirmed this position a decade later, see (Evans and Schmalensee, 2012). For a more recent approval of this test see (Gurkaynak, Inanilir, Sinan, and Gizem Yasar, 2016). Similar proposals were presented by (Fletcher, 2007; Rato and Petit, 2013). The latter authors explicitly hold that zero-prices should generally be perceived to benefit consumers.

economic model of predatory pricing test in multi-sided markets, concluding that predatory pricing would arise when a dominant undertaking is making an overall loss.

Contrarily, Gal and Rubinfeld (2016) underlined the risk of EU competition law leading to false positives. They held that the narrow application of predatory pricing test leads to a conclusion that a zero price is the worst type of predation (Gal and Rubinfeld, 2016). As a remedy they proposed the introduction of a requirement of potential recoupment, following the US model. Despite the CJEU having already rejected any recoupment requirement regarding predatory assessment,²⁹ the Court should refine this approach when assessing zero-price practices characteristics to avoid false positives. Besides supporting the recoupment assessment, which considers interrelated markets for error prevention, Newman (2015) advocated for including the information and attention costs incurred by consumers when making use of zero-priced services. Nonetheless, as pointed out by Bostoen (2019) quantifying information and attention can be problematic, thus making use of the advertising revenue while relying on the predatory pricing test presented above may be a better solution.

Agreeing with Bostoen (2019, p. 270) zero-price practices offered by online platforms will not amount to predatory pricing ‘as long as (i) the overall price level exceeds the average total cost of providing the service to the different sides of the market; or (ii) the overall price level exceeds the average variable but not total cost, and there is no intention to eliminate a competitor’. Nevertheless, the economic characteristics of online platforms inherently make them prone to engage in predatory behaviour (Bamberger and Lobel, 2017). As the value of the platform is dependent on the quantity and quality of users on both sides, gaining more users on one side results in gaining more users on the other. Thus, platforms aim to increase their number of users, leading to a few platforms dominating the market. Competing *for* the market rather than *in* the market, platforms tend to adapt a growth-over-profits strategy, where they focus on maximization of the number of users rather than profits (Srniczek, 2016).

2. Freemium models

Offering a product or service for ‘free’ does not always mean that no price will be charged to any of the customers. SMPs often try to balance the tension between the high (initial) costs of digital products and lack of (initial) revenue through the freemium model (Niemand, Mai and Kraus,

²⁹ CJ judgment of 2.04.2009, Case C-292/07 P *France Télécom v Commission*, ECLI:EU:C:2009:214, para. 110.

2019). While already widespread among online platforms and predicted to grow even further (Kumar, 2014), running the freemium model can be difficult due to the so-called ‘penny gap’ (Kopelman, 2007).³⁰ Users already benefitting from the free version are reluctant to pay for the premium upgrade.

The risk involved in predatory pricing assessment of freemium models can be illustrated by the recent French *Bottin Cartographes/Google France, Google Inc.* case line. It concerned the Google Maps application programming interface (hereinafter: API), which was licensed for free to firms who wanted to embed Google maps on their websites.³¹ Bottin Cartographes, a French online mapping services competitor, brought proceedings against Google, alleging that the zero-pricing strategy was predatory and thus constituted an abuse of dominance. Controversially, the Court of Commerce of Paris (hereinafter: CCP) supported their claim, reasoning that since the price of the service amounted to zero, it did not allow Google to recoup any of the production costs it inevitably incurred.³² Having ruled that the conduct constituted part of a general exclusionary strategy, the Court concluded that Google had abused its dominant position.

Following the Opinion of the French Competition Authority (hereinafter: FCA), the Paris Court of Appeals (hereinafter: PCA) reversed the judgement.³³ The FCA investigated Google’s business model, observing a difference between the functioning of the free version and the paid version of Maps API (Maps API for Business). Namely, the latter included higher resolution, more itinerary options and real-time tracking of vehicles and was guaranteed to be free from advertisements. Having applied the EU predatory pricing test, the FCA concluded that there was a substantial margin between the revenues, that Google obtains both from Maps API (particularly the licensing fees) and advertising (should Google insert advertising in the free version of Maps API),

³⁰ This is also backed up by behavioural economics research; see (Thaler, 2015), where the ‘endowment effect’ is discussed, finding that the entitlement to the terms of trade to which one is accustomed is especially visible in goods or services traditionally offered for free.

³¹ Judgement of the Court of Commerce of Paris of 31.01.2012, *Bottin Cartographes Google France, Google Inc.*, available (in French) at: <https://www.legalis.net/jurisprudences/tribunal-de-commerce-de-paris-15eme-chambre-jugement-du-31-janvier-2012/>.

³² Rato and Petit (2013, p. 51) refer to this judgement as ‘somewhat nonsensical’, suggesting that the Court’s reasoning that Google’s alleged exclusionary strategy aimed at the long-term optimization of marketing of targeted advertising resembles a conspiracy theory. They should be applauded, however, for pointing out the Court’s mistakes in dismissing the economic characteristics of multi-sided platforms in technology-enabled markets.

³³ Autorité de la concurrence, Opinion 14-A-18 of 16.12.2014, *Bottin Cartographes/Google France, Google Inc.*, available (in French) at: <https://www.autoritedelaconcurrence.fr/sites/default/files/commitments/14a18.pdf>.

and the costs. Based on the FCA's opinion, the PCA concluded that Google did not engage in predatory conduct in offering a free version of Maps API.³⁴

In summary, *Bottin Cartographes* case line exemplifies through the CCP's judgement that freemium models may induce courts finding false positives, and through the FCA's opinion and PCA's judgement that they require thorough analysis of their pricing models to avoid such mistakes. As Bostoen suggests, this could be prevented by understanding the low marginal costs of digital products as well as considering all revenue (and all cost) generated by the undertaking in predatory pricing assessment. In case of freemium models, the revenue incoming from the premium version should be included (Bostoen, 2019).

3. Recommendations

Although not actually 'free', services offered at a zero-price by multi-sided and freemium-based SMPs can constitute predatory pricing. Yet, the risk of finding false positives prevails, as the current framework for analysis of predatory pricing is based upon the values of positive prices. To adapt it to zero-price markets it is imperative to understand the sector and its characteristics. While it is my conviction it is better for competition authorities to err on the side of imposing a remedy, rather than do nothing and risk harm to competitive processes and consumers, it is important to introduce the following safeguards to ideally avoid any such mistakes in assessment.

Considering multi-sided platforms, competition authorities cannot forget about their advertising revenue, which must be considered when applying the predatory price tests. The advertising revenue should be treated as the price of the product to allow weighing it with its cost. Regarding freemium models, the revenue the platform gains from the premium users who pay for the additional benefits should be considered. In this case, this revenue is what competition authorities should compare to the costs of both freemium and premium users. Advertising revenue should also be accounted for.

Overall, the EU framework for assessment of predatory pricing misses the link between the zero-price practice and the actual harm to competition and consumer welfare. While recoupment is not required in the EU assessment, it would be a criterion worth introducing for zero-price practices, as without eventually raising prices – and in case of zero-price markets, these could

³⁴ Judgement of the Paris Court of Appeals of 20.11.2013, Case 12/02931, *Google France, Google Inc./Bottin Cartographes*, available (in French) at: <https://www.legalis.net/jurisprudences/cour-dappel-de-paris-pole-5-chambre-4-arret-du-20-novembre-2013/>.

include data and attention costs as well – the pricing schemes may not have anti-competitive character.

Finally, even though this analysis focuses on the user side of SMPs, predatory pricing could also occur on the advertising side. In case of platforms offering advertising spaces at a very low price, to only raise prices once they fortified their market position, the traditional predatory pricing assessment would be applicable.

V. Excessive pricing

Discussing issues regarding the assessment of excessive pricing when the price of a service offered by a SMP is set at EUR 0 may seem counterintuitive. Nonetheless, zero-price services are not actually ‘free’ as platforms recoup such practices with consumers’ personal information and attention. Bearing in mind that data and attention constitute the ‘price’ consumers ‘pay’ for the zero-price services of SMPs, the question of excessiveness should focus on these aspects.

1. Information costs

Information costs refer to personal data of users, i.e. their name, e-mail address, age or relationship status, which they initially share in order to access the ‘free’ services or volunteer to post on their profiles later on.³⁵ Users also incur information costs in a more implicit way, as for instance Facebook tracks one’s activity of engaging with particular pages or posts, clicking on certain ads, recently even following users’ non-Facebook activities online or on their devices.³⁶ Many SMPs, such as Facebook and Instagram operate a take-

³⁵ In the EU, data and privacy protection is mainly secured under the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (OJ L 119/1), hereinafter: GDPR (General Data Protection Regulation). The GDPR impacts how data can be harvested, processed and commodified.

³⁶ On these issues see e.g. The Washington Post, *Facebook will now show you exactly how it stalks you – even when you’re not using Facebook*, 2020, available at: <https://www.washingtonpost.com/technology/2020/01/28/off-facebook-activity-page/> (accessed on 30 April 2021); New York Times, *What You Don’t Know About How Facebook Uses Your Data*, 2018, available at: <https://www.nytimes.com/2018/04/11/technology/facebook-privacy-hearings.html> (accessed on 30 April 2021).

it-or-leave-it approach, where users have little to no control over their data (e.g. they cannot turn off personalised advertising). To access the SMPs, users must condition their personal information and whatever is done to it. While they express their consent to subject their data when joining the platforms, complications to access privacy settings on many SMPs create issues for maintaining informed consent, which is imperative for protecting the welfare of consumers.

When discussing excessive pricing with regard to information costs, it is crucial to turn to the FCO's *Facebook* case line.³⁷ In 2019 the FCO held that Facebook had abused its dominant position in the market for social networks by conditioning the use of its social networking service upon users' consent to extensive collection and processing of their data.³⁸ Following appeals, the Federal Supreme Court (hereinafter: FSC) preliminarily confirmed the allegation, arguing that Facebook was undoubtedly dominant on the German social networks markets and that it was abusing its position by using the terms of service, which deprived users of choice.³⁹ Consequently, competition on social networks markets and online advertising markets, also associated with consumer data, could be impeded. However, upon return for a final verdict, the Düsseldorf Court of Appel (hereinafter: DCA) referred to the CJEU for a preliminary ruling on whether data rules can be cited in competition proceedings (Tiede, 2021).

Regardless of the outcome of the proceedings, the theory of harm applied by the FSC in discussing the abuse of dominance by Facebook offers a unique perspective – on the one hand, users were harmed by lack of choice and by being forced to provide more data than they wished to, having to use a product they did not fully want, on the other hand, competitors suffered from increased difficulty to compete in advertising services. The clarification that a zero-price practice can be excessive as well as the implication that using Facebook, consumers incur information and attention costs,⁴⁰ have been long needed and they could put other data-driven platform's models under question.

The *Facebook* case line has faced criticism concerning reliance on data protection in constructing the theory of harm. However, in my view the FSC was right to build the theory of harm through the connection with data protection issues yet tackle the problem through the lens of exploitative

³⁷ For an overview of the entire Facebook investigation see (Buiten, 2020).

³⁸ Decision of Bundeskartellamt of 6.02.2019 no. B6-22/16 *Facebook Inc. i.a.*

³⁹ Decision of the Oberlandesgericht Düsseldorf in interim proceedings of 26.08.2019 no. VI-Kart 1/19 (V).

⁴⁰ For more comments on the impact of SMPs' 'data as a price' business model on consumer welfare see the studies (Summers, 2020; Sunstein, 2018).

abuse and competition law enforcement,⁴¹ as it stemmed from the market structure, constituting potential for harm not only to consumers' privacy, but also competitive processes. With this, I believe competition assessment should not fear to engage data protection rules, as the two domains are closely interlinked when assessing excessiveness of information costs and should be used to mutually strengthen consumer welfare.

2. Attention costs

Many companies try to justify their excessive data collection with the objective of improving their products through, for example, better targeted advertising. These attention costs often make operating the platform profitable. As Grimmelman (2019, p. 228) puts it 'there is no need to sell people something else once you have a bit of their attention. Their attention itself is the commodity'. Advertisements on SMPs can be a real nuisance when users have to watch a 30-second advertisement to be able to watch a video on YouTube. Other times, the attention costs are smaller, when ads more subtly appear on one's Facebook feed. However, advertisements constitute costs for consumers either way, as after all 'time is money'. They are particularly problematic, when the platform does not allow users to decide whether they wish to receive targeting advertising.

Unlike the widely researched issues of competition law assessment stemming from information costs⁴², matters regarding attention costs users incur in zero-price digital markets only recently gained in relevance in the scholarly debate. Many of the SMPs offering 'free' products or services rely on 'attention economics' (De Marcos, 2020) in their business models. These so-called 'attention markets' also bring various challenges to competition assessment (Newman, 2020; Wu, 2019). Interestingly, as Evans argues, consumer benefits, i.e. access to the content on the 'free' platform, stemming from online advertising, can surpass the nuisance they create to users (Evans, 2020). Furthermore, advertisements can promote competition and contribute to consumer welfare, as users who engage with advertisements create positive externalities, leading to platforms lowering prices and improving quality (Evans, 2020).

Nevertheless, attention is scarce, rivalrous and tradeable; thus, people often choose to swap it for access to an online platform, such as a social

⁴¹ In comparison to the FCO, where data protection issues were placed at the forefront of finding of the abuse.

⁴² For discussions on data and privacy protection implications on competition law see (Costa-Cabral and Lynskey, 2017; Graef, 2016; Lynskey, 2018).

media network (Newman, 2020). Newman argues this swap takes the shape of a barter exchange, where two products are mutually exchanged, without involving a monetary currency, which in its nature is a yet another issue to the price-centric competition review. However, the excessive pricing relating to attention markets can be seen by the analogy of ‘attention overcharge’, a situation in which an undertaking extracts higher attention costs from customers, through for example displaying more frequent or lengthier advertisements while depicting the same product or service, than it would be able to obtain under competitive conditions (Newman, 2020). Another harmful practice connected to excessive attention costs is ‘attention theft’, seizure of attention that is non-consensual (Wu, 2019). Seeing advertisements to which one has not agreed is excessive.

3. Recommendations

Social media platforms offering ‘free’ products or services can engage in excessive pricing practices. However, the assessment of excessiveness must focus on information costs and attention costs users incur. While both aspects are difficult to grasp and measure,⁴³ the following improvements should be made to adapt the legal framework.

Regarding information costs, excessive pricing may take shape of exclusionary, excessive or unfair use of personal data, as was allegedly the case of Facebook in the FCO proceedings. As the case line highlights, the characteristics of digital platforms and the data-driven business models must be reflected in competition law assessment. The applied theory of harm underlines the importance of data protection rules in competition proceedings. Awaiting the preliminary ruling of the CJEU in the *Facebook* case, the FSC’s approach to taking a stance on matters encroaching on personal data protection in the name of safeguarding competition and consumer welfare should be praised. In my view, abuse of dominance assessment of such data-driven digital platforms, given their market power and social importance, should allow for flexibility to expand the competition review.

Considering attention costs, the excessive pricing can take the shape of attention overcharge, an excess of undesired advertisements. The key remedy lies in the correct assessment of market power of attention markets. Models, such as the A-SSNIP test, considering customers reaction to a small but significant, non-transitory increase in unwanted advertising messages, aim to adapt the well-established SSNIP test to the specifics of attention markets. As

⁴³ Although for a proposition on how competition assessment could account for the value of content in attention markets see (Evans, 2019).

for attention theft, consumer protection laws are better fitted than competition law.⁴⁴ I believe that in updating consumer regulation, the EU policymakers must further take account of digital markets and the implications they have on commercial practices.

VI. Conclusion

Based on this research, zero-price practices of social media platforms present fundamental challenges to traditional EU competition law. As the price of zero seems to be preferred by platforms' users, the companies offering products or services "free" of charge seek recoupment either way. The actual price is either compensated by advertisers, who pay the platform for access to users' information and attention, or by premium users of freemium platforms.

As the EU framework for assessment of unilateral pricing conduct of dominant undertakings is price-centred, my conclusion is that it must be adapted to effectively analyse zero-price practices. At first glance, the price of EUR 0 for a service seems to by default fall under the scope of predatory pricing – the price of zero appears to *always* be below costs (which even if marginal, still exist for SMPs). However, before jumping to such conclusions, which would ultimately often result in finding false positives, competition authorities should thoroughly analyse the characteristics of the platform in question and consider revenue from advertisements and freemium users. Only then such revenues can be weighed against the costs incurred in applying the adapted predatory pricing test.

Conversely, the price of EUR 0 for a product or service seems to by default fall out of the scope of excessive pricing – the price of zero appears *never* to be too high for consumers. However, this assumption could lead to finding false negatives. Since zero-priced services come at information and attention costs to consumers, the danger of their excessive charge or use by the SMPs persists. Competition authorities should be able to assess whether dominant SMPs are engaging in excessive or unfair use of personal data, or excessive or unwanted advertisement as potential exploitative abuses such as excessive

⁴⁴ See e.g. Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services (OJ L 136/1); Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive') (OJ L 149/22).

pricing. While measuring information and attention costs can be difficult and ambiguous, competition law should build theories of harm associated with data and consumer protection.

Finally, this research proves that the issues of assessment of abusive pricing practices of zero-price social media platforms overlap with data and consumer protection laws. I infer that they should be perceived mindful of the broader question of what the best tools to tackle the use of consumer's information and attention on digital markets are. In my view, the balance of control over consumer's data is currently favouring the platforms, thus granting consumers genuine choice and control over the use of their data is imperative. Accordingly, competition enforcement should not shy away from building theories of harm encroaching on other branches of law, i.e. data protection. Nonetheless, matters concerning advertising, should be left to consumer protection regulation, as the EU consumer policies are better equipped to address them.

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