The Challenges of Regulating Vertically Integrated Online Platforms: An Analysis of Margin Squeeze Doctrine and Non-Discrimination Rules

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AEC test	: As-Efficient Competitor Test
EC	: European Commission
ECJ	: European Court of Justice
EU	: European Union
GDPR	: General Data Protection Regulation
LRAIC	: Long-Run Average Incremental Cost
MS	: Member States of the European Union
P2BR:	: Platform to Business Regulation
SME	: Small and Medium Enterprise
TFEU	: Treaty on the Functioning of the European Union
U.S.	: United States of America

1. INTRODUCTION

Online platforms are not insurgent business models. On the contrary, Google and Amazon, for instance, are available on the market since 1998[1] and 1994[2], respectively. Online commerce, on the same note, is by the day becoming the preferred way to shop[3], and it will only experience exponential expansion, with predictions indicating an annual growth rate on revenue of 7.5%[4].

Nevertheless, such online intermediation activities, besides being available for many years, still do not operate in a peaceful environment. On 27th of June 2017, for example, European antitrust officials imposed on Google a record fine of €2.7 billion[5] for favouring its own products on internet search results, which was deemed as discriminatory and anti-competitive.

Apple, on is turn, gives yet another example. On 2016, the American company, which has its own music service, refused to offer, on its Apple Store, an update on its competitor Spotify's app. Apart from that discriminatory practice, the commission rates Apple imposes on its business users, including music streaming apps, is also being investigated due its expressivity (30%) and possible prejudicial outcome.

The problem with those conducts, and others under investigation, is that they can potentially harm consumers and the competitive structure of the market, the two main objects of protection of competition law. To take one step at a time, however, it is first important to highlight the common background of all cases, which is the existence of an online platform – or intermediary, which holds a significant share of the market, being classified as dominant.

When in such a position, incumbent firms can abuse their dominant position by, for instance, adopting discriminatory practices towards its competitors, directly affecting their revenue and, many times, forcing them to go out of business. Those conducts, therefore, are exclusionary.

While, however, the frequency of such cases shows that twenty years is a significant term for technological development, competition law authorities, because of the technological turbulence, struggle to find a theory of harm that is applicable to big technological firms. Other works[6], on this tone, focus on stating the expressiveness of problems. This study,

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[1] Google, '*About Us – Our Story*'. <https://about.google/our-story/>

[2] Fundable, '*Amazon Startup Story*'. <https://www.fundable.com/learn/startup-stories/amazon>

[3] Peter Roesler, 'New research reveals more consumers are shopping online for everyday items', Inc. (16 April 2018). <https://www.inc.com/peter-roesler/new-research-reveals-more-consumers-are-shopping-online-for-everyday-items.html>

[4] Statista, '*Global eCommerce Revenue* – Europe'. <https://www.statista.com/outlook/243/102/ecommerce/europe>

[5] Mark Scott, '*Google fined record $2.7 billion in E.U. antitrust ruling*', The New Yrok Times (27 June 2017). <https://www.nytimes.com/2017/06/27/technology/eu-google-fine.html>

[6] Robin S. Lee, 'Vertical integration and exclusivity in platform and two-sided markets', American Economic Review, (2013), 103(7).

on the other hand, aims at analysing ideas that can potentially be used to regulate tech companies.

1.1. The Rationale of Online Platforms and the Vertical Integrated Phenomenon

The rationality of online platforms is associated with the peculiarities of the so-called two-sided markets. Such markets are characterized by facilitating interaction between distinct but interrelated user groups in such a way that it is possible to change the volume of transactions through allocating costs to one side while reducing costs to the other[7].

In those markets, the bottom line is that business and end-users must meet and interact to benefit from the increase in participants from the other side. To be efficient, however, the rapprochement between the two sides needs to be effective to increase the likelihood of those parties entering in a reciprocal relationship and negotiation.

That is precisely where online platforms operate. The costs of such approximation can be substantial, but the business model creates an ecosystem of constant interaction between the players for the permanent optimization of contacts and economic exchanges[8].

While increasing in size, those intermediaries, however, tend to become vertically integrated. As such, after their first starting years of operation, they expand the business and start to offer both the intermediate service – the platform where transactions are enabled - and goods that compete with the goods of their business users. Amazon is, nowadays, a great example, since besides being an intermediary, it also makes available a diverse range of its own products.

Besides marketplaces, search engines can also become vertically integrated, as well as application stores. To use Google as an example, besides aggregating search results and raking them using smart algorithms, the platform encompasses its own shopping service, called Google Shopping. There, it sponsors its products, which compete with products being offered by business users of the platform.

Because of their expanding capacity, platforms create, especially to SMEs, a giant opportunity of leverage. As such, they provide an effective and easy opportunity to such businesses to offer their products and services online and, simultaneously, access to a great number of potential customers. Thus, it is not surprising how businesses become increasingly dependent on intermediaries.

While, however, benefits are irrefutable, problems are likely to arise due to their growing market expressiveness. Before, however, further discussing the issues, it is fundamental to understand the reasons why platforms experience such an escalated growth. And, equally important is to recognize that such reasons are not an exclusivity of the online environment.

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[7] Jean Tirole, 'Economics for the common good', New Jersey: Princeton University Press, (2017), p. 379.

[8] Sangeet Paul Choudary, 'Platform scale: how an emerging business models helps startups build large empires with minimum investment', Cambridge: Platform Thinking Labs, (2015).

1.2. Direct and Indirect Network Effects and Abuse of Dominant Position

WhatsApp is an online messaging app created in 2009 which, by 2017, had up to 1.5 billion users[9]. Facebook and Amazon, similarly, also saw an exponential enlargement of its users over a few operating years[10]. The reasons for that are associated with advantages deriving from economies of scale and direct and indirect network effects.

The central idea of direct network effects is that the value of a service is directly conditioned on the number of users that use such service have[11]. This way, the greater the number of users, the higher the chance of the platform to increasingly attract more users[12].

Indirect network effects, on their turn, happen when the number of users on one side of the market attract more users to the other side[13]. Take, for instance, Facebook. One of its sources of revenue is the advertisement sector. As such, the more users the social network has, the more advertisers will want to also use the platform to expose its products. In fact, those effects are of such value for platforms that some claim that two or multi-sided markets can only be labeled as such if indirect network effects are the most important ones[14].

Those characteristics combined leave intermediaries in a dominant position, arguably close to a monopoly, where they can act independently from its competitors and strategically harm both consumers and business users. From a competition law perspective, therefore, some discriminatory practices can potentially be qualified as an abuse of dominance position and will, consequently, breach Article 102 of the TFEU.

As a result, both end and business users are directly affected. For the former, for instance, studies show that, when engaging in online search, they mostly focus on results at the top, even more so when searches are conducted via mobiles[15]. Hence, a potential manipulation of the order of results in online searches can influence and steer the choice of billions of internet users, curtailing their autonomy. For business users, on the other hand, which are

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[9] Statista, '*Number of monthly active WhatsApp users*' <https://www.statista.com/statistics/260819/number-of-monthly-active-whatsapp-users/>

[10] Statista, '*Number of monthly active Facebook users worldwide*' <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>; Statista, '*Number of active Amazon customer accounts quarter*' <https://www.statista.com/statistics/476196/number-of-active-amazon-customer-accounts-quarter/>

[11] David Evans & Richard Schmalensee, 'Network effects: march to the evidence, not to the slogans', Antitrust Chronicle, (September 2017).

[12] WhatsApp is an example of service that experienced expressive network effects. The greater number of people using the service made it become internationally used.

[13] Mark Amstrong, 'Competition in Two Sided Markets', RAND Journal of Economics, (2006), 37(3), 668-691, p. 668.

[14] Justus Haucap & Ulrich Heimeschoff, 'Google, Facebook, Amazon, eBay: is the internet driving competition or market monopolization?', International Economics and Economic Policy, (2014), 11(1-2), 49-61, p. 51.

[15] Competition & Markets Authority (CMA), 'Online search: consumer and firm behavior – a review of existing literature.', United Kingdom, (7 April 2017), pg. 38. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/607077/online-search-literature-review-7-april-2017.pdf>

the group this work target, abusive practices can, to a greater extend, have foreclosure effects, i.e. causing them to go out of business and decreasing choice to end users.

This happens because vertical platforms can, for instance, charge a very low price on their own products, influencing consumers' choice, or charge too much of their business users to announce on the platform. On the long term, the result is an environment too burdensome for business users to continue their activities. The favoring of goods from some third parties over others by the use of smart algorithms without clear indication of performance measurement is yet another example[16].

In essence, most abusive measures constitute discriminatory practices towards business users and can be adopted by the platforms because of the power asymmetry between them and the former. At the very end, this knowingly impacts creativity and innovation in the negotiating environment, since competitors are discouraged to remain in the market when a sustainable and trusted online business environment is not existent[17].

Interestingly, however, this is not a new phenomenon. The telecommunication sector experienced similar characteristics when was liberalized in 1998, being subject to direct network effects and economies of scale which lead to incumbent firms abusing their dominant position[18]. As a result, many cases reached competition law authorities and a regulatory framework was established to address possible misconducts by companies who owned the telecommunication infrastructure – i.e. dominant undertakings.

One discriminatory practice, in particular, denominated margin squeeze, was identified in this and other utility sectors, being subject to scrutiny by case law. Given, therefore, the similarities between the characteristics of online platforms and the telecommunication sector, it is worth analyzing whether the framework established for the latter can provide a valuable offline comparable or, because of the intrinsic characteristics of the online environment, this theory of harm is simply not suitable.

1.3. Margin Squeeze and Regulatory Fragmentation

To shed light on this specific abuse, margin squeeze is a potential competition law offence caused by a vertically integrated firm that holds a dominant position in the upstream market. It materializes when this player sets predatory prices that prevent its competitors from trading profitably, since the difference between the input and retail prices is insufficient to give competitors a reasonable profit margin[19].

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[16] European Commission Staff Working Document: Impact Assessment, 'Proposal for a Regulation of the European Parliament and of the Council on promoting fairness and transparency for business users of online intermediation services.', SWD(2013), 138 final, p. 32. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013SC0138>

[17] European Commission, Proposal for a Regulation of the European Parliament and of the Council, 'On promoting fairness and transparency for business users of online intermediation services.', COM(2018), 238 final, p. 7. <https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=51803>

[18] See, for e.g. Case C-280/08 P – *Deutsche Telekom AG v Commission*, EU:C:2010:603.

[19] Richard Whish & David Bailey, 'Competition Law', Oxford University Press, (2018), 9th edition, pp. 771-777

As a result, it becomes economically inviable to achieve a price-cost margin that allows competitors to stay in the market. And, since they are foreclosed, this abuse is classified as exclusionary.

This antitrust practice knew its peak after the liberalization of the telecommunications sector. The once state-owned market was slowly privatized from late of the 20th century and, in each country, one company became the owner of the entire telephone infrastructure. Consequently, other players, in order to avoid making high investments to compete, opted to enter the market by providing their services using the already existent infrastructure. As such, the former became the provider on the upstream market while also competing with new entrants.

This does not mean, however, that margin squeeze is confined to the telecommunication sector. Any sector where vertical integration and manipulation of inputs is possible, is a potential target for such doctrine. And while the abuse is often seen in utility sectors, it has also been spotted in other sectors of the economy[20]. Hence, it is worth considering if such doctrine could potentially be used to assess anticompetitive conducts practices in the online ecosystem as well. Some indeed already mention the return of this notion to this context[21], but debates are still very limited.

Along with the practical problems, legal issues are also likely to arise when each MS start to conduct reports and adopt their own strategies on regulatory measures to discriminatory practices. The French Parliament, for instance, targeted online operators with its law on platform fairness - *loyauté des plateformes*[22] – in October of 2016.

Furthermore, while being addressed individually by MSs, concerns about discriminatory practices on the online environment are also not being overlooked by the EC. On the contrary, on 20 June 2019, the EU adopted the Regulation on "fairness and transparency for business users of online intermediation services" – P2BR[23]. The effort comes exactly as an attempt to stop fragmentation on the topic by MSs, which would only weaken the Single Market strategy.

The P2BR is a result from several actions of the EC, including many studies and reports, that gave rise to a public consultation in 2015 targeting business users of such platforms. Summarizing, in this investigation, business users were asked about their experiences

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[20] Case 76/185/ECSC – National Carbonising, [1976] OJ L 035/6, Commission decision; Case 88/518/EEC – Napier Brown – British Sugar, [1988] OJ L 284/41, Commission decision; Case T-5/97 – Industrie des Poudres Sphériques v Commission, [2000] ECR II 3755.

[21] Friso Bostoen, 'Online platforms and vertical integration: the return of margin squeeze', Journal of Antitrust Enforcement, (2018), 6(3), 355-381.

[22] LOI nº 2016-1321 du 7 octobre 2016 pour une République numérique (1). JORF nº 0235 du 8 octobre 2016. <https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=3D6F334C1E6A987A94C9B640945C331F.tplgfr32s_2?cidTexte=JORFTEXT000033202746&categorieLien=id>

[23] Regulation of the European Parliament and of the Council, COM(2018), <https://ec.europa.eu/digital-single-market/en/business-business-trading-practices>

with the intermediaries. The outcome was that an impressive nine out of ten participants claimed dissatisfaction mainly due to exposure to abusive terms of services[24].

Together with the consultation, an impact assessment and innumerous reports[25], the conclusion was that data-driven networks, within which the online platforms are inserted, can limit the number of successful players on the multi-sided markets, causing market concentration, abuse of dominant position and, finally, directly affect consumer welfare[26]. Thus, a Regulation was deemed needed to prevent discriminatory practices and harmful results on the online ecosystem.

While the Regulation, on one hand, calls for more transparency obligations on platforms, by imposing, for instance, the need of explicit disclosure of differentiated treatment on the Terms and Conditions of platforms that favor their own goods, the EC itself, on the other hand, recognizes the limits of top-down regulation. More specifically, on its 2016 Communication on Online Platforms[27] the EC admitted the likelihood of self and co-regulation to become more important on the internet's governance.

Given the context, it is necessary to seek alternatives for adequately addressing the competition problems arising from practices by online intermediaries to ensure the sustainability and continuity of the business model. Otherwise, MS will risk regulatory fragmentation by taking the lead and adopting solutions targeting exclusively their national matters, which runs counter the internationalization perspective that is needed on the online environment.

The problem, however, is that currently there is no consensus in scholarship or case law on how to best target big tech companies. Decisions and judgements still shift interpretations between existing theories of harm and scholars disagree on the need for more intrusive regulation. Additionally, it is questionable whether competition enforcement is even sufficient and/or should be the only way to address practices by such players. On this tone, considering that the telecommunication sector has similar characteristics and experienced analogous regulation turbulence and concerns, the research question of this work is presented below.

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[24] European Commission, 'Full report on the results of the public consultation on the Regulatory environment for Platforms, Online Intermediaries and the Collaborative Economy', (25 May 2016). <https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=15877>

[25] European Commission, 'Initiative of Inception Impact Assessment on Fairness in platform-to-business relations', (2017). <https://ec.europa.eu/info/law/better-regulation/initiative/1161/publication/123282/attachment/090166e5b5feede8_en>

[26] Proposal for a Regulation of the European Parliament and of the Council, COM(2018), supra note 17, pg. 1-2.

[27] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Online Platforms and the Digital Single Market Opportunities and Challenges for Europe', COM(2016), 288 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0288>

1.4. Research Question and Methodology

Given the importance of online platforms to the digital economy, this study analyzes whether and to what extend the framework carved for the telecommunication sector, which includes a margin squeeze doctrine and sector specific regulation, can adequately address discriminatory practices by online platforms. Additionally, it also discusses, without wanting to limit discussions on the topic, other alternatives for curtailing such practices in this scenario.

To address the topic, this paper is divided in four parts. Part I focuses on preliminary notions of an abuse of dominance infringement. Moreover, it provides a critical analysis of two recent judgements – *Google Shopping* and *Google Android* – to demonstrate how competition authorities are either lessening the requirements for an abuse to be found or creating new theories of harm when online intermediaries are under scrutiny. Part II then analyses whether the established notion of margin squeeze can be applied to online platforms by first identifying its requirements and then applying them to such players.

Then, Part IV explores the contributions of the P2BR to the current state of the art, mainly to highlight its focus on transparency obligations. Finally, alternative measures to avoid discrimination are highlighted, such as the adoption of a neutrality principle, as well as interoperability and data portability. A brief summary of the findings is then introduced in the conclusion.

It is important to note, however, that due to the complexity of the subject and the intrinsic limitation of this work, the study is conducted generally from the business user's perspective yet keeping in mind possible implications for consumers as well. The first reason underlining the choice regards the P2BR since it targets specifically the relationship between platforms and its professional users. The second reason, in its turn, relates to the necessity to create policies that do not undermine innovation in such context, a topic that was discussed extensively, for instance, in the debate promoted by the Computer and Communications Industry Association in June of 2018[28].

The research methodology strategy includes use of qualitative data. Therefore, the main technique used is documentary research, including legal articles, handbooks, monographs, decisions and case law selected through systematic search. Legislation, mainly the P2BR and national initiatives, is another source, so that documentary search has been the primary source for collecting information.

[28] Computer & Communications Industry Association (CCIA), 'Debate on The Online Platform Ecosystem: Opportunities, Challenges and the Right Policy Framework', (30 May 2018). <https://www.ccianet.org/event/the-online-platform-ecosystem/>

2. ABUSE OF DOMINANCE AND DISCRIMINATORY PRACTICES

Margin squeeze is, first and foremost, one of many discriminatory conducts that can potentially be adopted by incumbents. The assessment of abuse of dominance in competition cases, however, has never been straightforward, and approaches were developed through the years, with different theories of harm being adopted.

This happens mainly because although many of those conducts can harm consumers, they can also stimulate pro-competitive behavior, making discrimination cases ambiguous. Therefore, an evaluation is needed to see if the benefits outweigh the harms that a practice can have prior to the finding of an abuse.

The purpose of this chapter is then to see how the assessment of abuse of dominance cases is, especially the ones dealing with leveraging[29] abuses. To do so, the chapter is divided in two parts. Part I deals with the preliminary notions of Article 102 developed through case law. Then, Part II selects two specific cases to show how these notions and theories of harm are being reshaped by authorities, especially when there is an online intermediary involved. In the view of the above, the intrinsic limits of competition law are then highlighted.

2.1. Article 102 of the TFEU

Article 102 of the TFEU is the overarching provision targeting the abuse of dominant positions. While Article 101 attempts to control anti-competitive agreements between two or more undertakings, Article 102 targets abusive conducts unilaterally committed by an incumbent. Specifically, Article 102 (c) deals with price discrimination cases, prohibiting the application of '*dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage*'.

Differently from 101, however, 102 is not clearly structured. It does not provide a list of practices that can be regarded as abusive nor is clear on whether objective justifications can be offered by alleged infringers to prevent the finding of an abuse. Thus, this was confirmed by case law later on[30].

Some main considerations form, however, the basics of all infringements.

2.1.1. Dominance and Special Responsibility of Dominant Undertakings

The first precondition for the applicability of Article 102 is latent: there must be a dominant undertaking. A clear-cut definition of dominance, however, is not provided by legislation, case law being called for clarification.

In *United Brands v. Commission*[31] the ECJ equated dominance with substantial market power. Consequently, an undertaking is understood to enjoy dominance whether it can act independently from its competitors, customers and consumers for a significant period.

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[29] Leveraging is the use of dominance in one market to strengths the market position in a related market. For an extensive concept and explanation, see Giorgio Moonti, 'EC Competition Law', Cambridge University Press, (2007), 1st edition, pp. 186-95.

[30] See Case C-209/10 – *Post Danmark A/S v Konkurrencerådet*, EU:C:2012:172.

[31] Case 27/76 – *United Brands Company and United Brands Continentaal BV v Commission of the European Communities*, [1978] ECR 207.

The EC, in its turn, holds the same reasoning under paragraph 10 of its Guidance on enforcement priorities in applying Article 102 ("Guidance").[32]

The complexity relies, however, on the inexistence of a solo identifier of substantial market power. Market shares, as described in *Hoffmann-La Roche* and the Guidance, provide a first indication[33]. However, other elements must be considered given the unique structure of each market. Price elasticity of demand, profitability measurement, barriers to entry and barriers to expand, for instance, are other possible indicators.

Once a dominant position has been established, however, it is important to note that a mere holding of it is not unlawful *per se*. Concerns only arise when the power asymmetry between the incumbent and its competitors allows the former to abuse its position by adopting conducts that harm competition.

If, on one hand, dominance as such is not illegal, the ECJ has stated that dominant undertakings carry a *'special responsibility not to allow its conduct to impair undistorted competition'*[34]. And while this special obligation has been repeated in decisions ever since[35], competition law cannot unrestrictedly impose obligations to dominant undertakings, a topic further discussed in section 2.2.2.

2.1.2. Competition on the Merits and the Equally-Efficient Competitor Notion

If the establishment of dominance by itself already imposes a first challenge due to multiple indicators and, for online markets, the lack of monetary price, the notion of distortion of competition also gives rise to debates[36]. Those became more substantial especially after the EC started to impose substantial fines in large US companies operating in the ICT sector, such as Google[37], an area that EU firms are not very prominent. As such, claims that European competition authorities were more concerned about the protection of its competitors than the competitive process itself were made[38].

As convincing as the arguments can be, the ECJ already made clear, however, that Article 102 does not, by any means, prevent the lawful acquisition of a dominant position "*nor does seek to ensure that competitors less efficient than the undertaking with the dominant position should remain on the market*"[39]. In fact, it recognized that competition on the merits can simply lead to the marginalization of competitors that cannot, for instance, provide many choices to consumers or equate the quality of a product introduced by another player, being, as such, less efficient[40].

The protection of as-efficient competitors, however, was not always so clear cut. In the 70s, a British company, dominant in the supply of coking coal (upstream market), a key

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[32] Guidance on Article 102 Enforcement Priorities.
[33] Case 85/76 – Hoffman-La Roche v. Commission of the European Communities, [1979] ECR 461.
[34] Case 322/81 – Michelin v. Commission of the European Communities, [1983] ECR 3461, para. 57.
[35] E.g. Case 38606 - AT.39740 – Google Search (Shopping), Commission decision of 27 June 2017, para. 331.
[36] D. Daniel Sokol, 'Troubled Waters Between U.S. and European Antitrust', (2017), University of Florida Levin College of Law Research Paper, No. 17-21. <https://ssrn.com/abstract=2902085>
[37] Case 38606 - AT.39740 – Google Search (Shopping), Commission decision of 27 June 2017, para. 331.
[38] Eleanor M. Fox, 'We Protect Competition, You Protect Competitors', World Competition, (2013), 26(2), 149-165.
[39] Case T-286/09 – Intel v. Commission, EU:T:2014:472, para. 133.
[40] Ibid. para. 134.

element to produce coke (downstream market), was convicted of charging extremely low levels for the essential input. Since the incumbent also produced coke, therefore being a competitor at the downstream level, for the first time a margin squeeze abuse was found[41].

However, the ECJ specifically mentioned that dominant undertakings have the duty to behave in such a way that allows *reasonably efficient* downstream competitors to stay on the market[42]. As such, it relied on a reasonably-efficient competitor test to find an abuse.

Only thirteen years later, in *British Sugar*, the approach changed. Here, the key input was sugar and the EC concluded that, by engaging in a pricing policy that "*maintains an artificially low margin between the price of the raw material [...] and the price of the downstream product*"[43] *(retail sugar) the dominant firm was able to diminish the margins of as efficient competitors*[44]. Hence, the test shifted from reasonably-efficient to as-efficient competitor.

The AEC test was then confirmed by following decisions, for many other abusive practices. In *Post Danmark I*, for instance, a case that was dealt as an anti-competitive pricing case, the ECJ stated that not every discriminatory practice that leads to the exclusion of competitors shall be understood to be abusive and affect competition[45]. On the contrary, the existence of an abusive conduct requires, as a preliminary step, a potential distortion in competition. Hence, if, by competing on merits, less efficient competitors are marginalized, this should not be a concern that triggers competition rules.

Other types of abuses followed the same pattern. As such, the AEC test was confirmed for rebates (*Intel*), margin squeeze (*Deutsche Telekom* and *TeliaSonera*) and, more recently, for price discrimination (*Meo v. GDA*).

2.1.3. Form-Based Approach v. Effects-Based Approach and Anti-Competitive Effects

Article 102, differently from Article 101 has no *per se* or by object illegality[46], at least not anymore. When, in 2009, the EC adopted its Guidance, besides clearly stating that would not protect less efficient competitors, it also set the intention to only investigate practices which are likely to have harmful effects to consumers. As such, the EC was trying to replace the once seen form-based approach, that considers the practice itself as an abuse, by an effects-approach. This, on its turn, requires an analysis of the consequences of the practices to see if their benefits outweigh their harms. In case it does, a conduct is not abusive.

It is important to remember, however, that the Guidance is not binding. In *Tomra*, for instance, a case that dealt with retroactive rebates, the ECJ adopted, in its decision from 2012, a very strong form-based approach to recognize the abuse. Therefore, even though

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[41] Case 109/75 R – *National Carbonizing v Commission,* EU:C:1975:133, [1975] ECR 1197-8.
[42] Ibid.
[43] Case IV/30.178 – *Napier Brown – British Sugar*, Commission Decision, [1988] OJ L284/41, para 25.
[44] Ibid, para 65.
[45] Case C-209/10 – *Post Danmark A/S v Konkurrencerådet*, EU:C:2012:172, para. 22.
[46] Article 101(1) prohibits agreements which have *by object or by effect* 'the prevention, restriction or distortion of competition'. By object restrictions are the ones that by itself, without the need to analyze its effects, have a 'sufficient degree of harm to competition' – Case C-67/13 P – *Groupement des Cartes Bancaires v. Commission* EU:C:2014:2204, para. 57

the Guidance was published three years before the decision[47], the ECJ did not take it into consideration, at least not on this topic.

This indicates, on this tone, that the shift was gradual. In margin squeeze cases, *Deutsche Telekom* trigged the change of mentality[48]. For pricing practices, to give another example, in *Post Danmark I* the ECJ stated that all circumstances, including the likely effects of a practice must be considered to establish an abuse[49].

Besides the necessity to show anti-competitive effects, it is important to consider, on a final note, that if a dominant undertaking claims that its conduct does not have foreclosure or anti-competitive effects and provides proof of this, competition authorities must address the statement.[50]

2.1.4. Objective Justification

Even though Article 102 does not specifically say that a dominant undertaking can justify its conduct based on objective reasoning, Section III D of the Guidance permits this, and *Post Danmark I* confirmed the possibility[51]. Thus, it is possible that a type of abuse can be deemed not abusive if the EC or the ECJ accept the rationale. The burden of proof, on this case, is always on the dominant firm.

In order for such argument to be accepted, however, there are cumulative requirements. First, the conduct must be objectively necessary. Moreover, it must outweigh the harms it can have on consumers. And then, based on the proof provided, the EC will analyze the indispensability and the proportionality of the conduct[52].

Since Article 102 does not provide a list of possible arguments, case law clarifies the topic even though there is not much regarding the matter. One argument that was, however, already interpreted, is meeting competition.

The EC has recognized that the conduct of lowering prices based on market comparisons is an advantage of competition. Moreover, the fact that every company is entitled to defend its commercial interests is already a pacific point[53]. However, at the same time, this conduct cannot mean the dominant undertaking can, without incurring in any fallouts, impose losses on as efficient competitors to strengthen the dominance on the market[54].

[47] In paragraph 332, for instance, the Commission states: "*an abuse under Article 82 it is sufficient to "show that the abusive conduct of the undertaking in a dominant position tends to restrict competition or, in other words, that the conduct is capable of having that effect"*. Case COMP/38113 *Prokent-Tomra*, Commission decision of 29 March 2006.

[48] Case C-280/08 P – *Deutsche Telekom AG v Commission,* EU:C:2010:603, paras. 250-261

[49] Case C-209/10 – *Post Danmark A/S v Konkurrencerådet*, supra note 45, para. 26.

[50] To prove the point, the ECJ found in *Intel* that the General Court did not sufficiently consider the arguments presented by the company. Therefore, it referred the case back for further examination. See, for example, case T-286/09 – *Intel v. Commission*, EU:T:2014:472.

[51] Case C-209/10 – *Post Danmark A/S v Konkurrencerådet*, supra note 45.

[52] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB,* EU:C:2011:83, para. 88.

[53] Case 27/76 – *United Brands Company and United Brands Continentaal BV v Commission of the European Communities*, supra note 31.

[54] Case COMP/38784 – *Telófonica*, Commission decision of 4 July 2007, para. 638.

Therefore, the meeting competition argument will be scrutinized with caution and will not be accepted as such. The existence of other alternatives that could lead to the same result, for instance, will be weighted by the competent authorities.

The efficiency defense, in addition, was also already scrutinized. As such, the dominant undertaking must show that its practices are beneficial for consumers on the long term. Based on the arguments presented, competition authorities will then assess if they indeed outweigh possible negative effects of the same conduct[55]. Considering, however, that for such assessment the criterion is the maintenance on the market of as efficient competitors, the efficiency argument is unlikely to succeed.

Finally, profitability of investments based on reaching a minimum scale of operations cannot be used by dominant undertakings as justification[56]. In another words, such undertaking cannot claim it will only be able to gain back the investments it made when a certain number of consumers use the product or service offered on the downstream market, even if such investment is high because it involves the use of new technology[57]. Network effects[58], on this tone, will only be able to justify a below cost pricing up until the point this conduct starts to impose losses on competitors that are not experienced by the dominant undertaking[59].

It is important to highlight, moreover, that a dominant undertaking which is vertically integrated and holds dominance on the upstream market is, as seen, able to act in a way it can leverage its position on the downstream market. Therefore, market penetration on retail level cannot be used to justify an abusive conduct.

In summary, objective justifications are very difficult to be accepted by competition authorities. This does not mean, however, that they are impossible. In significant economies of scale[60], for instance, such as seen on the telecommunication sector and in

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[55] Case T-201/04 – *Microsoft vs. the Commission,* [2007] ECR II-3601.

[56] Case COMP/38784 – *Telófonica*, supra note 54, paras 649-654.

[57] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 114.

[58] "Consumers can face two generic situations in which coordination can be valuable. One involves a communications network, such as the public telephone system, where various end users join a system that allows them to exchange messages with one another. Joining such a network is valuable precisely because many other households and businesses obtain components of the overall system (for an early analysis, see Rohlfs, 1974). Because the value of membership to one user is positively affected when another user joins and enlarges the network, such markets are said to exhibit "network effects," or "network externalities." Carl Shapiro & Michael L. Katz, 'System competition and network effects', Journal of economic perspectives, (Spring 1994), 8(2), p. 93-115.

[59] Case COMP/38784 – *Telófonica,* supra note 54, para. 652.

[60] "Economies of scale is the term used for describing falling average costs as a result of increasing production volumes or numbers. The more a firm produces of a good, the cheaper every single unit becomes. To expand production is thus a generally advantageous strategy to pursue in this case because it purports a potential cost advantage over other producers in a similar market segment. Returns to scale are derived from production technologies and refer to the proportionality of output changes following changes in all input factors (the latter changed in a fixed relation with each other). If output increases over-proportionally following an equal increase in all inputs, we refer to this as increasing returns (with constant and decreasing returns as the equivalent categories for proportional and under-proportional increases). Economies of scale is a consequence of increasing returns to scale." Wolfram Elsner, Torsten Heinrich & Henning Schwardt, 'The microeconomics of complex economies: evolutionary, institutional, neoclassical, and complexity perspectives', Academic Press, (2014), 1st edition.

the online environment, the EC has already recognized that prices below LRAIC[61] are exceptionally possible, provided that this situation happens for a temporary period[62].

2.2. A Critical Look into Recent Competition Law Cases on Discriminatory Practices

2.2.1. Refusal to deal and Google Android

Refusal to deal is essentially an abuse that amounts to the refusal to supply essential products or services or to give access to facilities. This way, a dominant firm that exclusively holds a specific asset or infrastructure and refuses to provide them to competing third parties at the downstream level, excludes these parties from the secondary market, simply making impossible for them to compete. Additionally, the incumbent can also prevent new players from entering since it controls the access to the essential input.

Considering that the finding of this abuse results into a duty to supply, being a far-reaching intervention, competition authorities must meet the highest burden of proof to prove that a practice is abusive under this theory of harm. This happens because such a mandatory obligation goes against the freedom to contract[63] and right to protect that undertakings have.

A long line of cases deals with refusal to deal, but in *Bronner*[64] the ECJ set three conditions to recognize the practice. The first is the requirement of elimination of all competition on the downstream market. Considering this would mean to wait until the harm to competitors and consumers is factual, in this sense the judgement was unintentionally not very coherent with the goals of competition law. Fortunately, however, this was remedied in *Microsoft Sun*, when the General Court stated that it is enough to show that a practice is likely to eliminate all effective competition. And even though this last case did not reach the ECJ, most certainly this will prevail in future refusal to deal assessments given the tendency of adoption of a more economic approach and the recent judgement of the ECJ in *Meo v. GDA,* topic further discussed in section 2.2.2.

Following, the ECJ added the no objective justification requirement. The most important contribution of *Bronner*, however, relates to the indispensability criterion to find an abuse under this theory of harm and the long term versus short term perspective that escorted it.

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[61] LRAIC stands for long-run average incremental costs, which "is calculated by dividing all its long-run incremental costs by its output. LRAIC is the same as the average total cost of a firm producing a single product. It will be lower than the average total cost of a firm producing multiple products that benefits from economies of scope, since LRAIC excludes costs that are common to several products". Supra note 19, p. 734.

[62] Case COMP/38784 – *Telófonica,* supra note 54, para. 650.

[63] See, e.g. a statement made in *Bayer* by the General Court: "The case-law of the Court of Justice indirectly recognizes the importance of safeguarding free enterprise when applying the competition rules of the Treaty where it expressly acknowledges that even an undertaking in a dominant position may, in certain cases, refuse to sell or change its supply or delivery policy without falling under the prohibition laid down in Article 86". Case T-41/96 – Bayer v. Commission, ECLI:EU:T:2000:242, par. 180.

[64] In summary, Mediaprint was a newspaper publisher (downstream market) and, in addition, had a home delivery system (upstream market). Bronner, the applicant, being a publisher as well, wanted to make use of the delivery system but Mediaprint refused to provide access.

As such, the applicant must prove that the asset at the upstream market is indispensable to carry its business, having no actual or potential substitute for it.

Moreover, it is not sufficient for the applicant to prove that it is not economic viable to produce an alternative substitute. One could claim, therefore, that what is needed is proof of extremely hard conditions, which could encompass, for instance, technical matters or the need of an unreasonable amount of time, to do so. And there is exactly where this strict approach relates to the long-term perspective. As stated by Advocate General Jacobs, if access to such indispensable asset is given too easily, the incentive for competitors to develop competing facilities is undermined. Accordingly, on the short-term the granting of access would boost competition, but on the long-term innovation would lessen, negatively affecting consumers[65].

The point is that even though those requirements where, later, loosen in *IMS*[66] and *Microsoft Sun*[67], the ECJ seemed to completely ignore the refusal to deal assessment in *Google Android* (2018). As a background, in this case, one of the conducts addressed was the fact that Google conditioned the licensing of its app store to the pre-installation of the Google search app and browser (Chrome) by manufacturers.

Refusal to deal here, therefore, would fit the circumstances, since the essential input would be Google's app store. When assessing the case, however, the EC preferred to deal with the conduct using another theory of harm, namely tying. Tying is characterized by conditioning, by contract or technical measures, the sale of one product to the purchase of a different product or service. In another words, one cannot purchase a product and/or service without the tied product.

Although some argue that tying is suitable in the case because consumers usually lack IT skills and would not uninstall Chrome[68], the fact is that uninstalling was possible, and

[65] "[The]…justification in terms of competition policy for interfering with a dominant undertaking's freedom to contract often requires a careful balancing of conflicting considerations. In the long term it is generally pro-competitive and in the interest of consumers to allow a company to retain for its own use facilities which it has developed for the purpose of its business. For example, if access to a production, purchasing or distribution facility were allowed too easily there would be no incentive for a competitor to develop competing facilities. Thus, while competition was increased in the short term it would be reduced in the long term. Moreover, the incentive for a dominant undertaking to invest in efficient facilities would be reduced if its competitors were, upon request, able to share the benefits. Thus, the mere fact that by retaining a facility for its own use a dominant undertaking retains an advantage over a competitor cannot justify requiring access to it." Oscar Bronner, Opinion of Advocate General Jacobs, Case C-7/97, (28 May 1998), para 57. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:61997CC0007&from=FR>

[66] In IMS, where the company refused to give an indispensable license to IMS operate in the downstream market for provision of pharmaceutical sales data, the ECJ added a new criterion to the refusal to deal assessment. Since the case was about IP rights it said that the practice could not prevent the emergence of a new product. Additionally, since IMS was a monopoly, it stated that it is sufficient that there is potential of hypothetical market, otherwise in all cases where there is just one company, competition would not be stimulated.

[67] In Microsoft Sun, for instance, when Microsoft denied access to interoperability information to a developer of PC operating systems, besides softening the requirement of new product established in IMS, saying that elimination of technical development is already enough to meet the new product criteria, the General Court also stated that the mere fact that a product is covered by IP rights cannot constitute an objective justification, otherwise a refusal to license would never amount to an abuse.

[68] Anca D. Chirita, 'Google's Anti-Competitive and Unfair Practices in Digital Leisure Market', Competition Law Review, (2015), 11(1), 109-131, pg. 125.

Google even provides a step-by-step guide to do it[69]. Therefore, a tying abuse simply does not fit. There is no contractual obligation, nor a technical one.

Interestingly, however, the conditions of finding a tying practice abusive need to meet a lower standard of proof[70]. In another words, for refusal to deal, the EC would have to meet the indispensability criterion, showing that Google app store was indispensable for customers to access the market. And since this would be indisputably difficult, given the existence of known alternatives to app developers, some start to wonder if Article 102, or competition enforcement in general, is even suitable anymore to address abuse of dominance cases for online platforms[71].

Moreover, by expanding the scope of application of abuses, the consistency of competition law is put in question. Legal certainty, on the same tone, is not achieved and enterprises will only keep being substantially fined. As a result, the enlargement could even eventually lead to less innovation based on the fear to operate in an unstable legal environment.

2.2.2. Google Shopping and Non-discrimination

In 2017, the EC fined Google €2.42 billion for abuse of its dominant position as a search engine. The ground for conviction was mainly the favoring of its own online shopping service, Google Shopping, by giving prominent placement to its products when compared to results from competing shopping services. Additionally, results of such players were found out to be subject to a special algorithm, Panda, which Google's own products were exempted. This made results from competitors appear on average only from the forth page on of Google's search results[72]. According to the EC, this could not be qualified as competition on merits[73] and, as such, the fine was justified.

Besides Google arguing that the *Bronner* criteria should be applied, the EC dismissed the arguments on two main grounds. First, Google was not denying access to its search results. As a matter of fact, its conduct was, on the opposite, an "*active behavior relating to the more favorable positioning and display by Google*"[74] of its own results. Then, it added that the remedy here would not be imposing a duty to deal to "*transfer an asset or enter into agreements with persons with whom it has not chosen to contract*"[75].

Besides these deviations from the refusal to deal framework, some argue, however, that the distinction is just a matter of the difference in the essential asset at stake[76]. In another

[69] Google, '*Google Play Help – Delete or disable apps on Android*' <http://support.google.com/googleplay/answer/2521768?hl=en-GB>

[70] Show that: (i) the tying and tied products are distinct products; (ii) the undertaking concerned is dominant in tying product market; (iii) the undertaking concerned does not give customers a choice to obtain the tying product without the tied product; and (iv) tying is liable to foreclose competition.

[71] Francisc Ioanid Toma, 'The Challenges of Digital Markets for EU Competition Law The case of Android', (24 December 2017). <https://dx.doi.org/10.2139/ssrn.3092823>

[72] Case 38606 - AT.39740 – Google Search (Shopping), supra note 37, para. 389.

[73] Ibid, para. 649.

[74] Ibid, para. 650.

[75] Ibid, para. 651.

[76] Inge Graef, 'Rethinking the Essential Facilities Doctrine for the EU Digital Economy', (2019). <http://dx.doi.org/10.2139/ssrn.3371457>

words, a search engine does not need to transfer any asset to conduct its result positioning business.

Considering that competition cases remedies need to fit into a theory of harm and the possibility to refusal to deal be applied was denied, the EC, in the search for a more suitable candidate, established a new precedent. By adopting a sort of leveraging theory of harm, it imposed as remedy an obligation to treat competitors in a manner "*no less favorably than its own comparison-shopping service within its general search results pages*"[77]. In another words, it adopted this new theory of harm to establish a non-discrimination principle, approach much discussed[78].

Before going into this discussion, however, a question arises from the decision. In 2018, the ECJ delivered its judgement on *MEO v. GDA* case where it clarified the notion of competition disadvantage under Article 102(c). In this price discrimination case, the ECJ was asked whether it is necessary to examine the effects of discrimination on the complainant to see if a competitive disadvantaged had occurred. Furthermore, the Court was also asked if the seriousness of the effects should be considered as a criterion for the finding of such abuse.

In the judgement, the ECJ hold that competition is not distorted if there is a mere presence of disadvantage between undertakings[79]. Thus, all relevant circumstances must be analyzed to see whether a price discrimination can have competitive disadvantages. This approach is aligned with the effects analysis seen in many other abuse of dominance judgements, such as *Post Danmark* and *Intel v. Commission*.

Logically, the ECJ also clarified that there is no need to wait for actual deterioration of the competitive position of competitors for an abuse to be established. The goal of competition law, as a reminder, is ensuring consumer welfare and, thus, the existence good alternatives is in their interest.

Regarding the second question, the ECJ stated, once again[80], that for the purpose of finding an illegal abuse, there is no '*de minimis threshold*'[81]. However, the interests of the complainant must be affected in order for a competitive disadvantage to materialize[82], even though there is no quantitative minimum established for such effect.

With this background, coming back to *Google Shopping*, the EC assumes that end-users have choices when online shopping since they can visit other websites. In this sense, a direct harm to consumers is not found but is presumed from the decrease of traffic in those competitors, even if they are not excluded from the market. The existence of an anticompetitive effect is, in this way, confirmed.

One problem is that, in order to be aligned with precedents from the ECJ, specifically *Post Danmark II*, this decrease of traffic should be a result of Google's actions – or

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[77] Case 38606 - AT.39740, supra note 37, para. 699.

[78] See, for example, Pinar Akman, 'The Theory of Abuse in Google Search: A Positive and Normative Assessment Under EU Competition Law', Journal of Law, Technology and Policy, (2017), 2017, 301-374. <http://dx.doi.org/10.2139/ssrn.2811789>

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

[80] Case C-209/10 – Post Danmark A/S v Konkurrencerådet, supra note 45.

[81] Case C-525/16 MEO, supra note 78, para. 29.

[82] Ibid, para. 30.

attributable to Google[83] in order for an abuse to be found. This means the EC should have had a very high burden to prove that the decrease was caused by Google and not due to any other reason – that could plausibly be a consumer's choice to make purchases via apps or the development of competing platforms, for instance.

This was not, however, clarified by the EC and, therefore, it seems that a causal link between the abuse and its respective anticompetitive effects is missing. On this path, the EC risks any kind of alleged competitive disadvantage being regarded as having anti-competitive effects, being attributable or not to the dominant undertaking, which certainly goes against the findings of the ECJ. Since the decision from the EC is from 2017, the remaining question is, therefore, whether the ECJ will confirm this. And, in case it does, more uncertainty is given to theories of harm and their respective requirements.

While clearly on this topic the decision distances itself from precedents, the self-preferencing theory of harm is also new, such as the remedy imposed to treat competitors in an equal way. And, on this topic, a few remarks are needed.

First, by demanding equal treatment it is implied that a company should not give its own services any favoring. As good as this may sound, competition law does not and cannot impose on any undertaking a duty to sustain its competitors on the market, otherwise it would unbalance its own goals and competition on the merits would be a long-gone concept. If competitors are simply less efficient, the fact that they leave the market as a result of a lawful practices or the fast development of the market, from a competition law perspective, should not be problematic.

Moreover, it is important to remember that online intermediaries are not considered to be essential facilities, at least not yet. This means that the essential facilities doctrine, which enables the legal imposition of a duty to a dominant undertaking to deal or assist competitors when they hold an essential input to competitors, was not yet carved for online platforms. This topic, however, is better explained in 3.2.1.3.

When the EC imposes non-discrimination remedies, therefore, this, in view of the foregoing, cannot open the door to every discrimination be seen as abusive nor to impose on online intermediaries, or any other kind of dominant undertaking, the duty to, as a rule, share its assets in order an equal treatment to be accomplished. In this sense, the statement of the Advocate General in *Bronner* needs to be remembered and a broad non-discrimination principle is not yet preferable.

Additionally, dominant undertakings indeed have a special responsibility, but they do not have to ensure the presence of competitors on the market. Thus, they are entitled and encouraged, given the benefits to, for instance, innovation, to legally protect their respective commercial interests. And by doing so, they cannot be forced to harm their own business in order to ensure the existence of other companies, even if this means that their dominance is increased. This completely changes, however, if sufficient economic evidence is gathered emphasizing the prevalence of harmful effects to consumers, which, however, is not yet the case.

In the view of the foregoing, the point is that competition law cannot unlimitedly impose duties to dominant undertakings, especially if ignoring the pro-competitive effects

[83] Case C-23/14 - Post Danmark A/S v. Konkurrencerådet, para. 47

generated by their activities. This means that the assessment of practices needs to balance favorable and unfavorable effects but, equally important, should take into consideration precedents and the characteristics of the market. Otherwise, this will lead to arbitrariness in competition law assessments, which only gives rise to legal uncertainty.

2.3. Chapter Conclusion

Broad provisions that allow interpretation, such as Article 102, should not be regarded as negative. Actually, they enable legislation to be always aligned with developments without the need to always go through a long lasting regulatory and, in most cases, outdated process.

This not mean, on the other hand, that, as a result, legal certainty must be disregarded in competition law assessments. By expanding the notion of theories of harm on abuse of dominance assessment through the adoption of less strict conditions, however, this is exactly what the EC and the ECJ put at risk.

Next chapter, therefore, is dedicated to margin squeeze doctrine to see whether this theory of harm can be used to address conducts of online platforms.

3. MARGIN SQUEEZE

3.1. Concept

Margin squeeze, as previously mentioned, is an exclusionary conduct that occurs in vertically integrated markets that leads to the foreclosure of competitors. As such, a dominant undertaking, provider of an essential input to the downstream market, charges a price for it that, when compared to the price it offers to its own products/services at the same market, does not leave a profitable margin to competitors.[84] Hence, disabled from the ability to profit in the long term, those undertakings leave the market and competition is hampered.

This theory of harm was extensively discussed in case law, being first addressed in 1975[85]. Since then, the EC and the ECJ developed the requirements to find a conduct abusive under this doctrine. On this tone, this chapter analyzes how European case law qualifies margin squeeze and the requirements it sets, pinpointing controversies and a comparison with the U.S. approach. Finally, an evaluation is made to see to what extend the framework is applicable to online intermediaries.

3.2. Margin Squeeze Doctrine

3.2.1. Pillars

3.2.1.1. Operation on the upstream and downstream markets and dominant position

First and foremost, margin squeeze is an abuse that can only occur when there is vertical integration. To illustrate, Amazon provides a good example. Besides providing a platform enabling e-commerce (upstream market), it is also a seller of many products (downstream market), competing with the business users of the platform.

Application stores, such as the ones developed by Apple and Google, are yet another example. They created an online environment where developers can offer their apps to an unlimited amount of people (upstream market), but they also compete with those by having their own applications (downstream market).

3.2.1.2. Dominance on the Upstream Market

If vertical integration exists, the next requirement is dominance. As seen, vertical integration predicates the existence of activities in two levels, but Article 102 simply mentions abuse of dominance applying to the most diverse situations, whether there is vertical integration or not. Thus, it does not provide any indication on which level dominance must be in order to margin squeeze to occur.

Case law, however, have sufficiently clarified that dominance on the upstream market is mandatory. Otherwise, the undertaking would not have the power to harm competitors by itself. In *TeliaSonera*, for instance, the ECJ concluded that the use of one's dominant

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[84] Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C45/7, para. 80.
[85] Case 109/75 R – *National Carbonising v Commission*, supra note 41, ECR 1193.

position on the upstream market to leverage its position on the downstream end is sufficient to characterize an infringement[86]. Therefore, this indirectly reveals that dominance downstream is not a requirement.

This interpretation, once again, targets the protection of competition and consumers interests, because since dominance is not required at the retail level, an infringement can be addressed before having concrete effects there, which is on the interests of the previously mentioned.

3.2.1.3. Essential Input in the Upstream Market

While vertical integration and dominance at the upstream level are necessary, it is also fundamental that the upstream asset is essential for downstream operators. As such, those competitors, for the applicability of the margin squeeze test, cannot be able to operate, or must do so with much more struggle, without the input provided by the dominant firm. If there are good substitutes available to this asset, an abuse cannot be found.[87]

Amazon, once again, can illustrate. Sellers on the platform are able to operate independently from the platform. In fact, before the internet was invented, that is exactly what they did. With the facility of online shopping, however, and the possibility to reach an indefinite number of consumers without even the need of a physical infrastructure, the use of the platform is an intelligent commercial strategy. And, considering the expansion of this particular platform, and its prevalence over other marketplaces, it is not an easy task to find a substitute available for sellers, at least not an as efficient one.

This essential input requirement, however, was not always straightforward and raised fundamental issues regarding the need to prove a legal duty to supply from the perspective of the dominant undertaking. As such, intense discussions followed towards whether margin squeeze should be limited to cases where the upstream input is an indispensable asset, linking the idea to the essential facilities doctrine developed by case law in the US[88].

In simple terms, this doctrine aims at the exclusionary conducts of incumbent firms where they refuse to give access to an input that is a "bottleneck" for competitors, without which they are unable to compete. While, however, this idea was developed to aim physical infrastructures, such as railways, EU policy discussions often refer to it when online intermediaries are regarded as gatekeepers to consumers[89], even though it has not been applied yet.

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[86] Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C45/7, Section III D para. 28.

[87] "*[A price squeeze] assumes that the incumbent has an upstream monopoly over an essential input. In practice, the incumbent's upstream market power may not be that strong. While the incumbent operator typically own the copper line, substitute networks in the form of cable, wireless, etc…are available. In other words, the incumbent's essential facility is not absolute. The downstream competitors may therefore bypass the incumbent's network and consider purchasing access from alternative providers, or investing in an own network*". Jan Bouckaert & Frank Verboven, 'Price squeezes in a regulatory environment', (2003), CEPR Discussion Paper No. 3824. <https://ssrn.com/abstract=405122>

[88] United States v. Terminal Railroad Association of St. Louis, 224, U.S. 383 (1912).

[89] For instance, Autorité de la Concurrence and the Bundeskartellamt, 'Competition Law and Data', (10 May 2016), p. 17-18. <http://www.autoritedelaconcurrence.fr/doc/reportcompetitionlawanddatafinal.pdf>

For now, it is important to keep in mind that the ECJ, in *TeliaSonera*, established that an abuse can occur even when there is no duty to supply[90], or, in another words, in non-regulated markets.

3.2.1.4. Product Analysis

Deutsche Telekom also set a requirement for the assessment of margin squeeze – i.e. the need for comparable products at wholesale and retail levels[91]. Therefore, it was established that the product or service offered at both upstream and downstream markets must be distinct, but comparable or derivate of one another.

As straightforward as it may seem, there is no criteria for the assessment of such comparability. Moreover, a product or service at the upstream or wholesale level, for instance, can be used for the offer of various products or services at the downstream or retail level. Thus, given the lack of clarity on this regard, the selection of the relevant product is not a simple task and will have to be analyzed according to the circumstances of each case.

One topic that was, however clarified was the influence of sector-specific legislation on the relevant market[92]. At the time, German legislation imposed on the dominant firm two specific limits. First, there was a fixed price the company could charge for the access of the telecommunication network (the wholesale product). Second, it also imposed a cap on the prices of retail products. Considering these thresholds, the EC then conducted a retail-minus approach[93] to find the difference between the prices charged for its retail services and the price charged for the wholesale service. The result of the subtraction was then deemed insufficient by the EC to cover the specifics costs the company had with its retail products. Hence, a margin squeeze was indeed happening.

The analysis conducted by the EC means that the existence of sector-specific legislation does not exempt any dominant undertaking from its duty to charge retail prices that cover its production and additional costs at wholesale level. As such, in principle, if national legislation imposes a duty to supply, Article 102 cannot be invoked. However, if the incumbent is still able, regardless of the obligation, to act autonomously on the market and negatively impact competition, EU competition rules will be trigged. This specifically aligns with the special responsibility carried by dominant undertaking.

3.2.1.5. Spread Analysis

While the AEC test was already discussed in section 2.1.2, only in *Deutsche Telekom* the EC and the ECJ confirmed it should be applicable to margin squeezes, clarifying the meaning of the test under this abuse.

In simple terms, it is necessary to conduct a spread analysis to find the difference between prices of the dominant undertaking at retail and wholesale levels. The aim is to assess whether such firm can profitably offer its retail price in the downstream market if it adopts the charges imposed to competitors.

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[90] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB,* supra note 52, para. 47-59.
[91] Case COMP/37.451 – *Deutsche Telekom AG*, Commission decision on 21 May 2003, para. 109.
[92] This matter was also discussed in Case COMP/38.784 – *Telófonica.*
[93] Case COMP/37.451 – *Deutsche Telekom AG*, supra note 89, para. 148.

This own cost analysis suggested by the EC and confirmed by the ECJ offers two important advantages. First, since the costs of production of any other competitor are unknown, the use of this benchmark for determining whether margin squeezes materialize would also be purely speculative. Thus, the use of parameters offered by the dominant firm itself is a more concrete approach that ensures legal certainty[94].

Second, competition law is interested in as efficient competitors. And such competitors, when faced with below-cost sales, should be able to sustain themselves on the market for a short period of time. They could, for instance, in that time, adopt innovative ideas for reducing its own production costs. This would benefit both competition (since innovation stimulates more innovation) and consumers, who would enjoy lower prices.

Regarding the results of the spread analysis, if they are found to be negative for a long period of time, it means the incumbent is selling below its own production costs and clearly aims at excluding its competitors, since they are "*compelled to sell at a loss"*[95].

If the result is zero, it is also likely that a margin squeeze is occurring because other costs at downstream level must be considered. Those relate, for instance, to expenditures on the transportation of the product, or on administrative tasks. As such, a zero result indicates that the prices charged at the downstream market do not cover those additional costs, justifying the likelihood of the abuse.

Scholarship discussions, however, amount around the findings of the ECJ in *TeliaSonera*, where the Court stated that a positive result can also indicate an abuse[96]. This case, that dealt with electronic communication markets, established that in order for a competitive disadvantage to be proved when the result is positive, it is enough to demonstrate that competitors operate "*at reduced levels of profitability*"[97]. And, even though the Court stated that, in this case, authorities have a higher burden of proof[98], this is problematic.

First, some consider, for instance, that by considering levels of profitability of competitors, the ECJ simply undermines the efficiency approach and becomes more concerned about what is considered to be fair[99]. And as good as it sounds, fairness is a subjective notion.

Moreover, by not providing clarity about what is to be considered reduced profitability to characterize an abuse, the ECJ opens the doors to every conduct to be classified as anti-competitive. Competitors need only to prove that trade is made more difficult on the market. And this not only makes, once again, operation on the market uncertain, but also goes beyond the special responsibility of dominant undertakings, basically imposing on

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[94] Case C-280/08 P – *Deutsche Telekom AG v Commission,* supra note 48, ECR I-9555, para 202.
[95] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 33.
[96] Nicolas Petit, 'Price squeezes with positive margins in the EU Competition Law: economics and legal anatomy of a zombie', (2014). <https://dx.doi.org/10.2139/ssrn.2506521>
[97] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 33.
[98] Anne-Lise Sibony, 'Compression des marges – Ciseau tarifaire: La Cour de Justice juge qu'il peut y avoir abus par compression des marges même si la prestation intermédiaire n'est pas un intrant indispensable pour les nouveaux entrants sur le marché aval, dès lors qu'un effet d'éviction potentiel peut être établi (Konkurrensverket/TeliaSonera)', Revue Concurrences, (February 2011), N° 2-2011, Art. N° 35665, 108-110, p.109. <https://www.concurrences.com/en/review/issues/no-2-2011/Case-Comments-1154/Compression-des-marges-Ciseau>
[99] Fuat Oguz, 'The politics of margin squeeze in telecommunications: diverging paths of the US and EU', Digital Policy, Regulation and Governance, (2015), 17(2), pp. 1-15.

them a duty to secure that its competitors have profits[100]. Some already argue, on this tone, that this interpretation only ensures inefficiencies, since vertically integrated firms can become majorly concerned about avoiding liability[101].

Moreover, *TeliaSonera* is also inconsistent with previous and subsequent judgements[102]. The indispensability criteria set out in Bronner, to start, is put to test when the ECJ states that margin squeeze can occur even if the input is not indispensable.

More importantly, the positive margin squeeze theory goes against the decision of the ECJ in *Post Danmark*, judged one year after *TeliaSonera*. In *Post Danmark* the ECJ clarified that setting prices above the cost line is not a competition issue[103]. In another words, as efficient competitors have a fair chance to compete and make profit when prices of the incumbent are higher than its production costs.

And even though the case was about predatory pricing, the ECJ itself set, as a rule, the idea that there is no pricing abuse as long as competitors do not experience losses[104]. Moreover, among scholars, the judgement is also considered a pillar stone for the assessment of all abuse of dominance cases[105]. Therefore, as a pricing abuse, the positive margin squeeze theory simply does not fit this rule.

Also, in *TeliaSonera*, the ECJ confirmed that margin squeeze should be an independent abuse[106], not to be interpreted as an abusive discrimination. The argument, when analyzing whether it should be qualified as a refusal to deal abuse or abusive price discrimination was that this would "*unduly reduce the effectiveness of Article 102 TFEU*". One should note however, that those two abuses demand, from competition authorities, a high burden of proof, as discussed before. By distancing margin squeeze from them, this way, it also distances from economic literature, which deals with margin squeeze as a combination of price discrimination in the upstream market and predatory pricing in the other[107].

By means of comparison, by recognizing margin squeeze as a stand-alone abuse, Europe completely diverges from the approach taken in the U.S. According to *LinkLine*[108], judged by the Supreme Court, this conduct is under the refusal to deal standard. As such, a margin squeeze abuse can only be found when the vertically integrated incumbent is under a duty to supply[109].

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[100] J. Gregory Sidak, 'Abolishing the price squeeze as a theory of antitrust liability', Journal of Competition Law and Economics, (2008), 4(2), p. 294.
[101] Dennis W. Carlton, 'Should "price squeeze" be a recognized form of anticompetitive conduct?', Journal of Competition Law & Economics, (2008), 4(2), pp. 271-278.
[102] Nicolas Petit, 'Price squeezes with positive margins in the EU Competition Law: economics and legal anatomy of a zombie', (2014). <https://dx.doi.org/10.2139/ssrn.2506521>
[103] Case C-209/10 – Post Danmark A/S v Konkurrencerådet, supra note 45, para. 38.
[104] Ibid, para. 38.
[105] Mel Marquis & Ekaterina Rousseva, 'Hell freezes over: a climate change for assessing exclusionary conduct under Article 102 TFEU', Journal of European Competition Law and Practice, (2013), 4(1), pp. 32-50. (First published online 25 October 2012).
[106] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 54.
[107] Fuat Oguz, supra note 16.
[108] *Pacific Bell Telephone Co. v. linkLine Communications, Inc.*, 555 U.S. 438 (2009).
[109] Ibid, page 3.

Moreover, as seen on 3.2.1.5, if in Europe the existence of sector-specific regulation does not exempt firms from observing antitrust rules, the same does not hold in the U.S. If regulation is in place, it has prominent role and competition law must accept it[110].

3.2.1.6. Anti-competitive Effects

The EC hold a formalist approach towards margin squeeze in *Deustche Telekom*[111]. This way, the practice was considered unlawful as such, regardless of its effects. If this approach was preferable in certain time, case law already consolidated a shift of understanding towards the effects approach[112].

This means a direct effect is not deemed necessary, but the conduct must at last have the potential to hamper competition. And this potential directly relates to the result of the spread analysis. In another words, as seen, if the result is negative, meaning retail prices do not covering wholesale costs, negative fallouts on competition are almost certain. If, on the other hand, the result on the spread analysis is positive, anti-competitive effects must be demonstrated[113].

When *TeliaSonera* opened the door to margin squeeze being possible also in non-regulated markets, it also made a link between the product or service indispensability on the wholesale and anti-competitive effects. As such, if the product or service is indispensable for competitors, anti-competitive effects are very probable. On the other hand, if there is no such indispensability, those effects are not obvious. Either way, they must be shown by the competition authority addressing the problem[114].

This means that competition authorities are the ones holding the burden of proof of anti-competitive effects on margin squeeze practices. Therefore, the dominant undertaking does not need to show a presumption of competitive effects on their conducts. *TeliaSonera*, however, did not provide any specific guidance for this assessment and, as such, other case law must be consulted. Here, a decision of the ECJ demonstrate that authorities must show *convincing evidence*[115] of such effects.

On a final note, it is important to remember that the analysis of harmful effects consider long-term fallouts, focusing on the protection of consumer welfare. This means that a conduct which is beneficial for consumers on the short-term, does not necessarily have favorable effects on the long-run as well. *Deustche Telekom* provides a good illustration. The below the production costs price that the firm used to charge for its services allowed consumers to pay a cheap fare at first glance. However, on the long-term, this practice would have eliminated competition and, as a result, the dominant undertaking would be able to raise its prices significantly, consequently impacting consumer welfare. Thus, the company should have raised its prices on the retail level, charging a little bit more of consumers, to ensure they are benefited from the remaining competition on the market.

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[110] Caroline Cavaleri Rudaz, ‘Did Trinko really kill antitrust price squeeze claims? A critical approach to the linkline decision through a comparison of EU and US case law’, Vanderbilt Journal of Transnational Law, (2010), 43(4), p. 271-278.
[111] Case COMP/37.451 – *Deutsche Telekom AG*, supra note 89.
[112] See, for instance, Case C-209/10 – Post Danmark A/S v Konkurrencerådet, supra note 49.
[113] Case C-280/08 P – *Deutsche Telekom AG v Commission,* supra note 48, para. 73.
[114] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 72.
[115] Case T-5/02 – Tetra Laval BV vs. the Commission, [2002] ECR II-4381, para. 155.

3.2.2. Misconceptions

3.2.2.1. Market Strength

Even though the ECJ addressed many cases where super-dominance existed[116], in *TeliaSonera* it made clear that a quasi-monopoly is not necessary for the assessment of a margin squeeze practice. On the contrary, the important factor is the economic strength of the undertaking and the power it has to affect as-efficient competitors[117]. Thus, dominance is mandatory, but there is no minimum threshold for its existence.

It is important to remember, complementarily, that when a product is indispensable, anti-competitive effects are most certain. This way, the degree of market strength can be significant when the effects of the alleged abusive practice are being addressed.

3.2.2.2. Recoupment

When a margin squeeze occurs, the dominant undertaking can incur in losses at least until competitors finally leave the market by not being able to compete. When this happens, it has the power, as seen, to raise significantly its prices at retail level and regain part of the its losses. Such action is called recoupment.

This does not mean, however, that losses are mandatory for a margin squeeze to occur, at least not in Europe[118]. Margins of competitors can also be squeezed when the dominant undertaking charges an extremely high price at the upstream level[119]. And, in this case, the dominant will not incur in any losses, but the practice is still abusive.

Considering, therefore, that losses will not even occur in every margin squeeze case, the ability to recoup them cannot be a requirement for such assessments[120].

3.3. Assessment of Margin Squeeze in Online Platforms

Since online platforms are vertically integrated, experience the same effects as telecom operators and there is no concrete theory of harm established so far to approach their practices, it is worth evaluating the suitability of the margin squeeze doctrine to online platforms.

3.3.1. Market Definition and the Challenge of Free Services

A definition of the relevant market is the pre-condition of all competition law assessments. It is important to observe the boundaries of the market; the competitors and to establish the ability of an incumbent to raise prices above the competitive level. Most online platforms, however, today offer services that are free of charge for end users, already imposing a first challenge to competition assessments.

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[116] Case C-333/94 P – Tetra Pak v Commission, [1996] ECR I-5951, para. 31.
[117] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 81.
[118] Recoupment is a requirement for margin squeeze assessments in the United States.
[119] Case C-52/09 – *Konkurrensverket. v. TeliaSonera Sverige AB*, supra note 52, para. 98.
[120] Ibid para. 103.

Free of charge, should be noted, only means that those users do not need to make any pecuniary payment to access and use the platforms. They do, instead, provide data to enable the proper function of the service. Facebook is a good example. After an easy signing up process, individuals can, without the need of any direct payment, engage in several social interaction methods. While using the platform, however, Facebook tracks the on-site activity, such as likes and clicks, to see the user's preference and offer targeted advertisement. Apart from that, the can also see the websites a person visits while logged in and can connect individuals to third-parties when allowing to sign-in to their services using Facebook[121].

If, on one hand, the exchange of data is recurrent, on the other the finding of the relevant market in competition assessments, including for margin squeeze cases, still strongly considers a specific product or service, mainly disregarding the ownership of data. This happens because platforms use data to improve their services, therefore, a supply and demand relationship cannot be identified for the purposed of defining a specific market for data.

Given the context, one can wonder about the price-centered fixation that surrounds competition analysis in a free-services era. In fact, data is already argued by some as the world's most valuable resource[122], which indicates a need for a change. Indeed, is it undeniable that, with more data, companies can better develop its products and services, since they can adapt according to consumer preferences. Furthermore, the biggest amount of data, the higher is the entry barrier on the market because competitors must gather the same or similar amounts of data to provide comparable services.

This leads to a discussion that has long being on the spotlight: whether competition law authorities should consider data in competition law assessments. While the EC had firmly advocated before that data issues are not to be addressed by competition authorities[123], gladly the *Microsoft/LinkedIn* merger presented a hint towards the acceptance of a more open approach when the EC referred to a *hypothetical market for the supply of [...] data"* and *Google Shopping* also confirmed followed[124].

German legislation, on the same note, also took an important step towards a more open market definition assessment. Claiming that competition law must be "fit for the digital age"[125], the country adopted in 2017 the 9th Amendment to the German Competition

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[121] Dylan Curran, '*Opinion: Are you ready? Here is all the data Facebook and Google Have on you*', The Guardian (30 March 2018). <https://www.theguardian.com/commentisfree/2018/mar/28/all-the-data-facebook-google-has-on-you-privacy>

[122] Leaders, Print Edition, '*The world's most valuable resource is no longer oil, but data*', The Economist (6 May 2017). <https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data>

[123] Case No COMP/M.7217 – Facebook/WhatsApp, Commission decision on 3 October 2014, para. 164.

[124] Case 38606 - AT.39740 Google Search (Shopping), supra note 37, para. 158.

[125] Federal Ministry for Economic Affairs and Energy (BMWi), *'State Secretary Machnig visits Japan to hold talks on the sustainable digitalization of the economy'*, Press release, (9 June 2017). <https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2017/20170908-state-secretary-machnig-visits-japan-to-hold-talks-on-the-sustainable-digitisation-of-the-economy.html>

Act[126]. There, one of the challenges addressed was exactly the need to consider particularities of digital markets.

On this tone, Section 18(2a) of the Amendment establishes that the existence of a service that is free of charge cannot impair the finding of a market. This means that multi-sided platforms, that offer different products to two or more distinct groups, can no longer sleep in peace, at least not in Germany. Thus, social networking services are finally encompassed by the provision and can no longer rely of the free service argument against a finding of a market.

This is good first step towards a market definition that goes beyond the traditional finding of a relevant market within a specific product or service. It is important to point out, however, that data should be a recurrent asset not only to analyze the competitiveness of a market in terms of capability to improve services. It must also be considered to evaluate competitive constrains. As such, competition authorities must, for instance, inspect how much data is needed in order for a potential new entrant to enter the market to assess how high is the barrier to enter.

3.3.2. Dominance on the Upstream Level

The presence of dominance on the upstream market is a topic that needs to be carefully assessed. Indeed, for some online platforms such as search engines, for instance, it is already possible to advocate for the dilution of Google's trademark. As such, Google is so often used as the main (and why not only) search engine, that it became a generic term for the service itself. Amazon, on the marketplace side, is almost reaching the same stage.

The problem, however, relies on the significance of market shares for the finding of a dominant position. In *Microsoft/Skype* the EC claimed, while dealing with growing and dynamic markets, that market shares only provide limited indication of competitive strength[127]. In *Google Shopping*, however, the finding of a very large market share did not prevent the imposition of a millionaire fine. Thus, one can wonder about the real role of market share in dynamic markets.

Once dominance is established, however, if, at a first glance, telecommunications providers do not bear resemblance to online platforms, it might be necessary to give further thought. Naturally, the physical structure of the former is not a common ground, given online intermediaries mainly need servers, but the analysis must consider more than just physicality.

Economies of scale, for instance, are enjoyed by both sectors. In general, both need a first big investment to set up their respective infrastructure. However, once this is in place, the costs of providing the service to an additional user are almost insignificant, making their variable costs very low.

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[126] The English version can be found at <http://www.gesetze-im-internet.de/englisch_gwb/> accessed 19 April 2019.
[127] Case COMP/M.6281 – Microsoft/Skype, Commission decision C(2011)7279, para 78.

On the same note, network effects are also enjoyed by both telecom providers and online platforms. For the former, the value and attractiveness of the service increase when more users adhere to the network, since the greater the possibilities to connect with people. The same is applicable for digital markets. Marketplaces, to give one example, grow exponentially after receiving positive reviews. The more satisfied users are, the greater the number of sellers and buyers.

Therefore, those two characteristics combined lead to market concentration and, consequently, dominance.

Altogether, this means that the assessment of dominance on the telecom sector provides a valuable cornerstone that can be reused for the same purpose on online platforms. And this is already something that was considered in case law. In *Microsoft/Skype*, as mentioned above, when the EC clarified that market shares in digital markets are merely an indication of competitive strength due to the characteristically high dynamism of those markets derived from constant innovation, it opened the door for the inclusion of external elements such as the ones above discussed – i.e. economies of scale and direct and indirect network effects. Additionally, aspects like low entry barriers, easy interoperability[128] and multihoming[129] should also be considered.

On this topic, the above-mentioned German legislation also took lead. Section 18(3a) of the 9th Amendment confirms that direct and indirect network effects must be, together with other factors, considered for the finding of a dominant position. The initiative, therefore, clearly complements the line of thought of the EC. Economies of scale, the potential to innovate and the access to data, according to the German competition authority, *Bunderkartellamt*, are also additional elements which need to be considered.

All things combined, is clear that competition law, given the experience with telecom providers, has the tools to the finding of dominance in digital markets. It is just necessary to consider other elements to provide a reasoned decision of whether a platform has (or not) significant market strength. And, on a final tone, it is also important for the EC to have a final position on the importance of market shares, otherwise, the above-mentioned controversies just lead to legal uncertainty.

3.3.3. As-efficient Competitor Test

As seen, a margin squeeze analysis encompasses an AEC test. As such, it must be checked whether the incumbent firm is able to offer its downstream services profitably if it had to pay its own costs[130].

[128] Interoperability is “the ability to transfer and render useful data and other information across systems, applications or components.”. John G. Palfrey & Urs Gasser, ‘Interoperability in information systems in the furtherance of trade’, (2012), NCCR Trade Regulation Paper No. 2012/26, p.5. <https://dx.doi.org/10.2139/ssrn.2192651>

[129] “Multihoming is a mechanism used to configure one computer with more than one network interface and multiple IP addresses. It provides enhanced and reliable Internet connectivity without compromising efficient performance” – Techopedia. <https://www.techopedia.com/definition/24984/multihoming>

[130] Case C-280/08 P – *Deutsche Telekom AG v Commission,* supra note 48, para. 201.

This line of thought applied to App Stores is feasible. One can imagine, for instance, that the mentioned costs of the dominant firm would be the rate it charges for downloads of applications offered at the platform (which can be a percentage or a fixed amount). Thus, if the incumbent firm charges downstream competitors, for instance, a 5 euros fee per download, it must be checked whether, in accordance with *Deutsche Telekom*, after the payment of its own 5 euros fee, the app of the dominant firm would still be profitable. Of course, to provide a better overview and a more coherent competition analysis, the examination would not consider every single download, but the profits of the activity as a role. Nevertheless, the feasibility is undeniable.

It can be argued that in a case where the analysis comes across an activity that it is not profitable this assessment would not be possible[131]. Although not common, this indeed could occur in situations where, for instance, the variable costs of the competitor are high and not yet covered by the number of downloads or subscription (it can be, for instance, that a competitor is expanding and, therefore, incurring in more variable costs). Here, any comparison using the above-mentioned test would lead to a margin squeeze abuse.

However, a more in-depth comparison between the competitors can still be conducted to assess whether competitors are as efficient. The difference would be, however, on the values checked. Maybe, for this case, an analysis of losses could be a good substitute, for instance[132].

If, on one hand, this test is, as shown, generally applicable to App Stores, its applicability can be contested for another kind of platforms, namely search engines. This happens because this business model usually does not charge any amount, on a first glance, to have a result included on its search results. Therefore, the question of whether its own downstream service could still be profitable if it had to pay its own costs is simply inapplicable since there are no costs to begin with.

However, it is naive to consider that there are no fees charged by the dominant undertaking in general, the fact is that they just come from another end. Google's billionaire revenue[133], for instance, comes from the advertising service. When conducting a search, Google's algorithm provides results that are most relevant for the specific query and, among those, are some suggested pages from AdWords advertiser. To be among the suggested pages, players must outbid each other, and the revenue only comes from the clicks those pages receive. Thus, the free services are simply subsidized by advertisers.

Applying the AEC test here, however, has specific issues. First, the definition of relevant market of intermediaries that operate in multi-sided markets should be broaden, otherwise 'free services' will indeed impair the applicability of the test. If, on the other hand, market definitions are broadened, or even abandoned, as suggested by some, other revenues and

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[131] Friso Bostoen, supra note 21, p. 355.
[132] Ibid.
[133] Alphabet, Fourth Quarter and Fiscal Year 2017 Earnings Release. <https://abc.xyz/investor/static/pdf/2017Q4_alphabet_earnings_release.pdf>

costs could be considered. And this was even made easier when, in *Google Shopping,* the EC found that abuse and effects can be in different markets.

Indeed, however, one thing is finding the relevant market for free services, other is applying the as-efficient competitor test in this context[134]. Applying the test here would mean asking if Google would still be able to profit if the revenue made out of clicks on its own pages would cover its own its costs. But considering online intermediaries have high-fixed costs but low marginal costs[135], is very likely that an abuse would never be found, not under margin squeeze at least.

And while other costs could also be considered, such as the amount Google invests in innovation through research and development[136], the analysis would become too broad and complex. Furthermore, considering the high pace of changes in digital platforms, could be even counterproductive.

If margin squeeze is then arguably not the best suit for search engine's conducts, *Google Shopping* and practices by national competent authorities bring the attention to the remedy applied by authorities on this case: equal treatment. As argued before, however, a broad non-discrimination principle should not be welcomed in competition law, which leaves the wonder of how practices of online intermediaries should then be addressed and if sector-specific regulation should be adopted as well for online platforms.

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[134] Friso Bostoen, supra note 21, p. 372.

[135] Christian Ahlborn, Vincenzo Denicolò, Damien Geradin & A. Jorge Padilla, 'DG Comp's Discussion Paper on Article 82: Implications of the Proposed Framework and Antitrust Rules for Dynamically Competitive Constraints' (2006), p. 13. <http://ec.europa.eu/competition/antitrust/art82/057.pdf>

[136] Statista, '*Alphabet Annual research and development expenditure of Alphabet in 2013 and 2016 (in million U.S. dollars)*' <https://www.statista.com/statistics/507858/alphabet-google-rd-costs/>

4. THE CHALLENGE OF REGULATING ONLINE PLATFORMS

The fast-changing pace of online platforms makes, as seen, the EC and ECJ struggle to apply Article 102. Indeed, as stated by Lasserre "*with new players and new forms of trade come new challenges for competition authorities*"[137]. In this context, some already consider adopting sector-specific regulation to online players[138], which, however, as it is argued below, is a too soon intrusion.

This chapter, therefore, aims at analyzing the contributions of the P2BR and other ideas for regulatory measures that go beyond competition law.

4.1. Non-discrimination and Transparency

4.1.1. Non-discrimination

As seen on chapter 2, the underlying idea of non-discrimination is the obligation to give equal treatment to competitors. When finding, in *Google Shopping*, that the company had abused its dominant position, that is exactly what the EC imposed as remedy. As such, it demanded Google to stop giving preferential treatment to its own products in search results[139].

While the implementation of such practice was left to the incumbent firm, the solution adopted by Google was the creation of a unit that allowed all shopping services, including the one owned by Google itself, to bid for higher page placement[140]. Logically, this allows as-efficient competitors to compete, on fair terms, with Google. Curiously, this outcome would be similar, if not the same, had a margin squeeze infringement been found[141].

The problem is that since Google was the responsible party to implement the equal treatment measures, its solution was subject to criticism. Indeed, a letter addressed to commissioner Margrethe Vestager reached the EC in the beginning of 2018, claiming that the non-discriminatory remedy had no positive effect. In fact, one of the claims was that Google's algorithm Panda was still able to demote competing services[142]. Thus, it urged for an intervention and new solutions.

At national level, this urge, together with similar concerns regarding online platforms, resulted in several initiatives. In France, for instance, the Digital Council's report in 2014, which received the name of *neutralité des plateformes* (platform neutrality), stated, on

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[137] Bruno Lasserre, 'Competition Authorities and Digital Markets: The Need for an All-Around Resolute Action', Journal of European Competition Law & Practice, (2016), 7(7), 429-508, p. 429.

[138] Alexandre de Streel, 'The Relationship between Competition Law and Sector Specific Regulation: The Case of Electronic Communications', Reflets & Perspectives de la vie économique, (2008), XLVII (1), 55-72, pp. 68-69.

[139] Case 38606 - AT.39740 Google Search (Shopping), supra note 37, pp. 204-206

[140] Google, '*Changes to Google Shopping in Europe*', Press release, (27 September 2017). <https://adwords.googleblog.com/2017/09/changes-to-google-shopping-in-europe.html>

[141] Friso Bostoen, supra note 21, p. 373.

[142] Foundem et al., Open Letter to Commissioner Vestager re: AT.39740 – Google Search (Comparison Shopping), (28 February 2018). <http://www.foundem.co.uk/Open_Letter_Commissioner_Vestager_Feb_2018.pdf>

this regard, that users and competitors should be able to understand rank results, specially to identify the ones which are advertised[143].

This report, together with others, were the basis for the law adopted by France in 2016, which, however, received the name of law on platform fairness. The switch from neutrality to fairness, according to the French Council of State in another report from 2015, was justified by the impossibility to impose an obligation of equal treatment to search engines[144]. In another words, since they organize the results, at some point the platforms would naturally favor some over others.

The provisions of the law impose on platforms which conduct searches and matching services a responsibility to sufficiently inform users mainly about two things: (i) the ranking methods used to organize results; and (ii) the existence of any link between the platform and the result provided, which can be a consequence, for instance, of a contractual relationship between the Parties or any kind of remuneration. It is clear, therefore, that while carrying a fairness nomenclature, the law aims to reach equal treatment (or non-discrimination) through transparency obligations. And this is also the direction the EU is going with the implementation of the P2BR.

Before better analyzing the Regulation, however, it is important to understand that that one thing is demanding equal treatment *ex-post* or through transparency duties, other is implementing a broad non-discrimination principle. The latter, for instance, could impose on incumbents the obligation to share their input, which for most intermediaries is mainly data, to its competitors in order for an equal treatment to be achieved. This would mean, in another words, that the special responsibility of online platforms would shift towards a need to sustain those competitors on the market. And, in the long term, as highlighted by Advocate General in *Bronner*, this would impar competitors from developing competing facilities, which is not aligned with consumer welfare.

In this context, the adoption of transparency obligations can potentially be a first good compromise in the regulation of online platforms challenge.

4.1.2. Platform to Business Regulation – Transparency

Since 2015 the EC has been analyzing the role of platforms to make the single market fit for the digital age. In its assessments[145], it noticed that platforms become quasi gatekeepers in the main sector of the economy they operate. As a result, they can easily adopt abusive practices to foreclosure competitors and, since their business users are

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[143] Conseil d'Etat. Le numérique et les droits fondamentaux, (2014), p. 278. <https://www.enssib.fr/bibliotheque-numerique/documents/64705-le-numerique-et-les-droits-fondamentaux.pdf>

[144] Conseil National du Numérique. Ambition numérique: Pour une politique française et européenne de la transition numérique, (2015), p. 58-78. <http://static.latribune.fr/485354/rapport.pdf>

[145] See, e.g. European Commission (2016b). Public consultation on the regulatory environment for platforms, online intermediaries and the collaborative economy. Synopsis Report. <https://ec.europa.eu/digital-single-market/en/news/results-public-consultation-regulatory-environment-platforms-online-intermediaries-data-and>; and e.g. European Commission (2017d). Fairness in platform-to-business relations. Inception impact assessment, Ref. Ares (2017)5222469. <https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-5222469_en>

small companies or even individuals, they lack bargaining power against such conducts[146].

Moreover, the EC added that EU rules were not addressing those issues in a sufficient manner. Competition law, for instance, can be invoked only to a certain extent, since interventions are made after a conduct is alleged abusive. Other regimes, on the same tone, do not offer enough redress[147]. Therefore, this, added to the fact that national authorities were adopting measures for their respective territories, which could lead to regulatory fragmentation and a weaker single market, were enough to prioritize an EU-wide resolution, resulting in the P2BR.

Thus, the P2BR drafted a definition of online platforms to englobe all online intermediaries that target EU consumers. To do so, it references the definition of information society services of Directive 2015/1535 and adds two additional requirements: (i) they should facilitate direct transactions between business users and consumers; and (ii) they should have a contractual relationship with business users[148]. This definition, however, does not encompass search engines; thus, those were added to the scope of the regulation independently[149].

The application of wide-reaching transparency obligations can be seen in several articles. Article 5 of the proposed text, for instance, establishes that whenever a ranking system is involved, platforms must clearly inform, in their terms and conditions, the parameters used to organize the results. It should also be clear which results are influenced by payments. This is also applicable for the platforms own's products. As such, if the platform is vertically integrated, it should inform if its own goods are given differentiated treatment.

Apart from Article 5, several other provisions also require transparency[150]. This aims at stimulating equal treatment and preventing discrimination without prohibiting conducts as such, being a less harmful policy measure.

Given the power asymmetry of digital markets and competitors, however, there is no consensus if more intrusive regulation should be adopted, a topic discussed on the following topic.

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[146] Communication from The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions on the Mid-Term Review on the implementation of the Digital Single Market Strategy A Connected Digital Single Market for All - COM/2017/0228 final

[147] Consumer protection, for instance, is only applicable to business to consumers transactions.

[148] Art. 2(2), Platform to Business Regulation.

[149] Art. 2(5) and Art. 3, Platform to Business Regulation.

[150] Art. 7, for instance, states that whenever a platform has access to data of business users and consumers, it has to specify to which categories of data it has access and under what conditions. This is significant for marketplaces, for example, since they can use data from consumers to identify popular products and start to produce their own version of such good. Article 15, on its term, states that regarding changes to terms and services, the platform will be obliged to inform all its business users with at least 15 days in advance. This is significant particularly to app stores, for instance, because applications available there will have some time to adapt instead of being automatically removed after a specific change.

4.2. Regulatory Approaches

4.2.1. Adoption of Non-discrimination Rules

Until now, two scenarios can be clearly distinguished. First, *Google Shopping* provides an example of the applicability of non-discrimination and transparency obligations through competition law enforcement, which is an *ex post* intervention that relies on a harm-based approach. Then, the P2BR, which is an *ex-ante* intervention, provides a more intrusive resolution by already requiring transparency as a rule.

The question that remains is whether more *ex-ante* interventions, through the adoption of sector specific rules, should be established to online platforms, in a similar way that happened to telecom operators. The main argument subsidizing this idea is that similar functionalities require similar regulatory treatment. The point is, however, that sector specific regulation is adopted in markets that are knowingly problematic. Digital markets, on the other hand, offer many benefits to consumers, as stated by EU Commissioner Andrus Ansip in 2018[151].Moreover, some discriminatory practices of online platforms, such as paid prominence on search results, is on the interest of consumers besides being harmful to competitors[152].

Containing innovation and benefits to end-users through the adoption of strict measures, therefore, does not align with ensuring consumer welfare. Additionally, since there is not enough economic insight nor a clear approach in case law to support a general theory of harm to discriminatory practices that could enable an *ex-ante* application of a non-discriminatory principle, transparency obligations seem, for now, a more prudent step. Besides, other issues can impair this approach, as discussed below.

4.2.1.1. Platform Definition

The first element against the adoption of *ex-ante* intervention surrounds a complex matter: the definition of online platforms.

Undoubtedly, telecom providers lost big part of their revenues to online platforms[153]. Moreover, their claim to establish a level playing field that protects end users, given the services are very similar[154], is in the interest of consumer welfare. The problem is that experience has proven that a fit all definition has not been reached, if it ever will.

To elaborate on the matter, when the EU decided, for instance, to expand its telecom regulation to online services, attending therefore the claim of telecom providers, it faced

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[151] "Millions of mostly small traders in the EU now depend on online platforms to reach their customers across the Digital Single Market. These new online marketplaces drive growth and innovation in the EU, but we need a set of clear and basic rules to ensure a sustainable and predictable business environment".

[152] Jan Krämer & Daniel Schnurr, 'Is there a need for platform neutrality regulation in the EU?', Telecommunications Policy, (2018), 42(7), 514-529.

[153] Erik Heinrich, '*Telecom companies count $386 billion in lost revenue to Skype, WhatsApp, others*', Fortune, (23 June 2014). <http://fortune.com/2014/06/23/telecom-companies-count-386-billion-in-lost-revenue-to-skype-whatsapp-others/>

[154] Sam Schechner & Stu Woo, '*Telecom firms call for level playing field*', The Wall Street Journal, (22 February 2016). <https://www.wsj.com/articles/telecom-firms-call-for-level-playing-field-1456178403>

the challenge of having to define electronic communication services. At the end, it reached a threefold definition: i) it is a service that enables direct interpersonal and interactive exchange of information; b) it has to be between a finite number of persons; and iii) the user must determine to whom he/she is sending the communication.

Clearly, e-mails and platforms such as Skype and WhatsApp meet all three requirements. Other platforms, on the other hand, do not. Facebook, for instance, fails on the second pillar, since communication, in general, is available for an indefinite number of people. One of its services, however, namely Messenger, is a form of communication. Websites, on the same tone, fail the same requirement for the same logic. Streaming services, such as Netflix, search engines, e-commerce platforms and many others, in their turn, are not a mere communication service and thus do not meet the first pillar. As such, the conclusion is that most online platforms are out of the scope of the definition, even when they do have a communication service.

If this effort already shows the struggle in defining online platforms, since they continuously expand their services, ending up operating in multi-sided markets, another one came in 2015 when the EC conducted a public consultation to assess the role of such operators. In the questionnaire available for submission, it asked whether respondents agreed that online platforms should "*refer to an undertaking operating in two (or multi)-sided markets, which used the Internet to enable interactions between two or more distinct but interdependent groups of users so as to generate value for at least one of the groups*"[155].

The result simply showed a lack of consensus among the replies[156]. Furthermore, some claimed that the proposed definition had the ability to circumvent the entire Internet[157], an idea that regulators must shy away from. A fit all definition could result in imposing too burdensome obligations to new entrants, annulling the underlying idea of the creation of the Internet – i.e. to be a free space, open to new developments[158].

The P2BR, as seen, recently proposed another definition for online intermediaries. Although, to confirm the complexity of the subject, its definition, at the end, did not encompass search engines, which had to be added to the scope of the Regulation independently. If, in the future, this concept will still be able to catch all platforms, however, remains to be seen.

The lesson is that regulators should keep in mind that the Internet is not a set-in stone concept, and neither should online platforms be. They both are concepts in continuous

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[155] EU Policy – Platforms Consultation organization. <https://meta.wikimedia.org/wiki/EU_policy/Platforms_Consultation>

[156] European Commission, 'Public consultation on the regulatory environment for platforms, online intermediaries and the collaborative economy', Synopsis Report, (25 May 2016). <https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=15877>

[157] House of Lords Select Committee on European Union, 'Online platforms and the Digital Single Market', 10th Report of Session, (2015-2016). <https://publications.parliament.uk/pa/ld201516/ldselect/ldeucom/129/129.pdf>

[158] Katie Hafner & Lyon Matthew, 'Where wizards stay up late: the origins of the internet', Simon & Schuster, (1998), 1st edition.

constructions and are products of human intelligence, being developed according to societal needs. Online platforms provide certain functionalities today that, within a short period of time, may not be high valued anymore.

Additionally, considering the ability that business on the internet scale, the speed they progress and redefine their own boundaries, and the considerable slow pace of regulation, embedding a concept into law may prove to be a lost effort in a short time.

Altogether, this points to the direction that defining online platforms for the purpose of establishing an *ex-ante* intervention has serious implications, since it could either plaster further progress or turn out to be obsolete in no time. A less intrusive way to intervene, therefore, would be through a case-by-case analysis, considering empirical evidence. This does not, mean, on the other hand, that *ex-post* interventions are sufficient, but, without more economic evidence, transparency obligations, once again, are preferred.

4.2.1.2. Interoperability

One of the greatest advantages of online platforms is that they provide a convenient alternative to connect different groups that need each other but cannot easily make contact by themselves. This is logically beneficial to all parties involved. End-users, for instance, have a great new or improved functionality that are most times available for free or for an inexpressive amount. On the other side, advertisers, sellers or others have the opportunity to engage in pecuniary transactions faster, increasing their revenues in a fast pace.

Logically, for this end-result to occur, everything depends on the number of users the online intermediary manages to engage. As such, the platform will only exponentially increase its value if users from both (or all) sides adhere to the business.

This is the topic that deserves attention, since a duality can be identified. For clarification purposes, the duality that deserves scrutiny is not the one deriving from the number of sides involved, but the one on the competitive ambiguity this business model can have. In another words, the circumstances that may lead to the foreclosure of competitors are the same that bring benefits to users and make the business successful by attracting more people.

This happens because users can be attracted naturally, given the success of the functionality for instance, but they can also be allured as a result of abusive business practices, exclusionary strategies or a combination of all. And while more users mean higher platform value and consumer welfare, concentration can also make the later decrease.

Interoperability denials provide a good example. While it is a good strategy to prevent users from switching platforms and increasing the number of customers, it is clearly detrimental to other players, since it deprives them a minimum viable scale [159]. Moreover,

[159] Alfonso Lamadrid de Pablo, 'The double duality of two-sided markets' in 'Internet: competition and regulation of online platforms', Competition Policy International, (2016), 95-108, p. 102.

it also makes it easier for undertakings to become dominant and adopt abusive practices to further ensure dominance. On this tone, one could claim the need for interoperability in online platforms. If required by law, this would be another non-discrimination rule imposed in abstract to horizontal relations (between different platforms), but not on the grounds of competition laws.

Careful assessment is however needed, and the telecom sector again provides an offline comparable. Interoperability was imposed by the EU to telecom providers via regulation in 1998[160]. From the user perspective, communication was made easier because users were finally allowed to connect with each other irrespectively from their provider, which undeniably ensured their direct social and economic well-being. Thus, it was clear that the number of benefits outweighed any possible harms that the conduct could have.

The question of whether this should also hold in the online environment needs to be answered, therefore, considering the same parameters – i.e. if its benefits outweigh possible harms. One already identified harm is the consequent less innovation this could have on the sector, since the core of interoperability is the need of some communication between the players to enable their systems to be more malleable.

But this is not the only discussion surrounding the topic. For social networks, for instance, considering the several communications methods individuals have at their disposal nowadays, interoperability, one a first look, can seem to not directly benefit them. However, it is arguably helpful for enabling more competition[161], since entry barriers are reduced. With less of those, new entrants are encouraged to enter the market, which consequently booster consumer choice and welfare.

This leads to the conclusion that interoperability should, therefore, be demanded for digital markets, since it appears to be more beneficial than a harmful conduct. Although, it should be noted that its applicability here is more complex than for the telecommunications sector. Data protection concerns, for example, arise simply because of the nature of the Internet. In another words, the network was created to be a place where nothing is ever lost[162]. This means that, if in a phone of mobile call, the relationship between the user and the provider ends after the call is concluded, the same does not hold for the online environment.

Take, for instance, a social network platform. If interoperability is required, this means that a user from Facebook should be able, without having an account in a competing platform, to make a post there in, for example, a friend's timeline. This post could be deleted by the author at any time but could also stay there forever if the person wants so.

<https://www.competitionpolicyinternational.com/wp-content/uploads/2016/05/INTERNET-COMPETITION-LIBRO.pdf>

[160] Directive 97/33, 1997: Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP), OJ 1997, L 199/32. – Art. 4 (1).

[161] Inge Graef, 'Mandating portability and interoperability in online social networks: Regulatory and competition law issues in the European Union', Telecommunications Policy, (2015), 39(6), 502-514.

[162] Katie Hafner & Lyon Matthew, supra note 156.

This means that while in telecommunications providers can easily arrange, among themselves, the costs of the use of each other network, since calls are time limited, this is, as shown, more complex for online platforms.

This, as seen, leads to an extensive data protection discussion, as well as intellectual property concerns. The bottom line is that interoperability should be generally demanded, since it has positive results for consumers, but the concerns above stated must be first addressed to ensure a coherent system.

Apart from that, an interoperability scenario also requires geographical considerations, since many online platforms are not EU based and often also do not have a representative in any MS. This situation, however, is somehow less of a concern because an extraterritorial scope of application can mirror what was already done, for instance, in the GDPR[163].

4.2.1.3. Data Portability:

While interoperability ensures the technical communication between systems, in a way that information can be exchanged among them and used afterwards, data portability is the tool that allows users to coordinate their own personal data. In another words, is through the latter that users should be able to take information stored in different platforms and move it freely to wherever they want.

This right was already recognized by the GDPR in Article 20 and gives end-users the control over their data, but it does not entitle business users access to it. During one of Google's investigations in 2014, Commissioner Almunia recognized, however, that portability is fundamental to ensure competition[164]. And this, combined with the idea that data is a critical competitive asset in the online environment, could, therefore, be the basis for a claim on refusal to deal under which the EC could force an incumbent to give access to its collected data.

As seen on chapter two, under the new standards of *Microsoft*, a refusal to deal could, under certain circumstances more than others[165], be recognized on the online scenario. The question that remains, however, is whether access to data should already be required *ex-ante* instead of just via competition assessments. One could claim, indeed, that this would allow competitors to compete on functionalities instead of data lock-ins, however, a general right to data portability embedded in law is not recommended to all platforms[166], and could have negative effects on consumer welfare[167]. In another words, portability

[163] Article 2(1) of the GDPR states that the Regulation will apply even if the processing of personal data of EU citizens is made by a controller or processor not established in the EU but offers goods or services to members in the community and/or monitors their behaviors.

[164] Joaquín Almunia, 'Statement on the Google Investigation', Press Conference Brussels, (5 February 2014). <http://europa.eu/rapid/press-release_SPEECH-14-93_en.htm>

[165] Inge Graef, Sih Yuliana Wahyuningtyas, & Peggy Valcke, 'Assessing data access issues in online platforms', Telecommunications Policy, (2015), 39(5), 375-387.

[166] Barbara Engels, 'Data portability among online platforms' Internet Policy Review, (2016), 5(2).

[167] Peter Swire & Yianni Lagos, 'Why the Right to Data Portability Likely Reduces Consumer Welfare: Antitrust and Privacy Critique', Maryland Law Review, (2013), 72(2), 335-380. <http://digitalcommons.law.umaryland.edu/mlr/vol72/iss2/1>

could indeed foster innovation by allowing new players to compete, but could also, over time, hamper innovation by making access to data too easy. And, curiously, this aligns perfectly with the statement of Advocate General Jacobs in *Bronner* seen in section 2.2.1.

4.2.1.4. Neutrality Regulation

The European Parliament in a report about platforms and digital markets of 2017, stated that: "*the need for net neutrality and fair and non-discriminatory access to online platforms [is] a prerequisite for innovation and a truly competitive market*"[168]. This way, some start to wonder if online platforms should be the next target of neutrality rules[169].

As a background, neutrality obligations were subject to EU Regulation in 2016 to prevent traffic management strategies that could lead to the foreclosure of competitors. In essence, it means that those networks providers should treat every content that goes through their network equally, without given preference to any specific content in detriment of others or blocking passage of selected ones.

As good as it sounds, applying the same rationality to online platforms is still controversial because of ambiguous welfare effects. In another words, there is no evidence that, by giving prominence to its own service at the downstream level, the incumbent will harm consumers.[170] Economic literature, in fact, identifies different scenarios for ranking decisions depending on whether those decisions are made in price or quality.

When a platform organizes results based on the commission fees it receives for sponsoring a product/service, it will logically give better placement to the player who pays the highest fee. But this carries consequences. First, the player who pays more has a bigger marginal cost and, as a result, its products will become more expensive. Consequently, since it was demonstrated that consumers are likely to look just a few first results, they will end up paying higher prices, which is not on consumers' interests.

If, on the other hand, the platform organizes placement only according to quality standards, players will compete in the quality of the product and the information they provide to consumers in order to be better ranked. This drives up consumers' surplus because they end up finding the better-quality products/services at the top.

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[168] European Parliament, 'Report on online platforms and the digital single market (2016/2276(ini))', Committee on industry, research and energy committee on the internal market and consumer protection, (2017). <http://www.europarl.europa.eu/doceo/document/A-8-2017-0204_EN.html?redirect>

[169] Jan Krämer & Daniel Schnurr, supra note 16.

[170] Yongmin Chen & Tianle Zhang, 'Intermediaries and consumer search' International Journal of Industrial Organizations, (2017), 57, 255-277; Martin H. Telle, Eva Rytter Sunesen, Bruno Basalisco, Mie la Cour Sonne & Niels Christian Fredslund, 'Online intermediaries. Impact on the EU economy', Copenhagen Economics (2015). <http://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/2/342/1454501505/edima-online-intermediaries-eu-growth-engines.pdf>

One most consider, however, that, in general, search prominence is organized through a variant of both price and quality – e.g. Google[171]. Therefore, it is not clear-cut how is the counterbalance of between them nor if every competitor, including the platform's own service at downstream level, is subject to the same placement criteria or algorithm.

On this context, imposing an *ex-ante* neutrality obligation on online platforms, on the view of this work, is argued to a be a too intrusive measure to be adopted, at least until further evidence indicates that the harm of their practices outweighs the current benefits. For now, transparency obligations that enable players to acknowledge on what terms they are competing is a better mechanism. Some suggest, for example, that platforms that offer ranking services should reveal the type of information is more relevant for the placement analysis, conversion rates or even a bid range[172].

4.3. Chapter Conclusion

Since practices in multi-sided markets can clearly have both anti and pro-competitive effects, regulating online intermediaries is a pressing challenge. This does not mean, however, that they should not be subject to regulatory interventions, especially because of its strong network effects, economies of scale, the consequently monopoly risk and the increasing number of cases reaching the EC on the grounds of abusive practices.

Competition law, however, has its limits and broadening the scope of by object restrictions[173] like it is already suggested by some[174], is hardly the best approach to target online intermediaries. Even though some changes can be made in competition assessments, because of the extensive ownership of data by platforms and the multi-sided markets they operate, which challenge the definition of the market and the establishment of a dominant position, this does not mean the system needs to be complete restructured.

Sector-specific regulation, on the same tone, cannot be imposed without further economic evidence of its necessity, which impairs advocating for the adoption of too intrusive measures. This should only be considered if a market and conducts on it are undoubtedly harmful to competition and its potential pro-competitive effects cannot, in anyway, outweigh its harms.

Otherwise, innovation is put at risk, which is not in the interest of neither of the parties involved. Consumers, to start with, benefit from the convenience of online platforms that is continuously improved by new ideas according to detected consumer's needs. Business users, on the other side, can engage in more transactions because of the substantial amount

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[171] Google, '*Search Console Help – How Google Search Works*' <https://support.google.com/webmasters/answer/70897?hl=en>; Google, '*Google Ads Help – Top of page bid estimate: Definition*' <https://support.google.com/google-ads/answer/6292661?hl=en>

[172] Susan Athey, & Glenn Ellison, 'Position auctions with consumer search', Quarterly Journal of Economics, (2011), 126(3), 1213-1270.

[173] For the concept of by object restrictions, see footnote 46.

[174] Jacques Crémer, Yves-Alexandre de Montjoye, & Heike Schweitzer, 'Competition Policy for the digital era', European Commission, (2019). <http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>

of people they reach via the platforms. Finally, the intermediaries themselves are interested in innovation to boost their revenue and ensure their competitive status.

A first good compromise, therefore, until further evidence is gathered, is transparency, which is the core of the P2BR. As stated by Jakob Kucharczyk, vice President for the Competition & EU Regulatory Policy:

> *"Online platforms go to great lengths to maintain good relations with their business users because it's in their own interest to do so. Thriving business users are the key ingredient for thriving online platforms. There is no evidence of a systemic problem that would justify regulation through the strongest legislative instrument available to the EU. A more flexible approach, rather than an outsized, one-size-fits-all Regulation, would be more conducive to the growth of Europe's digital economy."*[175]

Beyond transparency, championing interoperability and data portability are other measures that are worth further analyzing. More economic evidence, however, should be gathered in order for one to firmly advocate for their adoption via *ex-ante* interventions and not merely on *ex-post* competition assessments.

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[175] Heather Greenfield, '*European Commission proposes new regulation on platform-to-business relations*', Computer & Communications Industry Association (CCIA), (26 April 2018). <http://www.ccianet.org/2018/04/european-commission-proposes-new-regulation-for-platform-to-business-relations/>

5. CONCLUSION

Online platforms have, over the last decade, exponentially increased in size because of, among other elements, strong networks effects and economies of scale. Consequently, some intermediaries today enjoy a quasi-monopolist position, which threats the competitive structure of the market and, foremost, consumer welfare. Because many platforms also become vertically integrated, this dominance on the upstream market facilitates the adoption of discriminatory measures to leverage the incumbent position on the retail level and exclude competitors.

Since abuse of dominance is addressed by competition law, specifically Article 102 of the TFEU, antitrust is, therefore, immediately invoked to address and remedy such practices. This *ex-post* intervention, in the view of the above, was trigged many times over the years and case law developed theories of harm, each one with its specific requirements.

Because of specific characteristics of the online environment, however, such as the operation of platforms in multi-sided markets and the offering of free services, competition authorities, in an urge to stop abuses, started to reshape theories of harm to accommodate practices. As a result, requirements were lessened, judgements became ambiguous, new theories of harm were potentially created and critics piled up.

The phenomenon of size scalability and vertical integration, however, is not new. The telecommunication sector, after its liberalization, experienced similar effects and, as a result, together with the analysis of the exploration of other utilities, a margin squeeze doctrine was drafted to address practices of the owners of the network infrastructure. Moreover, since the sector was regarded as problematic as such, a sector-specific regulation followed to insure competition.

Giving the recent urge to regulate or even break 'Big Tech' companies[176], this work aimed, therefore, at analyzing whether, and to what extent, the telecommunication framework, which includes the almost forgotten margin squeeze doctrine and the adoption of sector-specific regulation, could also be an option to address practices of online intermediaries. And, from the analysis conducted within the chapters, a few points can be made.

First, while the margin squeeze doctrine can be used for some online platforms, mainly app stores, its applicability to search engines is problematic. Since this business model offers, at least for end-users, free services, there is already a challenge in the market definition phase of competition assessments, given its underlying idea of price and demand. Moreover, even if market definitions are broadened or abandoned, the applicability of the AEC test is also challenged. Considering that online platforms have high initial costs but low maintenance costs, an abuse under the margin squeeze doctrine would hardly be spotted, at least not without the analysis becoming too complex.

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[176] The American Politician Elizabeth Warren, potential presidential candidate for the U.S.A. 2020 election, for instance, claims online intermediaries have become too big and need to be broken up. See, for example, Colin Lecher, '*Elizabeth Warren says she wants to break up Amazon, Google, and Facebook',* The Verge, (8 March 2019). <https://www.theverge.com/2019/3/8/18256032/elizabeth-warren-antitrust-google-amazon-facebook-break-up>

If this theory of harm fails to recognize an abuse on self-preferencing services, however, it seems from the remedy adopted in *Google Shopping* that a non-discrimination notion might be able to offer some comfort. The underling idea of non-discrimination is basically to give equal treatment, but the moment in time when it should be demanded and if competition law should be the mechanism to ensure its adoption, bring issues to the equation.

As seen, discriminatory practices, in the online environment or not, have ambiguous effects on consumer welfare. Therefore, a conduct that can potentially benefit consumers cannot be labeled abusive as such and requires an analysis of its benefits and harms, which can only be done, in the context of competition law, via *ex post* interventions. This means that indicating in Article 102 a list of discriminatory practices 'by object', similarly to what happens in Article 101, is simply out of question.

If such conducts cannot be addressed *ex-ante* by competition law, it was seen that the regime has also its limits in remedies imposed after the finding of an abuse. As such, even though the special responsibility carried by dominant undertakings is already an accepted notion, competition authorities cannot demand incumbents to harm its own business and/or sustain its competitors on the market. This would contradict with the goal of competition law – i.e. to ensure a competitive structure to enable consumer welfare - and discourage innovation.

With this intrinsic limitation in mind, this thesis highlighted, on a positive tone, that non-discrimination goes well beyond the boundaries of competition law and can be reached through other regulatory measures. The P2BR, for instance, by imposing transparency obligations to online intermediaries, clearly aims at containing discriminatory practices, or at least at informing users about its existence. As such, it does not forbid any practice, but tries to avoid discriminatory ones by demanding information to be available to users and competitors.

This means, for instance, that if a search engine uses a special algorithm to rank results of its competitors but does not submit its own products to the same analysis, this should be well informed to both business and end-users. This way, they will have the power to make a conscious choice between using an intermediary that gives differential treatment to content or looking for – or why not creating – another one that does not.

Given the power asymmetry between some already well-established online intermediaries and its business users, however, it is possible that transparency obligations, when imposed, will not be able to solely remedy much of what already happens. This, together with the claim of the telecommunication industry to establish a level playing field between telecom operators and online intermediaries, are the reasons why sector-specific regulation start to be considered.

As fair as it may sound to some, this work pointed out, however, that this is not a straight forward exercise and, given the technological turbulence, a well-structured regulatory system risks being obsolete in a short period of time or even before its own adoption. A one fit all concept of online platforms, as discussed, is a first hindrance on the adoption of such specific regulation. The P2BR experienced itself the complexity of the matter given the multi-sided characteristics of such players.

If competition law cannot always redress discriminatory practices, sector specific regulation is claimed here to be a hasty measure and, as seen on chapter four, there is no strong economic evidence on the benefits of a neutrality regulation, it seems that it is time to recognize the limits of top-down regulation on the tech industry. Interestingly, this is aligned with what the EC itself mentioned on its 2016 Communication on Online Platforms, highlighted on the introduction of this work.

This does not mean, however, that nothing can be done in terms of regulation. The focus could obviously shift from trying to specifically target and break '*Big Tech*', to ensuring that new players can enter the market. And this is where interoperability and data portability, combined with the upcoming transparency obligations, could potentially contribute to the framework.

Data, without a doubt, is the most important input of platforms. Since some have been gathering it for a while, this creates an advantage that impairs new players from entering the market, even if platforms claim data is freely available to everyone to collect. However, one cannot immediately jump to the conclusion that, for this reason, data portability should be demanded in all occasions simply because companies will stop competing in data lock-ins and will have to invest and compete, with the new players, in the creation of new functionalities or on increasing the quality of existing ones.

A data portability demand does not have yet clear-cut evidence that will enhance consumer welfare, much like interoperability put long term innovation at risk due to the need for the systems to have a minimum set of similarities. The bottom line, therefore, is that a more concrete analysis is needed to evaluate the short- and long-term perspectives of such measures. Moreover, as discussed in chapter four, there are other concerns to be addressed before interoperability can fully be demanded – i.e. on data protection and intellectual property, leaving room to discussions on how this could be done.

To conclude, it is a fact that the intrinsic characteristics of the business model of online platforms create challenges to regulation. Moreover, due to the number of cases reaching the EC and the ECJ on the grounds of discriminatory practices, it is natural to wonder how this entire context should be addressed. One cannot conclude, however, that a broad non-discrimination principle should be adopted on competition law nor that sector specific regulation is needed. While more economic evidence is gathered, it is safer to rely on less intrusive measures such as transparency. And, on grounds of competition law and theories of harm, if margin squeeze could not fully encompass practices of such players, maybe the essential facilities doctrine can better address the problematic, a topic well addressed by Inge Graef[177].

To give food for thought, however, one can consider, as highlighted by some[178], if technological turbulence and the constant demand for innovation will not, by itself, corrode market powers. And, on this tone, the self-correcting powers of the market would better redress discriminatory conducts than tailor made approaches.

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